

WEST CHESTER STATE COLLEGE BULLETIN

## Undergraduate Academic Calendar

Last day to qualify for admission for Fall Semester<br>July 1 (Thursday)<br>FALL SEMESTER 1971<br>Classes begin September 7 (Tuesday) 8 a.m.<br>Thanksgiving Recess begins November 24 (Wednesday) as classes end<br>Thanksgiving Recess ends Last day to qualify for admission<br>for Spring Semester<br>Fall Semester classes end<br>Final examinations begin Final examinations end Fall Semester ends<br>December 1 (Wednesday)<br>December 15 (Wednesday)<br>December 16 (Thursday)<br>December 23 (Thursday)<br>December 23 (Thursday)

SPRING SEMESTER 1972
Classes begin January 17 (Monday) 8 a.m.
Spring Recess begins March 11 (Saturday) as classes end
Spring Recess ends
March 20 (Monday) 8 a.m.
Easter Recess begins
March 30 (Thursday) as classes end
Easter Recess ends Spring Semester classes end Final examinations begin Final examinations end Spring Semester ends

Alumni Day
Commencement May 21 (Sunday)

SUMMER SESSIONS 1972

| Pre Session | June 5-June 23 |
| ---: | :--- |
| Regular Session | June 26-August 4 |
| Post Session | August 7-August 25 |

The College reserves the right to change the Academic Calendar if deemed necessary.
Scheduling dates for enrolled students for Fall Semester and Spring Semester will be announced in College publications and on College bulletin boards.


# West Chester State College Bulletin 

# Undergraduate studies <br> 71.72 

CENTENNIAL YEAR

West Chester State College is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The American Association for Health, Physical Education, and Recreation, and The National Association of Schools of Music.

The provisions of this Bulletin are not to be regarded as an irrevocable contract between the student and the College. West Chester State College reserves the right to change any provisions or requirements at any time within the student's term of residence.

Lists of Boards, Administration, and Faculty are as of January 1, 1971.

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## COMMONWEALTH OF PENNSYLVANIA

Milton J. Shapp, Governor

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| :--- | ---: |
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Commissioner for Higher Education

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West Chester

## WEST CHESTER STATE COLLEGE



Paul W. Rossey, President
Albert E. Filano, Vice President for Academic Affairs
Undergraduate Degree Programs Offered at West Chester

| Teacher Education | Arts and Sciences |
| :---: | :---: |
|  | ARTS AND LETTERS MUSIC <br> Art B.A. Degree <br> Foreign Languages B.MUs. Degree <br> French $\quad$ Russian <br> German <br> Latin SOCIAL AND <br> Literature BEHAVIORAL SCIENCES <br> Philosophy Economics <br> Speech Arts Geography <br> Theatre Arts History <br>  Political Science <br> SCIENCES Psychology <br> Biology Sociology-Anthropology <br> Chemistry Social Welfare <br> Physics BUSINESS <br>  ADMINISTRATION <br> MATHEMATICS INTERDISCIPLINARY <br>  PROGRAMS <br>  American Studies <br>  Latin-American Studies <br>  Russian Studies |

## Introducing West Chester


#### Abstract

As they criss-cross campus paths, bound variously for conferences, classes, coffee, or the library, West Chester students this fall will once more transform the quiet of stone and grass and trees into that vibrant, living phenomenon: a college at work. But a special distinction falls to these 1971-72 under-graduates-they will be Centennial Year students. Man senses a certain significance and challenge in the turn of a century; West Chester will mark its own historic and challenging moment with a number of special events throughout this year. These events will take note-not only of the College's 100th anniversary as part of the Commonwealth's system of higher educa-tion-but of its heritage from the old West Chester Academy (1812-1869) from which the school emerged. Beyond all public ceremonies this year will be those private thoughts of students and teachers alike as they find their own way to link with a past that began when charter students entered the doors of Old Main one September morning a hundred years ago-and a future that heads searchingly into another century.


## W

est Chester is a multi-purpose college with a student body of more than 5,800 full-time undergraduates. Nearly one thousand additional undergraduates attend the College as part-time students and still another 1,600 are enrolled (mainly on a part-time basis) for graduate studies. West Chester is thus the second largest of the fourteen institutions of higher learning which the Commonwealth owns and maintains for the youth of Pennsylvania. The College offers the Bachelor of Arts, Bachelor of Science, Bachelor of Music, Master of Arts, Master of Science, and Master of Education degrees. Its objectives are to prepare teachers for Pennsylvania's public schools and to provide a liberal arts education for its youth.

The B.S. in Education degree is given in four basic curriculaelementary, secondary, music education, and health and physical educa-tion-and in one area (speech pathology and audiology) of special education. The College also has a program of courses designed to meet certification requirements in safety education and in the special education fields which train for the teaching of mentally retarded and physically handicapped children.

West Chester also maintains an extensive two-track program for teachers in service. One phase is composed of late-afternoon, evening, and Saturday-morning courses for those desiring to satisfy various professional needs, including certification requirements. The second is a graduate program (see below).

## 2/Introducing West Chester

Inaugurated in 1962, the liberal arts program now leads to the Bachelor of Arts degree in arts and letters, social and behavioral sciences, sciences, mathematics, and music; to the Bachelor of Music, and to the Bachelor of Science in Chemistry and in Business Administration, which may be pursued either as a day or an evening program.

The continued growth and improvement of the College's curricular offerings is an ongoing concern of the Administration and the faculty. Under the leadership of the Vice President for Academic Affairs and the Undergraduate Council, periodic evaluations are made, with emphasis on both subject matter content and methods of teaching. Special ad hoc committees make continuous study of a broad range of curricular problems and report their findings and recommendations to the faculty and the Administration.

The various programs at West Chester are comprehensive and designed to satisfy the intellectual, physical, and spiritual needs of all students. A wide span of extracurricular activities affords each student opportunities to mingle purposefully with his fellow students and his faculty, and to seek the fullest expression of his talents and capacities.


## WEST CHESTER'S HISTORY

The present College traces its history back to the West Chester Academy, founded in 1812. Since then, an educational institution bearing the name of West Chester, and figuring importantly in the history of teacher education in Pennsylvania, has been in existence. The College has acquired its present dimensions through a series of changes, largely determined as the Commonwealth assumed increasing responsibility for the education of the youth of Pennsylvania.

West Chester Academy was classified as a "state-aided County Academy." It was non-sectarian and privately owned. James Pyle Wickersham, the nineteenth century educator and diplomat, once spoke of it as "for more than fifty years one of the leading schools of its class in eastern Pennsylvania."

In 1869, under encouragement from the Commonwealth, the Academy was closed, and its properties were sold, to make way for a district normal school. Funds from the sale helped to finance the West Chester State Normal School which, on September 25, 1871, opened the doors of its single stately building to 160 students. (That first building, with wings added, came to be known as Old Main.) West Chester State Normal School continued as a privately owned but state-certified institution until 1913, when it became the first of the Pennsylvania normal schools to be owned outright by the Commonwealth.


In 1927, Pennsylvania initiated a four-year progran of teacher training and named the school West Chester State Teachers College. The Legislature paved the way for an even broader program on January 8, 1960, when the College acquired its present name.

## LOCATION OF THE COLLEGE

West Chester State College is in West Chester, a town which has been the seat of government in Chester County since 1786. With a population of 16,700 , the Borough proper is small enough to have the pleasant aspects of a tree-shaded American town, large enough to contain essential services and the substance of a vigorous community, and old enough to give the student first-hand touch with America's early history.

Students may walk to West Chester's many churches. West Chester has excellent stores and shops, and a fine hospital. The heart of the town is its courthouse, a Classical Revival building designed in the 1840's by Thomas U. Walter, one of the architects for the Capitol in Washington, D.C. Where the courthouse stands, a crossroads hamlet existed for years before the American Revolution. West Chester's first settlers were largely members of the Society of Friends who came to the Colony under William Penn's persuasion. These colonists and their descendants were leaders in the fashioning of a community of grace and charm, and in the development of a culture which produced a remarkable number of artists, writers, and scientists. The imprint of these flowering years-the first half of the nineteenth century particularly-is still evident, though the town is becoming the heart of a suburban area linked with Philadelphia.

In this growing area, described as Greater West Chester and comprising about 50,000 persons, students of the social sciences find abundant opportunities for the study of local, county, and regional government in an era caught in dynamic change.

The proximity of Philadelphia ( 25 miles east) and of Wilmington ( 15 miles south) puts the resources of both cities in convenient range. West Chester is near Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historic attractions of Chester County.

## How to Reach the College

Route 3 (West Chester Pike) from Philadelphia.
Route 100 South from Downingtown Interchange of Pennsylvania Turnpike.
Route 202 South from Valley Forge Interchange of Pennsylvania Turnpike.
Red Arrow Buses from 69th Street Terminal in Philadelphia.
Short Line Buses from the Paoli, Downingtown, Coatesville, or Wilmington stations of Penn Central railroad.
Penn Central Railroad from Philadelphia to West Chester (limited schedule).

Locally, the Short Line has bus service from the West Chester terminal to the campus, a distance of one mile.

In West Chester, follow High Street south to the College. (Route 100 South leads directly into High Street.)

## NORTH AND SOUTH CAMPUS

As a result of an expansion program undertaken more than a decade ago, the physical plant of the College is greatly enlarged today. Now contained on two campuses, West Chester has more than 30 major buildings and a land area of 346 acres. Most of the facilities are on North Campus, where the original campus, at the southern edge of the Borough, has grown to 82 acres. The new South Campus, one-half mile south via New Street, is a 264-acre expanse of gently sloping land affording a wide and pleasing view of rural Chester County. Earmarked for future development, this land now contains the new $\$ 4$-million Health and Physical Education Center and John A. Farrell Stadium, along with various playing and practice fields. The Center's facilities have been nationally commended in the health and physical education field. The building's handsome architectural features place it among the major academic centers of the Commonwealth.

Architecturally, North Campus is a harmonious composite of styles of the late nineteenth century, collegiate Gothic, and the contemporary. A hallmark of West Chester has always been its unusual green-hued serpentine stone, quarried in Chester County and used to build the school's earliest halls. The College is also known for the magnificent old trees which web North Campus.

The $\$ 44,000,000$ building program of the past decade has produced a number of major facilities and utilities which equip the College well for the needs of modern education. The Learning Research Center, the new library, and the two phases of Schmucker Science Center are important new additions. Six high-rise residence halls, spanning the western side of North Campus, are dramatic contemporary elements of the West Chester scene.

The principal buildings on North Campus are:

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## 6/Introducing West Chester

Anderson Hall (1938), a large, five-floor classroom building, extensively modernized in 1966, which houses the administrative offices of the School of Education, the School of Arts and Letters, and the School of Social and Behavioral Sciences, as well as several special services.

Elsie Oleita Bull Learning Research Center (1968), housing the Laboratory School, computer center, a television studio, and research offices.

Ehinger Gymnasium (1930) and Hollinger Field House (1949), connected buildings containing facilities of the School of Health and Physical Education.

Francis Harvey Green Library (1966), described below.
Lawrence Center (1965), which contains dining halls, the campus post office, the College radio station, a snack bar, a student lounge, and Student Affairs offices.

Maintenance Building (1968), a multi-purpose building accommodating the Plant Maintenance, Housekeeping, and Security Departments; various maintenance shops; the Centrex Automatic telephone exchange; and the fire detection center.

Lloyd C. Mitchell Hall (1970), a fine-arts classroom building containing the Department of Art, galleries, and the language laboratory, as well as additional classrooms, practice rooms, and offices for the School of Music, whose building (Swope Hall) adjoins the new hall.

Old Gym (1890), a landmark building in the field of health and physical education. This charming serpentine, facing the quad, now meets various needs of the School of Health and Physical Education and contains a snack bar.

Old Library (1902), a Classical Revival building of great beauty, now serving temporary purposes but scheduled for supplemental services to the forthcoming library complex.

Old Main (1871), the College's original building. Its two wings and annex were added between 1878 and 1886. After nearly a century of use as a residence hall and a classroom and administration facility, this historic serpentine structure is scheduled for demolition.

Philips Memorial Hall (1925), an outstanding example of collegiate Gothic, this stone building houses the Offices of the President, the College's largest auditorium, Philips Memorial Library, a ballroom, the faculty lounge, conference rooms, the Office of Business Affairs, and administrative offices for the Division of Facilities.

Recitation Hall (1892), a classroom building which houses the Department of Foreign Languages, Studio 208, and the College Bookstore. Recitation is a serpentine building.

Reynolds Hall (1871), a former farm home of serpentine now occupied by the College Health Service and the Placement Service.

Schmucker Science Center (1968), a two-phase center including the Biological Sciences and Physical Sciences Buildings. The Center contains classrooms and laboratories, a planetarium, astronomical observatory, television studio, an auditorium, and the Darlington Museum and Herbareum. The administrative offices of the School of Sciences and Mathematics are in Schmucker.

Special Education Building (1960), contains classrooms, a clinic area for special education, and offices of the Coordinators of special education and urban education.

Swope Hall (1959), houses the School of Music, including offices, classrooms, an auditorium, choral and instrumental rooms, a music library, and a music listening room.

Tanglewood, a historic and handsome residence with beautiful grounds, occupied by the President of the College.

Women's Residence Halls: Ramsey, Tyson, and Goshen, a trio of high-rise buildings opened in 1966; McCarthy (1960); and Schmidt, a high-rise under construction and scheduled to be in use in 1971-72.

Men's Residence Halls: Killinger (1959); Sanderson (1970), a high-rise; and Wayne, also a high-rise, due to be in use in Spring Semester, 1971.

A boiler plant, water pedisphere, garage, and laundry, along with several annex houses, complete the physical plant of North Campus.

South Campus facilities presently include:
Health and Physical Education Center (1970), which contains a one-acre gymnasium, divisible into six pneumatically sealed gymnasiums; a three-pool natatorium; multi-purpose teaching stations; research facilities; administrative offices; sixteen lecture classrooms; two dance studios, a physiological research laboratory; two physical therapy rooms; two sauna baths, and other facilities.

John A. Farrell Stadium (1970), providing spectator seating for 7,500 at varsity football and track events, a press box, lighting for night games, and concessions and rest areas.

Athletic Field Complex (1969-70), playing and practice fields for football, hockey, soccer, lacrosse, and baseball; tennis courts; night lighting; and parking for 1,000 cars.

## Future Expansion

To keep pace with ever-increasing enrollments, the College is now moving into the third phase of a long-term expansion program begun in 1958 under the Master Plan for Higher Education in Pennsylvania and involving an expenditure expected to reach \$65-million.

Old Main, having outlived its usefulness, is scheduled for demolition during the 1970-71 academic year and will make way for an additional phase of the Francis Harvey Green Library as well as a humanities classroom building. Among other future projects for which funds have been requested under Phase III are a new Student Life and Health Center, two more residence halls, a second dining hall, and a Dramatic Arts Center.


## FRANCIS HARVEY GREEN LIBRARY

West Chester students appreciate the beauty, conveniences, and modern equipment of the new Francis Harvey Green Library. Opened in the fall of 1966, the handsome contemporary building provides a setting highly conducive to study and research. The present building is the first of two phases, the second of which is now being planned.

With a collection of more than 250,000 volumes and subscriptions to more than 2,600 journals, the library is rapidly growing and is an increasingly important resource for both teaching and research. The library's curriculum laboratory contains an extensive collection of courses of study and textbooks as well as a wide variety of audio-visual materials. Its collection of sheet music, scores, and records is housed in Swope Hall.

The general collection is augmented by an extensive micromedia collection representing more than 300,000 volumes. The micromedia material includes books, periodicals, newspapers, and doctoral dissertations. Adequate facilities for reading this material are available. The specialcollection room houses the Chester County Collection of Scientific and Historical Books; the Normal Collection (a collection of historical books on physical education and publications by and about the faculty and alumni); the Biographies of the Signers of the Declaration of Independence, by John Sanderson; and the Shakespeare Folios. Other collections of importance are the juvenile, curriculum, and music collections and the Philips collection of autographed books. As part of a statewide program to promote world cultural understanding, the library is developing an extensive collection of materials on French culture.

The many services of the library are available to all undergraduate students. Of particular interest are the reference, interlibrary loan, and photoduplication services. The library also mounts art and photographic exhibits of note throughout the year.

## TASK FORCE ON BLACK CULTURE

A significant area of academic endeavor at West Chester was greatly expanded in 1970 with the formation of the Task Force on Black Culture, whose purposes are to communicate to the College the academic concerns of minority group students and to recommend ways of making the curriculum relevant to the needs of all students. Headed by the newly appointed Director of Curriculum Enrichment, the Task Force is concerned both with the development of new offerings in black studies and with the integration of elements of black studies and black culture into many existing courses.

## EDUCATIONAL SERVICES

BUREAU OF EDUCATIONAL MEDIA SERVICES. The College Educational Media Bureau provides assistance for instructional personnel who are planning and producing educational media used in their courses. The Bureau supplies the campus with audio-visual equipment and houses the College Film Library. The closed-circuit television system is operated
by the Bureau, and segments of appropriate courses are taught by television. Another service of the Bureau is production in the areas of motion pictures and still photography, recording, duplicating, and overhead transparencies.

THE DELAWARE-CHESTER REGIONAL INSTRUCTIONAL MATERIALS CENTER. West Chester serves as headquarters for the Delaware-Chester Regional Instructional Materials Center, an affiliation of some 35 Chester and Delaware County school districts. The Center, which is one of 26 such regional operations initiated by the State, makes more than 4,500 films available to its member schools. It also maintains various services which promote the use of audio-visual materials in the public schools of the two counties. College faculty and student teachers may make use of the Center's facilities.

BUREAU OF RESEARCH AND RELATED SERVICES. The Bureau of Research and Related Services fosters the development of basic, applied, and institutional research and provides facilities for the tabulation and analysis of research data. The research function of the Bureau encompasses studies initiated by the faculty and administrative staff of the College as well as cooperative endeavors carried on under the joint sponsorship of the College and various external educational agencies and foundations. The Bureau assists faculty and students to secure financial support for their research projects. A computer center, statistical laboratory, and research facilities are maintained in the Learning Research Center.

Data processing services include the tabulation and summarization of information essential to the operation of the various administrative divisions of the College and the statistical treatment and computer analysis of experimental data obtained from faculty and student research activities. The Department of Mathematics offers courses in computer science.

THE EDUCATIONAL DEVELOPMENT CENTER. The Educational Development Center, cooperatively maintained at West Chester and Cheyney State College, is part of a state-wide network of agencies established by the Pennsylvania Department of Education for the improvement of education through regional cooperation. The Center serves public, private, and parochial schools and agencies and public and private teacher-education colleges within Bucks, Chester, Delaware, and Montgomery Counties. Its program includes (1) publication of Curriculum

Highlights, a newsletter, (2) sponsorship of educational seminars, and (3) assistance to local schools and communities in securing grants and conducting programs under Title I and Title III of the Elementary and Secondary Education Act and Title V of the Educational Professions Development Act ${ }^{\circ}$ P.L. 90-35). Participation by educational agencies is on a voluntary basis. The Center is administered by a director at West Chester and an area curriculum coordinator at Cheyney.

## THE HIGHER EDUCATION OPPORTUNITY PROGRAM

The Higher Education Opportunity Program (HEOP), launched in the summer of 1968 , seeks to give disadvantaged high school students the fullest possible opportunity to progress successfully in college study. From its service area, the College selects a racially integrated group of students who, owing to deficiencies in their socio-economic backgrounds, would normally lack the means, the incentive, and the academic qualifications for admission to West Chester. These students study in an academic and cultural environment designed to compensate for various deficiencies and to give the participants the optimum setting for realizing potentials signaled by their performances in high school.

A lightened first-semester credit load and tutorial and remedial help are among the academic aspects of HEOP, which also includes intensive counseling and a rich exposure to art, music, drama, literature, and sports. The academic growth of the first two classes under the HEOP program gives high promise that the program will prove successful.


## OFFICE OF CULTURAL AFFAIRS

In answer to a need that had mounted with the College's increasing enrollment and expanding activities, the College, in the summer of 1968, created an Office of Cultural Affairs and appointed a director for it. Functioning as the center for the development, scheduling, and coordination of all cultural events, the Office has placed an important new focus upon the multitude of special programs which keep lights burning in at least one assembly hall virtually every night of the year. The constantly increasing events which clear through the Director of Cultural Affairs range over the areas of music, art, dance, cinema, and theater arts, on to lectures, institutes, symposiums, and clinics which supplement the educational experiences of students in a multi-purpose institution.

## THE SPEECH AND HEARING CLINIC

The Speech and Hearing Clinic of West Chester State College provides evaluation and therapy for children with speech and hearing handicaps from the Borough of West Chester and surrounding areas. The clinic also serves as a speech improvement center for College students who need help in meeting minimal speech standards. The Department of Speech and Theatre conducts the clinic, located at 620 South High Street.

## STUDY IN EUROPE

West Chester offers two study experiences which take place in Europe. The Junior Year Abroad Program, sponsored by the College, permits prospective teachers of French to spend two undergraduate semesters at the University of Montpellier in France. The program is described under the Department of Foreign Languages.

The second project is an annual European summer tour conducted by the School of Social and Behavioral Sciences. The tour includes seminars and lectures along the route, which crosses through the past and present of some ten European countries. Students visit museums, galleries, and cathedrals and attend operas, music festivals, and other cultural events. Six credits in history or the social sciences may be earned during the six-week tour, which is open to all undergraduate and graduate students. A faculty member from the School of Social and Behavioral Sciences is always in charge. Details may be obtained from the School.

## OCEANOGRAPHY CONSORTIUM

As a participant in the new Delaware Bay Marine Science Consortium, West Chester provides students in the sciences and geography with opportunities for field study in oceanography. The Consortium, an affiliation of eight Pennsylvania State Colleges and Indiana University of Pennsylvania, was launched in 1968. Its field station is located in Lewes, Delaware, where both undergraduate and graduate students may attend summer courses engaged in direct study of the Atlantic Ocean. Although primarily a summer project at present, the developing program has begun to include field trips to the station as part of fall and spring semester course work in oceanography. Detailed information may be obtained from the School of Sciences and Mathematics.


## GRADUATE STUDIES

West Chester's graduate program, introduced in 1959, has expanded rapidly and now offers study leading to the Master of Education in 17 disciplines and the Master of Arts and Master of Science in a number of fields. With the in-service teacher particularly in mind, West Chester designs its graduate studies for the fall and spring semesters around a schedule of late-afternoon, evening, and Saturday-morning classes. It is possible to undertake full-time graduate programs during the academic year and in Summer Sessions which, in 1971, will consist of a Pre, Regular, and Post Session.

The following graduate programs are available:

Certification
and/or Master
of Education
Biology
Chemistry
Counselor Education
(For those seeking
certification, the
master's degree
is required)
Elementary Education
English
French
Geography
German
Health and Physical
$\quad$ Education
Instructional Media
$\quad$ Education
Latin
Mathematics
Music Education
Physical Science
Physics
Social Science
Spanish
Master of Arts
Biology
English
History
Mathematics

Music
French
German
Latin
Spanish
Philosophy
Master of Science
Chemistry
Educational
Research
Health and Physical Education

Master of Music
(Pending Pennsylvania
Department of Education approval)

## SUMMER SESSIONS

West Chester offers programs for both undergraduates and graduates at summer sessions. In 1971, the summer schedule will be as follows:

1971

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June 7-June 25
June 28-August 6
August 9-August 27
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Pre Session<br>Regular Session<br>Post Session

No student may secure more than six semester hours of credit in one six-week session unless he has permission from the Dean of Undergraduate Studies (for undergraduates) or the Dean of Graduate Studies (for graduates).

Communicate with the Director of Admissions for further information about Undergraduate Summer Sessions and with the Dean of Graduate Studies for further information about Graduate Summer Sessions.

## THE ALUMNI

West Chester has a large and active alumni association whose members demonstrate a marked devotion to the College. The Association holds its annual meeting during Alumni Day-the Saturday preceding Commencement Sunday. Branch organizations are maintained in a number of communities. The Officers of the West Chester State College Alumni Association are shown following the faculty directory.


## Admission to West Chester

Admission to West Chester State College is generally based upon the satisfactory completion of the college preparatory program in the secondary schools. In exceptional circumstances an outstanding student may enter from another curriculum.

No more than five per cent of each Freshman Class at West Chester may be composed of out-of-state students, who are admitted on a highly selective basis. In addition to meeting the College's requirements they must have special abilities, particularly in fields where the demand for teachers is acute and in professions and industries where college-trained personnel is urgently needed.

West Chester welcomes qualified students, faculty, and staff from all racial, religious, ethnic, and socio-economic backgrounds.

## SECONDARY SCHOOL REQUIREMENTS

The candidate must furnish evidence of graduation, with satisfactory scholarship, from an approved secondary school. If a student has attended a non-accredited school, or his preparation is unusual otherwise, the College will submit his credentials to the Credentials Evaluation Division of the Pennsylvania Department of Education, which will determine whether they are acceptable.

## C.E.E.B./A.C.T. EXAMINATION REQUIREMENTS

For a number of years the Office of Admissions has asked applicants to submit scores on various tests administered by the College Entrance Examination Board (C.E.E.B.) of Princeton. In a recent change in admission requirements, West Chester now accepts either scores achieved on C.E.E.B. examinations or the composite score attained on tests given by the American College Testing Program (A.C.T.) of Iowa City.

For purposes of evaluation, scores achieved on either C.E.E.B. or A.C.T. tests are equally acceptable to the Office of Admissions. However, because of structural differences between the testing systems of the two national organizations, the nature of West Chester's test requirements now depends considerably on which of the two programs the applicant chooses to use. For this reason, West Chester's requirements are outlined in two parts, one applying only to applicants with C.E.E.B. scores and the other only to those with A.C.T. scores. Applicants must select the outline appropriate for them.

# PART A. For Applicants Submitting C.E.E.B. Scores 

Required:
Scholastic Aptitude Test (SAT)
English Composition Achievement Test
For a great portion of applicants, these two are the only tests which the College requires, although these applicants are strongly urged to submit one additional achievement test of their choice.

This category includes applicants intending to major in the following:
Business Administration Music Education
Elementary Education Music (Bachelor of Music Program)
Health Education
Health and Physical Education
C.E.E.B. SCORES REQUIRED FOR

SECONDARY EDUCATION APPLICANTS
SAT and English Achievement Test plus the achievement test for the intended concentration (major). If that major is English and if the applicant has studied a foreign language, the College also requires the achievement test in that language.
C.E.E.B. SCORES REQUIRED FOR B.A.

PROGRAMS AND THE B.S. IN CHEMISTRY
SAT and English Achievement Test plus the achievement test for the intended concentration (major) plus the achievement test in his foreign language-provided he has studied a foreign language.

## PART B. For Applicants Submitting A.C.T. Scores

The A.C.T. program embraces four tests, covering English, Mathematics, Natural Science, and Social Science, which—regardless of the student's intended major field-are administered to all participants, producing a composite score.

In view of the inclusive nature of the A.C.T. program, no additional A.C.T. tests are required of any applicants.

However, in considering applicants for some areas of study, the Office of Admissions asks students who have studied a foreign language to take a test in that language. This test is administered at the College by the Department of Foreign Languages. Included in this requirement are:

Applicants for secondary education whose intended major is either English or foreign languages.

Liberal Arts applicants who wish to pursue the B.A. degree in any program, including music; or the B.S. in Chemistry.

POLICY FOR DEFICIENT SCORES. Students admitted with low scores in English on either the C.E.E.B. English Composition Achievement Test or the English section of the A.C.T. tests are required to take a remedial English course, either in Summer Sessions preceding their freshman year or during their first semester.
ARRANGING FOR TESTS. Application forms and information about the time and place for the tests, for either C.E.E.B. or A.C.T., may be obtained from secondary school guidance counselors or from the testing programs. Their addresses are:

College Entrance Examination Board
P.O. Box 592

Princeton, N.J., 08540

American College Testing
Program
P.O. Box 414
Iowa City, Iowa, 52240

Communicate with the Office of Admissions or with the Department of Foreign Languages for further details, including dates, for the foreign-language test administered at the College.

Submitting Scores to West Chester. The scores must be sent directly to the Office of Admissions by the College Entrance Examination Board or the American College Testing Program. Either junior or senior year scores will be accepted.

## ADDITIONAL REQUIREMENTS AND RECOMMENDATIONS IN SPECIFIC FIELDS

Foreign Languages. Although previous study in foreign languages is not required, the College views it as highly desirable for those who intend to teach in the fields of foreign languages or English and for those pursuing an arts and sciences program.

Mathematics. Students intending to elect mathematics as their major field must present three secondary units of mathematics, including algebra and plane geometry.

Health and Physical Education and Health Education. See School of Health and Physical Education for additional admissions requirements.

Music. See School of Music for additional admissions requirements.

## REQUIRED REFERENCES

Health. The College requires a satisfactory medical report certifying that the applicant is in sufficiently good health to meet the demands of the College program. Forms for the necessary health examination are supplied by the College at the proper time.

Character. A written evaluation of the applicant must be included with the transcript. The evaluation may come from the principal, a guidance staff member, or another school official, and should appraise the student's character, personality, interests and abilities within the school community, and his promise of development.

## REQUIRED INTERVIEWS AND CONFERENCES

Before making a favorable decision upon an application, the College asks the student to come for either an interview or an admissions conference. The Office of Admissions will communicate with the student at the proper time; the student is not to seek the interview.

## CITIZENSHIP REQUIREMENT FOR TEACHERS

To be eligible for a teacher's certificate in Pennsylvania, a student must be a citizen of the United States. Exception is made for foreign languages, for which aliens may be certified on a three-year basis.

## HOW AND WHEN TO APPLY FOR ADMISSION

Candidates may obtain forms and instructions by sending the request form at the back of this catalogue to the Director of Admissions.

Candidates for the fall semester are urged to initiate the application procedure immediately after completing their junior year of secondary school. Facilities permitting, the Director of Admissions will accept applications throughout the winter and spring of the year in which admission is desired.

Candidates for the spring semester should submit the request by November 1. They must take their C.E.E.B. or A.C.T. tests no later than July.

Out-of-state students should write to the Office of Admissions, giving the reasons for their interest in West Chester, their desired field of study, their scholastic records, and their scores on the C.E.E.B. or A.C.T. tests.

Fees. See Expenses.
Last Day for Admission of New Freshmen. All application procedures must be completed and in the Office of Admissions by July 1 for a fall semester or December 1 for a spring semester. If enrollment quotas become filled before these dates, admissions will be closed.

Notice of Decisions. Candidates will hear from the Director of Admissions soon after decisions are reached. The secondary schools of those seeking admission as freshmen will also be notified.


## READMISSION OF FORMER STUDENTS

Students who have withdrawn from West Chester for acceptable reasons may ask the Office of Admissions for an application for readmission. Those who have attended any institutions of higher learning since leaving West Chester must request those institutions to forward transcripts of their records to the Office of Admissions.

Students intending to enroll in student teaching in the first semester of readmission must file an application for student teaching with the Director of Student Teaching at least four months before their expected readmission.

Students who were dismissed or asked to withdraw for academic reasons, and those who withdrew with a scholastic index less than required for their classification, will not be considered for readmission as full-time students for at least one semester, and then only if their scholastic index has been raised by attendance at evening classes or summer sessions at West Chester to that required for their classification.

Readmission to West Chester as a degree candidate is not possible if the student has been permanently (i.e., twice) dismissed because of academic failure.

All readmission applications must be filed not later than June 1 for the fall semester or December 1 for the spring semester. If enrollment quotas become filled before these dates, admissions will be closed. (Consult also Academic Information.)

## ADMISSION OF COLLEGE GRADUATES SEEKING CERTIFICATION

Graduates of other colleges who wish to obtain teaching certification may be admitted as special students.

## ADMISSION OF TRANSFER STUDENTS

Students previously enrolled in any institution of collegiate rank, no matter how briefly, are classified as transfer students. A cumulative grade-point average of 2.00 or higher is required for their admission.

No more than five per cent of the College's transfer enrollment may be students who are not legal residents of Pennsylvania. Out-ofstate students will be admitted selectively, on the basis of special abilities and of particular needs for teachers in certain fields and for collegetrained personnel in various professions and industries.

The last day to qualify for admission to the fall semester is July 1 and for the spring semester, December 1. If quotas are filled prior to
those dates, enrollment will be closed earlier. Actually, September quotas are usually reached in April.

An applicant must file transfer application forms, obtainable from the Office of Admissions, and must also see that the Director of Admissions receives the following material:
(1) Two official transcripts of records from all institutions attended. To be acceptable, this must show honorable dismissal. If a preliminary (incomplete) transcript is submitted, it is the student's responsibility to have a completed transcript filed later.
(2) A letter of recommendation from the Dean of Men (for men) or the Dean of Women (for women) of the last college attended full-time. To qualify the student for admission, the letter must state that the student's disciplinary record was entirely satisfactory.
(3) Two letters of recommendation from persons (not relatives) who have known the applicant well in his home community.
(4) A letter from the applicant, explaining fully his reasons for wishing to transfer to West Chester.
(5) Students with less than two semesters of college experience (less than 30 semester hours of credit) must supply College Board Scholastic Aptitude Test or American College Testing scores. These must meet the College's minimum for the curriculum concerned.

It is the applicant's responsibility to ask the Office of Admissions for an appointment for a required interview, after an application, including either a preliminary or final transcript, is on file.

Students enrolled in other institutions during the fall semester, and applying for admission the following spring semester, must supply midterm grades for the semester in progress.

Admission of qualified transfer students is subject to the availability of a place in the classes to which they should be assigned. Students other than commuting students will be approved only if residence facilities are available. (Consult also Academic Information.)

## ADVANCED CREDIT REQUIREMENT

Advanced credit may be granted for equivalent courses completed in accredited institutions of collegiate grade.

Credit will not be transferred if the course grade is the lowest passing grade of the institution assigning it. If D is the lowest passing mark, courses so marked will not be accepted. If numerical marking is used, courses will be accepted when the grade is ten or more points above the passing mark.

Applicants from collegiate institutions (including community colleges and junior colleges) which are not accredited by one of the six Regional Associations in the United States will be considered for admission under the following regulations:
(1) An applicant's cumulative grade-point average must be 2.00 (C) or better and, in the cases of community and junior colleges, must meet their recommended mark for transfer.
(2) The evaluation of academic courses listed on transcripts from an institution not accredited by one of the six Regional Associations will be made in accordance with the recommendations of the American Association of Collegiate Registrars and Admissions Officers in their Report of Credit Given by Educational Institutions. Thus, if the Report recommends that an institution's credits be recognized for transfer, West Chester will accept them for equivalent courses, provided the grades earned are $C$ or better.
(3) The evaluation of courses applying to the special areas of health and physical education and music will be made by the respective Schools in accordance with their policies as follows:
a. Health and Physical Education. Under the provisions of the national professional association, all colleges offering health, physical education, and recreation have reciprocal transfer relationships. Thus, a student wishing to transfer in health and physical education will receive transfer credits in the major field in terms of major courses satisfactorily passed (C or better) at a college accredited by the National Council for Accreditation of Teacher Education and the American Association for Health, Physical Education, and Recreation. Academic courses will be evaluated as stated in 2, above.
b. Music. Credit will be allowed only on the basis of music tests for music courses. Academic courses will be evaluated as stated in 2, above.
(4) Applicants must submit College Board Scholastic Aptitude Test scores which meet the minimum established by the College for the curriculum concerned.
(5) The West Chester State College graduation requirements in effect at the time of admission will apply to transfer students unless they do not graduate within four years of enrollment. In such an instance, the Dean of Undergraduate Studies may make course substitutions which he deems acceptable for degree requirements.
(6) Applicants shall complete the approved procedure for applying for admission. (See Admission of Transfer Students, above.)

West Chester does not allow credit for courses taken through correspondence.

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## ACCEPTANCE OF AN OFFER OF ADMISSION

Each applicant who accepts an offer of admission to the College must sign an acceptance form which includes the following statement: "I hereby submit myself to the jurisdiction of the College and agree to be governed by the rules and regulations of the College now existing or to be adopted during the period in which I am enrolled as a student."

## POLICY ON EARLY ADMISSIONS

Under the early-admissions policy, certain highly qualified students may enter West Chester as freshmen upon completing their junior year of secondary school. The policy is designed to let students with high academic achievement and unusually mature personal development undertake a college program when it is evident that they will benefit more from it than from the senior year in secondary school. In determining whether a student is ready for the college program and the college community without the senior year in secondary school, the College carefully evaluates a number of factors beyond the attainment of high grades. Students whose records, in the opinion of the guidance counselor, indicate that they might qualify for early admission are advised to write to the Director of Admissions for information. The closing date for application is June 1.

## AUDITING PRIVILEGES

See Academic Information.



## Expenses

Expenses are Subject to Change

## Fees

## BASIC FEE FOR PENNSYLVANIA STUDENTS

The basic fee* for full-time students who are legal residents of Pennsylvania is $\$ 325$ per semester. For part-time students (those taking eleven or less semester hours) the basic fee is $\$ 26$ per semester hour (minimum \$78).

## BASIC FEE FOR OUT-OF-STATE STUDENTS

The basic fee* for all out-of-state students is $\$ 43$ per semester hour. With a sixteen-credit-hour load, this amounts to $\$ 688$ per semester. The minimum fee for out-of-state students on a part-time basis is $\$ 129$.

Except for the basic fee, the expenses of out-of-state students are the same as those of Pennsylvania students.

## SPECIAL CURRICULUM FEES

In addition to the basic fee, students enrolled in the School of Music or the School of Health and Physical Education pay special curriculum fees as follows:
School of Music: $\$ 45$ per semester (prorated for part-time students). School of Health and Physical Education: $\$ 18$ per semester (prorated for part-time students).

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## HOUSING FEE

The housing fee for students living in campus residence halls is $\$ 360$ per semester, and covers room and meals while the College is in session. (Holiday and recess schedules may be noted on the College Calendar.) Independent housing students or off-campus students who desire to eat their meals in the College dining hall must secure permission from the Office of the Dean of Men (for men students) or the Dean of Women (for women students). The College charges these off-campus students $\$ 180$ per semester for meals in the dining hall.

## FINANCIAL OBLIGATIONS

Students and their parents or guardians are asked to observe that all fees and costs are subject to change without notice, and that, since the acceptance of a student is for a semester, financial obligations are accordingly for a semester.

At his discretion, the President may authorize payments on a monthly basis for full-time students on scholarships, whose circumstances require a deferred payment schedule. Requests for a deferred-payment schedule should be sent to the Director of Business Affairs.

## ADVANCE PAYMENT OF HOUSING AND BASIC FEES

All students are required to pay their housing and basic fees in advance of each semester. The College sends bills for these fees preceding each semester. If payment is not made within the stipulated period, the student is dropped from the admissions list or the rolls of the College and loses all privileges and priorities, including his room reservation.

For the academic year 1971-1972, payments will fall due as follows:

| Fall Semester: | August 2, 1971 |
| :--- | :--- |
| Spring Semester: | January 3, 1972 |

Notification of any changes in the above dates will accompany the invoices for the Fall and Spring Semesters.

Checks should be made payable to the "Commonwealth of Pennsylvania" and mailed to the Office of Business Affairs, West Chester State College, West Chester, Pa. 19380.

## APPLICATION FEE FOR NEW STUDENTS

An application fee of $\$ 10$ is required of all applicants. It is not refundable under any circumstances and is not credited to a student's account. The application fee must be paid by cashier's check or money order (not personal check or cash).

## acceptance fee for new students

The student accepts an offer of admission by paying an additional $\$ 75$ as a guarantee of his intention to enter the College in the semester indicated. This fee is not refundable, but upon enrollment it is credited toward the student's basic fee. The acceptance fee must be paid by cashier's check or money order.

## ADVANCE REGISTRATION FEE FOR RETURNING STUDENTS

Returning students affirm their intention to register for the immediate semester by their advance payment of semester fees (see above).

## DAMAGE FEE

Students are held responsible for damage, breakage, loss, or delayed return of college property and will be charged for any damage other than that occurring from normal use or deterioration. If a student damages College property while using an appliance not provided by the College, he may be charged a proportionate amount of the repair cost.

## PRIVATE MUSIC INSTRUCTION FEES

Students enrolled in the School of Music pay no extra fees for required private instruction in voice, piano, or band or orchestral instruments, nor for the use of pianos for practice. Music majors are, however, charged for the following:
(1) Pipe organ for practice, one period each weekday, $\$ 45$ per semester.
(2) Band or orchestral instruments, $\$ 6$ rental per semester.

Elementary Education Majors whose Area of Interest is Musiccharged a lesson fee of $\$ 45$ per semester if they elect private instruction in
voice, piano, organ, or band or orchestral instruments. Pianos for practice are available at no charge. The rates for organ practice and use of band or orchestral instruments are those shown above for music majors.

Students in one of the programs in the School of Arts and Letterscharged at the same rates as elementary education majors (above).

All Other Students-charged a lesson feee of $\$ 45$ each semester for one half-hour lesson per week, plus a $\$ 45$ out-of-music curriculum fee per semester. A charge of $\$ 6$ per semester is made for a daily practice period at the piano. The rates for organ practice and the use of band or orchestral instruments are those shown above for music majors.

## MISCELLANEOUS FEES

Diploma Fee of $\$ 5$. Required of degree candidates.
Record Transcript Fee of \$1. Charged to students for the second and all subsequent transcripts of records. The $\$ 1$. fee applies also to those not currently enrolled. (A cashier's check or money order is required.)

Late Registration Fee of $\$ 10$. Required of students completing registration after the official registration date.

Late Payment Fee of $\$ 5$. Charged for overdue payments required during the semester.

Transient Lodging Fee of $\$ 1.58$. Charged for overnight guests.
Additional Housing Fee of $\$ 2$ per week. Required when one person is permitted to occupy a double room. (This privilege is given only in summer sessions.)

Auditing Fee. Auditors are charged the part-time basic fee of $\$ 26$ per semester hour if residents of Pennsylvania, or $\$ 43$ per semester hour if out-of-state students. Minimum fees are $\$ 78$ and $\$ 129$ respectively. (See Auditing Privileges in Academic Information.)

## POLICIES ON REPAYMENTS AND REFUNDS

(1) Students who withdraw from the College after paying their semester fees will not be eligible for a refund of the room fee ( $\$ 180$ ) unless they give written notice by August 1 for the fall semester and by January 1 for the spring semester to: (a) the Office of Undergraduate Studies and (b) the Office of Business Affairs.

In any circumstance, students who withdraw after paying their semester fees are subject to a minimum forfeit of $\$ 75$.
(2) Resident students who change their housing status will likewise not be eligible for a refund of their room rent ( $\$ 180$ ) unless they give written notice by August 1 for the fall semester and by January 1 for the spring semester to: (a) the Dean of Women or Dean of Men and (b) the Office of Business Affairs.
(3) Repayments will not be made to students who are temporarily or indefinitely suspended, dismissed, or who voluntarily withdraw from the College.
(4) In cases of personal illness, certified by an attending physician, or for other reasons which may be approved by the Board of Trustees, the College will refund the proportion of the housing and other basic fees for the part of the semester which the student does not spend in the College. No refund will be made for an absence of less than two weeks. Application for a refund must be made in writing to the Office of Business Affairs.
(5) Repayments of the application fee or acceptance fee will not be made under any circumstance.

## DELINQUENT ACCOUNTS

No student will be enrolled, graduated, or given a transcript of his record until all charges due at the particular time are paid.

## ADDITIONAL COSTS

## COMPULSORY ACCIDENT INSURANCE

A policy costing approximately $\$ 10$ per year is compulsory for all students in health and physical education, for all students participating in the intercollegiate athletic program, and for all students who are members of a club of an athletic nature.

## INTRACOLLEGIATE GOVERNMENTAL ASSOCIATION FEE

A student activities fee of $\$ 25$ per semester is collected from all full-time students, and administered through a cooperative organization under regulations approved by the Board of Trustees. It covers the cost of the student
activities program in such areas as athletics, various musical organizations, lectures, entertainment, and student publications. The student activities fee should be paid promptly upon receipt of the bill. Checks should be drawn to "IGA" and mailed to the Intracollegiate Governmental Association.

Part-time students may secure the benefits of the activities program, at their initiative, by paying the $\$ 25$ fee at the College Bookstore.

## BOOKS

Each student buys his own books and supplies. They are available at the college bookstore, at a cost of approximately $\$ 75$ each semester.

## GYMNASIUM UNIFORMS

Men students in the B.S. in Health and Physical Education degree program are required to buy athletic and gym outfits costing approximately $\$ 35$ for the first semester and $\$ 35$ for the third semester.

Women Students in the B.S. in Health and Physical Education degree program must buy, for their first semester, uniforms costing approximately $\$ 70$. Order forms are sent to each applicant upon her acceptance by the College. An additional expenditure of $\$ 15$ is required of all sophomores.

All other students are required to purchase a regulation gym outfit. For the women students this includes a pair of blue shorts, a white shirt, a white sweat shirt, white socks, and canvas tennis shoes, costing altogether about $\$ 20$. For men the outfit includes a pair of white shorts, a white T-shirt, white socks, and canvas gym shoes, at an approximate total cost of $\$ 10$.

## IDENTIFICATION CARDS (I. D. CARDS)

On the day of registration a charge of $\$ 1$ is assessed for student identification cards, used to admit students to College functions sponsored by the Intracollegiate Governmental Association, and to the College dining room. The cards carry the student's photograph and show his home address and IBM number. If lost, they may be replaced for $\$ 2$.

## COUNCIL DUES

Every student is a member of Men's or Women's Government and as such is assessed Council Dues of $\$ 2$ per year.

## CLASS DUES

Class dues constitute an obligation which every full-time student assumes upon admission, and must be paid at the time of registration. Each class determines its dues. For the 1970-1971 academic year they were: Freshman Class, \$5; Sophomore Class, \$12; Junior Class, \$22; and Senior Class, \$26.

## FRESHMAN SWIM-SUIT RENTAL

All freshmen pay a swim-suit and towel rental fee of $\$ 3$, covering use of a suit throughout their undergraduate years.


# Summary of Yearly Costs for Full-Time Pennsylvania Students 

[Because they vary, class dues and the cost of required gymnasium uniforms are not included in these
schedules. The student may consult Additional Casts, above.]

## All Curricula but Music and Health and Physical Education

a. Students Living on Campus
Basic Fee \$650

Student Activities Fee 50
Books (approximately) 150
Room and Board 720
\$1,570
b. Day Students

Same as above, minus Room and Board $\$ 850$
Health and Physical Education Curricula
a. Students Living on Campus

Basic Fee and Special Curriculum Fee $\$ 686$
Student Activities Fee 50
Books (approximately) 150
Room and Board 720
\$1,606
b. Day Students

Same as above, minus Room and Board \$886
Music Curricula
a. Students Living on Campus

Basic Fee and Special Curriculum Fee $\$ 740$
Student Activities Fee 50
Books (approximately) 150
Room and Board 720
\$1,660
b. Day Students

Same as above, minus Room and Board \$940
Summary of Yearly Costs For Part-Time
Students (Pennsylvanians)
Pennsylvania part-time students may calculate a summary of costs by developing the basic fee from the charge of $\$ 26$ per semester hour (minimum \$78). If enrolled in music or health and physical education, they
will need to include their special curriculum fee, explained at the beginning of this section.

## Summary Of Yearly Costs For Out-Of-State Students

Out-of-state students may calculate a summary of costs by developing the basic fee from the charge of $\$ 43$ per semester hour (minimum $\$ 129$ ). If enrolled in music or health and physical education, they will need to include their special curricula fee, explained at the beginning of this section.

## EXPENSES AND FEES UNDERGRADUATE SUMMER SESSIONS

## Board and room: \$20 a week.

Activities fee (Regular Session): \$3.50.
Activities fee (Pre and Post Session): \$1.75.
Basic fee for legal residents of Pennsylvania: $\$ 26$ per semester hour of credit. (Minimum basic fee for the Regular Session: \$78. Minimum basic fee for the Pre or Post Session: \$39.)
Basic fee for out-of-state students: $\$ 43$ per semester hour of credit. (Minimum basic fee for the Regular Session: \$129. Minimum basic fee for the Pre. or Post Session: \$64.)

A special health-and-physical-education fee of $\$ 3$ per summer course is applicable in courses-such as driver education-which utilize College equipment. Special music fees apply for students taking private instruction.

All summer-session fees are due and payable on the general registration dates. The following late fees are charged:
(1) A late pre-registration fee of $\$ 10$ for failure to furnish the required preregistration form within the pre-registration period, which ends two Fridays prior to any session.
(2) A change-of-course fee of $\$ 5$ for a course change made after pre-registration.
(3) A late payment fee of $\$ 10$.


## Financial Aid

The purpose of the West Chester State College financial aid program, which is administered under the Director of Financial Aid to Students, is to provide monetary assistance to students who can benefit from further education, but who cannot do so without such assistance. West Chester State College administers a comprehensive program of scholarships, grants, loans, and student employment which enables many students with limited funds to meet their college costs.

Each applicant for financial aid must:

1. Be accepted for admission to West Chester State College.
2. Submit an application for financial aid to the Director of Financial Aid, Room 103, Lawrence Center, West Chester State College. The necessary forms will be included with the admissions materials which are sent to a student after he or she has been formally accepted at West Chester State College.
3. Submit a Parents' Confidential Statement (PCS) by May 1 to the College Scholarship Service, P.O. Box 176, Princeton, New Jersey 08540. The "PCS" form may be obtained from high school guidance offices, the College Scholarship Service, or the Director of Financial Aid at West Chester State College.
Please note that submission of the above forms does not automatically entitle a student to receive financial aid.

Unless otherwise specified, requests for scholarships, loans and employment opportunities described herein should be made to the Director of Financial Aid, West Chester State College.

## SCHOLARSHIPS

Alpha Sigma Phi Scholarship. An annual $\$ 100$ award given by the Alphite Society to a woman student on the basis of citizenship, scholarship, and need.

Bethlehem Alumni Club Scholarship. \$200 given annually to a Bethlehem High School or Bethlehem Catholic High School senior entering the College the next year.

James B. Bonder Memorial Scholarship. An annual award to a deserving football squad member by Mrs. James B. Bonder, alumni, and friends, in memory of Dr. Bonder, former football coach and faculty member, who died in 1965.

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Laury Samuel Brokenshire Scholarship. This $\$ 100$ scholarship is presented annually as a memorial to Laury Brokenshire, a member of the class of 1959, by his parents, Mr. and Mrs. James R. Brokenshire, of Reading. It is awarded to an outstanding Junior Class music student selected by the School of Music faculty.

Jean Burger Scholarship. A $\$ 100$ award presented each year by Mr. and Mrs. Robert A. Burger, of Leola, to an outstanding sophomore or junior woman gymnast in memory of their daughter, Jean Burger, who was a health and physical education major and gymnast at West Chester.

Delaware County Federation of Junior Women’s Clubs Scholarship. A yearly award of about $\$ 100$, given to at least one Junior Class woman residing in Delaware County.

Dr. Robert E. Drayer Memorial Award. An annual award for the senior who graduates with the most distinguished record in history, in memory of Dr. Robert E. Drayer, Assistant Professor of History, who died in 1968. The Department of History selects the recipient.

Friars Memorial Scholarship. This $\$ 100$ annual scholarship honors West Chester students who died in World War II. The recipient is a man in the Junior Class.

Arthur E. Jones Memorial Scholarship. Talent in the vocal-choral area and scholarship are among considerations for an annual award to a music student in remembrance of Dr. Arthur E. Jones, former Chairman of Choral Music. To be eligible, a student must be a junior who has completed a course in choral conducting. The Department of Vocal and Choral Music selects the recipient.

Walker Hamilton, Jr. Memorial Scholarship. As a memorial to Walker Hamilton, Jr., an Associate Professor of English who died in 1968, the Department of English annually makes an award to an academically superior English major. The recipient must have completed three years at West Chester.

School of Health and Physical Education Scholarship. Five $\$ 100$ scholarships, awarded to sophomore students in health and physical education.

Kift-Mullen Memorial Scholarship for Future Teachers. $\$ 200$ given annually to a junior or senior who is a graduate of Allentown High School or Allentown Central Catholic High School. The Robert L. Kift-Thomas R. Mullen, Jr. Memorial Fund, maintained by Lehigh Structural Steel Company, Allentown, is the donor.

Martin Luther King, Jr. Memorial Award. An annual award given to one or more Afro-American students by the West Chester campus chapter of the N.A.A.C.P. in honor of the late Dr. Martin Luther King, Jr. Applicants are reviewed by the campus chapter of N.A.A.C.P.

Samuel Martin Scholarship. Available to students of limited means who are preparing to teach. Children of Friends or students in sympathy with Friends are preferred. Applications are made to Elbert N. Pusey, Esquire, 30 West Market Street, West Chester.

Sarah H. Mfllor Scholarship Fund of the Chester County Council of ParentTeachfr Associations. A $\$ 100$ award, made yearly to one or more graduates from selected Chester County high schools in memory of a former West Chester student, teacher, and Trustee.
S. Powell Middleton Memorial Scholarsimp. An annual award to a freshman music student for talent and achievement on an orchestral instrument. The award honors the former conductor of the College Symphony Orchestra, who died in 1970.

Michael Morochko Memorial Piano Award. The Department of Keyboard Music presents a $\$ 200$ scholarship annually to an outstanding student pianist as a memorial to Michael Morochko, father of a former student.

Music Sophomore Scholarship. Three $\$ 100$ scholarships, given annually to School of Music sophomores. College citizenship and musical performance are criteria.

Hillary H. Parry Memorial Scholarship. An annual award to a junior music student, granted for scholarship, citizenship, and achievement in vocal study. The scholarship is in remembrance of a former teacher of voice.

Phi Mu Alpha (Sinfonia) Powell Middleton Award. An annual $\$ 100$ award to a male music major whose musicianship, scholarship, and character are outstanding. Phi Mu Alpha (Sinfonia), men's music fraternity, presents the award in memory of S. Powell Middleton, former conductor and instrumental teacher at the College.

William Pyle Philips Scholarships. Awarded annually to at least twenty juniors and seniors who are natives of Chester County. The scholarships recognize high scholastic ability and citizenship, and cover the students' yearly basic fees. If recipients are music or health and physical education majors, the special curriculum fee is also covered.

Theodore Prisser Foundation Scholarship. Two $\$ 200$ scholarships, made available by the Presser Foundation's Board of Trustees, are awarded each year to juniors or seniors in music education. The School of Music faculty makes the selections.

Anne M. Schaub Memorial Scholarship. As a memorial to a former faculty member of the School of Health and Physical Education, a scholarship is bestowed annually to a second-semester sophomore woman majoring in health and physical education.

Hannah Kent Schoff Memorial Scholarshif. Two scholarships of $\$ 150$ yearly or $\$ 600$ for four years are available from the Pennsylvania Congress of Parents and Teachers for students entering teacher education at any of the 13 Pennsylvania State Colleges or Indiana University of Pennsylvania. High school seniors become candidates upon recommendation of their guidance counselors. Application forms, available from guidance counselors, must be filed with the selected institution before March 1.

Schuylkill County Alumni Club Award. An annual award based on need, ability, and promise, given to a West Chester student residing in Schuylkill County.

David M. Sensenig Memorial Scholarship. $\$ 50$ savings bonds given annually to two juniors with outstanding ability in mathematics. Dr. Sensenig was chairman of the Department of Mathematics from 1895 to 1908.

Sico Scholarships. $\$ 300$ scholarships, in limited number, provided by the SICO Company of Pennsylvania to students from specified localities entering West Chester in the field of elementary education. Competitive examinations for the scholarships take place at West Chester each March. Applications from high school seniors must be filed before March 1 through their guidance counselors. The stipulated areas of legal residence are: Chester, Adams, Berks, Cumberland, Dauphin, Delaware, Lancaster, Lebanon, and York Counties; Kent, New Castle, and Sussex Counties in Delaware; and Cecil County, Maryland.

Dr. Charles S. Swope Memorial Scholarship Trust. A scholarship trust established by the Swope family in memory of Dr. Charles S. Swope, who served as President of West Chester State College for a quarter of a century. Several $\$ 600$ Scholarships are awarded yearly to outstanding students in one of the College's teachereducation programs. The Trustees Scholarship Committee determines the recipients upon the basis of academic achievement, character, dedication to the teaching profession, and participation in extracurricular activities. Applications may be obtained from the Office of the President or the Dean of Undergraduate Studies.

Valkyrie Club Scholarship. The Club, composed of women majors in health and physical education, awards an annual $\$ 100$ scholarship to one of its Junior Class members.

York County Alumni Award. A yearly award, in memory of Elsie Oleita Bull, for a York County resident entering or attending West Chester. Need, ability, and achievement are the criteria. The amount varies.

Pennsylvania Department of Education Scholarships. The Pennsylvania Department of Education offers a scholarship of $\$ 200$ per year for four years to the high school senior earning the highest score in competitive examinations given in each county of the Commonwealth. The scholarships may be used at West Chester. See guidance counselors for instructions about the examinations.

Pennsylvania State Scholarships. The Scholarship Program of the Commonwealth of Pennsylvania, created by the 1965 General Assembly, aids qualified Pennsylvania students who need financial assistance in order to attain a higher education. The scholarships are based upon the student's academic potential as shown on the Scholastic Aptitude Test of the College Entrance Examination Board, upon admission to an institution of higher learning, and upon need for financial assistance, as determined by the Pennsylvania Higher Education Assistance Agency.

## Counseling Services for Seniors Seeking Graduate Assistantships or Fellowships

Seniors planning to pursue graduate study at other colleges or universities may obtain information about scholarships, fellowships, or assistantships from the Director of Guidance and Counseling or the library. Conferences with department chairmen or faculty advisers are recommended.

## LOANS

National Defense Student Loan Fund. This Government Loan Program, established under the National Defense Education Act of 1958, provides for the establishment of higher education loan funds at institutions of higher education. Through the institutions, long-term, low-interest loans may be made available to qualified students in the institutions who are in need of financial assistance in order to pursue a course of study. The Program includes loan-cancellation provisions designed to attract superior students to the teaching profession at all academic levels. Further information may be secured from the Director of Financial Aid.

Pennsylvania Higher Education Loan Plan. This student loan plan was created by the Act of August 7, 1963, P.L. 549. Its purpose is to improve educational opportunities for residents of Pennsylvania who are attending approved institutions of higher learning in the State or elsewhere in the United States. To be eligible, students must be legal residents of Pennsylvania and admitted to or enrolled in an approved institution of higher education in the United States.

Application forms may be obtained from participating banks in the students' communities or from the Pennsylvania Higher Education Assistance Agency, Harrisburg, 17102.

West Chester State College Student Emergency Loan Fund. Students doing satisfactory academic work and needing funds to continue in the College may obtain short-term loans up to $\$ 100$ from this fund, which consolidates funds once maintained by the former Student Activities Association and the B'nai B'rith Lodge. The loans must be repaid before graduation or prior to registration for the next academic year.

General Student Alumni Loan Fund. The West Chester State College Alumni Association maintains a loan fund from which students in financial need may borrow up to $\$ 100$. No interest is charged, although legal security is required. Applicants must have a satisfactory academic record. The loans must be used for college expenses and be repaid before graduation or prior to registration for the next academic year.

Viola Marple Scholarship Loan Fund. The will of Miss Viola Marple, a former teacher in the Department of English, provides scholarship loans for the education of two deserving women students whose records of ability, scholarship, and character

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promise competence for teaching. Recipients of the interest-free and renewable loans are selected by the English faculty and the President. Application forms may be secured from the Chairman of the Department of English.

## STUDENT EMPLOYMENT

Many opportunities to work on campus or in the community are available through the Director of Financial Aid. Students seeking this type of assistance are required to submit the Parents' Confidential Statement described at the beginning of this section.

Student Assistants. A limited number of students are employed as helpers in laboratories, offices, and in the library. Usually, some skill or training is required. The positions are primarily available to those who could not otherwise attend college. The earnings must be used exclusively for college expenses.

Student Waiters. Students are employed on an hourly basis in the dining hall. These positions, too, are primarily available to those who could not otherwise attend college. The earnings must be used exclusively for college expenses.

Part-time Employment. Students may seek part-time work or odd jobs by registering with the Director of Financial Aid. Although every effort is made to provide employment, students should not anticipate it as a certainty.


## Student Living

## ADMINISTRATIVE CLASSIFICATION OF STUDENTS

Although the majority of West Chester's undergraduates live on the campus, many commute to the College. For administrative purposes, the College classifies its students as:

## (1) RESIDENT STUDENTS

a. R1—Students living in College Residence Halls

These students live in residence halls owned and operated by the College and are required to take meals in the dining hall.
b. R2—Students living in Fraternity or Sorority Houses

Students living in fraternity or sorority houses are governed by the rules and regulations established by the Interfraternity and Intersorority Councils in cooperation with the Dean of Men and the Dean of Women.

## (2) INDEPENDENT HOUSING OR OFF-CAMPUS STUDENTS

These students live away from the homes of their parents or legal guardians but not in a house supervised by the College or subject to College rules and regulations.

## (3) DAY OR COMMUTING STUDENTS

This classification includes students who travel or commute to and from the College from their legal residence.

## HOUSING

The residence halls on the campus provide accommodations for approximately 3,000 students.

As of September, 1971, newly admitted students will not be guaranteed housing for their full four years unless adequate housing in the residence halls becomes available.

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Room Assignments. The Dean of Men and the Dean of Women make the room assignments for all students living in the residence halls. Student rooms have basic furnishings for comfortable living and the students may make them more homelike with their own accessory additions. During Freshman Orientation, students are informed by the Dean of Women or Dean of Men about the services and equipment furnished by the College and those necessities which the student must supply for himself. Lounge and recreation areas, storage rooms, television, and a variety of other facilities add convenience and a pleasant setting for student life.

Freshman Students. All freshmen-both men and women-have the opportunity to live in the College residence halls.

Transfer Students. Transfer students are admitted as commuting students or independent housing students. Those transfer students who desire accommodations in residence halls are placed on a waiting list with priority based on the date of their accepted admission.

Married Students. The College has no housing facilities for married students. Prior to registration, they will need to secure their accommodations. Area realtors and newspapers should be consulted.

Overnight Guests. If accommodations are available, a resident student may have an overnight guest on Fridays or Saturdays, at a charge of $\$ 1.58$ per night. Prior approval and registration must be secured from the Dean of Men (for men students) and the Dean of Women (for women students).

## DINING ACCOMMODATIONS

Spacious dining accommodations are provided in Lawrence Center, where all resident students take their meals. Three meals are served, cafeteria style, every day of the week. Menus are carefully planned to meet the nutritional needs of active students.

The dining-hall staff is not equipped to meet the special needs of students whose health requires medically regulated diets. These students may obtain permission to take their meals elsewhere by applying to the Dean of Administration at least two weeks in advance of each semester.

## FRESHMAN ORIENTATION PROGRAM

The Freshman Orientation Program is an important part of entrance into West Chester. Mandatory for all incoming freshmen, the three-day program
is administered by the Guidance and Counseling Center and includes placement testing, counseling, discussion groups, and academic advisement. The program also acquaints incoming students with facilities and services. During their orientation students are housed in residence halls, have their meals in the dining hall, and take part in a variety of recreational and social activities. Within the limits of early response and availability of space, freshmen may schedule their orientation for the most convenient of a number of orientation periods. At an appropriate time, admitted freshmen receive advance notice of the program. If they have further questions, they may communicate by mail or telephone with the Guidance and Counseling Center.

## college health service

To meet emergency and first-aid needs, and to perform routine infirmary treatment of minor illnesses and minor surgical conditions, two part-time physicians and four registered nurses are available, at no cost to the students. A four-bed ward is available for short-term observation or treatment at the discretion of the College physicians. The Health Service is in Reynolds Hall where, for emergencies, a nurse is on duty on a 24 -hour basis while College is in session. Beyond these services, the College does not furnish medical care nor bear the costs of medical or surgical treatment or hospitalization. The community of West Chester has qualified physicians and excellent hospital facilities.

A group medical and accident policy, approved by the College and covering accidents and illness on a twelve-month basis, is available at registration, or from the College Health Service, at a minimal annual premium. Students and parents are urged to consider the excellent protection it offers.

In addition to the physical examination form required for admission, a completed physical examination form must be submitted to the College Health Service each year of attendance following the freshman year. Students may not receive treatment at the College Health Service (Infirmary) unless an examination form for the current year is on file at the Service.

## VEHICLE REGULATIONS

All students may operate motor vehicles at the College. Students who intend to park motor vehicles on official student parking lots must register their vehicles with the Security Police and obtain an authenticated decal, under College motor vehicle regulations. Although registration is not
mandatory for students unless they use the official parking lots, it is nevertheless recommended for all students with motor vehicles.

## CAMPUS POST OFFICE

The College has an on-campus post office, located on the second floor of Lawrence Center. Commuting students receive their mail here, through combination-lock mailboxes. Residence hall students receive their mail at their halls. To insure prompt delivery, mail sent to residence hall students should show the student's name, room number, the name of the residence hall, and West Chester State College, West Chester, Pa. 19380.

## COLLEGE POLICY FOR STORM CLOSINGS

If storm conditions make it necessary to close the College, announcement will be made over area radio and television stations via a system of code numbers keyed to closed schools. West Chester's numbers are:

853 Day Classes for Undergraduate Students
2853 Graduate Classes and other Evening Classes

## COLLEGE BOOKSTORE

In addition to required textbooks, the College Bookstore carries paperback books, stationery, other student supplies, records, gymnasium uniforms, college blazers, and various gifts and souvenir items. The store, located on the ground floor of Recitation Hall, is a student enterprise whose profits benefit the Intracollegiate Governmental Association.

## LOUNGE FACILITIES

In addition to the social lounges in residence halls, a large and attractively furnished lounge in Lawrence Center serves both commuting and resident students. Here they may entertain guests, gather informally for relaxation, or enjoy music. A snack bar, near the lounge, is another popular gathering place for leisure moments.

## SPEECH AND HEARING CLINIC

Students who need help in meeting minimal speech standards may obtain it at the Speech and Hearing Clinic which West Chester maintains. Along with serving as a speech improvement center for students, the Clinic
provides evaluation and therapy in speech and hearing for children and adults from the community of West Chester and the surrounding area.


## GUIDANCE AND COUNSELING CENTER

The professional services of the Guidance and Counseling Center are available to students who need help with problems affecting their academic proficiency, or who have difficulties in adjusting to college life. The staff is trained and experienced in the administration of psychological tests, counseling, and personality evaluation. The program offered includes orientation for entering students.

The student who is coping with emotional difficulties, tensions, or problems of a personal nature should seek assistance at the Center.

## PLACEMENT AND CAREER SERVICES

The College maintains an active Placement and Career Service for its students and graduates. The Director of Placement and Career Services is in general charge, and is assisted by the Undergraduate Office, the Graduate Office, the Offices of the Schools, and by student teaching supervisors and other members of the faculty.

The purpose of the Service is to help graduating seniors and graduates obtain desirable positions related to their interests and education.

It renders assistance to School officials who are seeking qualified teachers to fill vacancies in the schools of the Commonwealth. For the benefit of arts and sciences graduates, communication is maintained with government agencies, business, and industry.

Counseling is offered to all students and graduates in career planning, opportunities, and employment trends. A placement library provides information about career opportunities, area schools, job-training programs, Civil Service careers, job requirements, and application forms and procedures. At periodic intervals, group orientations for senior students are conducted. Although most career placement counseling takes place in the senior and graduate years, all undergraduates with inquiries about careers are invited to use the Placement Service library and to seek guidance from the Placement Service staff.

Meetings between applicants and potential employers are arranged, and private facilities on campus are made available for interviews and conferences. Appropriate follow-up research is conducted periodically with graduates and their employers.

## SELECTIVE SERVICE INFORMATION

The Dean of Undergraduate Studies is the adviser on Selective Service. Students wishing counsel on this subject should apply at his office.

At the beginning of each college year, a student seeking deferment must complete an SS109 Form which will be submitted to his Selective Service Board by the Dean of Undergraduate Studies. The forms are mailed to men students with their registration forms.


## The Student Community

## STUDENT GOVERNMENT

Quite understandably, students begin their undergraduate years with a sense of excitement. In a swift transformation, they are plunged into two large adventures: the pursuit of study that will shape the course of their lives, and a sudden move into a new kind of community, composed mainly of youth, focused largely toward the future, and bounded by time as well as the margins of the campus.

It is a conviction at West Chester that the two adventures are closely interwoven, that education is both an academic and a social process, going on in every moment of the student's day. The student community is viewed, not as the housing adjunct of the College, but as an intrinsic element of the West Chester experience.

The Administration holds that students should share responsibly in governing this community and should have a voice in the shaping and re-examination of the objectives of the College.

West Chester students have their own democratically constructed governmental organization for maintaining a mature and responsible student citizenry, and for developing the various activities and programs which best serve their interests and needs. Through advisory and committee machinery, the Administration, the faculty, and the student body seek to work democratically together in behalf of the general concerns of the College.

## the INTRACOLLEGIATE GOVERNMENTAL ASSOCIATION

Student government at West Chester is contained in the Intracollegiate Governmental Association, an organization to which all students, after payment of the activities fee, belong. Functioning within a constitutional framework, the IGA provides students with experience in the processes of democratic government.

The General Assembly, chosen by election, is the IGA's legislative body; the IGA program is administered through its officers and a student committee system. In fiscal matters, in various policy-making areas, and in disciplinary action, final authority rests with the President of the College and the Board of Trustees.

The General Assembly is composed of representatives from the Freshman, Sophomore, Junior, and Senior Classes, the Women's and Men's Resident Governments, the Women's and Men's Commuter Student Governments, and representatives-at-large.

The large concern of the IGA is the welfare of the student body. Under the guidance of the Dean of Students and faculty advisers, the IGA maintains the College Bookstore, publishes West Chester's student newspaper and handbook, operates the College radio station, conducts ticket sales for College events, and plans and executes many all-campus special events and programs.

## COUNCILS AND CLASS ORGANIZATIONS

Other matters of student government rest with the Freshman, Sophomore, Junior, and Senior Classes, who elect their officers, and with the Women's and Men's Resident Governments and Women's and Men's Commuter Governments, which are also democratically constructed.

## DISMISSAL FROM COLLEGE

The disciplinary powers of educational institutions are inherent in their responsibility to protect their educational purpose through the regulation of the use of their facilities and through the setting of standards of conduct and scholarship for the students who attend them. In aiding in the development of responsible student conduct, counseling, guidance, admonition, and example, as well as disciplinary proceedings, are used. Students found in violation of the College's rules and regulations may be subject to suspension or expulsion, but only upon the approval of the President.

## The Student Community/51

## THE EXTRACURRICULAR PROGRAM

The College views its extracurricular program as an important supplement to the student's academic experience, and looks upon the various available activities as a virtual laboratory in which the undergraduate puts into practice knowledge and skills generated in the classroom. The College also believes that its extracurricular activities offer the student experiences which will stand him in good stead in his later professional, business, or community life.

The Dean of Students has overall responsibility for West Chester's extracurricular program, and assures that it meets the needs of students and that its various phases fit into the whole of college living. The Dean works closely with the officers and committees of IGA and the four Classes and-through the Director of Student Activities and the Director of the Student Union-with the leadership of the College's many clubs and organizations.

Together, the Dean and the Directors encourage students to take part in extracurricular affairs. Some of the available activities are described in this section. The new student becomes fully acquainted with others through his student handbook. In summary, these include:

PROFESSIONAL ORGANIZATIONS. The various Schools and departments of the College sponsor clubs and activities devoted to professional development. Among these are such groups as the Association of Childhood Education; English, French, Geography, Mathematics, Music, Philosophy, Social Sciences, and Science clubs; and activities for health and physical education students.

CLUBS CENTERED AROUND INTERESTS. Photography, nature study, bowling, bridge, horseback riding, art, music, and other special interests draw students together in various clubs or groups.

ACTIVITIES CENTERED AROUND GROUP LIFE. These include the many committees and special projects arising within the student-government bodies, and range from membership on a committee planning a social or public-affairs event to working on the College yearbook or newspaper.

Organizations which meet the religious needs of students are listed below, under Religious Organizations. West Chester students are always made welcome at the many places of worship in and near the Borough of West Chester.


## SPECIAL EVENTS

A notably vigorous interest in the arts and thought of the times exists at West Chester and throughout the larger community (the Borough of West Chester and the surrounding sector of Chester County) in which the College is located.

In some part, this unusual devotion to letters and the performing arts has roots in the past of Chester County, which has had a remarkable number of scholars, scientists, writers, and artists over the past two centuries.

With Philadelphia's rich cultural resources in easy reach and with stimulus from the singular number of other colleges in the Philadelphia orbit, attention to the arts is keen in southeastern Pennsylvania, to the benefit of West Chester students.

All of West Chester's cultural events are coordinated in the offices of the Director of Cultural Affairs.

Throughout the academic year, students have many opportunities to deepen their interest in music by attending concerts and recitals provided by the faculty and students of the School of Music. At several annual series of programs, students and townspeople fill the large auditorium of Philips Memorial Hall.

Notably, the All-Star Series brings to the campus some of the world's distinguished artists in the fields of music, drama, and dance. Among these have been the Detroit, Washington National, Cincinnati, and Minneapolis Symphony Orchestras, the Robert Shaw and Roger Wagner Chorales, Isaac Stern, George London, Jerome Hines, Nicolai Gedda, Phyllis Curtin, Evelyn Lear, the National Ballet, the American Ballet Theatre, Jose Greco and Company, the Goldovsky Grand Opera Theater, and the APA Repertory Company.

Still other symphonies which the All-Star Series has presented have been the St. Louis, the Pittsburgh, and the Melbourne (Australia) orchestras.

The Chamber Music Series brings to the College outstanding small ensembles. In recent years programs have featured the Philadelphia Brass Ensemble, Curtis String Quartet, de Pasquale String Quartet, the Mozarteum Woodwind Quartet, the Gabrieli Brass Ensemble, and the Alard String Quartet.

Through the William Pyle Philips Lecture Foundation, students have opportunities to attend lecture programs bringing leaders in literature, science, and world affairs to the campus. Among these have been Madame V. L. Pandit, Arnold Toynbee, Winston Churchill II, Harrison Salisbury, Carl Rowan, Mark Van Doren, Sir Julian Huxley, Robert Frost, Dame Judith Anderson, General Carlos P. Romulo, Agnes de Mille, the Hon. Robert C. Weaver, Carey McWilliams, and George Wald.

The Assembly Series has brought to the campus talent such as Viveca Linfors and the Afro-Haitian Dance Company; the College Union Cultural Events Committee has recently presented David Susskind, Daniel Watts, Michael Harrington, and Ralph Nader, among others.

Under the aegis of the Campus Cinema Club, a monthly motionpicture series shows foreign films and classics from film libraries.

Other programs, sponsored by various clubs or organizations, bring to the campus speakers of regional or national importance in such areas as public affairs, the sciences, literature and the arts, and popular entertainers.

## MUSICAL ORGANIZATIONS

In conjunction with the regularly scheduled student and faculty recitals, the College Administration maintains the following well-developed musical organizations which contribute to the wealth of fine music on the campus:

THREE COLLEGE BANDS. The Symphonic Band, Concert Band, and Marching Band. Membership is determined by the student's qualifications regardless of curriculum.
WIND ENSEMBLE. A band of 50 to 60 outstanding campus wind instrumentalists and percussionists. The ensemble performs difficult music. Emphasis is on contemporary works.
SYMPHONY ORCHESTRA. Membership is determined by the student's qualifications.

INSTRUMENTAL ENSEMBLES AND CHAMBER MUSIC GROUPS. Membership in these groups is determined by the student's qualifications.
THE CRITERIONS. The College jazz lab band. Members are selected by audition. CONCERT CHOIR. A mixed choir of music students selected by audition. This choir of about 40 voices meets twice a week, devoting its efforts toward acquiring a fine technique of choral singing through the preparation of an extensive repertoire for performance.
MADRIGAL CHOIR. A performance group, selected by audition, which features the music of the Renaissance and Baroque periods.
CHOIR. A mixed choir of junior and senior music students. This group meets twice a week, devoting its efforts toward a wide association with choral literature. It is used as an opera chorus in School of Music productions and joins with the Concert Choir for large performances.

WOMEN'S CHORUS. All freshman and sophomore women not in the Concert Choir who are enrolled in music education are required to take this course, devoting their efforts primarily toward acquiring the techniques of choral singing.
MEN'S CHORUS. All freshman and sophomore men in music education who are not enrolled in the Concert Choir are required to take this course. Men from all other curricula are invited to audition for this group.
MIXED CHORUS. A mixed chorus of freshman and sophomore music education students which meet once a week, alternating as a mixed chorus and as Men's Chorus and Women's Chorus. It combines with the Concert Choir for performances.
SOCIETY FOR THE PERFORMANCE AND APPRECIATION OF MUSIC IN HISTORY. Open to all students, the weekly meetings are for the pleasure of learning to sing and play music written before 1800, using reproductions of ancient instruments. Public performances.

OPERA CHORUS. An elective course devoted to the training of a choral group which participates in opera and operetta production. Membership is by audition.

WOMEN'S GLEE CLUB. This organization provides an opportunity for nonmusic women students to participate in a choral group. The activities include the annual Christmas Carol Program and the Women's Glee Club spring concert. Membership is by individual audition.

## WEST CHESTER ATHLETIC PROGRAM

All West Chester students have opportunities to participate in the broad athletic program maintained by the College. Both the intramural and intercollegiate phases of the athletic program are described under School of Health and Physical Education.


## OTHER EXTRACURRICULAR ORGANIZATIONS AND ACTIVITIES

## LITTLE THEATRE

This student organization, functioning in Theatre 208, provides a workshop for those who wish training in educational, technical, and performing theatre. It presents a variety of major plays for the College as well as the surrounding community. Little Theatre established the West Chester chapter of Alphi Psi Omega, national honorary dramatic fraternity.

## FORENSICS

West Chester offers a rich extracurricular program in forensics-both intramural and intercollegiate. The Debate Society is a focal point for training and participation in intercollegiate competitive activity in debate, oratory, extemporaneous speaking, parliamentary discussion, and interpretative reading. The Debate Society also sponsors forensic tournaments for nearby high school students.

## PUBLICATIONS

QUAD ANGLES. This student newspaper is published by an undergraduate staff, with a faculty member serving as adviser. Positions on Quad Angles are open to any member of the student body with reportorial or editorial ability. Students who join the staff gain training and experience in journalism.

THE SERPENTINE. Publication of this College yearbook is a responsibility of the Senior Class. The yearbook, which records college activities, is edited by a student staff with two advisers.

THE LITERARY QUAD. An annual publication containing creative writing, both poetry and prose, selected from the literary output of West Chester students.

THE HANDBOOK. This annual publication provides incoming freshmen with pertinent information concerning student life at West Chester.

## STATION WCSC

Radio Station WCSC is on the air in the afternoons and evenings and brings national and local news as well as music to the campus. Students who take part in the project gain a working experience in programming and announcing.

## RELIGIOUS ORGANIZATIONS

Opportunities for fellowship and religious experience are offered at West Chester by the following groups:

Inter-Varsity Christian Fellowship<br>Hillel Club<br>Newman Student Association<br>Christian Science Association<br>Baha'i Club<br>Lutheran Student Association

Student Christian Association

## BLACK STUDENT UNION

This large and important organization came into official existence during the fall of the 1970-71 academic year. The Black Student Union is dedicated to the creation of a relevant atmosphere for the black students at West Chester. Union membership is open to all West Chester students, faculty, and staff-regardless of race, color, or creed-who have a concern for the black cause.

A major purpose of the new organization is to broaden and enhance the academic and social life for black students at the College.

The Union's democratically structured constitution provides for a chairman and board of directors, consisting of two members from each class, elected by the membership. Applications for membership in the Union are reviewed by its board of directors. Those interested in applying for membership should communicate with the adviser for the Black Student Union, who, as of 1970-71, is the Director of Curriculum Enrichment, with offices in the Administration Building.

Applications for membership may also be made through the Union chairman or the class representatives.

THE CAMPUS N.A.A.C.P.
The College has a large and active chapter, chartered in 1964, of the N.A.A.C.P. The major goals of the College chapter of N.A.A.C.P. are 1) to contribute to better racial understanding by informing the College community about black events and the contributions of blacks in many fields and 2) to encourage and conduct social, cultural, and educational events which meets the needs of black students at West Chester. The campus N.A.A.C.P. presents an annual Talent Show to benefit the Martin Luther King, Jr. Scholarship Fund, which the chapter established in 1968. Another major activity of the campus N.A.A.C.P. is its sponsorship of programs and displays in observance of Black History Week.

## SERVICE ORGANIZATIONS

ALPHA PHI OMEGA. A national men's service organization concerned with developing leadership and furthering the American heritage of freedom. Membership in Omicron Upsilon chapter is open to all West Chester men who have completed their first semester and have a background in scouting.

CAMPUS GIRL SCOUTS. Established at West Chester in the spring of 1969, this group is affiliated with the Girl Scout movement and dedicated to service, fellowship, and leadership.

THE FRIARS SOCIETY. Composed of sophomore, junior, and senior men, invited into the organization in recognition of character and leadership. The Society's various service projects concern the good of the College community.

## HONOR SOCIETIES

ALPHA LAMBDA DELTA. The West Chester chapter of this national freshman scholarship society for women encourages superior scholastic attainment and scholarship development. A 3.5 average for the first semester or a 3.5 cumulative average for the first two semesters is required for membership.

ALPHA PHI GAMMA. Delta Kappa chapter of this national honor society for men and women in journalism was established at West Chester in 1968.

ALPHA PSI OMEGA. Rho Mu, the West Chester chapter of this coeducational dramatic fraternity, was established in 1961. It is responsible for one major production presented each year in cooperation with the Little Theatre.

GAMMA THETA UPSILON. Gamma Eta chapter of this professional geography fraternity was established at West Chester in 1963. The organization promotes professional interest in geography.

KAPPA DELTA PI. The School of Education sponsors this society to encourage high professional standards in education. Membership is awarded by invitation to education majors with high academic standing.

PI GAMMA MU. The School of Social and Behavioral Sciences sponsors Omega chapter of Pi Gamma Mu for the purpose of improving scholarship in the social sciences and to inspire social service to mankind. Majors in the School with high academic accomplishments are invited into membership in their junior and senior years.

PI KAPPA DELTA. A chapter of this national honor society for students engaged in competitive forensic activities was established at West Chester in 1969. With its base in the Debate Society, the local chapter of Pi Kappa Delta offers West Chester students opportunity to affiliate with students interested in forensics in some 250 other chapters. The School of Arts and Letters sponsors the West Chester chapter.

PI MU EPSILON. This national mathematics society is open to Junior Standing students who rank in the upper one-third of their class and have completed 18 hours of mathematics with a minimum average of 3.0 .

SIGMA ALPHA IOTA. Epsilon Epsilon chapter of this internationally incorporated professional fraternity for women in music was formed in 1968. The fraternity is dedicated to service in the field of music. Membership, by invitation, recognizes scholarship. Members must be in at least their second semester.

PHI ALPHA THETA. Organized in 1968, Nu Sigma chapter of this international honor society in history is sponsored by the Department of History. Phi Alpha Theta is open to history majors in teacher education and liberal arts who have a minimum average of 3.01 in twelve or more semester credits in history.

PHI EPSILON KAPPA. The School of Health and Physical Education sponsors a chapter of this national professional fraternity for men majoring in health and physical education. Phi Epsilon Kappa seeks to advance the profession of health and physical education throughout the nation.

PHI MU ALPHA (Sinfonia Fraternity). Rho Sigma chapter of this professional fraternity for men majoring in music was formed at West Chester in 1967. The organization seeks to advance the cause of music in America and to further the welfare and brotherhood of students in music. Membership is by invitation. Members must be in at least their second semester.

PSI CHI. A chapter of this national honor society in psychology is sponsored by the Department of Psychology. Membership is by invitation, with scholarship and citizenship as criteria. Psi Chi, which is under the aegis of the American Psychological Association, endeavors to advance the service of psychology and encourages superior scholarship in psychology.


## SOCIAL FRATERNITIES AND SORORITIES

The College has a system of social fraternities and sororities, governed respectively by the Interfraternity Council and the Intersorority Council. The system, which came into being during 1967-1968, has rapidly taken its place as an integral part of campus life at West Chester.

## FRATERNITIES

Alpha Phi Alpha Alpha Sigma Phi Lambda Chi Alpha Sigma Tau Gamma Tau Kappa Epsilon Theta Chi Pi Lambda Phi Zeta Beta Tau

## SORORITIES

Alpha Omicron Pi
Alpha Sigma Alpha
Alpha Sigma Tau
Alpha Phi Sigma
Delta Zeta
Delta Psi Omega
Sigma Delta Tau
Zeta Tau Alpha

## SOCIAL EVENTS

A number of traditional social events highlight the student calendar throughout the year. Students look forward to the excitement and color of Rampage Weekend (homecoming), and to such pleasant affairs as the Christmas White Supper and Dance, Greek Weekend, Parents' Day, Spring Weekend, Senior Weekend, and the various class formals.


## Academic Information

The academic program at West Chester is developed under a committee process which reaches deeply through the faculty. Curricula, policies, and regulations are determined by the Undergraduate Council with the approval of the Administration and, where necessary, the Board of Trustees. Among the various bodies which make recommendations concerning academic matters to the Undergraduate Council are the several Schools, the Teacher Education Council, and committees such as those on Academic Standards, Curriculum Development, and Admissions.

Under West Chester's advisory program, every student has a faculty adviser who counsels him on academic matters throughout his undergraduate years. The student-adviser assignments are established early in the student's freshman year. Advisers maintain close relations with the staff of the Guidance and Counseling Center.

## CLASSIFICATION BY COLLEGE PROGRAM

Students are classified by programs, as follows:
Regular Student-all undergraduates admitted to a degree program.
Non-degree Student-special students admitted for course work toward teacher certification, professional growth, or other purposes.

## ACADEMIC CLASSIFICATION OF STUDENTS

The student's class designation is determined by the number of semester hours of credit earned, thus:

| Freshman | 31 semester hours or less of credit |
| :--- | :--- |
| Sophomore | $32-63$ s.h. of credit (inclusive) |
| Junior | $64-95$ s.h. of credit (inclusive) |
| Senior | 96 or more s.h. of credit |

GRADING SYSTEM
The College employs the following grading system:

| Grade | Interpretation | Percentage Equivalents | Quality Points |
| :---: | :---: | :---: | :---: |
| A | Excellent | $A=90-100$ | 4 |
| B | Superior | $B=80-89$ | 3 |
| C | Average | $C=70-79$ | 2 |
| D | Below Average | $\mathrm{D}=60-69$ | 1 |
| F | Failure | $\mathrm{F}=59$ or lower | 0 |
| I | Incomplete |  |  |
| WF | Withdrew Failing | $\mathrm{F}=59$ or lower | 0 |
| WP | Withdrew Passing |  |  |
| Aud | Audit |  |  |

An I (Incomplete) is given when there are valid reasons (such as serious illness or death in the family) for a student's failure to complete course requirements by the end of a semester. Unless the work is satisfactorily completed within the first nine weeks of the next semester, the I becomes an $F$.

## CUMULATIVE INDEX

The cumulative scholastic index (academic average) is determined by dividing the total quality points by the total credit hours attempted. The following example, based on a first semester of study, shows how the index accumulates:


All grades received during a student's enrollment are included in the cumulative index. Grades from other colleges are excluded.

## MAINTENANCE OF MINIMUM STANDARDS

All students should strive to maintain the best possible cumulative index. A 2.00 (C) index is the minimum standard which can be considered acceptable academic work. Students failing to maintain a 2.00 index are automatically considered probationary students.

More specifically, students must attain the following scholastic indices in order to remain in the College:

$$
\begin{array}{lll}
\text { a. } & \text { Students with } 0 \text { to } 32 \text { credits attempted } & 1.60 \\
\text { b. } & \text { Students with } 33 \text { to } 63 \text { credits attempted } & 1.60 \\
\text { c. } & \text { Students with } 64 \text { to } 95 \text { credits attempted } & 1.80 \\
\text { d. } & \text { Students with } 96 \text { or more credits attempted } & 2.00
\end{array}
$$

A minimum cumulative index of 2.00 (C) for all work taken at the College is required for Senior Standing and graduation.

Transfer students are required to maintain the cumulative indices indicated above. The number of credits taken at West Chester is added to the number of credits transferred in, for the purpose of determining the credit hours attempted. For example, 34 credits transferred in and 32 credits at the College equal 66 credits and require a minimum index of 1.80 .

## ACADEMIC DISMISSAL

If a student does not attain the required cumulative index by the end of the spring semester, he may attend Summer Sessions at West Chester in order to improve his academic average. If he does not attain the required cumulative index by the end of the Summer Sessions, he is dismissed from the College.

After his first academic dismissal from West Chester, he may apply for readmission as described below. A second academic dismissal automatically terminates his degree candidacy at West Chester. All courses taken as a non-degree student, following termination of degree candidacy for the second dismissal, shall not be included in his grade-point average nor imply the right to readmission to the College.

## REPEATING COURSES

A student must repeat any required courses in which he earned grades of $F$ at West Chester. He may repeat any course for which he received an F or D . The repeat grade will stand as the final grade for graduation,

but the original grade will not be erased from the student's record and will be computed into the cumulative index. Repeated courses for which D and F grades were received must be taken at West Chester.

## READMISSION

Readmission to West Chester as a degree candidate is not possible if the student has been permanently dismissed because of academic failure. (See Academic Dismissal, above.)
If a student fails to meet requirements for reinstatement following attendance at the West Chester summer sessions, the following course of action applies:
(1) The student must achieve the required grade-point average for readmission. (See Maintenance of Minimum Standards, above.) The student is not eligible for readmission as a degree candidate until he has remained away from West Chester State College as a full-time student for a period of at least one academic semester following academic dismissal.
(2) In an effort to secure the required grade-point average, he may register for courses in evening classes or summer sessions at West Chester as a part-time nondegree student. (Courses taken at other colleges or universities, even though
approved by the Dean of Undergraduate Studies, will not be considered in computing the cumulative index.)
(3) Candidates for readmission must file an application with the Director of Admissions by June 1 or December 1.
(4) Readmission status is granted only after approval by the Academic Standards Committee, the major department or School, and the Dean of Men or Women.

## ROOM RESERVATION POLICY FOR REINSTATED STUDENTS

Room reservations are not held for resident students who are in academic difficulty at the close of the spring semester. If students attend summer sessions and are reinstated for the following fall semester, they must re-apply for housing.

## GRADE REPORTS

After each semester, the Director of Scheduling and Academic Records mails a report of each student's semester grades to the student's home address.


## HONORS WORK

The Honors Program, which is limited to five per cent of the students in any program, is designed to stimulate the superior student to develop his powers of research and original thinking. The Honors program may be pursued by students in both the arts and sciences and in teacher education.

The honors student is challenged toward deepened comprehension in his field and toward intellectual achievement beyond that demanded by the College's standard graduation requirements. He is expected to make full use of West Chester's resources in the classroom, laboratory, research centers, and library, and beyond these, to seek new perspectives in his field and the areas it encompasses.

Although students may request consideration, enrollment is by invitation from the pertinent faculty, with approval from the Dean of the School providing the program. A cumulative index of 3.00 or better in both general work and the specialization is required. The student must have completed four semesters at West Chester.

To earn a degree with honors, the student must satisfactorily complete no less than twelve (and no more than 24) semester hours in honors work in his specialization and related areas. A grade of B or better is required for any honors credit given. Honors work usually falls into two categories: in-course and out-course work. Research may result in either a thesis-type term paper or a research report dealing with the solution of a statistical or mathematical problem.

For further information, consult the appropriate School.

## ACADEMIC HONORS LISTS

The Dean's Lists are published at the close of each semester.
High Honors List - cumulative index of 3.50-4.00
Honors List - cumulative index of 3.00-3.49
Students with appropriate cumulative indices at the end of their sixth semester (at least 96 semester hours) may be graduated with one of four distinctions, provided these 96 credits were earned at West Chester. The distinctions are:

> summa cum laude - cumulative index of 3.75-4.00
> magna cum laude - cumulative index of $3.50-3.74$
> cum laude - cumulative index of $3.25-3.49$
> honors - cumulative index of $3.00-3.24$

Transfer students are not eligible for these honors.

## STUDENT CLASS LOAD

A full-time student's schedule must have a normal load. This may range from twelve to seventeen semester hours of credit.

## STUDENT LOAD FOR VETERANS

The Veterans Administration requires a student to schedule at least twelve semester hours per semester in order to receive full benefits under the G. I. Bill. (All veterans' affairs are dealt with in the offices of the Director of Scheduling and Academic Records.)

## CLASS ATTENDANCE

Regular and punctual attendance at classes is considered essential to sound scholarship and good campus citizenship. A student handbook, given the student upon registration, states the absence policy in detail.

## WITHDRAWAL FROM A COURSE

A student has the privilege of withdrawing from a course within the first four weeks of a semester. He must first notify the Office of Undergraduate Studies and then his instructor, who will delete the student's name from the roll.

After the first four weeks of a semester, a withdrawal will not be approved except for special reasons and emergencies. The student initiates his request for an approved withdrawal with his instructor. The request is then acted upon by the department chairman and the Dean of Undergraduate Studies.

If the student is doing passing work at the time of approved withdrawal, a WP (Withdrawn Passing) will merely be noted on his permanent record; it will not be treated as a grade. On the other hand, if a WF (Withdrawn Failing) is given, the student receives an F on his record. A student who drops a course without official permission is given an F .

## WITHDRAWAL FROM THE COLLEGE

A student intending to withdraw from the College must give the Dean of Undergraduate Studies written notice, indicating why and when he plans to do so. The student who fails to comply with this requirement
will be declared not a member of the College, after ten days of an unexplained absence. His last day in classes will be considered the date which terminates his connection with the College.

When, owing to illness or other reasons, a student discontinues his work at the College, he must notify the Dean of Undergraduate Studies at once. Unless a student withdraws officially, F grades for unfinished courses are recorded.

## CREDIT BY EXAMINATION

Students wishing to secure credit by examination must apply on forms which they may obtain from the Office of Undergraduate Studies. The privilege of taking a course by examination is subject to the following:
(1) Application must be made within the first two weeks of a semester.
(2) The student must have a cumulative average of at least 3.00 in the major area.
(3) The student must give evidence of a satisfactory academic background for the course.
(4) The request must be approved by the dean or department chairman of the area concerned.
(5) An examination fee is charged.
(6) The grade received will be recorded on the student's permanent record card and will be credited toward graduation requirements.

## AUDITING PRIVILEGES

Anyone who wishes to attend the College for the sole purpose of auditing a course or courses may do so upon receiving permission from the Director of Admissions. The regular semester-hour fees are charged. Auditors have the privilege of attending the class and taking part in class discussion. At the instructor's discretion, auditors may take the examinations; however, no letter grades and no credit will be recorded.

Enrolled students may have auditing privileges under the following conditions:
(1) The Dean of Undergraduate Studies must give approval.
(2) The student must have a cumulative index of 2.75 or better.
(3) The professor teaching the requested course must give approval.
(4) No more than one course per semester may be audited.
(5) Application for auditing privileges must be in the Undergraduate Office during the first two weeks of a semester.
(6) Once enrolled as an auditor, the student may not receive credit for the course he is auditing. Audited courses will not appear on the student's record.
(7) Provided he is a full-time student, the auditor is not charged a fee for the course.

## ADVANCED PLACEMENT PROGRAM

Courses taken under the Advanced Placement Program offered by the College Entrance Examination Board, Princeton, New Jersey, may be applied toward advanced placement in the College and/or toward credit requirements for graduation. Application for credit must be made by July 1 to the Dean of Undergraduate Studies. The College recognizes grades of 5 and 4 as acceptable, but not grades 3,2 , or 1 .

If an application is approved, the student registers for the course and pays the fee. There is no fee for an application for advanced standing without credit. Not more than fifteen credits earned under the Advanced Placement Program may be applied toward graduation requirements. Information concerning the Advanced Placement Program may be obtained from the New York City offices of the College Entrance Examination Board, 475 Riverside Drive, New York, New York 10027, or from high school guidance counselors.

## RESIDENT CREDIT REQUIREMENT

To qualify for graduation from a degree curriculum, a student must take his last 30 semester hours of credit at West Chester. Resident credits may be earned in day, evening, and Saturday classes.

## STUDENT TEACHING

Student teaching is to be taken in the seventh or eighth semester and normally culminates the professional experience in pre-service preparation for teaching. Students are required to file applications for student teaching one year prior to their student-teaching semester. Regular meetings for student-teaching registration are scheduled annually for the first week in February. Prospective student teachers must attend one of these meetings.

Students must do their student teaching in stations in school areas where the College holds a contract for student teachers.

To be eligible for student teaching, candidates must have Senior Standing ( 96 semester hours), a cumulative index of 2.00 (C) or higher,
and should have completed all course work required in the first 6 semesters. Applications for admission to student teaching are reviewed by the department in which the applicant wishes to secure certification, by the Dean of Undergraduate Studies, and by the Director of Student Teaching.

## REQUIREMENTS FOR GRADUATION

A student is recommended for graduation upon the satisfactory completion of a minimum of 128 semester hours and upon the fulfillment of all categories of the requirements for his degree. A minimum cumulative index of $2.00(\mathrm{C})$ is required for graduation. Degree requirements are fully set forth in this catalogue, under the heading of the subject field, in the section entitled Programs of Study and Degree Requirements. The final 30 semester hours of credit must be attained at West Chester.

## NOTICE OF ANTICIPATION OF GRADUATION

It is the student's responsibility to report to the office of the Dean of Undergraduate Studies at least three months before the date of anticipated graduation. The student must see that his name, written as he desires, is placed upon the list of prospective graduates. Otherwise, recognition of his graduation will be postponed until the next regular Commencement. Diplomas will not be issued until all bills and obligations to the College are met.

## TRANSCRIPTS

Applications for official transcripts should be made in writing to the Director of Scheduling and Academic Records. There is no charge for the first transcript, supplied at graduation, nor for transcripts sent to Pennsylvania school officials with applications for a position. A charge of one dollar each is made for all other transcripts. Checks, payable to the "Commonwealth of Pennsylvania," must accompany requests.

Transcripts are considered official only when sent directly from the institution issuing them to the authority who is to evaluate or record them. Most school and college authorities accept only official transcripts. When requesting them, students need to give the names and addresses of the officials who are to receive them.

## ARMED SERVICES ROC PROGRAM

The College, with the approval of the Board of Trustees, has a policy under which West Chester students enrolled in the Armed Services ROC (Reserve Officer Candidate) Program may receive six semester hours of baccalaureate credit upon the successful completion and certification of ROC military requirements. Such credits are classified as free elective transfer credits. Depending on the status of each student's program at the time of transferring ROC credits, such credits will be counted toward, or in excess of, the 128 credits required for a baccalaureate degree.

ROC programs are contingent on the successful completion of military requirements during summer vacation and the earning of a college degree before being granted the service commission. The programs cover the Navy's Basic and Advanced Reserve Officer Candidate courses and the Marine Corps' Junior and Senior Platoon Leadership courses.

## TEACHING CERTIFICATES

Instructional I Certificate. A student who satisfactorily completes one of the teacher education curricula offered by the College receives his degree from the College and qualifies for an Instructional I Certificate (formerly the Provisional College Certificate) which is issued to him by the Pennsylvania Department of Education.

In the elementary field this certificate qualifies the holder to teach in the elementary schools of Pennsylvania for three years.

In the secondary field this certificate qualifies the holder to teach the subject written thereupon in the secondary schools of Pennsylvania for three years.

In health education, health and physical education, music education, foreign languages, and in the program in speech pathology and audiology, the certificate qualifies the holder to teach the specified subject in the public schools of Pennsylvania for three years.

Instructional II Certificate. This Certificate, formerly described as the Permanent College Certificate, requires three years of successful teaching in the public schools of Pennsylvania under the Instructional I Certificate and the satisfactory completion of 24 semester hours of additional work of collegiate grade, completed subsequent to the issuance of the baccalaureate degree. This certificate is a permanent license to teach in

Pennsylvania. When prepared for the Instructional II Certificate, teachers may obtain application instructions from superintendents of schools or county superintendents of schools.

## extension of college certificates

(1) A college certificate valid for the secondary field may be extended to include the elementary field by completing 24 semester hours of approved courses in the field of elementary education, distributed as follows: a course in the teaching of reading, the remainder selected from a minimum of four of the following areas: mathematics, art, music, health and physical education, language arts, sciences, social studies, and geography.
(2) A college certificate valid for the elementary field may be extended to include any subject of the secondary field by completing the College's field requirement for it and the related methods course.
(3) A college certificate valid for the secondary field may be extended to include additional academic subjects by completing the College's field requirements for them.

## Teachers in Service

The College does not grant credits for teaching experience. Credit for student teaching other than that done under the direction of the College will not be allowed.


## Programs of Study

## DEGREE REQUIREMENTS

West Chester State College offers programs leading to the Bachelor of Arts; the Bachelor of Science in Education, Business Administration, and Chemistry; and the Bachelor of Music degrees. Teacher education programs may be undertaken in elementary education, secondary education with specialization in any of a number of disciplines, health and physical education in two areas, music education, and speech pathology and audiology.

The Bachelor of Arts degree may be earned in fields within arts and letters, the social and behavioral sciences, the sciences, mathematics, and music. It is also possible for the student to develop a pre-professional program within the structure of the appropriate concentration; several of these programs are interdisciplinary in nature.

Certain basic studies (General Requirements) are common to all curricula. Although minor variations exist, these studies are normally composed of courses in arts and letters, social sciences, and sciencesmathematics. The student must consult with his academic adviser to determine the specific courses which will fulfill his General Requirements. (See the basic design for General Requirements on Page 75.)

All undergraduate curricula offered at West Chester may be noted on the chart at the opening pages of this catalogue. For detailed information about programs and degree requirements, consult the material given under

## 74/Programs of Study

the appropriate School. The Schools are alphabetically arranged, as follows:

| School of Arts and Letters | School of Music |
| :--- | :---: |
| School of Education | School of Sciences and |
| School of Health and | Mathematics |
| Physical Education | School of Social and |
|  | Behavioral Sciences |

The Schools of Arts and Letters, Sciences and Mathematics, and Social and Behavioral Sciences work jointly with the School of Education in developing degree requirements in secondary education. The responsibility for final certification of all students seeking the Bachelor of Science in Education rests with the Dean of Undergraduate Studies and, finally, with the Dean of the School of Education. (The professional-education requirements for secondary education majors are found under the School of Education.)

There is also close cooperation and interchange among all of the Schools of the College in the development of these respective curricula. For example, the programs of the School of Arts and Letters are broadened by appropriate courses given in the School of Music.

## Interdisciplinary Programs

Three interdisciplinary programs-American Studies, Latin-American Studies, and Russian Studies-which lead to the Bachelor of Arts degree are shown following the School of Social and Behavioral Sciences. These programs draw in varying degrees on the resources of all Schools of the College.

All courses, and the sequences in which they are given, are subject to change for administrative reasons.

## GENERAL REQUIREMENITS FOR ALL CURRICULA

I SKILLS AND COMPETENCIES: 12 or 18 semester hours
a. English Composition 6
b. Speech 2
c. Foreign Language 0 or

Required at intermediate (201-2| level for all B.A. degrees and B.S. in Education in English.
Credits accumulated at the elementary language level (101-2) do not count foward graduotion requirements for the B.A. or the B.S. in Education in either English or a foreign language unless they are 101-2 credits in an additional language or unless otherwise mandated by the student's major department or School.

For the B.A. in physics and mathematics the language must be French, Russian, or German.
For the B.S. in chemistry, the 101-2 level is sufficient but must be in Germon. (French 101-2 is acceptable substitute if a reading proficiency in German is demonstrated. 1
The B.Mus. requires 6 s.h. of foreign language—need not be at intermediate level.
Except in the field of English, there is no foreign-language requirement for the B.S. in Education.
d. Physical Education 2
e. Health 2

2 ARTS AND LETTERS: 15 semester hours
a. Literature ( 1 Required, 1 Elective) 6
b. Art 3
c. Music 3
d. Philosophy 3

3 SOCIAL SCIENCES: 15 semester hours
a. History (1 Required, 1 Elective) 6
b. Geography 3
c. Psychology or Sociology 3
d. Political Science or Economics 3

4 SCIENCES: II semester hours
a. Science (with Lab) 8
b. Mathematics 3

5 FREE ELECTIVES: 3 semester hours

## 76/General Requirements-Continued

The courses required should be mutually agreeable to the curricular areas concerned. Freedom of choice for the student, with his adviser's approval, to elect substitutes to meet area requirements is recommended. Majors in business administration, chemistry, elementary education, health education, health and physical education, music education, and B. Mus. majors will find the minor variations in their General Requirements outlined in their curricula.


## School of Arts and Letters

John W. Clokey, Dean
Powell S. Thomas, Associate Dean for Graduate Studies
Department of Art
Department of English
Department of Foreign Languages
Department of Philosophy
Department of Speech and Theatre

## BACHELOR OF ARTS

Art
Foreign Languages
Literature

Philosophy
Speech Arts
Theatre Arts

## bachelor of science in education

Comprehensive English
Foreign Languages

Speech and Theatre
Speech Pathology and Audiology

All B. A. students in Arts and Letters note: Throughout the School of Arts and Letters, all B.A. programs have one component in common: the Arts and Letters Core Requirement. Because this Core is standard for every B.A. program in the five departments, it is printed only once, in the following outline. The student will find reference to this outline at Part II, as he studies his Department's B.A. program.

## ARTS AND LETTERS CORE REQUIREMENTS | 18 Semester Hours

(Part II-B.A. programs in Art, Foreign Languages, Literature, Philosophy, Speech Arts, Theatre Arts)
Select 18 s.h. from groups below, but no more than 6 s.h. from any one group. Courses are 3 credits except for music courses shown as 2 credits.

## [1] PHILOSOPHY

Lit 321-Great Books I
Lit 322-Great Books II
Lit 349-Bible as Literature
Phi 360-Philosophy of Language (also Lin 360)
Phi 374-Aesthetics
Phi 380-Ethics
Phi 461-Indian Thought
[2] HISTORY AND LITERATURE OF THE THEATER
Lit 332-English Drama to 1642
Lit 333-Shakespeare I
Lit 334-Shakespeare II
Lit 355-Modern British Drama
Lit 356-Modern Continental Drama
Lit 357-Modern American Drama

Phi 462-Chinese and Japanese Thought
Phi 470-History of Philosophy, Ancient
Phi 471-History of Philosophy, Medieval
Phi 472-History of Philosophy, Modern
Phi 486-Philosophy of Religion
Phi 490-Logic

## [3] MUSIC HISTORY AND LITERATURE

Part 1 (General Requirements) of the total curriculum requires 3 hrs . of music, usually met with Mus 121 (Fine Arts-Music) or Mus 122. If Mus 122 is chosen for Part $I$, Mus 123 is the preferable Care choice. Or, with sufficient musical background, students may (under advisement) meet bath
Requirements with the more technical pair, Music in Western Civ. I-II (Mus 221-222).

Mus 122-Music History I
Mus 123-Music History II
Mus 320-Contemporary Styles (2)
Mus 322-American Music (2)
Mus 323-Aesthetics and Music Criticism (2)

Mus 421-Literature of the
Musical Theater (2)
Mus 422-Musico-Dramatic
Production I (2)
Mus 423-Musico Dramatic
Production II (2)

## [4] ART HISTORY

Art 381-Near Eastern Art: Ancient Antiquity
Art 382-Western Art I: Classical Antiquity
Art 383-Western Art II: Middle Ages
Art 384-Western Art III: RenaissanceBaroque
Art 401-History of Aesthetics and Art Criticism

Art 402-Aesthetics: Contemporary Art Forms
Art 403-Primitive Art
Art 405-Russian Art: Revolution vs. Tradition
Art 407-Oriental Art
Art 408-Arts of the United States I Art 409-Arts of the United States II Art 411-Latin-American Art

## DEPARTMENT OF ART

Dr. Kuruna, Chairman

| PROFESSOR | ASSISTANT PROFESSORS | INSTRUCTOR |
| :--- | :--- | :--- |
| KURUNA | NEWMAN |  |
| ASSOCIATE PROFESSORS | RARICK |  |
| HHITE | SHAPIRO |  |
| HAWTHORNE |  |  |
| HEMPHILL |  |  |
| HOBERG |  |  |
| LASUCHIN |  |  |
| MCKINNEY |  |  |
| RING |  |  |
| SIMMENDINGER |  |  |
| STEIN |  |  |

## BACHELOR OF ARTS

## Art

The major in art is designed to prepare students either for the broad areas of visual communications and environmental design or for competence in a specific medium or selected media. The program also teaches the language of visual expression from the twin approaches of historical analysis and studio practice. There is special focus on art as an integrating force within the arts and letters program. The major must be planned under advisement from the Department of Art faculty.

Degree candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

1 General Requirements - . . . . 62 Semester Hours
(See apening pages, Programs of Study-locate by leafing to black bar on margin.)

II Arts and Letters Core Requirements - - 18 Semester Hours See Page 78.

III Art Concentration Requirements - - . 36 Semester Hours

Art 101-Fine Arts [Art]
(credited to General Requirements) Art 106-Drawing I

Art 111-Design I
Art 112—Design II

Choose either A. Studio Art or B. Art History:

## A. Studio Art

18 semester hours in Studio Art, chosen under advisement from available Art offerings

9 semester hours in Art History

## B. Art History

Art 381-Near Eastern Art: Ancient Antiquity
Art 382-Western Art I: Classical Antiquity
Art 383-Western Art II: Middle Ages
Art 384-Western Art III: Renais-sance-Baroque

Art 385-Western Art IV: Romanticism
Art 386-Western Art V: 20th Century Art 403-Primitive Art
An additional 6 semester hours of Art History, elected from other Art History offerings

IV Electives - - . . . . . - 12 Semester Hours
A typical sequence of courses may be obtained from the Department.

## OFFERINGS IN ART

Art 101 Fine Arts [Art]
Art 106 Drawing I: Perspective, Proportion, Composition
Art 107 Drawing II: Advanced Techniques and Problems
Art 111 Design I: Color Theory and Two-Dimensional Techniques
Art 112 Design II: Three-Dimensional Techniques
Art 206 Drawing: Anatomy of Figure Drawing
Art 207 Drawing: Advanced Figure Drawing
Art 211 Design: Communication Techniques, Lettering, Layout
Art 212 Design: Commercial and Architectural Rendering
Art 216 Painting I: Fundamental Techniques-Basic Composition

Art 217 Painting II: Concepts of Visual Imagery
Art 221 Sculpture I: Subtractive Techniques
Art 222 Sculpture II: Additive Techniques
Art 226 Water Color: Basic WaterBased Techniques
Art 227 Water Color: Intermediate Water-Based Techniques
Art 231 Ceramics I: Basic Techniques and Glaze Calculations
Art 232 Ceramics II: Intermediate Techniques and Glaze Calculations
Art 241 Graphics I
Art 242 Graphics II
Art 251 Art in the Elementary School I
(Continued)

Art 252 Art in the Elementary School II
Art 256 Art in Elementary Education
Art 261 Arts and Crafts: Recreation
Art 263 Arts and Crafts: Special Education
Art 266 Crafts: Three-Dimensional Media for Elementary Education
Art 306 Drawing: Drafting
Art 308 Drawing: Independent Studies
Art 311 Design: Fashion Illustration
Art 316 Painting: Advanced Painting Problems
Art 317 Painting: Head and Figure
Art 320 Painting: Independent Studies
Art 321 Sculpture: Advanced Subtractive Techniques
Art 322 Sculpture: Advanced Additive Techniques
Art 323: Sculpture: Environmental
Art 325 Sculpture: Independent Studies
Art 330 Water Color: Independent Studies
Art 331 Ceramics: Advanced Techniques and Glaze Calculations
Art 332 Ceramics: Kiln Construction
Art 335 Ceramics: Independent Studies
Art 341 Graphics: Intaglio
Art 342 Graphics: Lithography
Art 345 Graphics: Independent Studies

Art 346 Crafts: Jewelry and Metalwork
Art 347 Crafts: Fabric Design
Art 358 Curriculum Development in Art
Art 359 Communication in Art
Art 360 Function of the Museum in Art
Art 381 Near Eastern Art: Ancient Antiquity
Art 382 Western Art I: Classical Antiquity
Art 383 Western Art II: Middle Ages
Art 384 Western Art III: Renais-sance-Baroque
Art 385 Western Art IV: Romanticism
Art 386 Western Art V: 20th Century
Art 401 History of Aesthetics and Art Criticism
Art 402 Aesthetics: Contemporary Art Forms
Art 403 Primitive Art
Art 405 Russian Art: Revolution vs. Tradition
Art 407 Oriental Art
Art 408 Arts of the United States: Material Culture I
Art 409 Arts of the United States: Material Culture II
Art 410 Arts of the United States: Material Culture III
Art 411 Latin-American Art
Art 412 American Architecture
Art 414 Research and Methodology
Art 415 Art History: Independent Studies

## DEPARTMENT OF ENGLISH

Dr. McKenty, Chairman

| PROFESSORS |  | ASSISTANT PROFESSORS |
| :--- | :--- | :--- |
| BAILEY | BROWNE | BAUMGARTNER |
| BERRY | BRUTON | BONKOSKI |
| CLOKEY | CHIRICHELLA | BOYLAN |
| GARRETT | CORR | COMBS |
| HAVILAND | FALGIE | FORD |
| HAYWARD | FIELD | GAUNT |
| HENRY | FORDYCE | MCGRATH |
| JORDAN | HUNSBERGER | MATHEWS |
| KERSHNER | KELLEHER | MYRSIADES |
| MCKENTY | KELIY | PEICH |
| MARKOW | LANDRUM | RIMEL |
| NEWMAN | MCDOWELL (PART-TIME) | ROBERTSON |
| OLDSEY | MILIER | VOOIS (PART-TIME) |
| TAYLOR | MOISIADES |  |
| THOMAS | PAGE | INSTRUCTORS |
| WEISS | PARKER |  |
| WEST | PRATER | CHRISTIAN (PART-TIME) |
| VISITING PROFESSOR | SMITH, E. | HARDIGAN (PART-TIME) |
| JAMES E. ANDREWS | SMITH, J. | L'HEUREUX (PART-TIME) |
| CHEYNEY STATE COLLEGE | WARD | WILEY (PART-TIME) |
| ASSOCIATE PROFESSORS | WATKINS | WISE |
| BERGER (PART-TIME) | ZIEGLER |  |
| BOSWORTH.FLING |  |  |

## BACHELOR OF ARTS

## Literature

The major in literature is. a logical preparation for graduate studies, journalism, publishing, editing, public relations, advertising, specialized fields of business and industrial operations, and certain government careers. Competence in writing and familiarity with the literature of the Western world are foundations for leadership in many areas. The program should be planned with the adviser's help.
Candidates must complete a minimum of 128 semester hours, distributed among four areas as follows:

1 General Requirements - - - - . 62 Semester Hours
(See opening pages, Programs of Study-lacate
by leafing to black bor on margin.)
The required 6 hours of a foreign language must be through the intermediate (201-202) level. Credits accumulated at the elementary language level (101-102)
do not count toward graduation requirements unless they are in a second language area.

The basic literature requirement is met with Lit 121 and Lit 127.
II Arts and Letters Core Requirements - - 18 Semester Hours See Page 78.

III Literature Concentration Requirements - - 39 Semester Hours

Eng 101-English Composition I
Eng 102-English Composition II
(101-102 credited to General Requirements)
Lit 121—General Literature I

Lit 127-General Literature II
(121-127 credited to General Requirements)
Foreign Language-201-202
(credited to General Requirements)

Electives chosen, under advisement, from the following:

Lit 223-American Literature I
Lit 224-American Literature II
Lit 225-English Literature I
Lit 226-English Literature II
Lit 328-Milton
Lit 329-Classical Mythology
Lit 330-Medieval Literature in England
Lit 331-Chaucer
Lit 332-English Drama to 1642
Lit 333-Shakespeare I
Lit 334-Shakespeare II
Lit 335-Restoration and Eighteenth Century Literature
Lit 336-The Romantic Movement
Lit 337-Victorian Literature
Lit 338-Modern Irish Literature
Lit 340-Minority Cultures in American Literature
Lit 341-Afro-American Literature I
Lit 342-Afro-American Literature II
Lit 344 -Literary Form and Content Since World War II
Lit 345-Criticism
Lit 347-Literature of Biography
Lit 348-Short Story
Lit 349-Bible as Literature
Lit 354-Restoration and Eighteenth Century Drama
Lit 355-Modern British Drama
Lit 356-Modern Continental Drama

Lit 357-Modern American Drama
Lit 360-Tudor Literature
Lit 361-Stuart Literature
Lit 370-Origins of the British Novel
Lit 371-Nineteenth Century British Novel
Lit 372-Development of the American Novel
Lit 373-Modern British Novel
Lit 374-Modern American Novel
Lit 380—Modern Poetry I
Lit 381二Modern Poetry II
Lit 385-Colonial and Revolutionary American Literature
Lit 400-English Honors Seminar
Eng 201-Introduction to Linguistics (also Lin 201)
Eng 211-Mass Media in Society
Eng 216-News Reporting
Eng 217-Feature Writing
Eng 218—History of Communications
Eng 309-Contrastive Analysis and Linguistic Interference
Eng 313-Advanced Writing
Eng 314-History of Language
Eng 315-Modern English Grammar
Eng 317-Old English Language and Literature
(Continued)

Eng 318-Middle English Language and Literature
Eng 319-American English

Eng 321-Creative Writing Hum 400-Contemporary Arts:

An Aesthetics Approach

A complete list of English offerings may be noted under Course Descriptions.
IV Electives - - - - . . . . 9 Semester Hours A typical sequence of courses may be obtained from the Department.

## B.S. IN EDUCATION

## Comprehensive English

A student may qualify for the Pennsylvania Instructional I Certificate in Comprehensive English by completing a minimum field requirement of 36 semester hours in English. Degree candidates must satisfactorily complete a minimum of 128 semester hours, distributed as follows:

## 1 General Requirements - . . . . 62 Semester Hours

(See opening pages, Programs of Study-locate
by leafing to black bar on margin.)
The required 6 hours of a foreign language must be through the intermediate (201-202) level. Credits accumulated at the elementary language level (101-102) do not count toward graduation requirements unless they are in a second language area.

The basic literature requirement is met with Lit 121 and Lit 127.
II Professional Education Requirements - - 28 Semester Hours
(See School of Educotion-locate
by leofing to black bar on morgin.)
III Specialized Preparation and Electives - . 36 Semester Hours

Lit 121-General Literature I
Lit 127-General Literature II
(121-127 credited to Generol Requirements)
Lit 223-American Literature I
Lit 224-American Literature II
Lit 225-English Literature I
Lit 226-English Literature II
Eng 201-Introduction to Linguistics (also Lin 201)

Eng 314-History of Language
Eng 315-Modern English Grammar
Eng 316-Teaching English in Secondary Schools
(credited to Professional Education)
Foreign Language 201-202
(Credited to General Requirements)

Electives - at least 15 semester hours are to be elected. Twelve of these must come from the following two groups:

Group 1 (Choose at least one)
Lit 328-Milton
Lit 329-Classical Mythology
Lit 330-Medieval Literature in England
Lit 331-Chaucer
Lit 332-English Drama to 1642
Lit 333-Shakespeare I
Lit 334-Shakespeare II
Lit 335-Restoration and Eighteenth Century Literature
Lit 336-The Romantic Movement
Lit 337-Victorian Literature
Lit 338-Modern Irish Literature
Lit 340-Minority Cultures in American Literature
Lit 341-Afro-American Literature I
Lit 342-Afro-American Literature II
Lit 344-Literary Form and Content Since World War II
Lit 345-Criticism
Lit 348-Short Story
Lit 349-Bible as Literature
Lit 353-Reading Interests of Secondary School Students*
Lit 354-Restoration and Eighteenth Century Drama
Lit 355-Modern British Drama
Lit 356-Modern Continental Drama
Lit 357-Modern American Drama
Lit 360-Tudor Literature
Lit 361-Stuart Literature
Lit 370-Origins of the British Novel
Lit 371-Nineteenth Century British Novel
Lit 372-Development of the American Novel

Lit 373-Modern British Novel
Lit 374-Modern American Novel
Lit 380-Modern Poetry I
Lit 381-Modern Poetry II
Lit 385-Colonial and Revolutionary American Literature
Lit 400-English Honors Seminar
Group 2 (Choose at least one)
Eng 105-Writing Workshop
Eng 211-Mass Media in Society
Eng 212—Principles of Newspaper Production I*
Eng 213-Principles of Newspaper Production II*
Eng 214-Principles of Yearbook Production I*
Eng 215-Principles of Yearbook Production II*
Eng 216-News Reporting*
Eng 217-Feature Writing*
Eng 218-History of Communications*
Eng 309-Contrastive Analysis and Linguistic Interference
Eng 313-Advanced Writing
Eng 317-Old English Language and Literature
Eng 318-Middle English Language and Literature
Eng 319-American English
Eng 321—Creative Writing
Eng 323-Poetry Workshop
Eng 325-Drama Workshop
Eng 327-Short Story Workshop
Eng 331-Exposition Workshop
Eng 405-Senior Writing Seminar

IV Free Electives - . . . . . . 2 Semester Hours
A typical sequence of courses may be obtained from the Department.

## ADDITIONAL OFFERINGS IN ENGLISH

A complete listing of courses offered by the Department of English may be found under Course Descriptions.

[^3]
## DEPARTMENT OF FOREIGN LANGUAGES

Dr. Roberts, Chairman

| PROFESSORS | GOUGHER | KULHANEK |
| :--- | :--- | :--- |
| FRIEMAN | KUHLMANN | LIPSCOMB |
| GUTWIRTH | KULASKI | REISS (PART-TIME) |
| NUNEZ | LOMBARDI | SCHEID |
| PFUND (PART-TIME) | PUERTA |  |
| ROBERTS | SCHNEIDER | INSTRUCTORS |
| SMITH |  |  |
| ASSOCIATE PROFESSORS | ASSISTANT PROFESSORS | BROWN |
| ESCORCIA | EISENSTADT | GEORGIOU (PART-TIME) |
| GIUMAC | GREENE | PETERS (PART-TIME) |

## BACHELOR OF ARTS

## Foreign Languages

French
German
Latin
Russian
Spanish
The program in foreign languages is intended as a preparation for careers involving the use of bilingual skills in government, business and industry, export-import companies, travel agencies, publishing houses, and social work. It is also intended as a preparation for graduate studies leading to advanced degrees. The major should be planned with the help of the faculty adviser. In most instances, the student will be strongly advised to elect Introduction to Linguistics (Lin 201).

Candidates for the B.A. degree, with a concentration in any one of the foreign languages, must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

I General Requirements - - - . . 62 Semester Hours
(See apening pages, Programs of Study-locate by leafing to black bar on margin.)

II Arts and Letters Core Requirements - - 18 Semester Hours See Page 78.

## III Foreign Language Concentration Requirements - 39 Semester Hours (Shown below, under the heading of each language.)

## IV Free Electives . - . . . . - 9 Semester Hours

Introduction to Linguistics (Lin 201) is strongly recommended. Courses in music, literature, art, or the social sciences will be suggested in the light of the student's particular interests.

> F R E N C H - CONCENTRATION REQUIREMENTS (39 HOURS)

Fre 101*-Elementary French I
Fre 102*-Elementary French II
Fre 201—Intermediate French I
Fre 202-Intermediate French II
(201-202 credited to General Requirements)

Fre 203-204-Advanced Grammar
and Composition I-II
Fre 205-206-French Civilization
I-II
Fre 207-Advanced Oral French

Additional courses to complete the 39 hours are to be selected, under advisement, from French electives and/or related fields.

## ELECTIVES

Electives in French are shown following Specialized Preparation for the B.S. in Education (French).
A typical sequence of courses may be obtained from the Department.
G ER M A N - CONCENTRATION REQUIREMENTS (39 HOURS)

Ger 101*-Elementary German I
Ger 102*-Elementary German II
Ger 201-Intermediate German I
Ger 202-Intermediate German II
(201-202 credited to General Requirements)

Ger 203-Advanced Grammar and Composition
Ger 204-Advanced Oral German
Ger 205-Survey of Literature I
Ger 206-Survey of Literature II

Additional courses to complete the 39 hours are to be selected, under advisement, from German electives and/or related fields.

## ELECTIVES

Electives in German are shown following Specialized Preparation for the B.S. in Education (German).

A typical sequence of courses may be obtained from the Department.

## LATIN - CONCENTRATION REQUIREMENTS (39 HOURS)

Lat 101*-Elementary Latin I
Lat 102*-Elementary Latin II
Lat 201—Cicero

Lat 202-Vergil
(201-202 credited to General Requirements)
Lat 303-Latin Prose Composition

Additional courses to complete the 39 hours are to be selected, under advisement, from Latin electives and/or related fields.

[^4]
## ELECTIVES

Electives in Latin are shown following Specialized Preparation for the B.S. in Education (Latin).

A typical sequence of courses may be obtained from the Department.
RUSSIA N - CONCENTRATION REQUIREMENTS (39 HOURS)

Rus 101*-Elementary Russian I
Rus 102*-Elementary Russian II
Rus 201-Intermediate Russian I
Rus 202-Intermediate Russian II
(201-202 credited to General Requirements)
Rus 203-Advanced Grammar and
Composition

Rus 204-Advanced Oral Russian
Rus 205-Advanced Readings in Russian I
Rus 206-Advanced Readings in Russian II

Additional courses to complete the 39 hours are to be selected, under advisement, from Russian electives and/or related fields.

## ELECTIVES

Electives in Russian are shown following Specialized Preparation for the B.S.
in Education (Russian).
A typical sequence of courses may be obtained from the Department.

> S P A NI S H - CONCENTRATION REQUIREMENTS (39 HOURS)

Spa 101*-Elementary Spanish I
Spa 102*-Elementary Spanish II
Spa 201—Intermediate Spanish I
Spa 202-Intermediate Spanish II
(201-202 credited ta General Requirements)
Spa 203-Advanced Spanish Grammar or
Spa 204-Advanced Spanish Composition
Spa 205-Advanced Oral Spanish

Two of the following:
Spa 305-Spanish Medieval Literature
Spa 306-Spanish Literature of the Renaissance
Spa 307-Spanish Literature of the 18th and 19th Centuries
Spa 308-Spanish Literature of the 20th Century
Spa 309-Spanish American Literature

Additional courses to complete the 39 hours are to be selected, under advisement, from electives in Spanish and/or related fields.

## ELECTIVES

Electives in Spanish are shown following Specialized Preparation for the B.S. in Education (Spanish).

A typical sequence of courses may be obtained from the Department.

[^5]
## B.S. IN EDUCATION

## Foreign Languages

French
German
Latin
Russian
Spanish
A student may qualify for the Pennsylvania Instructional I Certificate in a foreign language by completing a minimum field requirement of 30 semester hours in the language. Pennsylvania Certification in the Modern Foreign Languages is contingent on satisfactorily passing the Modern Language Association Proficiency Tests for Teachers and Advanced Students. Degree candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:
I General Requirements - - - - 56 Semester Hours
II Professional Education Requirements - - 28 Semester Hours

III Specialized Preparation - - - - . 30 Semester Hours (Shown belaw, under the heading of each language.)

IV Electives - - - . . - . . 14 Semester Hours Introduction to Linguistics (Lin 201) is strongly recommended.

F R E N C H—SPECIALIZED PREPARATION (30 HOURS)

Fre 101*-Elementary French I
Fre 102*-Elementary French II
Fre 201-Intermediate French I
Fre 202-Intermediate French II
Fre 203-204-Advanced Grammar and Composition I-II

Fre 205-206-French Civilization I-II
Fre 207-Advanced Oral French
Lan 301-Teaching of Modern Languages
(credited ta Professional Educatian)

Additional courses to complete the 30 semester hours must be selected from French electives.

[^6]
## ELECTIVES IN FRENCH

Fre 305-Nineteenth Century
French Novel
Fre 306-Twentieth Century
French Novel
Fre 401-French Literature of the 18th Century
Fre 402-French Lyric Poetry
Fre 403-French Literature of the 17th Century

Fre 404 -French Classical Drama
Fre 405-French Literature of the Middle Ages \& Renaissance
Fre 406-Modern French Theater
Fre 410-Honors Seminar
Fre 411-Honors Seminar
Fre 412-Independent Studies in French Language and Literature

A typical sequence of courses may be obtained from the Department.
G E R M A N-SPECIALIZED PREPARATION (30 HOURS)

Ger 101*-Elementary German I
Ger 102*-Elementary German II
Ger 201—Intermediate German I
Ger 202-Intermediate German II
Ger 203-Advanced Grammar and Composition
Additional courses to complete the 30 semester hours must be selected from German electives.

## ELECTIVES IN GERMAN

Ger 401-The Age of Goethe
Ger 402-Contemporary German Literature
Ger 403-The German Short Story
Ger 404-Goethe
Ger 204-Advanced Oral German
Ger 205-Survey of Literature I
Ger 206-Survey of Literature II
Lan 301-Teaching of Modern Languages
(credited to Professional Education)

Ger 405-Scientific German
Ger 406-German Civilization
Ger 410-Honors Seminar
Ger 411-Honors Seminar

A typical sequence of courses may be obtained from the Department.

## L A T I N — SPECIALIZED PREPARATION (30 HOURS)

Lat 101*-Elementary Latin I
Lat 102*-Elementary Latin II
Lat 201-Cicero
Lat 202-Vergil

Additional courses to complete the 30 semester hours must be selected from electives in Latin.

[^7]ELECTIVES IN LATIN
Lat 302 The Lyric Poets
Lat 304 The Elegiac Poets
Lat 305 Reading Course
Lat 306 Roman Historians
Lat 401 Roman Drama

Lat 402 Roman Philosophy
Lat 403 Roman Satire
Lat 404 The Latin Novel
Lat 405 Medieval Latin
Lat 406 Tutorial Course

A typical sequence of courses may be obtained from the Department. RUSSIA N-SPECIALIZED PREPARATION (30 HOURS)

Rus 101*-Elementary Russian I
Rus 102*-Elementary Russian II
Rus 201—Intermediate Russian I
Rus 202-Intermediate Russian II
Rus 203-Advanced Grammar and Composition

Rus 204-Advanced Oral Russian
Rus 205-Advanced Readings I
Rus 206-Advanced Readings II
Lan 301-Teaching of Modern Languages
(credited to Professional Education)

Additional courses to complete the 30 semester hours must be selected from electives in Russian.

## ELECTIVES IN RUSSIAN

Rus 303 Scientific Russian I
Rus 304 Scientific Russian II
Rus 401 The Russian Novel

Rus 402 The Russian Drama
Rus 410 Honors Seminar
Rus 411 Honors Seminar

A typical sequence of courses may be obtained from the Department.

> SPANISH-SPECIALIZED PREPARATION (30 HOURS)

Spa 101*-Elementary Spanish I
Spa 102*-Elementary Spanish II
Spa 201-Intermediate Spanish I
Spa 202-Intermediate Spanish II
Spa 203-Advanced Spanish Grammar
Spa 204-Advanced Spanish Composition
Spa 205-Advanced Oral Spanish
Lan 301-Teaching of Modern Languages
(credited to Professional Education)

Additional courses to complete the 30 semester hours must be selected from electives in Spanish.

[^8]
## ELECTIVES IN SPANISH

Spa 401 Spanish Comedia of the Golden Age
Spa 402 Cervantes
Spa 403 Spanish Lyric Poetry
Spa 404 The Picaresque Novel
Spa 405 Modern Spanish Theater

Spa 406 The Generation of 1898
Spa 410 Honors Seminar
Spa 411 Honors Seminar
Spa 412 Independent Studies in Spanish Language and Literature

A typical sequence of courses may be obtained from the Department.

## COURSES COMMON TO ALL LANGUAGES

Lan 301 Teaching of Modern Languages
Lan 303 Foreign Languages in the Elementary School

Lin 201 Introduction to Linguistics [also Eng 201]
Lin 360 Philosophy of Language [also Phi 360]
Lin 380 Language and Culture

## GREEK AND ITALIAN

The following courses in Greek and Italian are offered, but no major or minor field is available.

## GREEK

Gre 101 Beginning Greek I
Gre 102 Beginning Greek II

## ITALIAN

Ita 101 Elementary Italian I
Ita 102 Elementary Italian II

Gre 201 Intermediate Greek I
Gre 202 Intermediate Greek II

Ita 201 Intermediate Italian I
Ita 202 Intermediate Italian II

## THE JUNIOR YEAR ABROAD PROGRAM

The following courses in French are offered at the University of Montpellier, France, under the Junior Year Abroad Program sponsored by West Chester State College. The program is designed for prospective teachers of French in order to give them a firsthand acquaintance with French life and enable them to achieve a native command of the language.
The program is open to any student enrolled in a Pennsylvania college or university who has completed the equivalent of two years of college French and is able to take lectures in French. During the time the student is enrolled in the program, he is a student of West Chester State College and will receive a minimum of 30 credits for a full two semesters of college work after successful completion of the year-abroad program of studies. Each course runs for two semesters and is conducted entirely in French by French professors.

## COURSE OFFERINGS

Fre 361-62 Advanced Grammar and Composition
Fre 363-64 Advanced French Conversation

Fre 365-66 Phonetics and Translation
Fre 367-68 Contemporary French Civilization
Fre 369-70 Literary Studies

## DEPARTMENT OF PHILOSOPHY

Dr. Claghorn, Chairman

| PROFESSORS | ASSISTANT PROFESSORS | INSTRUCTOR |
| :--- | :--- | :--- |
| CLAGHORN | BANYACSKI | WILLIAMS |
| PLATT | CRODDY |  |
| RIUKAS | STREVELER |  |
| STRUCKMEYER |  |  |

## BACHELOR OF ARTS

## Philosophy

Philosophy aims to familiarize the student with our intellectual heritage, to promote clear thinking, and to encourage an understanding of other people. As philosophy analyzes and relates many disciplines, it is general education in the broadest sense. The philosophy major is standard preparation for opportunities in business and industry, particularly in connection with computers. It leads also to government posts dealing with personnel, problem-solving, and work with other cultures. Philosophy is recommended for pre-law and pre-seminary students. This program opens the way to graduate work and to careers in college teaching.

Candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:


IV Electives - - - - - - . . . 24 Semester Hours
A typical sequence of courses may be obtained from the Department.

## OFFERINGS IN PHILOSOPHY

Phi 280 Introduction to Philosophy
Phi 360 Philosophy of Language
Phi 374 Aesthetics
Phi 380 Ethics
Phi 461 Indian Thought
Phi 462 Chinese and Japanese Thought
Phi 463 History of Hebrew Thought
Phi 464 History of Islamic Thought
Phi 465 History of Christian Thought
Phi 470 History of Philosophy, Ancient
Phi 471 History of Philosophy, Medieval

Phi 472 History of Philosophy, Modern
Phi 475 Nineteenth Century Philosophy
Phi 483 Philosophy of History
Phi 484 American Philosophy
Phi 485 Contemporary Philosophy
Phi 486 Philosophy of Religion
Phi 487 Philosophy of Science
Phi 488 Theory of Knowledge
Phi 490 Logic
Phi 491 Advanced Logic
Phi 498 Seminar in Ancient Philosophy
Phi 499 Seminar in Modern Philosophy


## DEPARTMENT OF SPEECH AND THEATRE

Dr. Morehouse, Chairman

| PROFESSORS | ASSOCIATE PROFESSORS | ASSISTANT PROFESSORS |
| :--- | :--- | :--- |
| GRIFFITH | BERKOWITZ | CASAGRANDE |
| HAYES (PART-TIME) | COPE | EBERHART |
| MOREHOUSE | HASHIMOTO | HALL |
|  | JACOBS | KEEFE |
|  | MARTEL |  |
|  | MAXWELL |  |
|  | MEISWINKEL |  |
|  | PEREGO |  |
|  | PETERSON |  |
|  | SUPPAN |  |

The aims of the Department of Speech and Theatre are to develop the student into an independent, responsible, and effective citizen by enabling him to grasp the nature and scope of the communicative process and to assist him to master the skills of oral communication and the performing arts. All four of the Department's degree programs have certain courses in common. Beyond these it is possible to develop curricular and cocurricular programs emphasizing one of three areas: speech, theatre, or speech pathology and audiology. The last of these areas is a specialeducation discipline equipping the student to teach the speech and hearing handicapped in the elementary and secondary schools of the Commonwealth.

## BACHELOR OF ARTS DEGREE

## A. Speech Arts

Candidates for the B.A. degree in Speech Arts must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

1 General Requirements - - - - 62 Semester Hours
(See opening pages, Programs of Study-locate
by leafing to black bar on margin.)
II Arts and Letters Core Requirements - - 18 Semester Hours

96/Arts-Letters: Speech and Theatre

III Speech Arts Concentration Requirements - 39 Semester Hours

Sph 101-Fundamentals of Speaking
(credited to Generol Requirements)
Sph 102-Advanced Public Speaking
Sph 103-Discussion
Sph 105-Voice and Diction
Sph 201—Public Address
Sph 204-General Semantics

Sph 305-History of Rhetorical Theory: Classical
ThA 101-Introduction to the Theatre ThA 102-Oral Interpretation
SpP 201—Introduction to Speech Problems

Additional courses, as advised, from the offerings of the Department of Speech and Theatre- 12 semester hours.

IV Electives - - - - - - - 9 Semester Hours A typical sequence of courses may be obtained from the Department.

## B. Theatre Arts

Candidates for the B.A. degree in Theatre Arts must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

1 General Requirements - - - - - 62 Semester Hours
(See opening pages, Programs of Study-locote
by leafing to block bor on margin.)
II Arts and Letters Core Requirements - - 18 Semester Hours
See Page 78.
III Theatre Arts Concentration Requirements - 40 Semester Hours

ThA 100-Theatre Practice
ThA 101-Introduction to Theatre
ThA 102-Oral Interpretation
(credited to General Requirements)
ThA 103-Beginning Acting
ThA 204-Stagecraft and Production Management
ThA 301—Play Direction
ThA 308-History of the Theatre to 16th Century
ThA 309-History of the Theatre, 16th Century to Present

Sph 103-Discussion
Sph 401-Psychology of Speech
Lit 332-English Drama to 1642
Choose two Literature courses from
the following:
Lit 355-Modern British Drama
Lit 356-Modern Continental Drama
Lit 357-Modern American Drama
PEd 341-Modern Dance I
PEd 342-Modern Dance II
( 341 -342 credited to Generol Requirements) Electives in Theatre Arts as advised.

IV Electives
II Semester Hours
A typical sequence of courses may be obtained from the Department.

## B.S. IN EDUCATION

## A. Speech and Theatre

A student may qualify for the Pennsylvania Instructional I Certificate in Speech and Theatre by completing a minimum field requirement of 33 semester hours. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed in four areas as follows:

1 General Requirements - - - . 56 Semester Hours
(See opening pages, Programs of Study-locale
by leafing lo black bar on morgin.)
II Professional Education Requirements - - 28 Semester Hours
See School of Educotion-locate
by leafing to block bor on morgin.)
III Specialized Preparation - . - . . 33 Semester Hours

Sph 101-Fundamentals of Speaking (credited to General Requirements)
Sph 103-Discussion
Sph 105-Voice and Diction
Sph 201-Public Address
Sph 203-Argumentation and Debate
ThA 101-Introduction to Theatre
ThA 102-Oral Interpretation
ThA 103-Beginning Acting

ThA 206-Educational Theatre Production
ThA 301-Play Direction
SpP 201-Introduction to Speech Problems
Sph 401-Psychology of Speech
Sph 402-Teaching Speech and Drama
(credited to Professional Education)

IV Electives - . - . . . . - II Semester Hours
A typical sequence of courses may be obtained from the Department.

## B. Speech Pathology and Audiology

A student may qualify for the Pennsylvania Instructional I Certificate in Teaching the Speech and Hearing Handicapped-allowing him to function as a therapist (K-12) in the schools of the Commonwealth-by completing a minimum field requirement of $38-40$ hours. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

## II Professional Education . . . . . 33 Semester Hours

EdA 241-Psychology of Exceptional Children
EdF 100-School and Society
EdF 307-Field Experience in Education (K-12)
EdP 250—Psychology of Learning and Development

Psy 370-Mental Hygiene 3

Psy 425-Psychological Testing and Measurement 3

SpP 402-The School Speech and Hearing Program 3
SpP 412-Therapy in the Public Schools (Student
Teaching) ..... 12

III Specialized Preparation - - - - 38-40 Semester Hours
Sph 100-Bases of Speech
Sph 106-Introduction to Phonetics
SpP 170-Speech and Language
Development
SpP 202--Speech Pathology I
SpP 203-Speech Pathology II
SpP 204-Clinical Principles
in Speech and Hearing
SpP 301-Introduction to
Audiology
SpP 303-Clinical Practicum (4-6 s.h.)
SpP 304-Aural Rehabilitation

SpP 305-Audiometry
SpP 404-Inter-Professional Seminar in Speech and Hearing
Bio 100-Basic Biological Science
(credited to Generol Requirements)
Bio 202-Anatomy of Speech and Hearing Mechanisms
(credited to General Requirements)
Phy 110-Acoustics for Speech and Hearing
Psy 420-Statistics for the Behavioral Sciences

IV Electives - - . . . - . . 0.2 Semester Hours

A typical sequence of courses may be obtained from the Department.

Offerings of the Department are shown below.

## Other Programs in Special Education

In addition to the degree program delineated above, West Chester offers two other opportunities for study in the area of special education. Both lead to certificationone for teaching the mentally retarded and the other for teaching the physically handicapped. See Certification Programs in Special Education under School of Education.

## OFFERINGS IN SPEECH AND THEATRE

## SPEECH

Sph 100 Bases of Speech
Sph 101 Fundamentals of Speaking
Sph 102 Advanced Public Speaking
Sph 103 Discussion
Sph 105 Voice and Diction
Sph 106 Introduction to Phonetics
Sph 201 Public Address
Sph 203 Argumentation and Debate
Sph 204 General Semantics
Sph 230 Business and Professional Speech Communication
Sph 303 Advanced Argumentation and Debate

Sph 305 History of Rhetorical Theory: Classical
Sph 306 History of Rhetorical Theory: Medieval to Modern
Sph 317 Directing Forensics
Sph 399 Directed Studies in Speech and Theatre
Sph 401 Psychology of Speech
Sph 402 Teaching Speech and Drama
Sph 403 Persuasion

## SPEECH PATHOLOGY AND AUDIOLOGY

SpP 000 Speech Improvement
SpP 170 Speech and Language Development
SpP 201 Introduction to Speech Problems
SpP 202 Speech Pathology I
SpP 203 Speech Pathology II
SpP 204 Clinical Principles in Speech and Hearing
SpP 301 Introduction to Audiology
SpP 303 Clinical Practicum

## THEATRE ARTS

ThA 100 Theatre Practice
ThA 101 Introduction to the Theatre
ThA 102 Oral Interpretation
ThA 103 Beginning Acting
ThA 104 Stage Lighting
ThA 201 Stage Makeup
ThA 202 Advanced Oral
Interpretation
ThA 203 Intermediate Acting
ThA 204 Stagecraft and Production Management
ThA 205 History of Costume and Design I
ThA 206 Educational Theatre Production

SpP 304 Aural Rehabilitation
SpP 305 Audiometry
SpP 399 Directed Studies in Speech and Theatre
SpP 402 The School Speech and Hearing Program
SpP 404 Inter-Professional Seminar in Speech and Hearing
SpP 412 Therapy in the Public Schools (Student Teaching)

ThA 207 Creative Dramatics
ThA 217 Television Production Techniques
ThA 300 The Art of Oral Reading for Teachers
ThA 301 Play Direction
ThA 302 Directing and Producing the Instructional Television Program
ThA 304 Scene Design
ThA 305 History and Costume of Design II
ThA 308 History of the Theatre to the 16 th C .

ThA 309 History of the Theatre, 16th C. to the Present
ThA 310 History and Aesthetics of the Oriental Theatre
ThA 399 Directed Studies in Speech and Theatre
ThA 401 Advanced Directing

ThA 402 Directing and Producing the Dramatic Television Program
ThA 403 Advanced Acting
ThA 404 Advanced Scene Design
ThA 405 Advanced Costume Design
ThA 409 Advanced Makeup

## INTERDISCIPLINARY PROGRAMS

West Chester offers three interdisciplinary programs: American Studies, Latin-American Studies, and Russian Studies. All lead to the Bachelor of Arts degree.

The curricula for these three programs are fully outlined under School of Social and Behavorial Sciences (see Interdisciplinary Programs in index for page). Further information may be obtained from either the Dean of the School of Arts and Letters or the Dean of the School of Social and Behavioral Sciences.

## Interdisciplinary Course Offerings

Two interdisciplinary courses of particular interest to Arts and Letters students are described in Course Descriptions under "English." They are Humanities 400 (The Contemporary Arts: An Aesthetics Approach) and Humanities 370 (Seminar in Science and Values).


## School of <br> Education

Harold W. Benda, Dean
John A. Lander, Associate Dean
Michael F. Bannon, Associate Dean for Graduate Studies

| Department of | Department of | Department of |
| :---: | :---: | :---: |
| Elementary | Secondary | Counselor |
| Education | Education and | Education |
| Charlotte E. King, Chairman | Professional Siudies | Julian M. Swiren, Acting Chairman |
| Carlos R. Ziegler, | Walter N. Ridley, | PROFESSOR |
| Assistant Chairman | Chairman | HILL |
|  |  | ASSOCIATE PROFESSORS |
| PROFESSORS | PROFESSORS | CLARK |
| KING | BANNON | gottshall |
| ROSS | BENDA | Greenberg |
|  | DESSENBERGER | PAGANELLI |
| ASSOCIATE PROFESSORS | LANDER | RAHN |
| GOOD, CHARLOTTE | RIDLEY | SWIREN |
| HAAS | THOMAS |  |
| HABECKER |  | Department of |
| HERRES | ASSOCIATE PROFESSORS | Instructional |
| KULP | BARTH | Instructional |
| PEIA ZIEGLER | BUECHELE CLEARY | Media Education |
| ASSISTANT PROFESSORS | FRANCELLA | Richard P. Weagley, |
| CHERN | GLEOCKLER GROSS | Chairman |
| DUNLAP | KIPP |  |
| GIBSON | McClure | PROFESSORS |
| GRASTY | MISSISSYAN | MCTAVISH |
| HASSELQUIST | PAGANELLI | STRAYER |
| HOUSEMAN | PATTERSON | WEAGLEY |
| NEWHAM | RECKTENWALD | ASSOCIATE PROFESSORS |
| PETKOFSKY | ASSISTANT PROFESSORS | REDMOND |
| INSTRUCTORS | McKENDRY (PART-TIME) | SPIECKER |
| BLACK | SCHURR (PART-TIME) | ASSISTANT PROFESSORS |
| MORGAN, MARY ANN | TREADWELL | REIS |
|  |  | STEINMETZ |
|  |  | INSTRUCTORS |
|  |  | FRANZ (PART-TIME) |
|  |  | MORGAN, JOHN (PART-TIME) |


| Reading | Laboratory School | Student Teaching |
| :---: | :---: | :---: |
| Charles D. Rice, | Gerald B. Cartright, | Program |
| Coordinator | Principal | Mark M. Evans, |
| ASSOCIATE PROFESSOR | associate professor | Director |
| RICE | CARTRIGHt | professor |
| Special Education | Assistant professor | EVANS |
|  | PRITCHARD | ASSOCIATE PROFESSORS |
| Howard Freeman, | instructors | brice |
| Coordinator | ${ }_{\text {Browne }}^{\text {Browel }}$ | ${ }_{\text {BRIS }}^{\text {BROM }}$ |
| Professor | MCCOACH | GERMAN |
| fremman | MORGAN, MARY ANN | GogGard |
| ASSOCIATE PROEFSSOR |  | holingjak |
| PAINTING (PART-TIME) |  | JACECKO |
|  |  | talley |
| Assistant professor |  | Walters |
| NICKLES |  | ASSIITANT PROFESSORS |
|  |  | Grafton |
| Urban Education |  | hasselquist |
| F. William Leeds, |  | Lewis |
| Coordinator |  |  |
| ASSOCIATE PROFESSOR |  |  |

[The Schoal of Health and Physical Education ond the School of Music ossist the Student Teaching Program by providing foculty for supervisian in their respective speciol skills.]

The School of Education, working cooperatively with the total College community, assumes the responsibility for providing the prospective teacher with the technical knowledge and skills, supported by laboratory experiences, to be used in his profession; and with the social, ethical, and professional attitudes necessary for success in teaching.

# DEPARTMENT OF ELEMENTARY EDUCATION 

Charlotte E. King, Chairman<br>Carlos R. Ziegler, Assistant Chairman

The elementary education curriculum is designed to provide a broad background of general education, an understanding of children, and the knowledge and skills needed to teach all aspects of the elementary school program. There is no major or minor field in this curriculum, but students must meet the State requirements for an area of interest (formerly described as area of concentration). Upon satisfactory completion of the approved program in elementary education, the student will qualify for a Pennsylvania Instructional I Teaching Certificate (formerly the College Provisional Certificate). This certificate will be valid for teaching for three years in the nursery school, kindergarten, and grades one through six.

Students desiring specific certification in grades four through eight are advised to consult with the Chairman of the Department of Elementary Education.

## B.S. IN EDUCATION DEGREE

Candidates for the B.S. in Education must complete a minimum of 128 semester hours, distributed among the following four areas:

I General Requirements . . - - . 56 Semester Hours
(See apening pages, Pragrams of Study-lacate
by leafing to black bar on margin.)
Note that the specific courses which meet General Requirements in the elementary education curriculum are shown in the typical course sequence at the end of this Department of Elementary Education section.

II Professional Education - - - . . 22 Semester Hours
EDF 100-School and Society (3)
EdP 250-Psychology of Learning and Development (3)
EDM 300-Audio-Visual Education (2)
EdP 351-Evaluation and Measurement (2)
EdE 411-Student Teaching and Practicum (12)

## III Specialized Preparation - . - . . 37 Semester Hours

Art 251-Art in the Elementary School I (3)
EdE 251-Human Development: Childhood (3)
Mus 231-Music for the Primary Grades (3) or Mus 232-Music for the Intermediate Grades (3)
PEd 201-Practice and Theory in Elementary Physical Education (1) (credited to General Requirements)
PEd 202-Dance Activities in the Elementary Program (1)
Sci 250-Science for the Elementary Grades (3)
SpP 201-Introduction to Speech Problems (3)
EdE 305-Field Experience in Elementary Education (1)
EdE 309-Language Arts in the Elementary School (6) or, with departmental approval, EdE 317-Oral and Written Expression in the Elementary School (3) and EdE 319-Reading in the Elementary School (3)
EdE 332-Teaching Social Studies in the Elementary School (3)
HEd 350-Health for the Elementary Grades (3)
Lit 350-Children's Literature (3)
Mat 351-Teaching Mathematics in Elementary Schools (3)
EdE 401-Current Trends in Elementary Education (2)

## IV Electives - . . . . . . |3-2| Semester Hours

In order to meet the State requirement for concentrated study in a specific fieid and to earn part or all of the elective credits required for graduation, elementary education majors must select an area of interest from the list below. This is not a minor field; except for foreign language and special education, it does not add any field to the teaching certificate. All electives, whether part of an area of interest or not, should be selected under advisement by the department involved.

## Requirement for Transfer Students

All transfer students whose major field is elementary education must complete a minimum of six s.h. in EdE courses at West Chester prior to undertaking their student-teaching semester. This requirement must be met even if all courses listed under Specialized Preparation were completed at another institution.

## AREAS OF INTEREST

ART

| Elementary Education |
| :--- |
| Curriculum Requirements ( 6 s.h.) |
| Art 101—Fine Arts (Art) |
| Art 251—Art in the Elementary |
| School I |
| Area of Interest Requirements ( 6 s.h.) |
| Art 252—Art in the Elementary |
| School II |
| Art 266-Crafts: Three-Dimensional |
| Media for Elementary |
| Education |
| Electives (12 s.h.) |
| Art courses, chosen under advisement |
| EARLY CHILDHOOD |
| EDUCATION |

Elementary Education Curriculum Requirements (9 s.h.)

EdE 251-Human Development: Childhood
EdE 309-Language Arts in the Elemeniary School
Area of Interest Requirements ( 12 s.h.)
EdE 302-Field Experience in Early Childhood Education
EdE 403-Early Childhood Education I
EdE 404—Early Childhood Education II
Soc 231-Introduction to Sociology
Electives (6 s.h.)
Selected under advisement from the following groups:
A. Creative Expression (3 s.h.)

EdE 301-Creativity in the Classroom ThA 207-Creative Dramatics
B. Society and Culture ( 3 s.h.)

Ant 231-Introduction to Anthropology
EdU 360-The Disadvantaged Child
EdU 361-Teaching in Urban Schools
Soc 332-Contemporary Social Problems
Soc 333-The Family
Soc 335-Racial and Cultural Minorities

ENGLISH 26 s.h.

Elementary Education
Curriculum Requirements (20 s.h.)
Eng 101-English Composition I
Eng 102-English Composition II
Sph 101-Fundamentals of Speaking
Lit 121-General Literature I
Lit 122-General Literature II
Lit 350-Children's Literature
SpP 201-Introduction to Speech Problems

Electives (6 s.h.)
2 electives in English

## ENGLISH AND FOREIGN LANGUAGES 26 s.h.

Elementary Education
Curriculum Requirements (14 s.h.)
Eng 101-English Composition I
Eng 102-English Composition II
Sph 101-Fundamentals of Speaking
Lit 121-General Literature I
Lit 122-General Literature II
Electives
12 s.h. in a foreign language.
Note: See Department of Foreign Languoges
before scheduling language courses.

## EXPRESSIVE LANGUAGE <br> ARTS 24 s.h.

Elementary Education
Curriculum Requirements (11 s.h.)
Eng 101-English Composition I
Eng 102-English Composition II
Sph 101-Fundamentals of Speaking
SpP 201—Introduction to Speech Problems

Area of Interest Requirements ( 6 s.h.)
ThA 102-Oral Interpretation
ThA 207-Creative Dramatics
Electives (7 s.h.)
Courses in English, Speech, and Theatre Arts, selected under advisement

## GEOGRAPHY

Elementary Education
Curriculum Requirements (6 s.h.)
Geo 101-World Geography
EdE 332-Teaching Social Studies in the Elementary School

Area of Interest Requirements (3 s.h.)
Geo 202-Geography of the U.S. and Canada

Electives (12 s.h.)
Selected under advisement.
The following are most suitable:
Geo 100-Physical Geography
Geo 201-Conservation of Natural Resources
Geo 203-Applied Economic Geography
Geo 204-Geography of Pennsylvania
Geo 207-Geography of Europe
Geo 208-Geography of Latin America

HEALTH AND
PHYSICAL EDUCATION 24 s.h.

Elementary Education
Curriculum Requirements (8 s.h.)
PEd 101—Physical Activities I
PEd 201-Practice and Theory in Elementary Physical Education
PEd 202-Dance Activities in the Elementary Program
HEd 150-Health
HEd 350-Health for the Elementary Grades

Area of Interest
Requirements (13 s.h.)
PEd 261-History and Philosophy of Physical Education
PEd 365-Physical Activities for Atypical Children I
PEd 465-Elementary Physical Education Curriculum
PEd 466-Self-Testing Activities in Elementary School Physical Education
HEd 253-The School Health Program
HEd 353-First Aid for Teachers
Electives (3 s.h.)
Selected under advisement from the following:
PEd 130-Aquatic Fundamentals (Men)
or
PEd 131-Aquatic Fundamentals (Women)
PEd 341—Modern Dance I
PEd 355-Kinesiology
PEd 367-Arts and Crafts in Recreation
PEd 370-Camping and Outing
PEd 481-Education for Safe Living
HEd 356-Family Life Education
HEd 357-Community Health

## HISTORY

24 s.h.

Elementary Education
Curriculum Requirements (9 s.h.)
His 101-History of Civilization I
His 102-History of Civilization II
His 211-History of U.S. I
Area of Interest Requirements (3 s.h.)
His 212-History of U.S. II
Electives (12 s.h.)
Selected under advisement
from the following groups:
A. American History (3 s.h.)

His 313-History of Pennsylvania
His 316-History of the American Frontier
His 317-History of American Science and Technology
His 319-Social and Cultural History of the U.S.
His 320-History of the South
His 339-History of the Afro-American
B. European History (3 s.h.)

His 219-Medieval Europe
His 331-History of England to 1688
His 332-History of England since 1688
His 340-Modern Germany
His 350-Russian History to 1917
His 351-Soviet Russia
C. World and Regional History ( 6 s.h.)
His 218-The Ancient World
His 322-History of South Asia
His 323-History of the Middle East
His 325-History of the Twentieth Century World
His 326-History of Africa to 1800
His 328-History of Subsaharan Africa since 1800
His 329-History of East Asia

His 333-History of Latin America to 1825
His 334-History of Latin America since 1825

MATHEMATICS
24 s.h.

Elementary Education
Curriculum Requirements (6 s.h.)
Mat 101-Introduction to College Mathematics I
Mat 351-Teaching Mathematics in Elementary Schools

## Area of Interest

Requirements ( 9 s.h.)
Mat 102-Introduction to College Mathematics II
Mat 311-Algebra for Elementary Teachers
Mat 331-Geometry for Elementary Teachers
Electives (9 s.h.)
Selected under advisement
from the following:
Mat 105-College Algebra and Trigonometry
Mat 106-Foundations of Mathematics
Mat 121-Statistics
Mat 141-Calculus I
Mat 142-Calculus II
Mat 211-Linear Algebra
Mat 231-Concepts of Euclidean Geometry
Mat 401-History of Mathematics
MUSIC 24 s.h.

Prerequisites: Music qualifying tests and approval by the School of Music.
music history (6 s.h.)
Mus 122-Music History I
(in place of Mus 121)
Mus 123-Music History II

THEORY OF MUSIC (6 s.h.)
Mus 111-Foundations of Music I
Mus 211-Foundations of Music II
PROFESSIONAL EDUCATION (6 s.h.)
Mus 332-Elementary Music Methods
(in place of Mus 231 or Mus 232)
Mus 334-Teaching Music Appreciation in the Elementary Grades

APPLIED MUSIC ( 6 s.h.)
Performance Area [individual lessons] (3 s.h.)
Voice [individual lessons] (1 s.h.)
Musical Organization (1 s.h.)
Elective (1-2 s.h.)

## OUTDOOR EDUCATION

A new Area, concerned with environmental and ecological problems, is being prepared jointly by several Departments as this catalogue goes to press. For details, communicate with the Chairman of the Department of Elementary Education.

| PSYCHOLOGY 23 s.h. |
| :--- |
| Elementary Education <br> Curriculum Requirements (11 s.h.) <br> Psy 100—Introduction to Psychology <br> EdP 250—Psychology of Learning <br> $\quad$ and Development |
| EdE 251—Human Development: |
| $\quad$Childhood |
| EdP 351—Evaluation and |
| Measurement |
| Electives (12 s.h.) |
| 4 courses in psychology |

SCIENCES 26 s.h.

Elementary Education
Curriculum Requirements (11 s.h.)
Bio 100-Basic Biological Science
Sci 150-Basic Physical Science
Sci 250-Science for the Elementary Grades

Electives (15 s.h.)
Selected under advise-
ment from the following groups:
A. Biological Science

Bio 200-Basic Genetics
Bio 201-Basic Ecology
Bio 271-Wildlife Conservation
Bio 275-Field Botany
Bio. 277—Field Zoology
Bio 378-Ornithology
B. Physical Science

Sci 251-Matter and Energy
ESS 101-Earth Science
ESS 111—General Astronomy
ESS 201—Physical Geology

## SOCIAL SCIENCES <br> 24 s.h.

Elementary Education
Curriculum Requirements (18 s.h.)
Geo 101-World Geography
His 101-History of Civilization I
His 102-History of Civilization II
His 211-History of U.S. I
PSc 231—American Government
EdE 332-Teaching Social Studies in the Elementary School

Electives (6 s.h.)
2 courses (1 in sociology, the other in economics)

## SPECIAL EDUCATION 25 s.h.

Elementary Education
Curriculum Requirements (14 s.h.)
Art 251-Art in the Elementary School I
Psy 100-Introduction to Psychology
EdP 250-Psychology of Learning and Development
EdE 251—Human Development: Childhood
EdP 351-Evaluation and Measurement
Elective Areas (11 s.h. each)
(Choose either field)
Teaching the Mentally Retarded
EdA 241—Psychology of Exceptional Children
EdA 243-Psychology of the Mentally Retarded
EdA 344-Problems in Special Education
EdA 348-Curriculum and Methods for the Mentally Retarded
or
Teaching the Physically Handicapped
EdA 241—Psychology of Exceptional Children
EdA 349-Curriculum and Methods for the Physically Handicapped
PEd 390-Physical Disabilities of Childhood
PEd 391-Psychology of the Physically Handicapped

TEACHING THE SPEECH
AND HEARING
HANDICAPPED 21 s.h.

## Area of Interest Requirements

Sph 100-Bases of Speech
Sph 106-Introduction to Phonetics

SpP 170-Speech and Language Development
SpP 202-Speech Pathology I
(SpP 201-Introduction to Speech Problems
[required in the Elementary Curriculum] may
be substituted with the instructor's permission.)
SpP 203-Speech Pathology II
SpP 301-Introduction to Audiology
SpP 303-Clinical Practicum (3 s.h.)

## URBAN EDUCATION 24 s.h.

Elementary Education
Curriculum Requirements (9 s.h.)
EdF 100-School and Society
EdP 250—Psychology of Learning and Development
EdE 251-Human Development: Childhood

## Area of Interest

Requirements (12 s.h.)
Soc 231-Introduction to Sociology
Soc 335-Racial and Cultural Minorities
EdU 360-The Disadvantaged Child
EdU 361-Teaching in Urban Schools

Elective (3 s.h.)
Soc 332-Contemporary Social Problems
Soc 333-The Family
Soc 334-Juvenile Delinquency
Soc 336-Urban Sociology
Eco 333-Consumer Economics
His 339-History of the Afro-American
Lit 340-Minority Cultures in American Literature
Lit 341-Afro-American Literature I
Lit 342-Afro-American Literature II
Psy 354-Social Psychology

## TYPICAL COURSE SEQUENCE IN THE ELEMENTARY EDUCATION CURRICULUM

(The sequence of courses is subject to change for administrative reasons.)

FRESHMAN`YEAR<br>Semester Hours

Art 101-Fine Arts (Art) 3
Bio 100-Basic Biological Science4
Eng 101—English Composition I ..... 3
Eng 102-English Composition II ..... 3
Geo 101-World Geography ..... 3
HEd 150-Health ..... 2
Mat 101-Introduction to College Mathematics I ..... 3
Mus 121-Fine Arts (Music) ..... 3
PEd 101—Physical Activities I ..... 1
Psy 100-Introduction to Psychology ..... 3
Sci 150-Basic Physical Science ..... 4
Sph 101-Fundamentals ofSpeaking234
(All courses shown for the freshmon Year are credited to General Requirements)

## SOPHOMORE YEAR

Semester HoursArt 251-Art in the ElementarySchool I3
EdF 100-School and Society ..... 3
EdP 250-Psychology of Learningand Development3
His 101-History of Civili- zation I ..... 3
His 102-History of Civili- zation II ..... 3
(101-102 credited to Genera: Requirements)
Lit 121-General Literature I ..... 3
Lit 122-General Literature II ..... 3
(121-122 credited to General Requirements)
Mus 231-Music for the PrimaryGrades or
Mus 232-Music for the Inter- mediate Grades ..... 3
PEd 201-Practice and Theory in Elementary Physical Education ..... 1
(credited to Generol Requirements)
PEd 202-Dance Activities in theElementary Program 1
SpP 201-Introduction to SpeechProblems3
Elective ..... 332
JUNIOR YEAR
Semester HoursEdE 251-Human Development:Childhood3
EdE 305-Field Experience in Elementary Education 1EdE 309-Language Arts in theElementary School6
EdE 332-Teaching Social Studies in the Elementary School ..... 3
EdM 300—Audio-Visual Education ..... 2
HEd 350-Health for the
Elementary Grades ..... 3
His 211-History of the U.S. I ..... 3
(credited to General Requirements)
Lit 350-Children's Literature ..... 3
Mat 351-Teaching Mathematicsin ElementarySchools3
Sci 250 -Science for the Elementary Grades ..... 3
Electives ..... 5

## SENIOR YEAR

## Semester Hours

EdE 401-Current Trends in Elementary Education 2
EdE 411-Student Teaching and Practicum 12
EdP 351-Evaluation and Measurement 2
Phi 280-Introduction to
Philosophy 3
(credited to General Requirements)
PSc 231-American Government 3
(credited to General Requirements)
Electives


## DEPARTMENT OF SECONDARY EDUCATION AND PROFESSIONAL STUDIES

Walter N. Ridley, Chairman

A major in secondary education may be earned in biology, chemistry, comprehensive science, earth and space science, English, French, geography, German, history, Latin, mathematics, physics, Russian, social studies, Spanish, and Speech and Theatre. Upon satisfactory completion of the requirements of the secondary curriculum, the student will be granted the degree of Bachelor of Science in Education by the College and will qualify for a Pennsylvania Instructional I Certificate (formerly described as the Pennsylvania Provisional Certificate). This certificate is valid for teaching the specified subject or subjects in an approved secondary school in Pennsylvania for three years. Students must choose one field of specialization.

## GENERAL REQUIREMENTS-SECONDARY EDUCATION MAJORS

Although the General Requirements of the College are primarily the same for all subject fields, certain variations are made when there is logical reason for them. The basic pattern for General Requirements may be noted in the opening pages of Programs of Study (locate by leafing to black bar on margin). To determine approved substitutions for his particular field, the secondary education major must consult the course requirements listed under the heading of his field.

## PROFESSIONAL EDUCATIONSECONDARY EDUCATION MAJORS

Professional Education Courses Semester Hours
EdF 100 School and Society ..... 3
EdP 250 Psychology of Learning and Development ..... 3
EdM 300 Audio-Visual Education ..... 2
EdS 306 Field Experience in Secondary Education ..... 3
EdP 351 Evaluation and Measurement ..... 2
EdS 412 Student Teaching for Secondary Majors, including Practicum ..... 12
Methods of Teaching Academic Subject ..... 3

## SPECIALIZATION FOR SECONDARY TEACHING

Specialization in one of the teaching fields listed below is required for graduation in secondary education. The minimum semester hours which West Chester requires for each field will satisfy the teacher certification requirements in Pennsylvania. The minimum for each field of specialization may be noted in the particular B.S. in Education program, given under the heading of the department. (See School of Arts and Letters, School of Sciences and Mathematics, or School of Social and Behavioral Sciences.)

## SECONDARY TEACHING FIELDS

| Biology | Earth and Space Science | Mathematics |
| :--- | :--- | :--- |
| Chemistry | French | Physics |
| Comprehensive English | Geography | Russian |
| Comprehensive Science | German | Spanish |
| Comprehensive Social | History | Speech and Theatre |
| Studies | Latin |  |

In planning his program, the secondary education major must confer frequently with his adviser. The final certification of all students whose goal is the Bachelor of Science in Education is the responsibility of the Dean of the School of Education.

## CERTIFICATION PROGRAMS IN SPECIAL EDUCATION*

Howard Freeman, Coordinator

Two programs in special education enable students to secure certification to teach classes for the mentally retarded or the physically handicapped. The course sequences included in the programs are offered as extensions of existing curricula and permit students to graduate with dual certification, that is, their teaching certificates will be valid for teaching in the regular classroom and in special classes for either the mentally retarded or the physically handicapped.

The program at West Chester meets the state requirements of a minimum of twelve semester hours and is so planned that regular elementary students will not find it necessary to carry an overload or attend summer sessions. Courses in special

[^9]education are offered as part of the summer program, but in most cases certification should be possible without summer study.
Students working toward a degree in secondary education will receive dual certification upon completion of the Special Education courses and, in addition basic courses in the teaching of reading for the elementary grades and the teaching of mathematics for the elementary grades. In order to acquire these additional credits, it may be necessary for secondary education students to attend summer school.
Student Teaching. In both programs, not less than four weeks nor more than nine weeks of the regular student teaching are to be allocated to a special education station.
Special education courses are scheduled to enable students to begin the program during the second semester of their sophomore year. Students interested in teaching retarded or physically handicapped children should indicate their interest when planning their sophomore schedule, and are advised to confer with the Coordinator of Special Education. Those students who are not certain of their interest in the field may enroll in one or more of the special education courses on an exploratory basis, to determine the degree of their personal commitment to the field. If the program is not pursued further, the courses will serve as elective credits in other curricula.
Students wishing to explore these programs should consult with the Coordinator of Special Education, Special Education Building.

## Program for Teaching the Mentally Retarded

Prerequisite: Psy 100 Introduction to Psychology Semester Hours
EdA 241—Psychology of Exceptional Children
EdA 243-Psychology of the Mentally Retarded 3
EdA 344 -Problems in Special Education 2
EdA 348-Curriculum and Methods for the Mentally Retarded 3
Art 251—Art in the Elementary School I 3
(required for all elementary education majors)
14
Note: The first four courses should be taken in order shown.

## Program for Teaching the Physically Handicapped

Prerequisite: Psy 100 Introduction to Psychology
EdA 241—Psychology of Exceptional Children
Semester Hours

PEd 390_Physical Disabilities of Childhood
PEd 391—Psychology of the Physically Handicapped
2
EA 3
EdA 349-Curriculum and Methods for the Physically Handicapped 3
Art 251-Art in the Elementary School I 3
(required for all elementary education majors)

Note: The first four courses should be taken in order shown.

## DEGREE PROGRAM IN <br> SPECIAL EDUCATION

In the area of special education, West Chester also has a degree program which leads to the B.S. in Education in Speech Pathology and Audiology. The program qualifies the student for the Pennsylvania Instructional I Certificate in Teaching the Speech and Hearing Handicapped, permitting him to teach in this area of special education in the elementary and secondary schools of the Commonwealth. The degree requirements are stated under the Department of Speech and Theatre, which provides the specialized preparation for the field. Students interested in the speech pathology and audiology program are invited to consult with the Chairman of the Department of Speech and Theatre.

## URBAN EDUCATION PROGRAM

F. William Leeds, Coordinator

West Chester offers a special program which strengthens the preparation of teachers who wish to work in the schools of the inner cities, where the need for skilled teachers is acute.

The prospective urban teacher needs both carefully planned college courses and equally well planned experience in the schools. Because of the complexity of urban civilization and the diversity of the persons and situations he deals with, the urban teacher should have a particularly rich background in both the liberal arts and professional studies.

The urban education program does not provide additional certification and does not vary essentially from the normal requirements for either the elementary or the secondary major. However, the student who undertakes the program is required to take at least half of his student teaching in the urban school. He must also take a special core of course work related to teaching in the inner city.

Elementary education majors incorporate the urban education program into their curriculum by selecting it as their area of interest. (See Areas of Interest above.)

Secondary education majors who wish to consider this special preparation must first consult with the Coordinator of Urban Education. Unless the requirements for their field are unusually heavy, they are generally able to fit the urban education core into their curriculum without going beyond the 128 hours required for graduation.


# School of Health and Physical Education 

Edwin L. Youmans, Dean
Edward N. Norris, Associate Dean for Graduate Studies Edwin B. Cottrell, Assistant to the Dean
Walter E. Funk, Chairman, Department of Health Education
Melvin M. Lorback, Chairman, Department of Physical Education
Robert W. Reese, Director of Athletics
Barbara J. Coates, Coordinator of Women's Activities
Alvin B. Davis, Coordinator of Student Teaching
Robert M. Mitten, Coordinator of Safety Education

| PROFESSORS | HELLER | ECKMAN |
| :---: | :---: | :---: |
| COCHRAN | HUFFMAN | GIUNTA |
| COTTRELL | KAPILIAN | GROS |
| LEMCKE | LANK | JONES |
| MITTEN | LEIGHTON | PAGANO |
| NORRIS | LORBACK | PARKINSON |
| OWENS | LOWE | REMLEY |
| SERPICO | MARGERUM | SMILEY |
| STURZEBECKER | MARTIN | SMITH |
| YOUMANS | PEACE | TRNKA |
|  | REED | WALKER |
| ASSOCIATE PROFESSORS | REESE | WEber |
| BALDWIN | STEINMETZ | INSTRUCTORS |
| BUTLER | TREZISE | INSTRUCTORS |
| CHARTERS | WILKINSON | CELAIN |
| COATES | WINTERMUTE | FORSYTH (PART-TIME) |
| COLlier | WOODS | KROUSE (PART-TIME) |
| DAVIS | YANISCH | LAPPANO |
| De MILIION | YODER | McKONLY (PART-TIME) |
| DONLEY |  | NYE |
| FISHER | ASSISTANT PROFESSORS | SCHINTZIUS (PART-TIME) |
| FUNK | ALFORD | TEETS |
| FURLOW | BONSALI | TYNDALL (PART-TIME) |
| GOODWIN | CUNNINGHAM |  |
| GREENWOOD | DEMPSEY |  |
| HEAD COACHES FOR MEN |  | HEAD COACHES FOR WOMEN |
| BASEBALL-SERPICO |  | ARCHERY-PARKINSON |
| BASKETBALL-FUNK |  | BADMINTON-TO BE ANNOUNCED |
| CROSS-COUNTRY-BUTLER |  | BASKETBALL-ECKMAN |
| FOOTBALL-MITTEN |  | BOWLING-HELLER |
| GOLF-COTTRELL |  | FIELD HOCKEY-GROS |
| GYMNASTICS-TRNKA |  | GYMNASTICS-DEMPSEY |
| SOCCER-LORBACK |  | LACROSSE-GROS |
| SWIMMING-NORRIS |  | SOFTBALL-WEBER |
| TENNIS-WOODS |  | SWIMMING-LEIGHTON |
| TRACK-BUTLER |  | TENNIS-LEIGHTON |
| WRESTLING-COLLIER |  |  |

The School of Health and Physical Education at West Chester has a record of excellence and a long history; West Chester's program of coeducational physical education is one of the oldest in the United States. The first Director of Physical Training, Dr. Clyde Ehinger, was appointed in 1890.

## PROGRAMS OF STUDY

## B.S. in Health and Physical Education

## B.S. in Health Education

The School of Health and Physical Education offers two degree programs. One is a dual major leading to the Bachelor of Science in Health and Physical Education. The second program, for which the College received approval in the fall semester of 1969-70, leads to the Bachelor of Science in Health Education. Both programs, upon satisfactory completion, permit the student to attain the Pennsylvania Instructional I Certificate, valid for teaching the specified subject in the elementary and secondary schools of Pennsylvania for three years.

## Non-Degree Programs

The School also offers courses leading to certification in Education for Safe Living. This program includes highway and general safety education. Students who desire to prepare as recreation leaders are afforded the opportunity to elect courses in recreation and to take part in a special program in camp leadership during the summer.

The School services the total college enrollment by providing courses in physical education and a course in health education for all undergraduate students. In addition, there is a broad program of recreational activities and intramural and intercollegiate athletics for all men and women at West Chester State College.

## FACILITIES

Facilities to support the programs of the School have kept pace with a rapid increase in students and faculty. The new Health and Physical Education Center and field complex, located on South Campus, provide the College with one of the nation's outstanding facilities for education and research in health and physical education. Among its notable components are its research facilities, its multi-purpose teaching stations, and a one-acre gymnasium divisible into six separate pneumatically sealed gymnasiums. A vast complex of tennis courts and baseball, lacrosse, field hockey, soccer, and football fields is also located on the South Campus.

## ADMISSION

All students seeking admission to the School of Health and Physical Education must meet the basic requirements of the College (see Admission to West Chester).

Admission to the Degree Program in Health and Physical Education. Applicants for the dual major must have participated in both physical education classes and extracurricular athletic programs in their secondary schools. A pre-admission interview, conducted by members of the School faculty, evaluates the candidate's evidence of leadership and the extent of participation in athletic programs.

Admission to the Health Education Degree Program. A pre-admission interview conducted by the faculty of the Department of Health Education evaluates the applicant's personal qualifications for admission.

Transfer Students—see "Admission of Transfer Students" and "Advanced Credit Requirement" under Admission to West Chester.

## Professional Requirements for Health and Physical Education Majors

Students pursuing the dual major in health and physical education are required to purchase uniforms. (For details, see "Additional Costs" under Expenses.) As a prerequisite for Senior Standing, students in the health and physical education major must have completed the extracurricular and sports credit requirement of the Department of Physical Education.

## MEN'S INTERCOLLEGIATE ATHLETIC PROGRAM

Because athletic activities provide situations similar to experiences in life, West Chester views, athletics as an important part of the college experience - indeed, as a facet of education. West Chester's athletic program has as its underlying purpose the development of enduring educational values. Another important phase of the athletic program is the training given to those who will later be called upon to coach. The program is administered by the School of Health and Physical Education. To permit as many men as possible to take part, the School offers a wide variety of sports activities, including football, baseball, basketball, soccer, track, wrestling, swimming, tennis, gymnastics, golf, and cross-country. Schedules are sought which, while in the College's class, measure up to the high athletic traditions and standing of West Chester. It is the College's policy to give its athletic program an important place in college life, with an emphasis in proportion to the value of the program.

West Chester is a member of the National Collegiate Athletic Association, the Middle Atlantic States Collegiate Athletic Conference, the I.C.4A., the Pennsylvania State College Athletic Conference, and a charter member of the Eastern Collegiate Athletic Conference.

Along with wide opportunities for participation, West Chester, with its new Health and Physical Education Center and field complex, opened in 1970-71, has excellent facilities and equipment. The new Center affords the College one of the ranking settings for training and research in health and physical education in the United States. All coaches are members of the faculty.

## Men's Intramural Athletics

Out of awareness that an athletic program is not educationally justified if confined to intercollegiate competition, West Chester provides a variety of athletic activities which are available to all students. Such sports as touch football, swimming, soccer, tennis, basketball, track, softball, and volleyball are conducted for men.

## WOMEN'S ATHLETICS

In the interests of its women students, West Chester provides a broad variety of team, individual, and dual sports activities designed for them. Through participation in the planning, organizing, and performance of these sports, leadership responsibilities are developed. All women students are eligible to take part in women's intramural and intercollegiate sports programs.

## Women's Intercollegiate Athletic Program

The activities of the WIAP are conducted by the adviser of the program, the women coaches, and a student advisory council consisting of the managers of the varsity sports. The program includes a variety of team and individual sports, such as hockey, swimming, lacrosse, bowling, badminton, softball, gymnastics, basketball, tennis, and synchronized swimming. In accordance with the highest ideals of good sportsmanship, the activities are planned to provide opportunities for wholesome competition with college women of comparable skill. Participating students develop interest and skill in worthy leisure-time activities, further cultural understanding through contacts with students from other colleges, and gain experience in coaching. The entire women's intercollegiate program is guided by the standards and policies of the Division of Girls' and Women's Sports, a division of the American Association of Health, Physical Education, and Recreation.

## Women's Intramural Athletics

The Women's Athletic Association conducts intramural athletics for the social, physical, and recreational benefit of the women students. The governing council consists of the club officers and sports managers, who are elected by the students and a faculty adviser. Hockey, volleyball, basketball, tennis, softball, table tennis, lacrosse, and badminton are among the activities available. The organization fosters good sportsmanship and increased participation. It views personal satisfaction and enjoyment as the desired outcomes of sports activity. The WAA belongs to the National Athletic and Recreation Federation of College Women and the Pennsylvania Division of the Athletic and Recreation Federation of College Women.

## BACHELOR OF SCIENCE

IN

## HEALTH AND PHYSICAL EDUCATION

Candidates must satisfactorily complete 128 semester hours distributed among three areas as follows:

| General Requirements | - - | 62 Semester Hours |
| :---: | :---: | :---: |
| SKILLS AND COMPETENCIES 13 s . | 13 S. H. | SOCIAL SCIENCES 15 S . h. |
| Eng 101-Composition I | 3 | Psy 100-Intro to Psychology 3 |
| Eng 102-Composition II | 3 | His 101-History of Civ I 3 |
| Sph 101-Fund of Speaking | 2 | His 102-History of Civ II 3 |
| HEd 151-Personal Health I | 3 | PSc 231-American Government 3 |
| PEd 110M-Gym Activities | 1 | His 212-History of U.S. II 3 |
| PEd 111W-Soccer/Spdb/Bkb |  |  |
| PEd 112M-Tumbling/Vaulting | g |  |
| PEd 113W-Gym/Fund of Exercise |  | Mat 101-Introduction to |
| ARTS AND LETTERS 15 s . | $15 \mathrm{~S} . \mathrm{H}$. | College Mathematics I 3 |
| Art 101-Fine Arts (Art) | 3 | Che 100-Princ. of Chemistry 4 |
| Lit 121-General Literature I | 3 | Sci 150-Basic Physical Science |
| Lit 122-General Literature II | 3 | Bio 209-Human Anatomy |
| Mus 121-Fine Arts (Music) | 3 | Bio 309-Human Physiology 4 |
| Phi 280-Intro to Pbilosophy | 3 |  |
| II Professional Education | - - | 30 Semester Hours |
| EdF 100-School and Society | 3 | HEd 351-Human Development 3 |
| EdM 300-Audio-Visual Education | tion 2 | HEd 352-Methods and Materials |
| EdP 250-Psychology of Learning and Development | $\text { ing } \quad 3$ | in Health Education 2 PEd 361-Tests, Measurements, and |
| PEd 210M-Prep Teaching Elem PE | m PE 1 | Statistics in Health and Phys. Edu. 3 |
| PEd 211W-Prep Teaching Elem PE | PE | PEd 471-Student Teaching in the |
| PEd 310M—Prep Teaching Secondary PE | 1 | Secondary School, including <br> Professional Practicum |
| PEd 311W-Prep Teaching |  |  |
| III Health and Physical Education |  | 36 Semester Hours |
| PEd 120M-Individual Sports | 1 | PEd 213W-Advanced Gymnastics |
| PEd 121W-Lacrosse/Track/Field |  | PEd 220M-Football/Track/Field |
| PEd 122M-Soccer/Wrestling | 1 | PEd 221W—Adv $\mathrm{Hk} / \mathrm{Lac} / \mathrm{Tr} /$ Field |
| PEd 123W-Hockey/Volleyball |  | PEd 222M-Basketball/Baseball |
| PEd 130M-Aquatic Fundamentals | tals | PEd 223W-Basketball/Tennis |
| PEd 131W-Aquatic Fundamentals | tals | PEd 240 M -Elem Rhy/FIk Dance |
| PEd 132M-Life Saving | 1 | PEd 241W-Elem Rhy/Flk Dance |
| PEd 133W-Life Saving |  | PEd 242M-Social/Square Dance |
| PEd 212M-Heavy Apparatus | 1 | (Continued) |

PEd 243W-Social/Square Dance
HEd 252-First Aid/Injuries 2
HEd 253-School Health Program 2
PEd 261-History and Philosophy
of Physical Education
2
PEd 322M-Advanced Team Sports I 1
PEd $323 \mathrm{~W}-\mathrm{Tn} / \mathrm{Sfb} / \mathrm{Off} \mathrm{Hk} / \mathrm{Bkb}$
PEd 324 M -Advanced Team
Sports II
PEd 325W-Bdm/Golf/Archery
Men Elective 1
PED 341W-Modern Dance I
HEd 357-Community Health
PEd 362-Physical Education for Elementary Grades3
PEd 363W-Org/Adm of PE/Ath ..... 2
PEd $364 \mathrm{M}-\mathrm{Org} /$ Adm of PE/Ath
PEd 365-Physical Activities
for Atypical Children I ..... 2
PEd 455-Applied Physiology and Kinesiology ..... 3
PEd 461—Physical Activities for Atypical Children II ..... 2
PEd 462-Principles of Recreation ..... 2
PEd 463W-Principles of Coaching ..... 2PEd 464 M -Principles of Coaching

## TYPICAL COURSE SEQUENCE FOR

 HEALTH AND PHYSICAL EDUCATION MAJORS
## FIRST SEMESTER

EdF 100-School and Society 3
Eng 101-English Composition I 3
Mat 101-Introduction to College
Mathematics I
Sph 101-Fund of Speaking
PEd 110M-Gym Activities3PEd 111W-Soccer/Spdb/BkbPEd 120M-Individual Sports 1PEd 121W-Lacrosse/Track/FieldPEd 130M-Aquatic Fundamentals1
PEd 131W-Aquatic FundamentalsHEd 151-Personal Health I3
17
THIRD SEMESTER ..... SEM. HRS.
Bio 209-Human Anatomy ..... 4
His 101-History of Civ I ..... 3
Lit 121-General Literature I ..... 3
Sci 150-Basic Physical Science ..... 4
PEd 210M—Prep Teaching Elem PE 1
PEd 211 W -Prep Teaching Elem PEPEd 220M—Football/Track/FieldPEd 221W—Adv Hk/Lac/Tr/FldPEd 240M—Elem Rhy/Flk Dance1
PEd 241W—Elem Rhy/Flk DanceMen Elective1
PEd 341W-Modern Dance I
SECOND SEmester ..... SEM. HRS.
Art 101-Fine Arts (Art) ..... 3
Che 100-Principles of Chemistry ..... 4
Eng 102-English Composition II ..... 3
Psy 100-Intro to Psychology ..... 3
PEd 112M-Tumbling/Vaulting ..... 1
PEd 113W-Gym/Fund of Exercise
PEd 122M—Soccer/Wrestling1
PEd 123W-Hockey/Volleyball
PEd 132M—Life Saving ..... 1
PEd 133W—Life Saving
HEd 357-Community Health ..... 2
18
FOURTH SEMESTER ..... SEM. HRS.
His 102-History of
Civilization II3
Lit 122-General Literature II ..... 3
PEd 212M-Heavy Apparatus ..... 1
PEd 213W—Advanced Gymnastics
PEd 222 M -Basketball/Baseball ..... 1
PEd 223W-Basketball/Tennis
PEd 242M—Social/Square Dance ..... 1
PEd 243W-Social/Square Dance
HEd 252-First Aid/Injuries ..... 2
HEd 253-School Health Program ..... 2
PEd 261-History and Philosophy of Phys Edu ..... 2

FIFTH SEMESTER
SEM. HRS.
EdP 250-Psychology of Learning and Development 3
EdM 300-Audio-Visual Education 2
PEd 322M—Advanced Team Sports I 1
PEd 323W—Tn/Sfb/Off $\mathrm{Hk} / \mathrm{Bkb}$
HEd 351-Human Development 3
PEd 361-Tests/Meas./Stat., in
Physical Education
3
PEd 362-Physical Education for Elementary Grades 3
PEd 365-Physical Activities for Atypical Children I

17
SEVENTH SEMESTER
SEM. HRS.
Phi 280-Intro to Philosophy 3
PSc 231—American Government 3
PEd 455-Applied Physiology and
Kinesiology 3
PEd 461-Physical Activities for
Atypical Children II
2
PEd 462-Princ of Recreation 2
PEd 463W-Princ of Coaching 2
PEd 464 M -Princ of Coaching

SIXTH SEMESTER
SEM. HRS.
Bio 309-Human Physiology ..... 4
His 212-History of U.S. II ..... 3
Mus 121-Fine Arts (Music) ..... 3
PEd 310M-Prep Teaching Secon PE 1
PEd 311W-Prep Teaching Secon PEPEd 324M-Advanced Team
Sports II ..... 1
PEd 325W-Bdm/Golf/ArcheryHEd 352-Methods and Materialsof Health Education2
PEd 363W-Org/Adm of PE/Ath ..... 2
PEd $364 \mathrm{M}-\mathrm{Org} /$ Adm of PE/Ath16
EIGHTH SEMESTER ..... SEM. HRS.
PEd 471-Student Teaching in the Secondary School, including Practicum ..... 12-12
TOTAL SEMESTER HRS. ..... 128

## bachelor of science in health education

Candidates must satisfactorily complete 128 semester hours distributed among four areas as follows:


-     -         - 56 Semester Hours
ARTS AND ..... 15 S.H.
Art 101-Fine Arts (Art) ..... 3
Lit 121-General Literature I ..... 3
Lit 122-General Literature II ..... 3
Mus 121-Fine Arts (Music) ..... 3
Phi 280-Introduction to Philosophy 3Sciences11 s.t.
Bio 100-Basic Biological Science ..... 4
Che 100-Principles of Chemistry ..... 4
Mat 101-Introduction to College Mathematics I ..... 3
free electives3 S.H.



## 126/Health Education

| THIRD SEMESTER SEM. HRS | SEM. HRS. | Fourth semester sem. hrs. |
| :---: | :---: | :---: |
| Bio 209-Human Anatomy | 4 | Bio 309-Human Physiology |
| Che 100-Principles of Chemistry | istry | EdP 250-Psychology of Learning |
| Lit 121-General Literature I | I | and Development |
| PEd 131-Aquatic Fundamentals | tals | HEd 351-Human Development |
| PEd 252-First Aid and Care and | and | Lit 122-General Literature II |
| Prevention of Athletic | 2 | PEd 120M—Individual Sports for Men |
| Psy 370-Mental Hygiene | 3 | PEd 325W-Badminton, Golf, and |
|  | - | Archery |
|  | 17 | Sph 101-Fundamentals of Speaking |
|  |  |  |
| FIfth semester Sem. hrs | HRS. | SIXTH SEMESTER SEM. HRS. |
| EdM 300-Audio-Visual Education | cation | Art 101-Fine Arts (Art) |
| HEd 253-School Health Program | gram | HEd 352-Methods and Materials in Health Education |
| HEd 355-Nutrition | 2 |  |
| HEd 357-Community Health | h | HEd 356-Family Life Education |
| HEd 358-Field Experience in Community Health | in | HEd 359-Field Experience in Health Education |
| PEd Elective | 1 | His 212-History of U.S. II |
| PEd 361-Tests, Measurements, and Statistics in |  | PEd Elective Electives |
| Health and Phys. Ed. | 3 |  |
| Electives | 3 |  |
|  | 16 | 17 |

SEVENTH SEMESTER SEM. HRS.PEd 471-Student Teaching in theSecondary School, includingPracticüm

## CERTIFICATION PROGRAM IN EDUCATION FOR SAFE LIVING

## [Highway Safety and General Safety Education]

The standards for certification as approved by the Pennsylvania Department of Education, January 9, 1948, require twelve semester hours for the extension of a teacher's certificate to include this field. The following courses are offered by the School to satisfy the course requirement in this field:

Required:
Semester Hours
$\begin{array}{lll}\text { PEd } 481 & \text { Education for Safe Living } & 3 \\ \text { PEd } 483 & \text { Preparation for Teaching Driver } \\ \text { and Traffic Safety Education }\end{array}$
Elect two from the following:
PEd 482 Principles and Practices of Driver Education and Traffic Safety3

PEd 484 Methods and Materials of Safety Education 3
PEd 485 Safety Concepts, Emergency Procedures, and Injury Management

3

## A Program in Recreation Leadership

For students who desire to prepare as recreation leaders, the Department of Physical Education provides appropriate elective courses, in addition to related courses included in the requirements for the health and physical education major. The Department also offers a special program in camp leadership for staff members at children's summer camps. This supervised field experience is designed to aid the student's professional growth through work with children in the informal atmosphere of the camp.

Any West Chester student is eligible to participate in the field program. If credit is to be applied toward a degree, permission of his adviser should be obtained.

Students from other colleges may register, with the permission of the course instructor. They are advised to obtain approval from their own college in order to assure that credits from the course may be applied toward degree requirements. The available electives, as well as the summer field experience, are described below:

|  | Semester Hours |
| :--- | :---: |
| PEd 462 Principles of Recreation | 3 |
| PEd 367 Arts and Crafts in Recreation | 3 |
| PEd 370 Camping and Outing | 3 |
| Summer Field Experience |  |
| PEd 467 Supervised Camping Leadership | 3 |
| (6 to 8 weeks' attendance at camp July through August) |  |

## School of Music

Lloyd C. Mitchell, Dean

Alexander Antonowich, Associate Dean
Charles A. Sprenkle, Associate Dean for
Graduate Studies and Research
Department of Theory and Composition
Department of Music History and Literature
Department of Music Education
Department of Keyboard Music
Department of Vocal and Choral Music
Department of Instrumental Music
PROFESSORS
ANTONOWICH
CAREY
CHEESMAN
COHEN
FLETCHER
JOHNS
MITCHELL
MUNGER
PENNINGTON
SCHICK
SCHMIDT
SINGLEION
SPRENKIE
THOMSON
VELETA
WILKINSON
WRIGHT
ASSOCIATE PROFESSORS
ALT
BARROW
BEDFORD
CARSON

FRENZ
FRIDAY
GANGEMI
GOTTLIEB
HALES
HAYS
KLEIN
McCLELLAN
MARKOW
MERRELL
PETHES
PFLIEGER
SHEPPARD
SMITH
SWEET
VOOIS
WEISS
WELLS
WHITTEN
WILLIAMS

ASSISTANT PROFESSORS
BEATTY
BOERLIN

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CARL
COLIINS
CONAWAY
FARESE
GUIDETTI
KRUEGER
LAUDERMILCH
MILLER
NORTHEIMER
ROPER
SOUTHALL
SULLIVAN
VANDEVER
WAGNER
INSTRUCTORS
BREUNINGER (PART-TIME)
GOEBEL (PART-TIME)
RENTSCHLER
STOUFFER
SWARTLEY (PART-TIME)
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## BACHELOR OF SCIENCE IN MUSIC EDUCATION

## BACHELOR OF ARTS IN MUSIC

## BACHELOR OF MUSIC

The School of Music offers three programs of study leading to undergraduate degrees:
[1] Bachelor of Science in Music Education: a balanced program of general, specialized, and professional courses leading to qualification for a Pennsylvania Instructional I Certificate to teach music in the elementary and secondary schools of Pennsylvania for three years. Three teaching concentration programs-general, instrumental, and vocal-choral -are provided.
[2] Bachelor of Arts in Music: a balanced program of courses which are general and specialized, providing a concentration area in either applied music or a combination of music theory and music literature; structured for students desiring a liberal-arts education with a major in music.
[3] Bachelor of Music: a balanced program of courses which are general, specialized, and professional for the performing musician; structured for students desiring a college degree and interested in such areas as professional performance, studio teaching, and church music.

## ENTRANCE REQUIREMENTS

Candidates for admission to the School of Music must meet the general requirements for admission as indicated under Admission to West Chester. In addition, all candidates must appear for a personal interview and certain music tests, which vary according to the degree program sought.
The College will provide large instruments such as the tuba, string bass, or timpani for these tests. All smaller instruments must be brought to the College. All candidates will take the Seashore Test of Musical Talent, for which no preparation is necessary.
The following are acceptable as "major" instruments: violin, viola, cello, bass, trumpet, trombone, baritone, tuba, French horn, oboe, English horn, flute, clarinet, bassoon, and percussion (provided the candidate demonstrates an acceptable competence in playing various percussion instruments). The saxophone and accordion are not considered acceptable major performance areas. However, the School of Music will audition a candidate on these instruments if he believes the audition will demonstrate additional evidence of his background.

[^10]music tests - b.s. in music education
(1) Each candidate must demonstrate sufficient background in at least one performing medium which can be considered a major area: piano, organ, voice, or a band or orchestra instrument. The audition must give evidence of mastery of approximately fourth-grade-level material.
(2) All candidates are tested in voice, piano, and sight singing.
(3) A piano, organ, or voice major who has had band or orchestra instrument experience is urged to demonstrate his ability on his instrument.
Note: Each candidate must bring music for the vocal, piano, and instrumental compositions he intends to perform, and should come prepared with a song that will demonstrate vocal range and quality.

## mUSIC TESTS - b.A. IN MUSIC

Each candidate must demonstrate acceptable background in at least one performing medium. Those planning to elect the concentration in applied music must give evidence of mastery of approximately fourth-grade-level material.
music tests - B.mus.
Each candidate must demonstrate an advanced level of proficiency in the major area of performance as evidenced by his ability to perform compositions representing a variety of styles and by his mastery of approximately sixth-grade-level material.

## SCHOOL OF MUSIC DEGREE PROGRAMS

## B.S. IN MUSIC EDUCATION

Candidates choose one of three teaching concentration programs-general, instrumental, or vocal-choral. They must satisfactorily complete 128 semester hours, distributed among the following areas:

1. .SKILLS AND COMPETENCIES | 12 semester hours
a. English Composition 6
b. Speech 2
c. Health 2
d. Physical Education (including Eurythmics) 2
2. ARTS AND LETTERS | 18 semester hours
a. Literature 6
b. Art 3
c. Music 6
d. Philosophy 3
3. SOCIAL SCIENCES | 15 semester hours
a. History 9
b. Psychology 3
c. Political Science 3
4. SCIENCE (with Lab) $\mathbf{7}$ semester hours

II Professional Requirements - - . 24-26 Semester Hours

EdF 100-School and Society
Mus 331-The Music Curriculum, K-12: Methods and Materials
Methods course or courses in the Teaching Concentration 2-4 hours

EdP 250-Psychology of Learning and Development
Mus 431-Student Teaching, Practicum, and Direction of Student Activities
III Specialized Preparation - - - - 50-52 Semester Hours

Mus 112-Theory of Music I
Mus 113-Theory of Music II
Mus 114-Aural Activities I
Mus 115-Aural Activities II
Mus 212-Theory of Music III
Mus 213-Theory of Music IV
Mus 214-Aural Activities III
Mus 215-Aural Activities IV
Mus 221-222-Music in Western Civilization I-II
(221-222 credited to Generol Requirements)

Conducting course or courses in the Teaching Concentration 2-4 hours
Major Performing Area (Individual Lessons) 8 hours
Minor Performing Area (Individual Lessons) 4-6 hours
Minor Performing Area (Class) $31 / 2-81 / 2$ hours
Musical Organization 41/2-7 hours Electives $0-71 / 2$ hours
(Chosen from list below)

A typical sequence of courses may be obtained from the School of Music.

## MUSIC ELECTIVES AVAILABLE

## Theory and Composition

Mus 312 Counterpoint I
Mus 313 Counterpoint II
Mus 314 Musical Form
Mus 315 Orchestration
Mus 318 Techniques of Twentieth Century Composition
Mus 412 Composition I
Mus 413 Composition II

## Music History and Literature

Mus 224 Keyboard Literature I
Mus 225 Keyboard Literature II
Mus 226 Art Song
Mus 322 American Music
Mus 323 Aesthetics and Music Criticism
Mus 324 String Literature I

| Mus 325 | String Literature II |
| :---: | :---: |
| Mus 326 | Woodwind Literature I |
| Mus 327 | Woodwind Literature II |
| Mus 328 | Brass Literature I |
| Mus 329 | Brass Literature II |
| Mus 342 | Baroque Music |
| Mus 343 | Late Eighteenth Century Music |
| Mus 421 | Literature of the Musical Theater |
| Mus 422 | Musico-Dramatic Production I |
| Mus 423 | Musico-Dramatic Production II |
| Mus 424 | Development of the Opera |
| Mus 425 | Literature of Orchestral Music |
| Mus 426 | Choral Repertoire |
| Mus 428 | Chamber Music Literature |

## Music Education

Mus 334 Teaching Music Appreciation in the Elementary Grades
Mus 335 Choral Materials and Practices
Mus 336 Piano Methods (Class)

Mus 337 Instrumental Techniques and Materials
(Required in Music Education programInstrumental Teaching Concentration)
Mus 338 Piano Pedagogy
Applied Music
Musical Organizations, Ensembles, Master Classes, Conducting Courses (Choral and Instrumental)

## BACHELOR OF ARTS

Candidates must satisfactorily complete 128 semester hours, distributed among three areas as follows:

I General Requirements - - . . . 62 Semester Hours
(See opening pages, Programs of Study-lacote
by leafing to black bor on margin.)
The required 6 hours of a foreign language must be through the intermediate (201-202) level.

II Music Concentration Requirements - - - 56 Semester Hours Required Core [44 semester hours]

Mus 221-Music in Western Civilization I
(credited to General Requirements)
Mus 222-Music in Western Civilization II
Mus 323-Aesthetics and Music Criticism
Mus 112-113-212-213 Theory of Music I-II-III-IV
Mus 114-115-214-215 Aural Activities I-II-III-IV

Mus 312-Counterpoint I
Performance Area
(Individual Lessons) 8 hours
Minor Performance Area (Individual Lessons) 2 hours
Musical Organization 2 hours
Conducting (Choral or Instrumental ) 2 hours
Music History-Literature Elective

Required Courses in Major Area of Concentration [12 semester hours] ELECT EITHER A. OR B.
A. For students electing a concentration area of Applied Music:

Major Performing Area (Individual Lessons) 4 hours Special Elective Requirement of Concentration Area (under advisement) 8 hours
B. For students electing a concentration area in the combination of Theory-Music History and Literature:

## Required:

Mus 313-Counterpoint II
Mus 315-Orchestration
Mus 318-Techniques of Twen-
tieth Century
Composition
Three additional courses, chosen from:
Mus 342-Baroque Music

Mus 343-Late Eighteenth Century Music
Mus 424-Development of the Opera
Mus 425-Literature of Orchestral Music
Mus 428-Chamber Music Literature

III Electives - - - . - . . . 10 Semester Hours
These courses may be chosen, under advisement, from other curricula or from the list, Music Electives Available, shown under B.S. in Music Education, above.

A typical sequence of courses may be obtained from the School of Music.

## BACHELOR OF MUSIC

Candidates must satisfactorily complete a minimum of 128 semester hours, distributed among two areas, as follows:
I General Requirements - - - - - 50 Semester Hours
[1] SKILLS AND COMPETENCIES | 16 semester hours
a. English Composition
6
c. Health
2
b. Foreign Languages
d. Physical Education
(including
Eurythmics)
2
[2] ARTS AND LETTERS | 17 semester hours
a. English Literature 3 d. Music 3
b. English or Language
Literature
e. Aesthetics 2
f. Philosophy 3
c. Art
3
[3] SOCIAL SCIENCES | 6 or 9 semester hours

[5] ELECTIVES | 5 semester hours
(Chosen from all curricula)

## II Music Concentration Requirements

## A. Required Core [60 semester hours]

Mus 221 Music in Western
Civilization I
(credited to General Requirements)
Mus 222 Music in Western
Civilization II
Mus 112-113-212-213 Theory of Music I-II-III-IV
Mus 114-115-214-215 Aural
Activities I-II-III-IV

Mus 312 Counterpoint I
Major Performance Area 16
Minor Performance Area 4
Musical Organization 2
Conducting (Choral or Instrumental) 2
Master Class and/or Ensemble 4
Literature (Applied Major) 4
Music History-Literature Elective 3

> B. Electives [18 semester hours]

These courses may be chosen, under advisement, from the list, Music Electives A vailable, shown under B.S. in Music Education, above. Voice majors are required to elect 9 hours of a foreign language. (These language studies may be at any level.)

A typical sequence of courses may be obtained from the School of Music.


## School of Sciences and Mathematics

Russell K. Rickert, Dean

Department of Biology
Department of Chemistry
Department of Earth, Space, and General Sciences
Department of Mathematics
Department of Nursing
Department of Physics

## BACHELOR OF ARTS

Biology
Mathematics
Physics

## BACHELOR OF SCIENCE

Chemistry

## BACHELOR OF SCIENCE IN EDUCATION

Biology
Chemistry
Comprehensive Science
Earth and Space Science

Mathematics
Physics
COOPERATIVE DEGREE PROGRAMS FOR

Dental Hygienists
Public School Nurses

## DEPARTMENT OF BIOLOGY

Dr. Relis B. Brown, Chairman

PROFESSORS
BROWN, R. CINQUINA Demott DORCHESTER overlease trezise
ASSOCIATE PROFESSORS
BENSEL
BERNHARDT
CUILEN
MARTINEZ
MCDONNELI
ROMIG
SKILLEN
WALLENSTEIN

## ASSISTANT PROFESSORS

BLISS
BROWN, W.
CURRY
JONES
WEBSTER
woodruff

The major in biology centers about a core of courses which emphasize broad unifying principles. The foundation subjects-general biology, general botany, and general zoology-are followed by the integrative disciplines of genetics, ecology, and general physiology. Available electives provide enriching experiences in many areas of biology.

## BACHELOR OF ARTS

## Biology

The B.A. program in biology provides both the liberal education and the special preparation required for careers in college teaching, government service, independent and industrial research, science-related sales and public relations, and other areas of business. This program also prepares students to qualify for admission to graduate and professional schools. Candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

```
I General Requirements - - - - - }62\mathrm{ Semester Hours
    (See opening pages, Programs of Study-locate
    by leafing to black bar on margin.)
```

The required 6 semester hours of foreign language through the intermediate level may be met in any language other than the student's native tongue providing the department approves.

II Science Core Requirements - - - - 27 Semester Hours

Che 103-General Chemistry I
Che 104-General Chemistry II
( 103.4 credited to General Requirements)
Che 231—Organic Chemistry I
Che 232-Organic Chemistry II
Phy 103-General Physics I
Phy 104-General Physics II

Mat 105-College Algebra and
Trigonometry
(credited to General Requirements)
Mat 141-Calculus I
Mat 142-Calculus II
Mat 241-Calculus III (or)
Mat 121-Statistics

Elective in astronomy or earth science.

## III Biology Concentration Requirements - - 35 Semester Hours

Bio 110-General Biology Bio 361—General Physiology
Bio 115-General Botany
Bio 117-General Zoology
Bio 330-Genetics

Bio 370-Ecology
Bio 490-Biology Seminar

A minimum of 12 additional semester hours in biology must be chosen from available electives.

IV Electives - - - . . . . . 4 Semester Hours
Offerings in biology are shown following requirements for the B.S. in Education degree.

A typical sequence of courses may be obtained from the Department.

## B.S. IN EDUCATION

## Biology

A student may qualify for the Pennsylvania Instructional I Certificate in biology by completing a minimum field requirement of 39 semester hours as indicated below. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

1 General Requirements - - . - - 56 Semester Hours
(See opening pages, Programs of Study-locate by leofing to black bar on margin.)

II Professional Education Requirements - - 28 Semester. Hours
(See Schaol of Education-locate by leafing to black bar on margin.)

III Specialized Preparation - - - . . 39 Semester Hours

## Required in Related Fields

Che 103-General Chemistry I
Che 104-General Chemistry II
(103-4 credited to General Requirements)
Mat 105-College Algebra and
Trigonometry
(credited to General Requirements)
Che 230-Introduction to Organic Chemistry
Sci 350-Teaching Biology in Secondary Schools
(credited to Professional Education)

## Required in Biology

Bio 110-General Biology
Bio 115-General Botany
Bio 117-General Zoology
Bio 330-Genetics
Bio 361-General Physiology
Bio 370-Ecology
Bio 490-Biology Seminar

A minimum of an additional 12 semester hours in biology must be chosen from available electives.

IV Electives - - . . . . . . 5 Semester Hours
A typical sequence of courses may be obtained from the Department.

## OFFERINGS IN BIOLOGY

Bio 100 Basic Biological Science
Bio 101 Anatomy and Physiology for Nurses I
Bio 102 Anatomy and Physiology for Nurses II
Bio 104 Microbiology for Nurses
Bio 110 General Biology
Bio 115 General Botany
Bio 117 General Zoology
Bio 200 Basic Genetics
Bio 201 Basic Ecology
Bio 202 Anatomy of Speech and Hearing Mechanisms
Bio 209 Human Anatomy
Bio 215 Nonflowering Plants
Bio 217 Invertebrate Zoology
Bio 271 Wildlife Conservation
Bio 272 Field Ecology and Natural History

Bio 275 Field Botany
Bio 277 Field Zoology
Bio 309 Human Physiology
Bio 330 Genetics
Bio 356 Plant Structure
Bio 361 General Physiology
Bio 362 Physiological Chemistry
Bio 364 Bacteriology
Bio 365 Plant Physiology
Bio 370 Ecology
Bio 377 Entomology
Bio 378 Ornithology
Bio 412 Evolution
Bio 421 Cytology
Bio 457 Vertebrate Morphology I
Bio 458 Vertebrate Morphology II
Bio 485 Plant Taxonomy
Bio 490 Biology Seminar
Bio 491 Special Problems in Biology

For courses in Marine Science (given in summer only) see Earth, Space, and General
Sciences course descriptions.

## DEPARTMENT OF CHEMISTRY

## Dr. Reynolds, Chairman

| PROFESSORS | ASSOCIATE PROFESSORS | INSTRUCTORS |
| :--- | :--- | :--- |
| ASHKENAZ | DURAND | SANDY (PART-TIME) |
| BRAVO | GERCHMAN | SHAW (PART-TIME) |
| MEDEIROS | RACHINSKY |  |
| REYNOLDS | RUDNICK |  |
|  | SAUNDERS (PART-TIME) |  |
|  | WILLIAMS |  |

The basic core program in the specialization in chemistry is designed to provide a survey of the five principal branches of that science: analytical, biological, inorganic, organic, and physical chemistry. This is followed by a required sequence of courses covering the various areas of modern chemistry.

## BACHELOR OF SCIENCE IN CHEMISTRY

The B.S. program in chemistry enables the student to receive basic preparation required for the career of his choice. Such choices could be college and university teaching, positions as professional chemists, research work, and various services in industry and government. In all cases, the program will prepare the student for graduate study in the field of chemistry.
Candidates must satisfactorily complete a minimum of 128 semester hours distributed among five areas as follows:

```
1 General Requirements - - . . - }56\mathrm{ Semester Hours
    [1] SKILLS AND COMPETENCIES | 18 semester hours
```



```
[2] ARTS AND LETTERS | 12 semester hours
a. Literature 6
b. Art or Music 3
[3] SOCIAL SCIENCES | 12 semester hours
\begin{tabular}{llc} 
a. History & 6 & c. Political Science or \\
b. Psychology or Sociology & 3 & Economics
\end{tabular}
                            [4] SCIENCES | 11 semester hours
a. Science (with lab) 
8
b. Mathematics

Phy 101-102—General Physics I-II
Mat 141-Calculus I
(credited to General Requirements)

III Chemistry Concentration Requirements - - 33 Semester Hours
Che 103-104-General Chemistry I-II (credited to General Requirements)
Che 231-232-233-Organic Chemistry I-II-III
Che 321-Quantitative Analysis

Che 341-342-343-Physical
Chemistry I-II-III
Che 411-Advanced Inorganic Chemistry
Che 471-Fundamentals of Biochemistry

\section*{IV Science Electives - - . . . . . 9 Semester Hours}

Chosen, under advisement, from the following:

Che 401-History and Literature of Chemistry
Che 421-Advanced Analytical Chemistry
Che 431-Advanced Organic Chemistry
Che 432-Synthetic Organic Chemistry
Che 436-Introductory Polymer Chemistry
Che 440-Advanced Physical Chemistry

Che 445-Chemical Thermodynamics
Che 451-Chemistry of Coordination Compounds
Che 461-Nuclear Chemistry
Che 463-Electrochemistry
Che 480 -Introduction to
Chemical Research
Che 491-Seminar in Chemistry
Phy 212-Mechanics
Phy 421-Electricity and Magnetism I

A typical sequence of courses may be obtained from the Department.

\section*{B.S. IN EDUCATION}

\section*{Chemistry}

A student may qualify for the Pennsylvania Instructional I Certificate in chemistry by completing a minimum field requirement of 40 semester hours as indicated below. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

\footnotetext{
1 General Requirements
56 Semester Hours
(See opening pages, Programs of Study-lacate
by leafing to black bar on margin.)
}

III Specialized Preparation - . . . . 40 Semester Hours

Required in Chemistry
Che 103-104-General Chemistry I-II
Che 231-232-Organic Chemistry I-II
Che 321-Quantitative Analysis
Che 345-Physical Chemistry for the Life Sciences
(Chemistry 341 may be substituted)
Required in Related Fields
Phy 103-104-General Physics I-II
(credited to Generol Requirements)
Mat 141-Calculus I
(credited to General Requirements)
Mat 142-Calculus II

Che 401-History and Literature of Chemistry
Che 471-Fundamentals of Biochemistry

Sci 350-Teaching Science in Secondary Schools (credited to Professionol Educotion)
Earth and Space Science-8 semester hours

IV Free Electives - - . . . . . 4 Semester Hours
A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN CHEMISTRY}

Che 100 Principles of Chemistry
Che 101 Chemistry for Nurses
Che 103 General Chemistry I
Che 104 General Chemistry II and Qualitative Analysis
Che 230 Introduction to Organic Chemistry
Che 231 Organic Chemistry I
Che 232 Organic Chemistry II
Che 233 Organic Chemistry III
Che 321 Quantitative Analysis
Che 324 Instrumental Methods of Analysis
Che 341 Physical Chemistry I
Che 342 Physical Chemistry II
Che 343 Physical Chemistry III
Che 345 Physical Chemistry for the Life Sciences
Che 401 History and Literature of Chemistry
Che 411 Advanced Inorganic Chemistry

Che 421 Advanced Analytical
Chemistry
Che 431 Advanced Organic
Chemistry
Che 432 Synthetic Organic Chemistry
Che 435 Qualitative Organic Analysis
Che 436 Introductory Polymer Chemistry
Che 440 Advanced Physical Chemistry
Che 445 Chemical Thermodynamics
Che 451 Chemistry of Coordination Compounds
Che 461 Nuclear Chemistry
Che 463 Electrochemistry
Che 471 Fundamentals of Biochemistry
Che 480 Introduction to Chemical Research
Che 491 Seminar in Chemistry

\title{
DERARTMENT OF EARTH, SPACE, AND GENERAL SCIENCES
}

Dr. Greenberg, Chairman
\begin{tabular}{llr} 
PROFESSORS & & ASSOCIATE PROFESSORS \\
GREENBERG & CASCIATO & HARBER \\
REED & EHLEITER & WIDICK \\
RICKERT & &
\end{tabular}

The Department of Earth, Space, and General Sciences offers two programs leading to the Bachelor of Science in Education. Both are designed to prepare teachers for secondary schools and are ideal for students who plan to teach the junior high school sciences.

\section*{B.S. IN EDUCATION}

\section*{Comprehensive Science}

A student may qualify for the Pennsylvania Instructional I Certificate in Comprehensive Science by completing a minimum field requirement of 44 semester hours as indicated below. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among three areas as follows:

I General Requirements - - - - . 56 Semester Hours
(See opening poges, Progroms of Study-locate
by leafing to black bar on margin.)
II Professional Education Requirements - - 28 Semester Hours
(See School of Education-locato
by leafing to black bor on morgin.)
III Specialized Preparation - - . . - 44 Semester Hours
One year ( 8 credits) of Biology
(credited to General Requirements)
Che 103-104-General Chemistry I-II
Phy 103-104-General Physics I-II
ESS 111-General Astronomy

ESS 201-Physical Geology
Sci 350-Teaching Science in Secondary Schools
(credited to Professional Education)
Mat 105-College Algebra and Trigonometry
(credited to General Requiroments)

Twenty semester hours of electives must be chosen in consultation with the student's adviser. Students are advised to elect courses from biology, chemistry, earth and space sciences, or physics.

A typical sequence of courses may be obtained from the Department.

Sciences: Earth, Space, General Sciences/143

\section*{B.S. IN EDUCATION}

\section*{Earth and Space Science}

A student may qualify for the Pennsylvania Instructional I Certificate in Earth and Space Science by completing a minimum field requirement of 44 semester hours as indicated below. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among three areas as follows:

I General Requirements - . - . . 56 Semester Hours
(See apening pages, Pragrams of Study-Lacate
by leafing ta black bar on margin.)
II Professional Education Requirements . . 28 Semester Hours
(See Schoal of Education-locale
by leafing to black bar on margin.)
III Specialized Preparation - . . - - 44 Semester Hours
Che 103-104-General Chemistry
I-II
(credited to General Requirements)
Phy 103-104—General Physics I-II
Sci 350-Teaching Science in Secondary Schools
(credited ta Professional Education)
Mat 141-Calculus I
(credited to General Requirements)
In consultation with his adviser, a student elects each of the following:
a. Four semester hours in biology
b. Two of the following courses:

ESS 301-Mineralogy and Petrology
ESS 311-Geochemistry
ESS 321-Structural and Field Geology
ESS 415-Introduction to Seismology
ESS 465-Observatory Principles
ESS 475-Introduction to the Planetarium
Geo 205-Geomorphology
Geo 302-Climatology
c. Four more semester hours from mathematics, chemistry, biology, physics, geography, or earth and space sciences.

A typical sequence of courses may be obtained from the Department.
OFFERINGS IN EARTH AND SPACE SCIENCES

ESS 101 Earth Science
ESS 111 General Astronomy
ESS 201 Physical Geology

ESS 211 Historical Geology
ESS 230 Introduction to
Oceanography
(Continued)
\begin{tabular}{llll} 
ESS 240 & Introduction to & ESS 350 & Astronomy I \\
& Meteorology & ESS 351 & Astronomy II \\
ESS 301 & Mineralogy and Petrology & ESS 415 & Introduction to Seismology \\
ESS 311 & Geochemistry & ESS 465 & Observatory Principles \\
ESS 321 & Structural and & ESS 475 & Introduction to the \\
& & & \\
& Field Geology & & Planetarium
\end{tabular}

OFFERINGS IN TEACHING OF SCIENCE
Sci 250 Science for the Elementary Grades

Sci 350 Teaching Science in Secondary Schools

For courses in Marine Science, given in summer only, see Earth, Space, and General Science course descriptions.

\section*{DEPARTMENT OF MATHEMATICS}

Dr. Branton, Chairman
\begin{tabular}{lll} 
PROFESSORS & COTE & FASNACHT \\
BRANTON & L'HEUREUX & HODGSON \\
FILANO & MILLIMAN & SCHLOSBERG \\
GUMERMAN & MOSER & SNYDER \\
KOH & SEYBOLD & STANLEY \\
MANDELBAUM & VERNO & WIENER \\
MONTEMURO & WEISS & \\
ASSOCIATE PROFESSORS & & \\
AHLBORN & ASISTANT PROFESSORS & MSTRUCTORS \\
BENSON & CHILDS & MERCER (PART-TIME) \\
BERRY
\end{tabular}

The major in mathematics begins with a basic core program including analytic geometry, calculus, and linear algebra. This is followed by a required sequence of courses covering the major areas of modern mathematics. Additional specialization in specific branches of mathematics is possible through available electives.

\section*{BACHELOR OF ARTS}

\section*{Mathematics}

The B.A. program in mathematics enables each student to receive the basic preparation required for the career of his choice. Among these are college and university teaching, research and other service in government and industry, and computer programming. In all cases each student receives a sound preparation for graduate study in the field of mathematics. Candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:
```

1 General Requirements - . - . - 62 Semester Hours
(See opening pages, Pragrams of Study-locate
by leafing to black bar on margin.)

```

The required 6 semester hours of foreign language through the intermediate level must be met in French; German, or Russian.

\section*{II Science Core Requirements - - - - 12 Semester Hours}
\begin{tabular}{lc} 
Physics 101-102-Physics I-II & Laboratory Science \\
(credited to General Requirements) & Electives
\end{tabular} 8 semester hours

Physics Elective 4 semester hours
III Mathematics Concentration Requirements - - 36 Semester Hours

Mat 106-Foundations of Mathematics
(credited to General Requirements)
Mat 141-Calculus I
Mat 142-Calculus II
Mat 211-Linear Algebra

Mat 241-Calculus III
Mat 242-Calculus IV
Mat 411-Modern Algebra I
Mat 412-Modern Algebra II
Mat 441—Advanced Calculus I
Mat 442-Advanced Calculus II

A minimum of an additional 9 semester hours in mathematics must be chosen from available electives.

\section*{IV Electives - - - . - - - 18 Semester Hours}

A typical sequence of courses may be obtained from the Department.

\section*{COMPUTER SCIENCE OPTION}

By making appropriate use of his elective hours, a student majoring in mathematics in the Bachelor of Arts program may earn a concentration in computer science. Such a student takes the following 21 -semester-hour program:

CSc 101 Introduction to Computers
CSc 201 Computer Organization and Programming
CSc 202 Algorithmic Languages and Compilers
An additional 12 semester hours selected from the following:
CSc 311 Logic and Switching Theory
CSc 321 Information Processing
CSc 331 Computational Linguistics
CSc 461 Monte Carlo Methods and Simulations
Mat 321 Combinatorics and Graph Theory
Mat 425 Numerical Analysis
Mat 427 Introduction to Optimization Techniques

\section*{B.S. IN EDUCATION}

\section*{Mathematics}

A student may qualify for the Pennsylvania Instructional I Certificate in mathematics by completing a minimum field requirement of 36 semester hours as indicated below. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

1 General Requirements - - - - 56 Semester Hours
(See opening pages, Pragrams of Study-locate
by leafing to black bar on margin.)
II Professional Education Requirements
28 Semester Hours
(See School of Education-locate by leofing to black bar an margin.)

III Specialized Preparation - - . . . 36 Semester Hours

Mat 106-Foundations of Mathematics
(credited to Generol Requirements)
Mat 141-Calculus I
Mat 142-Calculus II
Mat 211-Linear Algebra
Mat 231-Concepts of Euclidean Geometry
Mat 241-Calculus III

Mat 242-Calculus IV
Mat 350-Teaching Mathematics in Secondary Schools
(credited to Prafessional Education)
Mat 411-Modern Algebra I
Mat 421-Mathematical Statistics I
Mat 422-Mathematical Statistics II
Mat 441—Advanced Calculus I

A minimum of an additional 6 semester hours in mathematics must be chosen from available electives.
\[
\text { IV Electives - . . . . . . . } 8 \text { Semester Hours }
\]

A typical sequence of courses may be obtained from the Department.

\section*{COMPUTER SCIENCE OPTION}

By making appropriate use of his elective hours, a student with a major in mathematics in the Bachelor of Science in Education program may earn a concentration in computer science. Such a student takes the following 12 -semester-hour program.
\[
\begin{array}{ll}
\text { CSc } 101 & \text { Introduction to Computers } \\
\text { CSc } 201 & \text { Computer Organization and Programming } \\
\text { CSc } 202 & \text { Algorithmic Languages and Compilers } \\
\text { CSc } 350 & \text { Computers in Education }
\end{array}
\]

\section*{OFFERINGS IN MATHEMATICS}

Mat 101 Introduction to College Mathematics I
Mat 102 Introduction to College Mathematics II
Mat 105 College Algebra and Trigonometry
Mat 106 Foundations of Mathematics
Mat 107 Mathematics for the Management Sciences I
Mat 108 Mathematics for the Management Sciences II
Mat 121 Statistics
Mat 141 Calculus 1
Mat 142 Calculus II
Mat 211 Linear Algebra
Mat 231 Concepts of Euclidean Geometry
Mat 241 Calculus III
Mat 242 Calculus IV
Mat 311 Algebra for Elementary Teachers
Mat 321 Combinatorics and Graph Theory

\section*{COMPUTER SCIENCE}

CSc 101 Introduction to Computers
CSc 102 Introduction to Computers -Business
CSc 201 Computer Organization and Programming
CSc 202 Algorithmic Languages and Compilers
CSc 305 Business Data Processing

Mat 331 Geometry for Elementary Teachers
Mat 343 Differential Equations
Mat 350 Teaching Mathematics in Secondary Schools
Mat 351 Teaching Mathematics in Elementary Schools
Mat 401 History of Mathematics
Mat 405 Special Topics in Mathematics
Mat 411 Modern Algebra I
Mat 412 Modern Algebra II
Mat 414 Theory of Numbers
Mat 421 Mathematical Statistics I
Mat 422 Mathematical Statistics II
Mat 425 Numerical Analysis
Mat 427 Introduction to
Optimization Techniques
Mat 431 Topics in Geometry
Mat 432 Topology
Mat 433 Differential Geometry
Mat 441 Advanced Calculus I
Mat 442 Advanced Calculus II
Mat 445 Complex Variables
Mat 490 Seminar in Mathematics

CSc 311 Logic and Switching
Theory
CSc 321 Information Processing
CSc 331 Computational Linguistics
CSc 350 Computers in Education
CSc 461 Monte Carlo Methods and Simulation

\title{
DEPARTMENT OF NURSING
}

\author{
Mrs. Schoel, Chairman
}
ASSOCIATE PROFESSOR ASSISTANT PROFESSOR

SCHOEL
KLINE

For some years West Chester has offered two special curricula, cooperative in nature, which have enabled dental hygienists and public school nurses to obtain the degree of Bachelor of Science in Education.

In the near future, the College hopes to introduce a program leading to the Bachelor of Science in nursing. The program, subject to final approval and subsequent implementation by the College, will be offered by the Department of Nursing, located in Schmucker Science Center. When the program is introduced, additional information will be available by writing to the Department of Nursing.

Although the program for dental hygienists continues to be offered, students are no longer being accepted into the school nurse program. Those currently enrolled will be able to complete the requirements by adjusting their schedules to summer study for the necessary courses in public school nursing. As soon as the College is able to do so, provisions for nurses interested in school nursing will be made within the contemplated generic four-year nursing program.

Nurses who hold a B.S. in Nursing and wish to achieve certification in public school nursing are advised to write to the Office of Undergraduate Studies for information.

\section*{DEGREE PROGRAM FOR PUBLIC SCHOOL NURSING}

Note: New students are not being accepted for this program, which is maintained only for those enrolled as of the 1970-71 academic year.

The degree of Bachelor of Science in Education will be conferred upon registered nurses who meet the following requirements: Satisfactory completion of a twoyear associate degree program or a three-year diploma program in an approved school of nursing; registration by the State Board of Examiners for the Registration of Nurses in Pennsylvania; and 60 semester hours of credit distributed as shown.

1 General Requirements - - - - 26 Semester Hours

Eng 102--English Composition II
Sph 101-Fundamentals of Speaking
Lit 121—General Literature I or
Lit 122-General Literature II
His 101-History of Civilization I
or
His 102-History of Civilization II
II Professional Education - . . . . 12 Semester Hours
EdF 100-School and Society
EdP 250-Psychology of Learning and Development
EdC 150-Introduction to Guidance and Counseling

His 211-History of U.S. I
PSc 231-American Government
Soc 231-Introduction to Sociology
Bio 100-Basic Biological Science
Psy 100-Introduction to Psychology

EdE 251—Human Development:
Childhood
(or)
Psy 352-Child and Adolescent Psychology

III Courses Related to Public School Nursing - - 17 Semester Hours

PSN 300—Public School Nursing
PSN 302—Public Health Nursing I
PSN 303-Public Health Nursing II
PSN 304 -Foundations of Nutrition
IV Electives - . - - - - - 5 Semester Hours
Choose any two of the following.
PSN 320-Problems in School Nursing
Phi 280-Introduction to Philosophy
Mus 121-Fine Arts (Music)

PSN 306-Prevention and Control of Communicable Diseases
PSN 370-Mental Hygiene

Nurses with less than a three-year nurse's training preparation will be required to pursue additional courses to meet the requirements for the degree.

\section*{DEGREE PROGRAM FOR DENTAL HYGIENISTS}

The degree of Bachelor of Science in Education will be conferred upon dental hygienists meeting the following requirements:
1. The possession of a valid license to practice dental hygiene in the Commonwealth of Pennsylvania, issued by the State Dental Council and Examining Board and by the Pennsylvania Department of Education. The requirement for admission to the Dental Hygiene curriculum is the satisfactory completion of an approved dental hygienist course of instruction of two years' duration. Each year must be

\section*{150/Sciences: Dental Hygienists}
composed of not less than 32 weeks, and each week must include not less than 30 hours of instruction. The requirement may also be met by equivalent instruction and graduation from a dental hygiene school approved by the State Council and Examining Board.
2. The satisfactory completion of 64 semester hours distributed as follows:

I General Requirements - . . . - 44 Semester Hours

Eng 101—English Composition I
Eng 102-English Composition II
Sph 101-Fundamentals of Speaking
Lit 121-General Literature I
Lit 122-General Literature II
Art 101-Fine Arts (Art)
Mus 121-Fine Arts (Music)
Geo 101-World Geography

Geo 202-Geography of U.S. and Canada
His 101-History of Civilization I
His 102-History of Civilization II
PSc 231-American Government
Eco 201-Principles of EconomicsSurvey
His 211-History of the U.S. I
Soc 231-Introduction to Sociology
II Professional Education - . . . . II Semester Hours

EdF 100-School and Society
Psy 100-Introduction to Psychology

EdM 300-Audio-Visual Education
EdP 250-Psychology of Learning and Development

III Electives . . . . . . . . 9 Semester Hours
Electives may be chosen, with the approval of the Dean of Undergraduate Studies, from any academic field or curriculum offered at the College, for a total of not less than 9 credits. In either the General Requirements or Professional Education categories listed above, credit will be given for equivalent courses pursued in the two-year dental hygiene curriculum. In such instances, students must increase their electives by the number of semester hours so credited. In those cases in which dental hygienists have had less than two years of specialized training, the credit given will be proportional. To make up the deficiency, additional General Requirement courses in the College will be necessary.

Dental hygienists desiring to enroll in this program may obtain application blanks and information from the Director of Admissions.

\section*{DEPARTMENT OF PHYSICS}

\author{
Dr. Yarosewick, Chairman
}
\begin{tabular}{ll} 
PROFESSORS & ASSOCIATE PROFESSORS \\
RICKERT & HAWKES \\
SHOAF & KAPLAN \\
& SKELTON \\
& SMITH, F. \\
& YAROSEWICK
\end{tabular}

\author{
ASSISTANT PROFESSOR \\ SHIVERS (PART-TIME) \\ INSTRUCTORS \\ MCDEVITT (PART-TIME) \\ PLEMMONS (PART-TIME) \\ SMITH, J. (PART-TIME)
}

The concentration in physics begins with a look at the broad discipline. This is followed by a sequence including an introduction to modern physics, classical mechanics, and electricity and magnetism: Advanced courses permit students to develop a thorough understanding of the field. The calculus is a necessary mathematical tool for the study of physics at all levels.

\section*{BACHELOR OF ARTS}

\section*{Physics}

The B.A. program in physics enables the student to receive the basic preparation required for a variety of careers. Among these are college and university teaching and research and related service in industry and government. In all cases, the student receives a sound preparation for graduate study in physics. Capable graduates of this program are normally eligible for fellowships and assistantships when they enter graduate school. Candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

1 General Requirements - . . . . 62 Semester Hours
(See opening pages, Programs of Study-locate
by leafing to black bar an margin.)
The required 6 semester hours of foreign language through the intermediate level must be met in French, German, or Russian.
\begin{tabular}{l} 
II Science Core Requirements \\
\begin{tabular}{l} 
Mathematics \\
(through Mat 343)
\end{tabular} 9 semester hours
\end{tabular} \begin{tabular}{c} 
Astronomy or \\
Geology
\end{tabular}\(\quad-\quad 20\) Semester Hours

Chemistry 8 semester hours

III Physics Concentration Requirements
Mat 141-142-Calculus I-II
\((141\) credited to General Requirements)
Phy 101-102—Physics I-II
Phy 212-Mechanics
Phy 233-Introduction to Modern Physics

40 Semester Hours
Phy 251-252-Intermediate Physics
Laboratory I-II
Phy 421-Electricity and Magnetism I
Phy 444 -Physics Seminar
Phy 451-Advanced Physics Laboratory I

A minimum of 19 additional semester hours in physics must be chosen from available electives.

IV Electives - - - . . . . . 6 Semester Hours
A typical sequence of courses may be obtained from the Department.

\section*{B.S. IN EDUCATION}

\section*{Physics}

A student may qualify for the Pennsylvania Instructional I Certificate in physics by completing a minimum field requirement of 38 semester hours as indicated below. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:
I General Requirements - - . . . 56 Semester Hours
(See opening pages, Programs of Study-locato by leafing to black bar an margin.)

II Professional Education Requirements . . 28 Semester Hours
(See School of Education-locate
by leafing to black bar on margin.)
III Specialized Preparation - - - . - 38 Semester Hours

Mat 141-Calculus I
(credited to General Requirements)
Mat 142-241-242-Calculus II-III-IV
Che 103-104-General Chemistry I-II (credited to General Requirements)
Phy 101-102—Physics I-II (Calculus) or
Phy 103-104-General Physics I-II
(Non-Calculus)
Phy 201—Intermediate Physics or

Phy 233-Introduction to Modern Physics
Phy 251-Intermediate Physics Laboratory I
Phy 423-Electronics
Phy 444-Seminar in Physics
Sci 350-Teaching Science in
Secondary Schools (credited to Professional Education)
Electives in sciences- 9 s.h.
(One course must be in physics.)

Phy 212-Mechanics

A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN PHYSICS}

Phy 100 Introduction to Physics
Phy 101 Physics I
Phy 102 Physics II
Phy 103 General Physics I
Phy 104 General Physics II
Phy 110 Acoustics for Speech and Hearing
Phy 201 Intermediate Physics
Phy 212 Mechanics
Phy 233 Introduction to Modern Physics
Phy 251 Intermediate Physics Laboratory I
Phy 252 Intermediate Physics Laboratory II
Phy 413 Analytical Dynamics

Phy 414 Heat and Thermodynamics
Phy 415 Mathematical Physics I
Phy 416 Mathematical Physics II
Phy 421 Electricity and Magnetism I
Phy 422 Optics
Phy 423 Electronics
Phy 424 Electricity and Magnenetism II
Phy 432 Introduction to Nuclear Physics
Phy 440 Introduction to Research
Phy 444 Seminar in Physics
Phy 451 Advanced Physics Laboratory I
Phy 452 Advanced Physics
Laboratory II

\section*{Interdisciplinary Seminar}

A course of particular interest to students in the sciences is Hum 370-Seminar in Science and Human Values, given jointly by the Schools of Arts and Letters and Sciences and Mathematics. See "English" in Course Descriptions for details.

\title{
School of Social and Behavioral Sciences
}

Byron Y. Fleck, Dean
Joseph M. Thorson, Associate Dean
Robert E. Carlson, Associate Dean for Graduate Studies

\author{
Department of Business and Economics Department of Geography Department of History Department of Political Science Department of Psychology Department of Sociology and Anthropology
}

Following Alexander Pope's injunction that "The proper study of mankind is man," the School of Social and Behavioral Sciences accepts the responsibility for translating appropriate social science substance into meaningful and enriching learning experiences.

\section*{BACHELOR OF ARTS}
\begin{tabular}{ll} 
Economics & Psychology \\
Geography & Sociology-Anthropology \\
History & Social Welfare \\
Political Science &
\end{tabular}

\section*{BACHELOR OF SCIENCE IN} BUSINESS ADMINISTRATION

\section*{BACHELOR OF SCIENCE IN EDUCATION}

Geography
History
Comprehensive Social Studies

\section*{DEPARTMENT OF BUSINESS AND ECONOMICS}

Dr. Thorson, Chairman
\begin{tabular}{lll} 
PROFESSORS & ASSOCIATE PROFESSORS & GREEN \\
SCHOOLER & BABSON & HASSLER \\
THORSON & BUTCHER (PART-TIME) & SHAMSEDDINE \\
& & SYIVESTER
\end{tabular}

The Department of Business and Economics offers two major specializations: a program in economics leading to a Bachelor of Arts degree and a program in business administration leading to a Bachelor of Science degree.

The B.A. in economics is designed for a broad understanding of the operation of the economic system and the role played by business, labor, and government. Careers lead to government, teaching, many areas of business, and to the graduate work necessary to become a professional economist.

The B.S. in Business Administration is designed for students preparing for positions in business and industry. It may be pursued in the daytime or in the evening. Students majoring in business administration elect one of the following areas of concentration: accounting, economics, or management.

\section*{BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION}

\section*{Concentrations:}

Accounting
Economics
Management
Candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

1 General Requirements - - - . 56 Semester Hours
1. SKILLS AND COMPETENCIES | 12 semester hours
a. English Composition 6
b. Speech 2
c. Physical Education* 2
d. Health* 2

\footnotetext{
* In the evening pragram, substituted with electives.
}

\section*{156/Social Sciences: Business and Economics}
2. ARTS AND LETTERS | 12 semester hours
a. Literature 6
b. Art or Music 3
c. Philosophy 3
3. SOCIAL SCIENCES | 12 semester hours
a. History 6
b. Psychology 3
c. Political Science 3
4. SCIENCES | 14 semester hours
a. Science (with lab) 8
b. Mathematics \(3^{3}\)
c. Computer Science 3
5. ELectives \(\mid 6\) semester hours 6

II Business Administration Core Requirements - 36 Semester Hours
BAc 201-202—Principles of
Accounting I-II 6
BAd 201-Business Organization
and Management
BAd 221-Principles of Marketing 3
BAd 325-Corporation. Finance 3
BLa 301—Business Law I 3
CSc 102-Introduction to Computers-Business 3
(credited lo General Requirements)
Eco 231-232—Principles of
Economics I-II 6
III Area of Concentration - - . . . 24 Semester Hours
Business administration majors select a concentration area of 24 semester hours, including Senior Seminar, from one of the following areas:
a. Accounting
b. Economics
c. Management

IV Electives
Business administration majors are advised to elect supplementary courses from the following: CSc 201-305, Geo 203-308, and His 315.

A typical sequence of courses may be obtained from the Department.

\section*{BACHELOR OF ARTS}

\section*{Economics}

Candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:
1 General Requirements - - - . . 62 Semester Hours
(See opening poges, Programs of Study-locate
by leafing to black bar on margin.)
II Social Science Core Requirements - - - 18 Semester Hours

His 211-History of U.S. I
His 212-History of U.S. II
Ant 231-Introduction to Anthropology

Eco 231-Principles of Economics I
Soc 231-Introduction to Sociology
Eco 400-Senior Seminar in Economics

III Economics Concentration Requirements - 30-36 Semester Hours

Eco 232-Principles of Economics II
Eco 335-Money, Banking, and Fiscal Policy
Eco 340-Intermediate Economic Theory I
Eco 351-352-Quantitative Business Statistics I-II

Mat 107-108-Mathematics for the Management Sciences I-II
(107 credited to General Requirements) Mat 121-Statistics -and additional economics electives to complete \(30-36\) semester hours in economics beyond the 6 hours in Core.

IV Electives - . . . . . . 12-18 Semester Hours
Economics majors are advised to elect supplementary courses from the following: BAc 201-202, BAd 221-344, BLa 301-302, CSc 102, Eco 347, Geo 203-308, and His 315.

A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN BUSINESS AND ECONOMICS}

\section*{I. Accounting}

BAc 201 Principles of Accounting I
BAc 202 Principles of Accounting II
BAc 301 Intermediate Accounting I
BAc 302 Intermediate Accounting II
BAc 303 Cost Accounting I
BAc 304 Cost Accounting II

\section*{2. Management}

BAd 201 Business Organization and Management
BAd 221 Principles of Marketing
BAd 302 Personnel Management
BAd 322 Advertising and Sales Promotion
BAd 323 Production Planning and Control
BAd 324 Quality Control
BAd 325 Corporation Finance
BAd 326 Production Management
BAd 344 Investments
BAd 400 Senior Seminar in Management
BAd 401 Industrial Organization and Management
BAd 402 Organization Behavior and Management
BAd 405 Business Policy
BAd 406 Quantitative Business Analysis
BAd 407 Budgeting and Systems
BAd 410 Independent Studies in Management

\section*{3. Business Law}

BLa 301 Business Law I
BLa 302 Business Law II

\section*{4. Economics}

Eco 201 Principles of EconomicsSurvey
Eco 231 Principles of Economics I
Eco 232 Principles of Economics II
Eco 333 Consumer Economics
Eco 334 Industrial Relations
Eco 335 Money, Banking, and Fiscal Policy
Eco 336 Business and Government

Eco 337 Economic Growth and Development
Eco 338 International Economics
Eco 340 Intermediate Economic Theory I
Eco 341 Public Finance
Eco 342 Business Cycles
Eco 343 Comparative Economics since 1930
Eco 345 History of Economic Thought
Eco 346 Economy of Soviet Russia: Organization and Growth
Eco 347 Managerial Economics
Eco 348 Intermediate Economic Theory II
Eco 349 Economics of Poverty
Eco 350 Urban Economics
Eco 351 Quantitative Business Statistics I
Eco 352 Quantitative Business Statistics II
Eco 400 Senior Seminar in Economics
Eco 401 Quantitative Analysis
Eco 410 Independent Studies in Economics
5. Recommended Electives for Business Administration

CSc 201 Computer Organization and Programming
CSc 305 Business Data Processing
Sph 230 Business and Professional Speech Communication
Geo 203 Economic Geography
Geo 308 Trade and Transportation
His 315 Economic History of the United States

\section*{DEPARTMENT OF GEOGRAPHY}

\author{
Dr. Keinard, Chairman
}

\section*{PROFESSORS}

KEINARD
LANGDON
```

ASSOCIATE PROFESSORS
BIELSKI
GRASSEL
HAWTHORNE
RAMPON
TACHOVSKY
THOMPSON

```

ASSISTANT PROFESSOR
MORROW
INSTRUCTORS
CORONWAY (PART-TIME)
GOLANY (PART.TIME)
HOLOWECKY (PART-TIME)

The basic objectives of study in geography at West Chester are threefold: (1) to serve the general education of all students, (2) to provide the specialized training needed for teaching geography, and (3) to supply the particular needs of students in the arts and sciences. The Department aims at helping students gain a full comprehension of the broad scope of man's physical environment and its relationships to cultural situations and problems. As a discipline, geography provides a way of organizing knowledge from various disciplines, and enables students to examine the integrated whole of a people in reference to their habitat and interspacial relationships.

\section*{BACHELOR OF ARTS}

\section*{Geography}

Candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

1 General Requirements - - - - 62 Semester Hours
(See opening pages, Programs of Study-locote
by leafing to black bar on margin.)
II Social Science Core Requirements - - - 18.Semester Hours

His 211-History of U.S. I
His 212-History of U.S. II
Ant 231-Introduction to Anthropology

Eco 201-Principles of Economics-Survey
Soc 231-Introduction to Sociology
Geo 400-Senior Seminar in Geography

III Geography Concentration Requirements - - 33 Semester Hours

Required - 21 hours
Group 1. Earth Sciences (9 hrs.)
Group 2. Economic Studies (3 hrs.)
Group 3. Regional Studies ( 3 hrs .)
Group 4. Cultural and Political Studies (3 hrs.)

Group 5. Techniques and Special Studies (3 hrs.)

Geography Electives
12 hours

IV Electives - - . . . . - . I5 Semester Hours
Geography majors are advised to elect supplementary courses from the following: Ant 333, PSc 335, Soc 332, and Soc 336.

A typical sequence of courses may be obtained from the Department.

\section*{B.S. IN EDUCATION}

\section*{Geography}

A student may qualify for the Pennsylvania Instructional I Geography Certificate by completing a minimum field requirement of 30 semester hours in geography. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

1 General Requirements - - - - 56 Semes!er Hours
(See opening poges, Programs of Study-locate by leafing to black bar on margin.)

II Professional Education Requirements - - 28 Semester Hours
(See School of Education-locate
by leafing to black bar on margin.)
III Specialized Preparation - - . . - 30 Semester Hours

Required - 18 semester hours
Geo 100—Physical Geography
Geo 202-Geography of the United States and Canada

Geo 203-Applied Economic Geography
Geo 205-Geomorphology

Geo 206-Meteorology: An Introduction to Climatology
Geo 211-Map Interpretation
Geo 311-Teaching Geography in Secondary Schools
(credited to Professional Education)
Electives in geography
or related fields
12 semester hours
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IV Electives - . - - - - - - I4 Semester Hours

```

A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN GEOGRAPHY}

\section*{I. Earth Sciences}

Geo 100 Physical Geography
Geo 205 Geomorphology
Geo 206 Introduction to Climatology
Geo 302 Climatology
2. Economic Studies

Geo 201 Conservation of Natural Resources
Geo 203 Applied Economic Geography
Geo 212 Geography of Modern Industry and Commerce
Geo 213 Location of Economic Activity
Geo 214 Urban Growth Patterns
Geo 308 Trade and Transportation
Geo 317 Methods and Models of Regional Analysis
Geo 414 Urban and Regional Planning

\section*{3. Regional Studies}

Geo 202 Geography of U.S. and Canada
Geo 204 Geography of Pennsylvania
Geo 207 Geography of Europe
Geo 208 Geography of Latin America
Geo 304 Geography of Asia
Geo 305 Geography of the Far East
Geo 306 Geography of Africa
Geo 307 Geography of the U.S.S.R.
Geo 412 Geography of Australia and Associated Islands

\section*{4. Cultural and Political Studies}

Geo 200 Geography of World Cultures
Geo 210 Geographic Influences in American History
Geo 309 Political Geography
Geo 313 Population Problems
Geo 316 Political and Military Geography of the U.S.
5. Techniques and Special Studies

Geo 211 Map Interpretation
Geo 303 Cartography
Geo 310 Geography Field Study Methods
Geo 311 Teaching Geography in Secondary Schools
Geo 315 Aerial Photographic Interpretation
Geo 400 Senior Seminar in Geography
Geo 410 Independent Studies in Geography
Geo 415 Geography Area Field Courses I, II, and III
Geo 416 Seminar in Special Studies in Geography
6. General

Geo 101 World Geography

\section*{DEPARTMENT OF HISTORY}

\author{
Dr. Riley, Interim Chairman
}
\begin{tabular}{lll} 
PROFESSORS & STUART & WEBSTER \\
CARLSON & SWAN & YOUNG \\
EVERETT & TURNER & \\
FLECK & & ASSISTANT PROFESSORS \\
FOSTER & ASSOCIATE PROFESSORS & AIZUPITIS \\
FOX & CROWLEY & BURGWIN \\
HARDING & DOYLE & IVINS \\
HOUPT & FERLING & O'GRADY \\
JOHNSON & MORGAN & \\
RILEY & SESSA & INSTRUCTOR \\
SCHALCK & SHAFFER & BLACK (PART-TIME) \\
SOLDON & SHUR &
\end{tabular}

The student of history seeks to recreate the past (or, more precisely, as much of it as is possible) not only rationally to explain and understand the past for its own sake, but also to identify himself and this age with earlier times. He is concerned with the origins and development of and relationships between past men and events and, from the multiplicity of credible and sometimes conflicting evidence, renders judgments on causation and consequences. He seeks to achieve a sense of the past. -Among the careers open to history majors are the law, government service, teaching, research, journalism, and business. Indeed, a strong preparation in history can lead to possibilities in virtually every field of endeavor.

\section*{BACHELOR OF ARTS}

\section*{History}

Candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

II Social Science Core Requirements - - - 24 Semester Hours
His 111-Western Civilization to 1300 A.D.
His 112-Western Civilization, 1300-1815
(111-112 credited to General Requirements)
His 113-Western Civilization, 1815-Present
His 211 -History of U.S. I
His 212-History of U.S. II
III History Concentration Requirements - - 18 Semester Hours
Group 1 American History ( 6 hrs.)
Group 2 European History (3 hrs.)

Ant 231-Introduction to Anthropology
Eco 201—Principles of Economics-Survey
Soc 231-Introduction to Sociology
His 400-Senior Seminar in History
Elective from Group 3 ( 3 hrs .)

Group 3 World and
Regional History ( 3 hrs .)
History Electives (6 hrs.)

IV Electives - . . . . . . . 24 Semester Hours
A typical sequence of courses may be obtained from the Department.

\section*{B.S. IN EDUCATION DEGREES}

\section*{A. Comprehensive Social Studies}

A student may qualify for the Pennsylvania Instructional I Comprehensive Social Studies Certificate by completing a minimum of 24 semester hours in history, and a minimum of 24 semester hours in the other social sciences. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

I General Requirements - - . - . 56 Semester Hours
(See opening pages, Programs of Study-locate by leofing to block bar on margin.)

II Professional Education Requirements - - . 28 Semester Hours
See School of Education-locate
by leafing to black bar on margin.)
III Specialized Preparation - . . . . 36 Semester Hours Required
His 101-History of Civilization I
His 102-History of Civilization II

His 211—History of U.S. I
His 212-History of U.S. II
PSc 231—American Government (credited to General Requirements)
(Continued)

Eco 201—Principles of Economics-Survey
Soc 231-Introduction to Sociology
Ant 231-Introduction to
Anthropology

SSc 331-Teaching Social Studies in Secondary Schools
(credited to Professional Education)
His 400-Senior Seminar in History

\section*{Restricted Electives}

Hisiory: 9 semester hours distributed equally in Groups 1, 2, and 3.
Social Sciences: 9 semester hours under advisement.
IV Electives - - - - - - - 8 Semester Hours
A typical sequence of courses may be obtained from the Department.

\section*{B. History}
(American History or World Cultures)
A student may qualify for the Pennsylvania Instructional I Certificate in history by completing a minimum of 36 semester hours in history and a minimum of 12 semester hours in the other social sciences. Degree candidates must satisfactorily complete a minimum of 128 semester hours distributed among four areas as follows:

1 General Requirements - - . - - 56 Semester Hours
(See opening pages, Programs of Study-locale by leafing to black bar on margin.)

II Professional Education Requirements - - - 28 Semester Hours
(See School of Educalion-locale
by leafing to black bar on margin.)
III Specialized Preparation - - - - - 36 Semester Hours
Required

His 111-Western Civilization to 1300 A.D.
His 112-Western Civilization, 1300-1815
(111-112 credited to General Requirements)
His 113-Western Civilization, 1815-Present
His 211-History of U.S. I
His 212-History of U.S. II

PSc 231-American Government
(credited to General Requirements)
Eco 201—Principles of Economics-Survey
SSc 331-Teaching Social Studies in Secondary Schools
(credited to Professional Education)
His 400-Senior Seminar in History

\section*{Restricted Electives}
(History majors select a concentration area in American History or World Cultures.)
\begin{tabular}{ll} 
AMERICAN HISTORY & WORLD CULTURES \\
CONCENTRATION & CONCENTRATION
\end{tabular}

Hours
worid cultures
Hours
\begin{tabular}{ll} 
His 313-History of Pennsylvania & 3 \\
History electives from Group 1 & 9 \\
History electives from & \\
Group 2 or 3 & 6 \\
Elines &
\end{tabular}

IV Electives - - - - - - - 8 Semester Hours
A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN HISTORY}

\section*{I. AMERICAN HISTORY}

His 211 History of U.S. I
His 212 History of U.S. II
His 313 History of Pennsylvania
His 314 Diplomatic History of U.S.
His 315 Economic History of U.S.
His 316 History of the American Frontier
His 317 History of American Science and Technology
His 318 Constitutional History of U.S.

His 319 Social and Cultural History of U.S.
His 320 History of the South
His 339 History of the AfroAmerican

\section*{2. EUROPEAN HISTORY}

His 112 Western Civilization, 1300-1815
His 113 Western Civilization, 1815-Present
His 219 Medieval Europe
His 220 Renaissance and Reformation
His 331 History of England to 1688

His 332 History of England since 1688
His 340 Modern Germany
His 350 Russian History to 1917
His 351 Soviet Russia
His 360 Diplomatic History of Europe since 1815

\section*{3. WORLD AND REGIONAL HISTORY}

His 101 History of Civilization I
His 102 History of Civilization II
His 111 Western Civilization to 1300 A.D.
His 218 The Ancient World
His 322 History of South Asia
His 323 History of the Middle East
His 325 History of the 20th Century World
His 326 History of Africa to 1800
His 328 History of Subsaharan Africa since 1800
His 329 History of East Asia
His 333 History of Latin America to 1825
His 334 History of Latin America Since 1825

\section*{department of political science}

\author{
Dr. Harding, Chairman
}
\begin{tabular}{lll} 
PROFESSOR & BURNS & ASSISTANT PROFESSOR \\
HARDING & BURTON & IACONO \\
& ELDREDGE & \\
ASSOCIATE PROFESSORS & MIINE & \\
BRADY & SHEA &
\end{tabular}

Political science systematically investigates the theory and practice of politics and levels of government-domestic, foreign, and international. Depending on the area, emphasis may be on the philosophical study of the nature of government and politics, on the political behavior of individuals or groups, or on the role of political and governmental institutions. Careers are open to majors in research, teaching, administration, personnel work, public relations, journalism, and government at home and abroad. A B.A. program in political science is especially important for the pre-law student, or the student who desires to teach political science at the college level.

\section*{BACHELOR OF ARTS}

\section*{Political Science}

Candidates must satisfactorily complete a minimum of 128 hours, distributed among four areas as follows:
1 General Requirements - - . - - 62 Semester Hours
(See opening pages, Progroms of Study-locate
by leafing to black bar on margin.)
II Social Science Core Requirements
His 211-History of U.S. I
His 212-History of U.S. II
Ant 231-Introduction to Anthropology

Eco 201-Principles of Eco-nomics-Survey
Soc 231-Introduction to Sociology
PSc 400-Senior Seminar in Political Science

\section*{III Political Science Concentration Requirements - 24-30 Semester Hours}

PSc 201-Introduction to Political Science
PSc 333-International Politics
PSc 338-Introduction to Political Thought
PSc 339-Elements of Public Administration

PSc 332-Governments and Politics of Western Europe

\section*{or}

PSc 351-The Politics of the Non-Western Areas
-and additional political science electives to complete \(24-30\) semester hours in political science beyond the 3 hours in Core.

IV Electives - . . . . . . \(18-24\) Semester Hours
Political science majors are especially advised to elect supplementary courses from the following: Eco 336, Eco 338, His 314, His 318, Mat 121, and Soc 336.

A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN POLITICAL SCIENCE}

PSc 201 Introduction to Political Science
PSc 231 American Government
PSc 331 State and Local Government
PSc 332 Governments and Politics of Western Europe
PSc 333 International Politics
PSc 334 American Political Parties
PSc 335 American Political Ideas
PSc 336 Soviet Government and Politics
PSc 337 American Foreign Policy
PSc 338 Introduction to Political Thought
PSc 339 Elements of Public Administration

PSc 340 American Constitutional Law
PSc 341 International Law
PSc 342 Public Opinion and Propaganda
PSc 343 Municipal Government
PSc 351 The Politics of the Non-Western Areas
PSc 352 Civil Liberties and Civil Rights
PSc 400 Senior Seminar in Political Science
PSc 410 Independent Studies in Political Science

\section*{DEPARTMENT OF PSYCHOLOGY}

\author{
Dr. Clark, Chairman
}
\begin{tabular}{lll} 
PROFESSORS & ASSOCIATE PROFESSORS & ASSISTANT PROFESSORS \\
CLARK & BARTHOLOMEW & MORSE \\
FELDMAN & MILGRAM & POTTIEGER \\
GREGG & PORTER & \\
& SANDS & \\
& SHINEHOUSE &
\end{tabular}

The psychologist endeavors to apply scientific processes in order to explain, predict, and in some cases control human behavior. A bachelor's degree in psychology should prepare the student to understand those variables, such as heredity, learning, and the environment, which shape and change behavior. Careers are possible in clinics, guidance centers, industry, hospitals, schools, and government.

\section*{BACHELOR OF ARTS}

\section*{Psychology}

Candidates must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

1 General Requirements
62 Semester Hours
(See opening poges, Programs of Study-locate
by leafing to black bar on margin.)
II Social Science Core Requirements
18 Semester Hours

His 211-History of U.S. I
His 212-History of U.S. II
Ant 231-Introduction to Anthropology

Eco 201-Principles of Economics-Survey
Soc 231-Introduction to Sociology
Psy 400-Senior Seminar in Psychology

III Psychology Concentration Requirements - 24-30 Semester Hours

Psy 354-Social Psychology
Psy 355-Experimental Psychology
Psy 356-The Study of Personality

Psy 375-Abnormal Psychology
-and additional psychology electives to complete 24-30 semester hours in psychology beyond the 3 hours in Core.

\section*{IV Electives - . . . . . - \(18-24\) Semester Hours}

Psychology majors are especially advised to elect supplementary courses from the following: Ant 331, Bio 309, Mat 121, and Soc 338.

A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN PSYCHOLOGY}

Psy 100 Introduction to Psychology
Psy 241 Psychology of Exceptional Children
Psy 243 Psychology of the Mentally Retarded
Psy 352 Child and Adolescent Psychology
Psy 354 Social Psychology
Psy 355 Experimental Psychology
Psy 356 The Study of Personality
Psy 361 Applied Psychology
Psy 362 History of Psychology
Psy 363 Psychology of Learning
Psy 364 Physiological Psychology

Psy 370 Mental Hygiene
Psy 375 Abnormal Psychology
Psy 400 Senior Seminar in Psychology
Psy 410 Independent Studies in Psychology
Psy 415 Verbal Behavior
Psy 420 Statistics for the Behavioral Sciences
Psy 425 Psychological Testing and Measurement
Psy 430 Human Sexual Behavior
Psy 470 Psychology of Perception and Cognition


\title{
DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY
}

\author{
Dr. Samuelson, Chairman
}
```

PROFESSOR

```
samuelson

\author{
ASSOCIATE PROFESSORS \\ BECKER \\ constable
}

\section*{ASSISTANT PROFESSORS \\ BRAM \\ COWEN \\ MURPHY}

Man creates culture, culture creates man. It is to the interplay of these two that sociology and anthropology address themselves. The sciences of human society study the structuring and functioning of groups in determining human behavior and interpreting social phenomena objectively. These disciplines aim to understand man: his biological and cultural development. Careers for the major in sociology-anthropology are in teaching; local, state, and national governmental agencies; criminology and penology; social service and personnel work; and public relations.

The B.A. degree program in social welfare is designed not only for those students wishing to pursue a career in social work and related human services but also for those students who desire to broaden and deepen their experience with and awareness of the human situation and professional and societal responses to human need.

\section*{BACHELOR OF ARTS DEGREES}

\section*{A. Sociology-Anthropology}

Candidates for the B.A. degree in sociology-anthropology must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:

I General Requirements - - - . . 62 Semester Hours
(See apening pages, Pragrams of Study-lacate by leafing to black bar on margin.)

II Social Science Core Requirements - - - 18 Semester Hours

His 211-History of U.S. I
His 212-History of U.S. II
Ant 231-Introduction to Anthropology

Eco 201-Principles of Economics-Survey
Soc 231-Introduction to Sociology
Soc or Ant 400-Senior Seminar in Sociology or Anthropology

\section*{III Sociology-Anthropology Concentration}

Requirements - - - - - - 24-30 Semester Hours

Soc 337-Sociological Theory
Soc 341-Social Change
Ant 331-Human Evolution

Ant 332-Social Organization
-and additional sociology and anthropology electives to complete 24-30 semester hours in sociology and anthropology beyond the 9 hours in Core.

IV Electives - - . - . - - 18-24 Semester Hours
Sociology-anthropology majors are especially advised to elect supplementary courses from the following: Psy 354, 356, 375, and 420.

A typical sequence of courses may be obtained from the Department.

\section*{B. Social Welfare}

Candidates for the B.A. degree in Social Welfare must satisfactorily complete a minimum of 128 semester hours, distributed among five areas as follows:

I General Requirements - - - - . 62 Semester Hours
(See opening pages, Pragrams of Study-lacate
by leafing ta black bar on margin.)
II Social Science Core Requirements
18 Semester Hours
His 211-History of U.S. I
His 212-History of U.S. II
Ant 231-Introduction to Anthropology

Eco 201—Principles of Economics-Survey
Soc 231-Introduction to Sociology
SWo 400-Senior Seminar in Social Work

III Sociology-Anthropology Requirements - - 12 Semester Hours

Soc 337-Sociological Theory
Soc 341—Social Change

Ant 331-Human Evolution
Ant 332-Social Organization
IV Social Welfare Concentration - - - 18 Semester Hours
SWo 200—Introduction to Social Work
SWo 300-Social Welfare Systems I
SWo 301—Social Welfare Systems II

SWo 320-Principles and Methods of Social Work
SWo 420--Field Experience in Social Welfare I
SWo 421-Field Experience in Social Welfare II

\section*{172/Social Sciences: Sociology-Anthropology}

\section*{\(\checkmark\) Electives - - . . . - - 18 Semester Hours}

Social Welfare majors are especially advised to elect supplementary courses from the following: Eco 336, PSc 331, PSc 339, Psy 370, Soc 332, and Soc 336.

A typical sequence of courses may be obtained from the Department.

\section*{OFFERINGS IN SOCIOLOGY-ANTHROPOLOGY and social welfare}

\section*{ANTHROPOLOGY}

Ant 200 Introduction to Archaeology
Ant 231 Introduction to Anthropology
Ant 305 Historical Archaeology
Ant 331 Human Evolution
Ant 332 Social Organization
Ant 333 Cultural Dynamics
Ant 334 World Ethnography
Ant 335 Personality and Culture
Ant 336 Social Anthropology
Ant 400 Senior Seminar in
Anthropology
Ant 410 Independent Studies
in Anthropology

\section*{SOCIOLOGY}

Soc 200 Introduction to
Social Research
Soc 231 Introduction to Sociology
Soc 332 Contemporary Social Problems
Soc 333 The Family
Soc 334 Juvenile Delinquency
Soc 335 Racial and Cultural
Minorities
Soc 336 Urban Sociology

Soc 337 Sociological Theory
Soc 338 Criminology
Soc 339 Social Stratification
Soc 341 Social Change
Soc 342 Community Analysis and Applied Social Change
Soc 343 Sociology of Small Groups
Soc 344 Sociology of Complex Organizations
Soc 345 Sociology of Religion
Soc 400 Senior Seminar in Sociology
Soc 410 Independent Studies in Sociology

SOCIAL WELFARE
SWo 200 Introduction to Social Work
SWo 300 Social Welfare Systems I
SWo 301 Social Welfare Systems II
SWo 320 Principles and Methods in Social Work
SWo 400 Senior Seminar in Social Work
SWo 420 Field Experience in Social Welfare I
SWo 421 Field Experience in Social Welfare II

\section*{Interdisciplinary \\ Programs}

West Chester also offers the Bachelor of Arts in three interdisciplinary programs: American Studies, Latin-American Studies, and Russian Studies.

The American Studies Program explores American art, economics, government, history, literature, music, philosophy, psychology, and sociology in interpreting American culture.

The Latin-American Studies Program is integrated and interdepartmental, involving economics, literature, art, music, foreign language, geography, history, political science, sociology-anthropology, and education.

The Russian Studies Program is designed to give a solid background in Russian language, literature, history, government, economics, geography, sociology-anthropology, education, art, and music.

\section*{AMERICAN STUDIES}

Candidates for the B.A. degree in American Studies must satisfactorily complete a minimum of 128 semester hours, distributed among four areas as follows:
I General Requirements - - - - - 62 Semester Hours
    (See opening poges, Programs of Study-lacate
    by leafing to black bar on margin.)
II Required Core - - - - - . 30 Semester Hours
1. Introduction to American Studies Seminar 3
2. American Literature (Lit 223, Lit 224) 6
3. American History (His 211, His 212) 6
4. Senior Seminars in American Studies 6
5. Three courses in Art, Music, Philosophy 9
(Art 408, Mus 322, Phi 374 or Phi 484)
III Specialization . - . - - - - 18 Semester Hours
1. Two courses in American History area
6
(His 314, His 315,-His 316, His 317, His 318,
His 319, His 320, His 331, His 332, or His 339)
2. Two courses in American Literature and Language area
3. Two courses in Social or Behavioral Sciences
(Ant 332, Eco 334, EdF 100, Geo 202, Geo 210, Geo 316, PSc 331, PSc 334, PSc 335, Psy 354, or Soc 332)

\section*{IV Electives - - - - - - . 18 Semester Hours}
(From any of the above areas or general curricula.)
Note: Students may obtain more detailed information about the American Studies program from the Dean of the School of Arts and Letters or the Dean of the School of Social and Behavioral Sciences.

\section*{LATIN-AMERICAN STUDIES}

Candidates for the B.A. degree in Latin-American studies must satisfactorily complete a minimum of 128 semester hours, distributed among three areas as follows:
I General Requirements - - - - - 62 Semester Hours
(See opening pages, Programs of Study-locate
by leafing to black bar on margin.)
II Required Core For Spec:alization - - - 42 Semester Hours
1. Spanish Language ..... 6
\(16^{\circ}\) hours beyond the intermediate level)
2. Spanish-American Literature ..... 6
3. Latin-American History ..... 6
4. Latin-American Government ..... 3
5. Latin-American Geography ..... 3
6. Latin-American Economics ..... 3
7. Latin-American Sociology-Anthropology ..... 3
8. Latin-American Education ..... 3
9. Latin-American Fine Arts (Art or Music) ..... 3
10. Seminars ..... 6
III Electives24 Semester Hours

Note: Spanish-language majors interested in this program should consult with the Chairman of the Department of Foreign Languages. All students may obtain more detailed information about the Latin-American Studies program from the office of the Dean of the School of Arts and Letters or the Dean of the School of Social and Behavioral Sciences.

\section*{RUSSIAN STUDIES}

Candidates for the B.A. degree in Russian Studies must satisfactorily complete a
minimum of 128 semester hours, distributed among three areas as follows:
1 General Requirements - - . - . 62 Semester Hours
(See opening pages, Programs af Study-lacate by leafing ta block bar on margin.)
II Required Core for Specialization 45 Semester Hours
1. Russian Language ..... 6
(6 hours beyond the intermediate level)
2. Russian Literature ..... 6
3. Russian History ..... 6
4. Russian Government ..... 6
5. Russian Geography ..... 3
6. Russian Economics ..... 3
7. Russian Sociology-Anthropology ..... 3
8. Russian Education ..... 3
9. Russian Fine Arts (Art or Music) ..... 3
10. Seminars ..... 6
III Electives 21 Semester Hours

Note: Russian-language majors interested in this program should consult with the Chairman of the Department of Foreign Languages. All students may obtain more detailed information about the Russian Studies program from the office of the Dean of the School of Arts and Letters or the Dean of the School of Social and Behavioral Sciences.


\section*{Course Descriptions}

Course descriptions are arranged alphabetically by field. Semester hours are indicated by a numeral in parentheses, immediately following a title.

ACCOUNTING See Department of Business and Economics
ANTHROPOLOGY See Department of Sociology and Anthropology

\section*{DEPARTMENT OF ART}

Daniel L. Kuruna, Chairman

\section*{Art 101 Fine Arts [Art] (3)}

Introduction to visual arts (painting, architecture, sculpture, and minor arts). Includes survey of historical styles and presentation of psychology of visual perception and expression.

Art 106 Drawing I: Perspective, Proportion, Composition (3)
An introduction to the art of drawing, with emphasis on line, form, mass; experimentation with a variety of media.

Art 107 Drawing II: Advanced Techniques and Problems (3)
Advanced problems in drawing; further exploration of and experimentation with materials and techniques in drawing.

Art 111 Design I: Color Theory and Two-Dimensional Techniques
Studio experimentation with the elements of art principles and their application to color theory and two-dimensional problems.

\section*{Art II2 Design II: Three-Dimensional Techniques (3)}

Problems in techniques involving three-dimensional forms. Includes packaging, display, and promotional art.

\section*{Art 206 Drawing: Anatomy of Figure Drawing (3)}

Basic techniques and their relationship to pictorial organization. Work in drawing from the life model.

Art 207 Drawing: Advanced Figure Drawing (3)
Challenging problems in drawing of figures with experiments in methods and techniques.

Art 211 Design: Communication Techniques, Lettering, Layout (3) Exploration of the visual-design aspects of layouts and lettering for communication.

\section*{Art 212 Commercial and Architectural Rendering (3)}

Experience in producing renderings of commercial and architectural problems for promotional use.

\section*{Art 216 Painting 1: Fundamental Techniques-Basic Composition (3)}

Explores a variety of media and techniques including oil, tempera, and acrylic. Content varies from representational to abstract.

\section*{Art 217 Painting II: Concepts of Visual Imagery (3)}

An advanced approach to painting in which all projects undertaken are pursued in depth.
Note: Students may begin their experience in sculpture by selecting either Art 221 or Art 222 as their first course.

\section*{Art 221 Sculpture I: Subtractive Techniques (3)}

Experience in designing three-dimensional forms and chiseling or carving wood, clay, and stone.

\section*{Art 222 Sculpture 11: Additive Techniques (3)}

A basic exploration of the new additive sculpture, using metals, plastics, plaster, woods, and assemblage techniques. Purpose of form is stressed.

\section*{Art 226 Water Color: Basic Water-Based Techniques (3)}

4 water color course which deals with transparencies, gouache, and mixed media. Work from still life, landscape, and imagination.

\section*{Art 227 Water Color: Intermediate Water-Based Techniques (3)}

Extension and further exploration of the water color media. Traditional, current, and experimental approaches are pursued, with emphasis on design and expressive content.

Art 231 Ceramics I: Basic Techniques and Glaze Calculations (3)
An understanding of basic materials, techniques, and processes involved in ceramics. Introduction to hand and wheel methods of construction; knowledge of clay bodies, glazes, and kiln firing. Emphasis on design as an organic outgrowth of the ceramic process.

Art 232 Ceramics II: Intermediate Techniques and Glaze Calculations (3) Fundamental methods of creating clay forms on the potter's wheel. Experimentation with glazes, clay bodies, and the operation of ceramic kilns. Emphasis on creative design.

Art 241 Graphics 1 (3)
An introduction to the media of the graphic arts: linoleum cuts, woodcuts, etc.
Art 242 Graphics II (3)
Graphic-art concepts and techniques in the process of serigraphy.

\section*{Art 251 Art in the Elementary School I}

An introduction to the teaching of art in the elementary school through curriculum study, philosophy, and workshop experience with materials and techniques.

Art 252 Art in the Elementary School II (3)
Organization and development of programs in art education in grades K-6. Emphasis on understanding the creative act of the young learner.

\section*{Art 256 Art in Elementary Education (3)}

The role of art in elementary education, with a concern for the interaction of teacher, student, and society in the development of the visual experience.

Art 261 Arts and Crafts: Recreation (3)
Designed for individuals interested in teaching arts and crafts in camps, playgrounds, senior citizen groups, clubs, and hospitals.

\section*{Art 263 Arts and Crafts: Special Education (3)}

Creative work in a variety of activities with arts and crafts materials for specialeducation classes.

Art 266 Crafts: Three-Dimensional Media for Elementary Education (3) Creative work in a variety of activities with arts and crafts materials. Emphasis on the application of art to activities in the classroom.

\section*{Art 306 Drawing: Drafting (3)}

Designed to familiarize the student with the use of drawing instruments and materials and to introduce him to engraving processes and the mechanics of reproduction for printing.

\section*{Art 308 Drawing: Independent Studies (3)}

An opportunity for the student to personalize his pursuit of drawing in a technique and materials of his choice.

\section*{Art 311 Design: Fashion Illustration (3)}

The techniques of rendering fashion drawing for commercial use in various areas of promotional materials.

\section*{Art 316 Painting: Advanced Painting Problems (3)}

Emphasis on creative exploration of materials and techniques. The student explores personal ideas and styles. Use of a variety of personal subject matter.

Art 317 Painting: Head and Figure (3)
Basic understanding of the elements of realistic painting. Students work directly from life. Various techniques, including underpainting, are studied.

\section*{Art 320 Painting: Independent Studies (3)}

A course for the advanced painter who wants to study in depth his personal approach to painting. Advanced criticism offered.

Art 321 Sculpture: Advanced Subtractive Techniques (3)
A concentrated course offering advanced work in wood, alabaster, and Carrara marble. Individual interpretation with emphasis on creative expression.

Art 322 Sculpture: Advanced Additive Techniques (3)
Advanced exploration of meanings and techniques used in the additive approach to sculptural form.

Art 323 Sculpture: Environmental (3)
An opportunity to explore environmental and monumental sculpture and its fitting into architectural projects.

Arł 325 Sculpture: Independent Studies (3)
Development of the individual's personal style is encouraged. Emphasis on large sculpture and advanced techniques.

Art 330 Water Color: Independent Studies (3)
The student is encouraged to pursue a technique in depth and to develop a personal water color style.

Art 331 Ceramics: Advanced Techniques and Glaze Calculations (3)
An advanced course to develop craftsmanship and explore clay as a means of individual expression. Experimentation with formulating glazes and clay bodies.

\section*{Art 332 Ceramics: Kiln Construction (3)}

For advanced students who want to study and analyze the construction and operation of the kiln.

Art 335 Ceramics: Independent Studies
Concentrated work in creating ceramic forms for personal expression. Opportunity for special research in desired area.

\section*{Art 341 Graphics: Intaglio (3)}

An introduction to basic intaglio techniques: etching, aquatint, soft ground, dry point, and engraving.

\section*{Art 342 Graphics: Lithography (3)}

An introduction to principles and techniques of stone and plate lithography.

Art 345 Graphics: Independent Studies (3)
An opportunity for personal pursuit and research of the student's favorite graphic media.

Art 346 Crafts: Jewelry and Metalwork (3)
An introduction to experience with precious and non-precious metals.

\section*{Art 347 Crafts: Fabric Design}

Fabric design and weaving is approached through an exploration of design techniques applicable to various materials.

\section*{Art 358 Curriculum Development in Art (3)}

Organization and development of programs in art education. Emphasis on incorporating methods and materials of teaching with laboratory experimentation.

Art 359 Communication in Art (3)
Adaptation of communicative media to art education curriculum. Instructional media, including instructional television, are investigated and developed.

\section*{Art 360 Function of the Museum in Art (3)}

The role and relationship of the museum as a learning and cultural influence in contemporary society.

Art 381 Near Eastern Art: Ancient Antiquity (3)
Originating loci for the art forms and ideas of Classical and Oriental cultures, comprising Sumeria, Babylonia, Assyria, Egypt, and various Semitic groups, culminating in the Judaic tradition.

\section*{Art 382 Western Art I: Classical Antiquity (3)}

Analysis of Graeco-Roman cultures in the light of proto-Classical (Minoan, Mycenaean, and Etruscan) forms and ideas as derived from Danubian Neolithic and Near East sources.

\section*{Art 383 Western Art II: Middle Ages (3)}

Analysis of the cross-currents and main thrust of art development through religious beliefs of Byzantium, Roman Christianity, Germanic Nomads, and Islam.

\section*{Art 384 Western Art III: Renaissance-Baroque (3)}

Analysis of art forms in the light of the Copernican Revolution; disruption of and reorientation to the Classical order and Christian belief.

\section*{Art 385 Western Art IV: Romanticism (3)}

Analysis of the major period of anti-Classicism and the development of Romantic sensibility. Attention given to rational-mechanistic and intuitive-organic concepts of the universe and creativity.

\section*{Art 386 Western Art V: 20th Century (3)}

An intensive exploration of contemporary art forms as they represent an extension of nineteenth-century experiments to isolate strictly formal aspects of art expression.

\section*{Art 401 History of Aesthetics and Art Criticism (3)}

The various philosophic theories of art and art products. An attempt is made not only to relate these theories to the senses and form itself but also to technical, psychological, and cultural values.

\section*{Art 402 Aesthetics: Contemporary Art Forms (3)}

Analysis of the meaning behind the "chaotic" multiforms of the twentieth century. Comparison of visual expressions with the manifestos and essays as they parallel innovations in style and ideas.

\section*{Art 403 Primitive Art (3)}

Analysis of primitive art as determined principally through ritual and myth. Focus of content divided among the following: prehistory to early Ancient Near East; contemporary primitive cultures; psychoanalytical interpretation; and contemporary primitivistic interests of the West.

\section*{Art 405 Russian Art: Revolution vs. Tradition (3)}

Russian art forms as they reflect the conflict between religious idealism and social realism. Emphasis on the nineteenth and twentieth century developments.

\section*{Art 407 Oriental Art (3)}

Analysis of art forms in the context of Eastern philosophy. Main emphasis on India, China, and Japan. Emphasis on East-West similarities and dichotomies.

\section*{Art 408 Arts of the U.S.: Material Culture I (3)}

Colonial Revolution. Cultural approach to development of American values related to visual expression. Oriented to American studies; a cross-study analysis of the impact of image and object on folk and elite tradition.

Art 409 Arts of the U.S.: Material Culture II (3)
Continuation of Art 408. Post Colonial Revolution through World War I.

\section*{Art 410 Arts of the U. S.: Material Culture 111 (3)}

Relating the art movements of the twentieth century, beginning with World War I, to the social climate of change generated by technological materialism; characterized by dehumanization and the development of a new humanism.

Art 411 Latin-American Art (3)
An analysis of the impact of Renaissance-Baroque forms and Counter-Reformation theology on native traditions and expressions in the new world. The evolution of twentieth century forms as a synthesis of these two culturally different traditions.

\section*{Art 412 American Architecture (3)}

Evolution of American style from colonial times to the present. Emphasizing the elements that contributed to the development of an indigenous functional architecture.

Art 414 Research and Methodology (1)
Introduction to the methods and bibliography of the art history program.
Art 415 Art History: Independent Studies (3)
Provides an opportunity for students to pursue a particular period of interest.

ASTRONOMY See Department of Earth, Space, and General Sciences

\section*{DEPARTMENT OF BIOLOGY}

Relis B. Brown, Chairman

\section*{Bio 100 Basic Biological Science (4)}

Basic principles of biology. Cell theory, energy metabolism, genetics, development, diversity of life forms, and ecology. Not open to biology majors. Three hours lecture and two hours lab.

Bio 101 Anatomy and Physiology for Nurses I (3)
Correlation of basic human structure with function, designed for student nurses with varying scientific backgrounds. Four hours per week, with lecture and laboratory combined.

\author{
Bio 102 Anatomy and Physiology for Nurses II (3) \\ A continuation of Bio 101. Prereq: Bio 101.
}

\section*{Bio 104 Microbiology for Nurses (4)}

A fundamental background in principles of microbiology and the nature and epidemiology of microbial diseases. Emphasis on host-parasite interactions. Recent advances in immunology and serology. Three hours lecture and two hours lab.

\section*{Bio 110 General Biology (4)}

The concepts general to all living organisms such as the life of cells, genetics, evolution, ecology, and man's role in the living world. Six hours, including lecture and lab.

\section*{B:o ll5 General Botany (4)}

Survey of the plant kingdom with stress on anatomy, physiology, and economic importance of these plants in the various divisions from Chlorophyta to and including the Angiosperms. Three hours lecture and three hours lab. Prereq: Bio 110.

\section*{Bio 117 General Zoology (4)}

Principles of animal biology. Form and function of vertebrate and invertebrate animal types. Three hours lecture and three hours lab. Prereq: Bio 110.

\section*{Bio 200 Basic Genetics (4)}

A course for non-major students. Mendelian laws of inheritance. Cell structure, cell division, mechanics of monohybrid and dihybrid crosses, linkage, crossing-over, and probability. Not open to students who have credit for Bio 100 or its equivalent. Three hours lecture and two hours lab.

\section*{Bio 201 Basic Ecology (3)}

A course for non-major students. The relationship between living things and their environments. Practical applications to the elementary school program. Two hours lecture and three hours lab. Prereq: Bio 100.

\section*{Bio 202 Anatomy of Speech and Hearing Mechanisms (3)}

For majors in speech pathology and audiology. Emphasis is given to the neurological, respiratory, and skeleto-muscular implications of human anatomy involved in communication skills. Two hours lecture and two hours lab. Prereq: Bio 100.

\section*{Bia 209 Human Anatomy (4)}

Structure of man: emphasis on the skeletal and muscular systems. Three hours lecture and two hours lab.

\section*{Bio 215 Nonflowering Plants (3)}

The anatomy, physiology, and reproductive processes of selected algae, bacteria, fungi, mosses, ferns, and their allies. Economic importance considered, with particular emphasis on certain plant diseases. Two hours lecture and three hours lab. Prereq: Bio 115.

\section*{Bio 217 Invertebrate Zoology (3)}

Selected invertebrate types. Classification, adaptive features, embryological patterns, and phylogenetic relationships. Two hours lecture and three hours lab. Prereq: Bio 117.

\section*{Bio 271 Wildlife Conservation (3)}

Principles of conservation of plant and animal resources. Collateral reading assignments. Prereq: Bio 100 or one semester of botany or zoology.

\section*{Bio 272 Field Ecology and Natural History, (3)}

Field work in ecology and natural history for the teacher. Basic environmental processes and concepts. Lectures and demonstrations included. Not open to biology majors. Prereq: permission of department.

\section*{Bio 275 Field Botany (3)}

Methods of studying plants in their natural surroundings. Use of keys, botanical manuals, and illustrated floras to identify living specimens. Two hours lecture and three hours lab. Prereq: Bio 100 or 115.

\section*{Bio 277 Field Zoology (3)}

Animal life in the surrounding localities. Use of keys, charts, books, and museum specimens to identify and classify various animals. Two hours lecture and three hours lab. Prereq: Bio 100 or 117.

\section*{Bio 309 Human Physiology (4)}

Basic human functions with emphasis on the circulatory, respiratory, and nervous systems. Three hours lecture and two hours lab.

\section*{Bio 330 Genetics (4)}

Laws of heredity in plants, animals, and men. Cell structure, molecular genetics, Mendelian inheritance, eugenics, linkage, probability, crossing-over, and random assortment. Three hours lecture and two hours lab. Prereq: Bio 100 or 110.

\section*{Bio 356 Plant Structure (3)}

Microscopic examination of plant cells. Interrelationship of cells, function of cells, and variations of cell anatomy. Two hours lecture and three hours lab. Prereq: Bio 115.

\section*{Bio 361 General Physiology (3)}

General principles of physiology. Concept of homeostasis; nature of protoplasm, acidbase balance, bioenergetics, electrophysiology, and enzyme activity. Two hours lecture and three hours lab. Prereq: Che 230 or 231, Bio 117, Mat 105 or equivalent.

\section*{Bio 362 Physiological Chemistry (3)}

The chemistry of living processes. Biologically important compounds and their metabolism. Two hours lecture and three hours lab. Prereq: Che 230 or 231, Bio 117, Mat 105 or equivalent.

\section*{Bio 364 Bacteriology (4)}

Microscopic forms of life commonly encountered in biological work. Culture techniques and physiological processes of microorganisms. Three hours lecture and two hours lab. Prereq: Bio 115, 117.

\section*{B:o 365 Plant Physiology (3)}

Physiological processes of plants. Photosynthesis, respiration, intermediate metabolism, entrance of solutes into the plant, water metabolism, and growth regulators. Two hours lecture and three hours lab. Prereq: Bio 115, Che 230 or 231.

\section*{Bio 370 Ecology (3)}

Relationship between living things and their environment approached through the study of individual ecosystems. The aquatic, the forest, the field, and the urban ecosystems. Two hours lecture and three hours lab. Prereq: 8 hours of biology or permission of instructor.

\section*{Bio 377 Entomology (3)}

Insects: their structure, functions, classification, economic importance, and biological significance. Two hours lecture and three hours lab. Prereq: Bio 117.

\section*{Bio 378 Ornithology (3)}

Introduction to the birds of Pennsylvania with emphasis on field identification. Classification, migration, songs, courtship, nesting, care of young, and plumage changes. Two hours lecture and three hours lab. Prereq: Bio 100 or one semester of zoology.

\section*{Bio 412 Evolution (3)}

The history, evidence, implications, and current status of the evolution theory. Prereq: 2 years of college biology or consent of instructor.

\section*{Bio 421 Cytology (3)}

Intracellular organization of plant and animal cells, correlated with structure, chemical constitution, and function. Two hours lecture and three hours lab. Prereq: Bio 115, 117, Che 104.

\section*{Bio 457 Vertebrate Morphology I (4)}

The comparative embryology, histology, and anatomy of vertebrate somatic systems.
Two hours lecture and two 3-hour labs. Prereq: Bio 117.

\section*{Bio 458 Vertebrate Morphology II (4)}

The comparative embryology, histology, and anatomy of vertebrate visceral systems. Two hours lecture and two 3-hour labs. Prereq: Bio 457.

\section*{Bio 485 Plant Taxonomy (3)}

Principles of evolution as illustrated by the principles of plant taxonomy. Modern concepts of biosystematics. Practical experience in plant identification. Two hours lecture and three hours lab. Prereq: Bio 115.

\section*{Bio 490 Biology Seminar (I)}

Reports on special topics and current developments in the biological sciences. Prereq: 18 hours of biology.

\section*{Bio 491 Special Problems in Biology (1 to 3)}

Tutorial course for advanced undergraduate biology majors capable of doing independent study and research on a problem approved by the supervising instructor. Prereq: consent of instructor.

For courses in Marine Science, given in summer only, see Earth, Space, and General Sciences.

BUSINESS See Department of Business and Economics

BUSINESS LAW See Department of Business and Economics

\section*{DEPARTMENT OF BUSINESS AND ECONOMICS}

Joseph M. Thorson, Chairman

\section*{ACCOUNTING}

BAc 201 Principles of Accounting 1 (3)
Introducing accounting: double entry procedures, income statement, balance sheet interpretation of accounts, plus proprietorship accounting.

\section*{188/Business and Economics}

BAc 202 Principles of Accounting II (3)
Accounting for partnerships and corporations. Stress is on concepts rather than bookkeeping. Prereq: BAc 201.

BAc 301 Intermediate Accounting I (3)
Analysis and evaluation of assets, liability, and capital accounts. Problems of income measurement and recognition. Prereq: BAc 202.

BAc 302 Intermediate Accounting II (3)
Continuation of BAc 301. Prereq: BAc 301.

\section*{BAc 303 Cost Accounting I (3)}

Techniques of product unit cost determination and uses of cost data in managerial decisions. Prereq: BAc 202.

BAc 304 Cost Accounting II (3)
Continuation of BAc 303. Prereq: BAc 303.

\section*{BAc 400 Senior Seminar in Accounting (3)}

Research in accounting. Emphasis on generally accepted accounting principles and written presentation thereof. Research paper must meet departmental requirements. Prereq: BAc 405.

\section*{BAc 401 Auditing (3)}

A study of generally accepted accounting principles and auditing procedures. Preparation of working papers. Prereq: BAc 405.

\section*{BAc 403 Federal Taxation (3)}

A complete study of individual, partnership, and corporate income taxes, with emphasis on current Internal Revenue Service regulations. Prereq: BAc 202.

\section*{BAc 405 Advanced Accounting (3)}

Special accounting procedures for installment sales, consignments, agency and branch accounting, consolidations, and receiverships. Statements of affairs. Prereq: BAc 302.

\section*{BAc 410 Independent Studies in Accounting (1 to 3)}

Special research projects, reports, readings in accounting. Open to seniors and Honors Program students only. Prereq: department chairman's approval.

\section*{MANAGEMENT}

\section*{BAd 201 Business Organization and Management (3)}

Introduction to the principles and the theory of business organization and management. Problems of business functions: organization, planning, direction, coordination, and control.

\section*{BAd 221 Principles of Marketing (3)}

The consumer market, product planning, merchandising and distribution, pricing, and market research.

\section*{BAd 302 Personnel Management (3)}

Problems of personnel policies and practices: recruiting; selection of personnel; testing and training programs; job evaluation, rating, promotion, and transfer; and employee services. Prereq: BAd 201.

\section*{BAd 322 Advertising and Sales Promotion (3)}

The role of advertising and promotion in wholesale and retail marketing. Current campaigns are studied. Prereq: BAd 221.

\section*{BAd 323 Production Planning and Control (3)}

Study of production-control organizations. Personnel; machines; methods of scheduling, dispatching, and renting; equipment and facilities; plant layout; and internal traffic control. The analysis of and application to production problem areas of linear programming, critical path analysis, PERT, forecasting methods, and other operations research techniques. Prereq: BAd 201 or permission of instructor.

\section*{BAd 324 Quality Control (3)}

Control techniques in industrial production, inspection, and experimentation. Intensive study of the SHEWHART control charts and acceptance sampling by attributes and variables. Prereq: Mat 108, BAd 201.

\section*{BAd 325 Corporation Finance (3)}

The organization and financing of the modern corporation. Promotion, capitalization, short-term financing, capital budgeting, distribution of earnings, expansion, consolidation, failure, and reorganization. Prereq: Eco 232.

\section*{BAd 326 Production Management (3)}

Plant location, design, and construction; internal organization for operations, production control, stores control, routing of materials, job analysis, and time study; wage systems, subdivision of executive responsibilities and duties; methods of coordination and planning. Prereq: BAd 201.

\section*{BAd 344 Investments (3)}

Problems and procedures of investment management; types of investment risks; security analysis; investment problems of the individual as well as the corporation. Prereq: BAd 325.

\section*{BAd 400 Senior Seminar in Management (3)}

Research in management. Emphasis on integrating and reinforcing principles studied in earlier courses. Research paper must meet departmental requirements. Prereq: BAd 401.

\section*{190/Business and Economics}

\section*{BAd 401 Industrial Organization and Management (3)}

Principles and theory involved in operating a modern plant; problems of organization, location, layout, equipment, standards, and control of operations. Prereq: BAd 202.

\section*{BAd 402 Organization Behavior and Management (3)}

The human aspect in management. Psychological and sociological factors in organization and personnel relations are studied. Prereq: BAd 202.

BAd 405 Business Policy (3)
Integrated course covering the various functions of business administration. The case method is employed. Prereq: BAd 401.

\section*{BAd 406 Quantitative Business Analysis (3)}

One section of the course deals with systems design and model building. The other deals with quantitative techniques including linear programming, probability theory, inventory models, and queuing theory. Applications to case problems. Prereq: Mat 108, Eco 352 or equivalents, or instructor's approval.

\section*{BAd 407 Budgeting and Systems (3)}

Budgeting and systems as aids in coordinating and directing business operation. Prereq: BAc 202, Eco 232.
BAd 410 Independent Studies in Management (1 to 3)
Special research projects, reports, readings in management. Open to seniors and Honors Program students only. Prereq: department chairman's approval.

\section*{BUSINESS LAW}

\section*{BLa 301 Business Law I (3)}

Fundamental principles of business law; its origin, nature, and administration. The law of contracts, sales, installment sales, insurance, and real property.

BLa 302 Business Law II (3)
Laws of negotiable instruments: nature of contract and agency relationships; em-ployer-employee negotiations; partnership and corporation law. Prereq: BLa 301.

\section*{ECONOMICS}

\section*{Eco 201 Principles of Economics-Survey (3)}
A. study of the basic principles underlying production and consumption activities in our modified capitalistic economic system, from the aggregate as well as individual and sectoral standpoints. Issues considered include competition, unemployment, inflation, economic growth, and alternative economic systems.

\section*{Eco 231 Principles of Economics I (3)}

The principles underlying use and allocation of scarce productive resources. Consumption and production activities. Value, price, and income distribution. Considerations of economic efficiency and welfare.

\section*{Eco 232 Principles of Economics II (3)}

National income and its measurement. The determination of price levels, output, and employment. Money and credit, expenditures, and economic stability. Government fiscal and monetary policy. Prereq: Eco 231.

\section*{Eco 333 Consumer Economics (3)}

The major kinds of economic decisions required of consumers; an evaluation of the social and economic consequences of those decisions.

\section*{Eco 334 Industrial Relations (3)}

Objectives sought and policies followed by labor and management in modern industrial relations in the United States. Collective bargaining processes and the role of government. Prereq: Eco 232.

\section*{Eco 335 Money, Banking, and Fiscal Policy (3)}

A survey of money, credit, and prices, emphasizing their effects on economic stabil-
ity. The Federal Reserve System and its effect on credit control. Prereq: Eco 232.

\section*{Eco 336 Business and Government (3)}

Background and development of public policies which directly modify the free enterprise economy of the United States. Evaluation of policies which change the nature and extent of competition. Prereq: Eco 231.

\section*{Eco 337 Economic Growth and Development (3)}

A survey and critical evaluation of alternative theories of capitalist economic development. Analysis and comparison of alternative public policies applicable to underdeveloped countries and regions. Prereq: Eco 232.

\section*{Eco 338 International Economics (3)}

A descriptive, analytical examination of international trade, financial, and other economic relationships. The effects of public policies on these relationships. Prereq: Eco 232.

Eco 340 Intermediate Economic Theory I (3)
A continuation and extension of the price-system analysis of Eco 231. Emphasis on the issue of efficiency in the economy's use of scarce productive resources. Prereq: Eco 232.

\section*{Eco 341 Public Finance (3)}

Government's influence on stability of national income. The nature of taxes and expenditures at the various levels of government and their effect on the allocation of resources and the distribution of income. Prereq: Eco 232.

\section*{Eco 342 Bus:ness Cycles (3)}

The nature of economic fluctuation in modern capitalism. Prereq: Eco 232.

\section*{Eco 343 Comparative Economics Since 1930 (3)}

Basic ideas and economic institutions of socialism, communism, and capitalism in the twentieth century; problems created by the emergence of competing systems. Prereq: Eco 232.

\section*{Eco 345 History of Economic Thought (3)}

Origins of economic thought and comparison of the major schools of economic doctrine. Current economic and socio-political factors. Prereq: Eco 232.

Eco 346 Economy of Soviet Russia: Organization and Growth (3)
Russian economic growth prior to 1917; economic change and growth under the Soviet system. Workers' control, planning, pricing, resource allocation, and controls. An assessment of the economy's achievements, shortcomings, and prospects. Prereq: Eco 232 or permission of instructor.

\section*{Eco 347 Managerial Economics (3)}

A course which seeks to develop managerial judgment. The premise is that technical application, to be successful, must proceed from economic feasability. One plan is weighed against another in terms of comparative costs and revenues, return on investment, plant-replacement problems, obsolescence, and depreciation. Prereq: Eco 232.

\section*{Eco 348 Intermediate Economic Theory II (3)}

Causes and implications of fluctuations in levels of national income, prefaced by a survey of the problems of defining and measuring national income. An introduction to the national-income approach to economics as exemplified in the writings of Keynes and his contemporaries. Prereq: Eco 232.

\section*{Eco 349 Economics of Poverty (3)}

Incidence, causes, and consequences of poverty in the United States. Economic theory, history, and statistics applied to analysis of poverty-reduction measures. Prereq: Eco 201 or 232 or consent of instructor.

\section*{Eco 350 Urban Economics (3)}

Economic aspects of such urban problems as poverty, housing, taxation, income distribution, and discrimination. Analysis of economic aspects of various proposed remedies, including urban renewal, family allowances, cooperatives, and others. Prereq: Eco 201 or 232 or consent of instructor.

\section*{Eco 35I Quantitative Business Statistics I (3)}

An application of algebra and elementary calculus to economic and business theories and problems. Prereq: Mat 108.

\section*{Eco 352 Quantitative Business Statistics II (3)}

An application of statistical techniques to mathematically formulated economic and business theories and problems. Prereq: Eco 351.

\section*{Eco 400 Senior Seminar in Economics (3)}

Research in economics. Emphasis on methodology, bibliography, and oral and written presentation. Research paper must meet departmental requirements. Prereq: Eco 340 .

\section*{Eco 401 Quantitative Analysis}

Statistical and mathematical techniques applied to economic situations. Use of empirical data in economic analysis. Prereq: Eco 352.

Eco 410 Independent Studies in Economics (1 to 3)
Special research projects, reports, readings in economics. Open to seniors and Honors Program students only. Prereq: department chairman's approval.

\section*{DEPARTMENT OF CHEMISTRY}

\section*{Francis J. Reynolds, Chairman}

Che 100 Principles of Chemistry (4)
A survey course required of all students in health and physical education. Fundamental laws and theories of chemistry, problem solving, and laboratory techniques. Three hours lecture, two hours lab.

\section*{Che 101 Chemistry for Nurses}

Topics in general, organic, and biological chemistry of medical and physiological significance. Standard laboratory experiments and clinical techniques. Three hours lecture and two hours lab.

Che 103 General Chemistry I (4)
Basic laws of chemistry, fundamentals of chemical combination, atomic structure, chemical bonding, oxidation-reduction, solutions, electrochemistry, and modern concepts of acids and bases. Two hours lecture, one hour recitation, three hours lab.

\section*{Che 104 General Chemistry II and Qualitative Analysis (4)}

A continuation of Che 103. Correlations of chemical principles and their application to modern descriptive chemistry. Laboratory work includes semi-micro qualitative analysis. Two hours lecture, one hour recitation, three hours lab. Prereq: Che 103.

\section*{Che 230 Introduction to Organic Chemistry (4)}

A one-semester course in fundamentals of organic chemistry. Structural theory of organic molecules; organic synthesis; and biological applications. Three hours lecture and four hours lab. Prereq: Che 104.

\section*{Che 231 Organic Chemistry I (3)}

Structure and reactions of organic molecules. Prepares for future study of organic chemistry. Prereq: Che 104.

\section*{Che 232 Organic Chemistry II (4)}

A continuation of Che 231. Three hours lecture and four hours lab. Prereq: Che 231.

\section*{Che 233 Organic Chemistry III (4)}

A continuation of Che 232 . Includes such topics as heterocyclic compounds, natural products, and stereochemistry. Three hours lecture and four hours lab. Prereq: Che 232.

\section*{Che 321 Quantitative Analysis (4)}

Introduction to the theory and techniques of gravimetric and volumetric methods of analysis. Two hours lecture and six hours lab. Prereq: Che 104.

\section*{Che 324 Instrumental Methods of Analysis}

Theory and application of modern analytical instruments. Laboratory devoted to techniques in the use of selected instruments. Two hours lecture and six hours lab. Prereq: Che 321.

Che 341 Physical Chemistry I (3)
Properties of the states of matter, chemical thermodynamics, theory of solutions, and chemical equilibrium. Prepares for future study of physical chemistry. Prereq: Mat 242 (may be concurrent), Che 321, and Phy 102 or 104.

\section*{Che 342 Physical Chemistry II}

A continuation of Che 341. Electrochemistry, chemical kinetics, and atomic and molecular structure. Three hours lecture and three hours lab. Prereq: Che 341.

Che 343 Physical Chemistry III (4)
Quantum chemistry and statistical mechanics. Theory of chemical bonding and molecular structure, with applications. Advanced experimental work. Three hours lecture and three hours lab. Prereq: Che 342.

Che 345 Physical Chemistry for the Life Sciences (4)
Primarily for biology majors. Chemical thermodynamics, equilibria, and kinetics. Emphasis on biochemical systems. Three hours lecture and three hours lab. Prereq: Che 232, Mat 142. General physics desirable but not required.

\section*{Che 401 History and Literature of Chemistry (2)}

Historical background of chemistry; survey of literature of chemistry; instruction in the use of a modern chemical library. Prereq: Upper Division Standing and permission of instructor.

\section*{Che 411 Advanced Inorganic Chemistry (3)}

The application of modern chemical theories to inorganic substances and reactions; the chemistry of the short and long transition elements. Prereq: Che 104.

Che 421 Advanced Analytical Chemistry (3)
Basic principles of analytical chemistry for background in modern instrumental methods. Prereq: Che 321, 342.

\section*{Che 431 Advanced Organic Chemistry}

Detailed mechanisms of some organic reactions, including aromatic substitutions, reductions, condensation reactions of carbonyl compounds, carbon skeleton rearrangements, and free radical reactions. Prereq: Che 233.

Che 432 Synthetic Organic Chemistry (3)
Discussion of selected topics in synthetic organic chemistry. Prereq: Che 233.

\section*{Che 435 Qualitative Organic Analysis (3)}

A laboratory course in classical and instrumental methods for identification of organic compounds. Two hours lecture and four hours lab. Prereq: Che 232, 321.

\section*{Che 436 Introductory Polymer Chemistry (3)}

Preparation and properties of principal polymer systems; practical applications. Prereq: Che 232.

\section*{Che 440 Advanced Physical Chemistry (3)}

Advanced treatment of molecular and crystal structure, quantum and statistical mechanics, chemical kinetics, and thermodynamics. Prereq: Che 342.

\section*{Che 445 Chemical Thermodynamics (3)}

Fundamental laws and functions of thermodynamics and their chemical applications.
Introduction to statistical thermodynamics. Prereq: Che 342.

Che 451 Chemistry of Coordination Compounds (3)
Theories of complexes: valence bond theory, ligand field theory, and molecular orbital theory. Preparation and reactions of important coordination complexes. Prereq: Che 411.

\section*{Che 461 Nuclear Chemistry (3)}

Properties of the atomic nucleus; nuclear particles and energy emission. Important radioisotopes and their applications to medicine and chemical research. Prereq: Che 342.

\section*{Che 463 Electrochemistry (3)}

Principles of electrochemical systems and galvanic cells; electrolytic applications in instrumentation and research. Prereq: Che 411.

Che 471 Fundamentals of Biochemistry (4)
Structures and chemistry of proteins and nucleic acids; thermodynamics of biochemical reactions; kinetics of enzyme and coenzyme mechanisms. Three hours lecture and three hours lab. Prereq: Che 232, Che 345, or equivalent.

Che 480 Introduction to Chemical Research (2 to 6)
Information retrieval and chemical research under direct supervision of a staff member. Six to eighteen hours of literature search and chemical research. Prereq: Senior Standing and permission of department chairman.

Che 491 Seminar in Chemistry (I)
Oral presentation of papers based upon laboratory or library research. Prereq: Senior Standing and permission of department chairman.

COMPUTER SCIENCE See Department of Mathematics

\section*{DEPARTMENT OF EARTH, SPACE, AND GENERAL SCIENCES}

Seymour S. Greenberg, Chairman

Sci 250 Science for the Elementary Grades (3)
A course to prepare the elementary teacher for teaching science. Selected units or problems which cut across various fields of science. Methods and processes of science and available resources. Prereq: Bio 100, Sci 150, or acceptable equivalents.

\section*{Sci 350 Teaching Science in Secondary Schools (3)}

Philosophy, objectives, and methods of teaching science. Practical experience provided. Prereq: Upper Division standing in a science major.

\section*{ESS 101 Earth Science (4)}

The earth's composition and history; the processes that occur on and within the earth. Three hours lecture and two hours lab.

\section*{ESS III General Astronomy (4)}

A descriptive course with laboratories in the observatory and planetarium. Three hours lecture and two hours lab.

\section*{ESS 201 Physical Geology (4)}

The earth's composition (minerals and rocks) and earth processes (weathering, erosion, volcanism, and diastrophism). Three hours lecture and two hours lab.

\section*{ESS 211 Historical Geology (4)}

The geologic history of the earth and the evidences for this history. Three hours lecture and two hours lab.

ESS 230 Introduction to Oceanography
A survey of our present knowledge of the waters and floor of the oceans. Three hours lecture and two hours lab.

\section*{ESS 240 Introduction to Meteorology (4)}

Principles governing the conditions of the earth's atmosphere; how these principles determine weather conditions. Three hours lecture and two hours lab.

\section*{ESS 301 Mineralogy and Petrology (3)}

Physico-chemical principles used in the classification, identification, and origin of minerals and rocks. Two hours lecture and two hours lab. Prereq: Che 104, ESS 201.

\section*{ESS 3II Geochemistry}

The chemistry of the earth and its relation to geologic processes. Two hours lecture and two hours lab. Prereq: Che 104, ESS 201.

\section*{ESS 321 Structural and Field Geology (3)}

The earth's structure, with practical experience in the techniques and tools of the field geologist. One hour lecture and three hours lab. Prereq: one Earth Science course or permission of instructor.

\section*{ESS 350 Astronomy I \\ (3)}

The study of the solar system: history of astronomy, the moon, planetary bodies, the sun, the telescope, and spectroscopy. Two hours lecture and two hours lab. Prereq: Phy 101.

\section*{ESS 351 Astronomy II (3)}

A continuation of ESS 350. A study of stellar systems, population of the universe, stellar motions, and galaxies. Two hours lecture and two hours lab. Prereq: ESS 350.

\section*{ESS 415 Introduction to Seismology (3)}

An introduction to the use of the seismograph emphasizing its use to detect and record earthquakes. Two hours lecture and two hours lab. Prereq: ESS 211.

\section*{ESS 465 Observatory Principles (3)}

Principles and use of the telescope. Specific projects are assigned. Hours by arrangement. Prereq: ESS 350.

\section*{ESS 475 Introduction to the Planetarium (3)}

Principles and use of the planetarium. Specific projects are assigned. Two hours lecture and two hours lab. Prereq: ESS 350.

\section*{MARINE SCIENCE}

The following courses are given at the Marine Science Consortium field station in the summer only. For further information communicate with the Department of Earth, Space, and General Sciences.

\section*{MSC 110 Introduction to Oceanography (3)}

Physical, chemical, and biological aspects of the oceans. Emphasis on lab and at-sea assignments.

\section*{MSC 211 Field Methods in Oceanography \\ (3)}

Field work on board small research vessels; use and application of standard oceanographic instruments and sampling devices. Prereq: MSC 110 or consent of instructor.

\section*{MSC 221 Invertebrate Zoology}

Development, reproduction, structure, function, and classification of selected marine organisms. Laboratory and field experience in collection, preservation, and classification. Prereq: 1 year of biology or consent of instructor.

\section*{MSC 241 Marine Biology (3)}

Biology of marine plants and animals, field samplings, identification, and analysis. Prereq: 1 year of biology or consent of instructor.

\section*{MSC 260 Marine Ecology (3)}

Relationship of marine plants and animals to physical, chemical, and biological factors; their zonation and communities. Prereq: 1 year of biology or consent of instructor.

\section*{MSC 331 Chemical Oceanography}

Oceanic chemical phenomena, sampling, and laboratory analysis techniques. Prereq: MSC 110, Che 103, 104 or consent of instructor.

\section*{MSC 342 Marine Botany (3)}

Marine and marine fringe plants of the Middle Atlantic coast. Techniques of collecting, preserving, identifying, and herbarium cataloging. Prereq: a course in general biology or 1 semester of botany.

\section*{MSC 343 Ichthyology (3)}

Anatomy, physiology, and systematics of fish along our eastern seaboard. Prereq: general biology or zoology or consent of instructor.

\section*{MSC 362 Marine Geology (3)}

Structural and sedimentary environment of the continental shelf, slopes, and ocean basins; genesis of the ocean basins. Prereq: MSC 110 and ESS 201 or consent of instructor.

\section*{MSC 364 Physical Oceanography (3)}

Physical properties of the ocean; basic instrumentation in field work. Prereq: MSC 110, Phy 103, 104, Mat 141 or consent or instructor.

\section*{MSC 420 Marine Micropaleontology}

Taxonomy, morphology, evolution, and ecological affinities of the Forminifera (Sarcodina), Radiolaria, Diatoms, and Ostracoda; sample collecting, preparation, and analysis. Prereq: 1 year of geology or 1 course each in geology and biology or consent of instructor.

\section*{MSC 457 Marine Geophysics (3)}

Basic geophysical theories for understanding the continental shelves and marine basins. Laboratory and field assignments employ a portable refraction seismograph, gravity meter, and magnetometer. Prereq: MSC 110, ESS 201, 1 year of mathematics or consent of instructor.

\section*{MSC 458 Exploration Methods in Marine Geology \\ (3)}

Geophysical and geological instruments and techniques used to study the topography and geology of the ocean bottom. Prereq: ESS 201 and 1 year of mathematics or consent of instructor.

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SCHOOL OF EDUCATION
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\author{
Harold W. Benda, Dean
}

John A. Lander, Associate Dean
Michael F. Bannon, Associate Dean for Graduate Studies
Charlotte E. King, Chairman, Department of Elementary Education
Walter N. Ridley, Chairman, Department of Secondary Education and Professional Studies
Richard P. Weagley, Chairman, Department of Instructional Media Education

Julian M. Swiren, Acting Chairman, Department of Counselor Education

\section*{EXPLANATION OF PREFIXES}

Courses given by the School of Education bear a general prefix of Ed followed by a letter which identifies the department or curriculum, as:

A - Atypical (Special Education) M - Instructional Media Education
C - Counselor Education
P - Psychology (Educational)
R — Reading
E - Elementary Education
S - Secondary Education
F - Foundations U - Urban Education

\section*{EdF 100 School and Society (3)}

An introduction to the nature, function, scope, organization, administration, and support of the public school in American society.

EdC 150 Introduction to Guidance and Counseling (3)
An orientation course for classroom teachers. The focus is upon personnel services. Prereq: Psy 100.

\section*{EdA 241 Psychology of Exceptional Children (3)}

Psychology of children with superior or inferior intellectual ability; with defective vision, hearing, or speech; or with emotional, social, or physical handicaps. Prereq: Psy 100 .

EdA 243 Psychology of the Mentally Retarded (3)
A survey of the psychological development of mentally retarded children. Emphasizes socio-economic, cultural, emotional, and educational factors influencing their behavior. Prereq: EdA 241.

EdP 250 Psychology of Learning and Development (3)
A study of learning in relation to the physical, social, emotional, and intellectual aspects of personality. Prereq: Psy 100.

\section*{EdE 25I Human Development: Childhood (3)}

A study of child growth, development, and behavior, with specific application to early childhood and elementary education. Prereq: Psy 100.

\section*{EdM 300 Audio-Visual Education (2)}

Techniques, materials and equipment, and the development of skill in their use in teaching. Class meets three times weekly.

\section*{EdE 301 Creativity in the Classroom (3)}

Exploration of materials and processes of children's perceptions and behavior, aimed at encouraging the development of their critical and creative potentials.

EdE 302 Field Experience in Early Childhood Education (3)
Practical experience with young children through participation in pre-school programs; related lecture and discussion. Prereq: EdE 251.

\section*{EdE 303 Early Childhood Seminar and Practicum I (3)}

The first half of a two-semester course for paraprofessionals in child carc centers. The two semesters consist of: I. Study of development and learning in early childhood; methods and materials for working with young children. II. Directed experiences with young children. III. Supervised on-the-job work in child care centers. No credit given until both EdE 303 and 304 are completed; must be taken in the same academic year. Permission of department required.

\section*{EdE 304 Early Childhood Seminar and Practicum II}

See description for EdE 303. Prereq: EdE 303.

\section*{EdE 305 Field Experience in Elementary Education (I)}

Junior-year participation in an elementary school classroom for a two-hour period each week. (Student schedule must provide at least a three-hour block.) Prereq: Junior Standing.

\section*{EdS 306 Field Experience in Secondary Education (3)}

Practical experience in identifying, analyzing, and defining problems in secondary education through placement of students as teacher-aides in cooperating schools. Students registering during fall and spring semesters are required to allow at least a three-hour block for field-observation responsibilities. Prereq: EdF 100, EdP 250, and Junior Standing.

EdF 307 Field Experience for Speech Pathology Majors (3)
Observation and participation in the classroom and observation of speech and hearing therapy in the clinical setting; related lecture and discussion. Prereq: permission of instructor.

EdE 309 Language Arts in the Elementary School (6)
A study of the total language program: oral language (listening and speaking), reading, and written language. Stresses content, sequence, methods, and materials of instruction. Combines the contents of EdE 317 and EdE 319, but focuses on the interrelatedness among the language arts.

EdE 317 Oral and Written Expression in the Elementary School (3)
A study of the program in oral language (listening and speaking) and written language. Stresses content, sequence, methods, and materials of instruction. Prereq: departmental approval and permission of Dean of Undergraduate Studies.

\section*{EdE 319 Reading in the Elementary School (3)}

Content, sequence, methods, and materials of instraction in the reading program. Prereq: departmental approval and permission of Dean of Undergraduate Studies.

\section*{EdS 320 Teaching of Reading in the Secondary Schools (3)}

The nature of the reading process, the reading program, and reading study skills. Open only to students preparing to teach at the secondary level.

\section*{EdR 321 Diagnostic and Remedial Reading (3)}

Identifying the nature and causes of reading disabilities; procedures and materials for helping children with reading problems. Prereq: EdE 309 or 319 or EdS 320.

\section*{EdA 330 Teaching the Exceptional Child (3)}

A study of atypical children; the selection of learning aids and materials; the development of teaching techniques. Prereq: Psy 100.

\section*{EdE 332 Teaching Social Studies in the Elementary School (3)}

Methods of teaching social studies and geography in the elementary curriculum. Techniques, current research projects, reading materials, audio-visual aids, resource persons, and field trips as tools of learning. The organization, development, and use of resource units are stressed.

\section*{EdA 344 Problems in Special Education (2)}

Significant problems in the program for the mentally retarded child. The teacher's role in interpreting the special aspects of the program to school personnel, parents, and community.

\section*{EdA 348 Curriculum and Methods for the Mentally Retarded (3)}

An introduction to methods of teaching mentally retarded children. Emphasis is upon developing classroom programs and the adaptation of instructional materials for use with the retarded child.

\section*{EdA 349 Curriculum and Methods for the Physically Handicapped (3)}

An introduction to methods of teaching physically handicapped children. Emphasis is upon developing classroom programs and the adaptation of instructional materials for use with the handicapped.

\section*{EdA 350 The Academically Superior Child (3)}

The gifted child and means of providing an effective educational program for him.

\section*{EdP 351 Evaluation and Measurement \\ (2)}

A survey of testing materials and procedures with emphasis upon interpretation and application of results for pupil guidance purposes. Class meets three times weekly. Prereq: Psy 100, EdP 250.

\section*{EdU 360 The Disadvantaged Child (3)}

Backgrounds, problems, and potentialities of the disadvantaged student. Prereq: Psy 100 and EdE 251 or Psy 352.

EdU 361 Teaching in Urban Schools
An introduction to urban education by means of observation, lectures, discussions, and related activities. Prereq: EdU 360 or permission of instructor.

EdE 401 Current Trends in Elementary Education (2)
Basic curriculum principles, organization and guidance of learning activities, classroom management, professional responsibilities of teachers, and trends in elementary education. Class meets three times weekly. Prereq: 96 semester hours, including all professional-education courses and all specialized-preparation courses listed for the first 6 semesters.

\section*{EdE 403 Early Childhood Education I}(3)

An introductory course: historical and philosophical background of early education, survey of current programs, and intensive study of child development in the early years.

\section*{EdE 404 Early Childhood Education II (3)}

Methods, materials, and content of educational programs for young children, with emphasis on the practical application of knowledge and theory. Prereq: EdE 403 or equivalent.

\section*{EdE 411 Student Teaching and Direction of Student Activities [Elementary Majors] Including Practicum \\ (12)}

Observation and participation in teaching and all other activities related to the teacher's work in the elementary school. Students meet once each week in a practicum session. Prereq: 96 semester hours including all professional-education courses and all specialized-preparation courses listed for the first six semesters. Students must have at least a 2.0 cumulative average and a 2.0 average in the major field (sophomore and junior courses listed under Specialized Preparation).

\section*{EdS 412 Student Teaching and Direction of Student Activities [Secondary Majors] Including Practicum (12)}

Observation and participation in teaching and all other activities related to the teacher's work in the area of the student's specialization. Prereq: 96 semester hours including all professional-education courses listed for the first six semesters. Students must have at least a 2.0 cumulative average and a 2.0 average in the major field.

\section*{EdE 421 Senior Seminar in Elementary Education (2)}

Independent study in early childhood education and/or elementary education; participation in experimental programs when possible. May be taken as an elective or, with departmental permission, may substitute for EdE 401. Prereq: Senior Standing and departmental approval.

\section*{DEPARTMENT OF ENGLISH}

\section*{David E. McKenty, Chairman}

\section*{ENGLISH COMPOSITION AND LANGUAGE}

\section*{Eng 000 English Composition (No credit) \\ Remedial English.}

\section*{Eng 101 English Composition I (3)}

Review of grammar and mechanics. Introduction to styles of writing. Compositions, outside reading, use of the library.

\section*{Eng 102 English Composition II (3)}

A continuation of methods of composition: exposition, narration, argumentation, description. Techniques of research paper. Prereq: Eng 101.

\section*{Eng 105 Writing Workshop (3)}

Practice in writing exposition, fiction, poetry, and drama with a view to discovering the student's most promising area. Prereq: Eng 321.

\section*{Eng 201 [also Lin 201] Introduction to Linguistics}

Basic concepts of language description, classification, change, reconstruction, dialectology, and socio-linguistics. Prerequisite for Eng 309, 314, 315, and 316.

\section*{Eng 211 Mass Media in Society (3)}

Introduction to theory and problems of mass media; their role in American culture.
Eng 212 Principles of Newspaper Production I
A workshop course in newspaper production through lectures and work on student newspaper.

Eng 213 Principles of Newspaper Production II
A continuation of Eng 212.
Eng 214 Principles of Yearbook Production 1(2)

All phases of yearbook planning, writing, editing, production, and financing. For yearbook staff members and potential yearbook advisers.

\section*{Eng 215 Principles of Yearbook Production II \\ (2)}

Practical applications of theories developed in Eng 214. Prereq: Eng 214.

\section*{Eng 216 News Reporting (2)}

Principles of news reporting and practice in gathering and writing news for all media. Research, writing, and the interview.

\section*{Eng 217 Feature Writing (2)}

Features in newspapers and magazines. Developing ideas, gathering material, and writing feature articles. Marketing methods for the free lancer.

\section*{Eng 218 History of Communications (3)}

History and development of newspapers, magazines, motion pictures, radio, and television.

\section*{Eng 230 Business Communication (3)}

Oral and written communications, reports, and forms. Duplication processes. Replaces Eng 102 for business administration majors.

Eng 309 Contrastive Analysis and Linguistic Interference
Identification and study of interferences in second language and second dialect learning situations, with particular attention to the comparison of standard English and the nonstandard English of disadvantaged minorities. Prereq: Eng 201 or equivalent.

\section*{Eng 313 Advanced Writing \\ (3)}

Experience in expository, descriptive, narrative, and argumentative techniques. Emphasis on style. Prereq: Eng 102.

\section*{Eng 314 History of Language (3)}

Review of the major forces and influences on language development. History of the English language. Prereq: Eng 201.

\section*{Eng 315 Modern English Grammar (3)}

Development of English grammar. A survey of the various approaches to the study of grammar. Prereq: Eng 201.

\section*{Eng 316 Teaching English in Secondary Schools (3}

Review of language-arts requirements in secondary schools. Special reference to grade-placement with adaptation of materials, appraisal of results, and development of programs of study. Prereq: Eng 314, 315.

\section*{Eng 317 Old English Language and Literature (3)}

An introductory study of the language and a review of selections from the religious and secular poetry. Prereq: Eng 314.

Eng 318 Middle English Language and Literature (3)
An introductory study of the language and a review of Middle English texts (exclusive of Chaucer). Prereq: Eng 314.

\section*{Eng 319 American English \\ (3)}

Trends and developments in American English; recent studies in dialects, usage, and sociolinguistics. Prereq: Eng 201.

Eng 320 Linguistics for the Elementary School Teacher (3)
Study of modern English phonology and morphology, regional and social variations in American dialects, and current linguistic concepts of grammar. Prereq: SpP 170 or 201.

Eng 321 Creative Writing (3)
Experience in writing fiction, poetry, drama. Prereq: permission of instructor.

\section*{Eng 323 Poetry Workshop (3)}

The theory and practice of poetry; the exploration of verse forms, prosody, metrics; practice in critical and interpretive analysis of poems written by fellow students and professional poets. The poem as a product of highly skilled craftsmanship.

\section*{Eng 325 Drama Workshop (3)}

Writing the play, with concrete reference to the possibilities and limitations of the stage. Attention to sets and costuming where relevant. Characterization by action and dialogue. Problems of establishing motivation. The play's totality in theme, character, and action. Informal readings of students' works.

\section*{Eng 327 Short Story Workshop \\ (3)}

Crafting the modern short story with special reference to American and British models. The weight of setting, atmosphere, characterization, and theme. Compression and the simultaneity of technique in the well-made story. Discussion and some exploitation of experimental ideas in the genre.

\section*{Eng 331 Exposition Workshop}
(3)

Practice in writing critically. Conventions of description, argumentation. Use of fictional techniques in factual prose. The commercial and quality magazine article.

\section*{Eng 405 Senior Writing Seminar (3)}

Discussion and development of major projects underway.

Eng 406 Independent Study (3)
Students of unusual promise work with individual instructors.

\section*{LITERATURE}

Lit 121 General Literature I (3)
Introduction to Western literature from Homer to Cervantes.

\section*{Lit 122 General Literature II (3)}

A continuation of Lit 121 from Shakespeare to the present. Prereq: Lit 121.

Lit 127 General Literature II (3)
Literature of Continental Europe from Neoclassicism to the present. For English majors and arts and letters majors in lieu of Lit 122.

Lit 223 American Literature I (3)
A survey of representative American writings from Colonial times to 1860. Emphasis on democratic ideals and national character.

Lit 224 American Literature II (3)
A survey of representative American writings from 1860 to the present.

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Lit 225 English Literature I (3) \\ A survey of English literature from Anglo-Saxon writing to Robert Burns.
}

Lit 226 English Literature II (3)
A survey of English literature from Robert Burns to the present.

\section*{Lit 321 Great Books I (3)}

A study in depth of six selected writings that have made significant contributions to the development of Western Civilization. Designed for students of all curricula; counted as Core selection for Arts and Letters students, free elective for secondary English majors.

\section*{Lit 322 Great Books II (3)}

A continuation of the study of the progress of Man in the world, using six additional masterworks. Designed for students of all curricula; counted as Core selection for Arts and Letters students, free elective for secondary English majors.

\section*{Lit 328 Milton (3)}

A survey of the major poetry and prose works.
Lit 329 Classical Mythology (I)
Literature of Mythology.

\section*{Lit 330 Medieval Literature in England (3)}

Medieval English literature (1066-1500). A survey of literature in translation from the Norman Conquest to the accession of the Tudors, emphasizing the popular forms: lyric, romance, metrical tale, fabliau, and ballad.

\section*{Lit 331 Chaucer (3)}

Canterbury Tales and Troilus and Criseyde; literary interpretation.

\section*{Lit 332 English Drama to 1642 (3)}

English drama from the early liturgical tropes to 1642 , exclusive of Shakespeare.

\section*{Lit 333 Shakespeare 1 (3)}

Selected comedies, histories, and tragedies. Literary and historical background and Shakespeare's development as a dramatist.

Lit 334 Shakespeare II
(3)

A continuation of Lit 333.
Lit 335 Restoration and Eighteenth Century Literature (3)
A critical consideration of eighteenth century writers, exclusive of the dramatists. The struggle between tradition and revolt.

\section*{Lit 336 The Romantic Movement (3)}

Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries in the light of social background and critical doctrine.

\section*{Lit 337 Victorian Literature (3)}

Victorian thought and culture in selections of non-fiction prose and poetry.

\section*{Lit 338 Modern Irish Literature (3)}

Major literary works of Ireland from 1840 to the present. Moore, Synge, Yeats, Joyce, Shaw, and O'Casey.

\section*{Lit 340 Minority Cultures in American Literature (3)}

Study of American ethnic, racial, and national groups in American literature and the contributions of creative literary artists representing these cultures.

\section*{Lit 341 Afro-American Literature 1 (3)}

Survey of Afro-American authors from the ante-bellum era through the first quarter of the twentieth century.

\section*{Lit 342 Afro-American Literature II (3)}

Continuation of Lit 341. Second quarter of the twentieth century to the present.

\section*{Lit 344 Literary Form and Content since World War II (3)}

Trends in American and English literature since the close of World War II. The anti-novel, anti-play, pseudo-play, current Theater of the Absurd, current Existentialist literature, neo-novella, theater-piece, happening, and other non-oeuvres.

\section*{Lit 345 Criticism (3)}

Study of the theories and values of major critics of the Classical Period and of England and the United States.

Lit 347 Literature of Biography
Historical development of biographical writing. Plutarch, Boswell, Carlyle, Macaulay, Strachey, Bradford, Ludwig, and standard contemporary biographers.

\section*{Lit 348 Short Story (3)}

The short story as an aesthetic literary form.
Lit 349 Bible as Literature (3)
Books of the English Bible, especially the King James Version, as a part of English and American Literature.

\section*{210/English}

\section*{Lit 350 Children's Literature (3)}

Introduction to important children's books, old and new. Techniques for presentation of book material and evaluation of children's books.

\section*{Lit 353 Reading Interests of Secondary School Students (3)}

A service source. Interests and reading growth of junior and senior high school students.

Lit 354 Restoration and Eighteenth Century Drama (3)
Study of the drama from the reopening of the theaters in 1660 to 1800.

\section*{Lit 355 Modern British Drama (3)}

British drama from Wilde to the present, with emphasis on the rebirtb of the British drama and its major writers.

\section*{Lit 356 Modern Continental Drama}

A consideration of the chief writers who influenced the modern drama: Ibsen, Strindberg, Chekhov, Hauptmann, Pirandello, Sartre, Brecht, and Ionesco.

Lit 357 Modern American Drama (3)
A survey of American drama from the early 1900's to the present, with emphasis on the development of the American theater as seen in such major dramatists as O'Neill, Odets, Wilder, Miller, Williams, and Albee.

Lit 360 Tudor Literature
Prose and poetry of the Tudor period. More to Spenser.
Lit 361 Stuart Literature (3)
Prose and poetry of the Stuart period. Jonson and Donne to Dryden.
Lit 370 Origins of the British Novel (3)
Study of the beginnings of the novel in English. Defoe, Richardson, Fielding, Smollett, Sterne, and Goldsmith.

\section*{Lit 371 Nineteenth Century British Novel (3)}

Study of the British novel from Austen to Hardy.
Lit 372 Development of the American Novel (3)
Study of the beginnings of the American novel to Frank Norris.
Lit 373 Modern British Novel (3)
Study of the novel in England from Conrad to the present.

Lit 374 Modern American Novel (3)
Study of the novel in America from Dreiser to the present.
Lit 380 Modern Poetry 1 (3)
English and American poetry from 1900 to World War II.
Lit 381 Modern Poetry II (3)
English and American poetry since World War II.
Lit 385 Colonial and Revolutionary American Literature (3)
Writers of Colonial and Revolutionary America. Prereq: Lit 223.
Lit 400 English Honors Seminar (3)
Preference to seniors. Prereq: permission of instructor.

\section*{HUMANITIES}

Hum 370 Seminar in Science and Human Values (3)
Man's relationship to his natural environment as seen by scientist and humanist.
Hum 400 The Contemporary Arts: An Aesthetics Approach (3)
Exploration of basic aesthetics principles appearing simultaneously in contemporary art forms: dance, music, art, literature, drama. A team-teaching effort; open on a pass-fail basis to juniors and seniors of all disciplines.

\section*{DEPARTMENT OF FOREIGN LANGUAGES}

\author{
Alfred D. Roberts, Chairman
}

\section*{FRENCH}

\section*{Fre 101 Elementary French 1 (3)}

Fundamentals of French grammar, syntax, and pronunciation. Introduction to French culture through easy reading texts. The audio-lingual method is employed at all times. Work in the language laboratory required..

Fre 102 Elementary French II (3)
A continuation of Fre 101 with increased emphasis on reading and conversation in French. Language laboratory drill required.

\section*{Fre 201 Intermediate French I}

Intensive review of grammar and syntax. Readings in French literature as a basis for class discussion in French and practice in composition. Language laboratory drill for remedial work only. Prereq: Fre 102 or equivalent.

\section*{Fre 202 Intermediate French II (3)}

A continuation of Fre 201 with more extensive practice in composition and conversation.

Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

\section*{Fre 203 Advanced Grammar and Composition I}

The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in writing compositions on a more advanced level, with emphasis on correct usage. Prereq: Fre 202 or equivalent.

Fre 204 Advanced Grammar and Composition II (3)
A continuation of Fre 203.

\section*{Fre 205 French Civilization}(3)

France's political and educational systems, her economic and religious institutions, and her folkways. The arts in France today. Prereq: Fre 201 or equivalent.

\section*{Fre 206 French Civilization II (3)}

A continuation of Fre 205. Prereq: Fre 205.

\section*{Fre 207 Advanced Oral French (3)}

Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. Prereq: Fre 203 or equivalent.

\section*{Fre 305 Nineteenth Century French Novel (3)}

Development of the French novel from the pre-Romantic period through the Naturalistic writers.

\section*{Fre 306 Twentieth Century Novel \\ (3)}

The French novel of this century, from Proust and Gide to the roman nouveau.

\section*{Fre 401 French Literature of the Eighteenth Century (3)}

The philosophes of the eighteenth century, emphasizing the works of Voltaire, Rousseau, Montesquieu, and Diderot. Prereq: Fre 206.

\section*{Fre 402 French Lyric Poetry (3)}

Development of French lyric forms; French versification; study of selected poets, using "explication de textes."

\section*{Fre 403 French Literature of the Seventeenth Century (3)}

Seventeenth century prose; lyric and narative poetry; the concept of classicism; Pascal, Boileau, Mme de Lafayette, La Rochefoucauld, La Fontaine, La Bruyere, and other authors of the period.

\section*{Fre 404 French Classical Drama (3)}

Corneille, Racine, and Moliere. Prereq: Fre 206.

\section*{Fre 405 French Literature of the Middle Ages and Renaissance (3)}

A survey of selected readings in Modern French translation from the Old French epic, the literature of courtly love, the Medieval farce, and from such major figures as Villon, Rabelais, the Pleiade poets and Montaigne.

\section*{Fre 406 Modern French Theater (3)}

A study of twentieth century theatrical forms, extending from the end of World War I to the present and dealing with surrealism, Jean Giraudoux, Camus, and Sartre as well as Antonin Artaud and the Theater of Cruelty.

Fre 410 Honors Seminar in French (3)
Independent study and research for upper division students who qualify under the Honors Program in foreign languages. Topics to be announced by the French faculty.

\section*{Fre 411 Honors Seminar in French (3)}

Independent study and research for upper division students who qualify under the Honors Program in foreign languages. Fre 410 is not prerequisite. A student may take Fre 410 or 411 or both. Topics to be announced by the French faculty.

Fre 412 Independent Studies in French Language and Literature (3)
Special topics for advanced students only; admission by permission of instructor.

\section*{JUNIOR YEAR ABROAD PROGRAM}

Fre 361-62 Advanced Grammar and Composition
Grammatical and syntactical structure of French. Practical application in free and controlled composition.

Fre 363-64 Advanced French Conversation (6)
Intensive drill in correct usage of contemporary speech patterns. Extensive opportunity for oral self-expression.

\section*{214/Foreign Languages}

\section*{Fre 365-66 Phonetics and Translation (6)}

The sounds of French through the medium of the international phonetic alphabet. The art of translation. The language laboratory is used for phonetic drill.

\section*{Fre 367-68 Contemporary French Civilization (6)}

France today-social, political, and economic life; science, technology, literature, art.

Fre 369-70 Literary Studies (6)
"Explication de Textes" from representative writers.

\section*{GERMAN}

\section*{Ger 101 Elementary German 1 (3)}

Fundamentals of German grammar, syntax, and pronunciation. Introduction to German culture through easy reading texts. The audio-lingual method is employed and language laboratory drill is required.

Ger 102 Elementary German II (3)
A continuation of Ger 101 with increased emphasis on reading and conversation in German. Language laboratory drill.

\section*{Ger 201 Intermediate German 1 (3)}

Review of grammar and syntax. Readings in German literature as a basis for class discussion in German and practice in composition. Language laboratory drill required for remedial work only. Prereq: Ger 102 or equivalent.

Ger 202 Intermediate German II (3)
A continuation of Ger 201. Extensive practice in composition and conversation.
Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

\section*{Ger 203 Advanced German Grammar and Composition (3)}

The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in writing compositions on a more advanced level, with emphasis on correct usage. Prereq: Ger 202 or equivalent.

\section*{Ger 204 Advanced Oral German (3)}

Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. Prereq: Ger 203 or equivalent.

\section*{Ger 205 Survey of German Literature I (3)}

German literature from its earliest beginnings to 1800. Prereq: Ger 202 or equivalent.

\section*{Ger 206 Survey of German Literature II \\ (3)}

German literature from 1800 to the present. Prereq: Ger 202 or equivalent.

\section*{Ger 401 The Age of Goethe}

German literary doctrines and masterpieces of the periods of Enlightenment, Storm and Stress, and Classicism. Prereq: Ger 202 or equivalent.

\section*{Ger 402 Contemporary German Literature (3)}

Works of the principal German writers of the twentieth century and the background of events and ideas which have contributed to the development of these writers. Prereq: Ger 202 or equivalent.

\section*{Ger 403 The German Short Story (3)}

The German short story from Romanticism to the present. Prereq: Ger 202 or equivalent.

Ger 404 Goethe (3)
Important works of Goethe; his background and literary development. Prereq: Ger 205.

Ger 405 Scientific German (3)
Review of syntax, readings, and translation in general science and basic technical fields. Prereq: Ger 102 or equivalent.

\section*{Ger 406 German Civilization (3)}

The evolution of Germany's social, political, and economic institutions. An analysis of the major contributions of German civilization to Western culture.

\section*{Ger 410 Honors Seminar in German \\ (3)}

Independent study and research for upper division students who qualify under the Honors Program in foreign languages.

\section*{Ger 411 Honors Seminar in German (3)}

Independent study and research for upper division students who qualify under the Honors Program in foreign languages. Ger 410 is not prerequisite. A student may take Ger 410 or 411 or both.

\section*{GREEK}

Gre 101 Beginning Greek I (3)
For students who have had no previous Greek. Forms, syntax, and idioms of Homeric Greek.

Gre 102 Beginning Greek II (3)
A continuation of Gre 101. Reading of Homer's Iliad, Book I, followed by an introduction to Attic Greek. Records and tapes in Greek to supplement class work.

\section*{Gre 201 Intermediate Greek I (3)}

Review of Attic grammar and readings in Attic authors. Introduction to the koine and readings in New Testament Greek.

\section*{Gre 202 Intermediate Greek II (3)}

Introduction to Greek Tragedy. Sophocles' Antigone and Euripides' Medea are read and analyzed.

\section*{ITALIAN}

\section*{Ita 101 Elementary Italian 1 (3)}

Introduction, through the audio-lingual method, to the sounds of Italian. Thorough and intensive drill, both in class and in the language laboratory, with pronunciation, intonation, and basic linguistic patterns. Introduction to Italian culture by means of basic dialogues and easy reading texts.

Ita 102 Elementary Italian II (3)
A continuation of Ita 101 with greater emphasis on structural analysis.

\section*{Ita 201 Intermediate Italian 1 (3)}

Review of Italian grammar and syntax. Introduction to Italian literature through short readings of intermediate difficulty. Composition and conversation in Italian based on reading assignments. Language laboratory for remedial drill.

Ita 202 Intermediate Italian II (3)
A Continuation of Ita 201 with increased emphasis on free composition and conversation.

\section*{LATIN}

Lat 101 Beginning Latin 1 (3)
For students who have had no previous Latin. Forms, syntax, and idioms of classical Latin. Selected readings.

\section*{Lat 102 Beginning Latin II (3)}

A continuation of Lat 101. Records and tapes in Latin to supplement class work.

\section*{Lat 201 Cicero (3)}

Selections from the orations, letters, and essays. Prereq: Lat 101, 102, or two years of secondary school Latin.

\section*{Lat 202 Vergil (3)}

Reading and analysis of celebrated portions of the Aeneid. The nature of Latin epic poetry. Prereq: Lat 201 or three years of secondary school Latin.
Note: Prereq to courses 301-406: Lat 202, or four years of secondary school Latin.

\section*{Lat 301 Teaching of Latin (3)}

Introduction to the problems, methods, and materials in the teaching of Latin.

\section*{Lat 302 The Latin Lyric Poets (3)}

Latin lyric poetry through readings in Catullus and the Odes and Epodes of Horace. Practice in the composition of lyric poetry.

\section*{Lat 303 Advanced Latin Prose Composition (3)}

Required of Latin majors; open to other students accepted by the instructor. The complex syntactical structures of Latin and of classical style. Translations of English prose into classical Latin.

\section*{Lat 304 The Latin Elegiac Poets (3)}

Latin elegiac poetry through readings, in Ovid, Tibullus, Lygdamas, Sulpicia, and Propertius. Practice in the composition of the elegiac poetry.

Lat 305 Reading Course in Latin (3)
Open to Latin majors only. Area and content to be determined by students' needs.

\section*{Lat 306 Roman Historians (3)}

Introduction to Roman historiography. Readings. in Livy, Sallust, and Tacitus.

\section*{Lat 401 Roman Drama (3)}

Origins and development of Roman drama. Selected plays of Plautus, Terence, and Seneca.

Lat 402 Roman Philosophy
Introduction to Greek and Roman philosophy. Readings in Cicero, Tusculan Disputations, and Lucretius, De Rerum Natura. Cicero presents mainly the Platonic view; Lucretius argues in epic verse for Epicurus' creed.

\section*{218/Foreign Languages}

\section*{Lat 403 Roman Satire (3)}

Origins and development of Roman satire. Readings in Horace, Persius, and Juvenal.

\section*{Lat 404 The Latin Novel (3)}

Readings in Petronius, Satyricon, and Apuleius, The Golden Ass. Lectures and discussion of the emergence of the novel as a literary form.

Lat 405 Medieval Latin (3)
Prose and poetry from the fourth to the seventeenth centuries.

\section*{Lat 406 Latin Tutorial Course (3)}

Required of majors in Latin or Classics; open to other students accepted by the instructor. Introduction to the history of the alphabet; principles of historical and comparative linguistics, especially as applied to Greek and Latin; and history of the Latin language as seen in ancient authors and inscriptions.

\section*{RUSSIAN}

Rus 101 Beginning Russian 1 (3)
Fundamentals of Russian grammar, syntax, and pronunciation. Extensive drill in the language laboratory is required. One class hour per week in the language laboratory.

\section*{Rus 102 Beginning Russian II (3)}

A continuation of Rus 101 with increased emphasis on reading and conversation in Russian. Language laboratory drill required.

\section*{Rus 201 Intermediate Russian I (3)}

Grammar review with readings in Russian literature as a basis for class discussion in Russian and practice in composition. Language laboratory drill recommended for those needing further work in pronunciation and intonation. Prereq: Rus 102 or the equivalent.

\section*{Rus 202 Intermediate Russian II (3)}

A continuation of Rus 201 with more extensive practice in composition and conversation.

Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

\section*{Rus 203 Advanced Russian Grammar and Composition (3)}

The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in writing compositions on a more advanced level, with emphasis on correct usage. Prereq: Rus 202 or equivalent.

Rus 204 Advanced Oral Russian (3)
Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. Prereq: Rus 203 or equivalent.

\section*{Rus 205 Advanced Readings in Russian Literature I (3)}

Works of Pushkin, Lermontov, Turgenev, and Gorki will be read and analyzed. Prereq: Rus 202 or the equivalent.

\section*{Rus 206 Advanced Readings in Russian Literature II}

A continuation of Rus 205.

\section*{Rus 303 Scientific Russian I}

Review of syntax; reading and translation in general science and basic technical fields. Prereq: Rus 202 or equivalent.

\section*{Rus 304 Scientific Russian II (3)}

A continuation of Rus 303.

\section*{Rus 401 The Russian Novel (3)}

The Russian novel and literary trends of the nineteenth and twentieth centuries. Prereq: Rus 205 or equivalent.

\section*{Rus 402 The Russian Drama (3)}

Works of the major Russian dramatists of the nineteenth and twentieth centuries. Prereq: Rus 205 or equivalent.

\section*{Rus 410 Honors Seminar in Russian (3)}

Independent study and research for upper division students who qualify under the Honors Program in Foreign languages.

\section*{Rus 41I Honors Seminar In Russian (3)}

Independent study and research for upper division students who qualify under the Honors Program in foreign languages. Rus 410 is not prerequisite. A student may take Rus 410 or 411 or both.

\section*{SPANISH}

\section*{Spa 101 Elementary Spanish 1 (3)}

Fundamentals of Spanish grammar, syntax, and pronunciation from the oral-aural point of view. Introduction to Spanish culture through easy reading texts. Language laboratory one hour a week.

\section*{Spa 102 Elementary Spanish II (3)}

A continuation of Spa 101 with emphasis on reading and conversation in Spanish with the aim of increasing oral-aural skills in the language. Language laboratory one hour a week.

Spa 201 Intermediate Spanish 1 (3)
Review of Spanish grammar and syntax. Readings in Spanish literature as a basis for class discussion in Spanish and practice in composition. Language laboratory drill recommended for remedial work where needed. Prereq: Spa 102 or equivalent.

Spa 202 Intermediate Spanish II (3)
A continuation of Spa 201 with extensive practice in composition and conversation on a more advanced level.
Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

\section*{Spa 203 Advanced Spanish Grammar (3)}

Review and mastery of Spanish grammar with emphasis on common grammatical problems, syntactic structures, and idiomatic expression. Prereq: Spa 202 or equivalent.

\section*{Spa 204 Advanced Spanish Composition (3)}

Written expression in Spanish on a more advanced level. Special attention to stylistics. An application of Spa 203. Prereq: Spa 203.

\section*{Spa 205 Advanced Oral Spanish (3)}

Intensive drill in oral usage of the Spanish language to develop proficiency in listening comprehension and speaking. Prereq: Spa 203 or eqr:--lent.

\section*{Spa 305 Spanish Medieval Literature (3)}

Spanish literature from its earliest beginning to the end of the fourteenth century. Prereq: Spa 203 or equivalent.

Spa 306 Spanish Literature of the Renaissance (3)
Spanish literature from the Celestina through the seventeenth century. Emphasis on the Golden Age. Prereq: Spa 203 or equivalent.

Spa 307 Spanish Literature of the Eighteenth and Nineteenth Centuries (3)
Spanish literature from the beginning of the eighteenth century to the end of the nineteenth, excluding the Generation of 1898. Prereq: Spa 203 or equivalent.

Spa 308 Spanish Literature of the Twentieth Century (3)
The literature and thought of this century in Spanish letters. Prereq: Spa 203 or equivalent.

\section*{Spa 309 Spanish American Literature (3)}

Spanish American literature through major authors and works. Perspective on the different literatures. Prereq: Spa 203 or equivalent.

Spa 320 Civilization of Spain (3)
Major contributions of Spain. Cultural, geographic, literary, philosophical, and artistic manifestations of the Hispanic world. Prereq: Spa 202 or equivalent.

\section*{Spa 321 Civilization of Spanish America (3)}

Cultural, geographic, litetary, philosophical, and artistic manifestations of the Hispanic American World. Prereq: Spa 202 or equivalent.

Spa 401 Spanish "Comedia" of the Golden Age (3)
Spanish National Theater. Themes and traditions in the "Comedia." Prereq: Spa 306 or equivalent.

Spa 402 Cervantes (3)
Study of Don Quijote. Cervantes' contribution to literature. An insight into his works. Prereq: Spa 306 or equivalent.

\section*{Spa 403 Spanish Lyric Poetry (3)}

Analysis of Spanish poetic expression and poetic form. Reading of the main lyric poets of Spanish literature. Prereq: Spa 305 or 306 or 307 or 308 or equivalents.

\section*{Spa 404 The Picaresque Novel (3)}

The picaresque tradition in Spain. The literary "picaro." The contribution of Spain to other literatures. Prereq: Spa 306 or equivalents.

Spa 405 Modern Spanish Theater (3)
Contemporary Spanish theater from the late nineteenth century to the present. Prereq: Spa 307 or 308 or equivalent.

Spa 406 The Generation of 1898 (3)
An evaluation of the Generation of 1898; its role in the literature, history and philosophy of Spain. Prereq: Spa 307 or 308 or equivalents.

\section*{Spa 410 Honors Seminar in Spanish (3)}

Independent study and research for upper division students who qualify under the Honors Program in foreign languages. Topics to be announced by the Spanish faculty.

\section*{Spa 411 Honors Seminar in Spanish (3)}

Independent study and research for upper division students who qualify under the Honors Program in foreign languages. Spa 410 is not prerequisite. A student may take Spa 410 or 411 or both. Topics to be announced by the Spanish faculty .

Spa 412 Independent Studies in Spanish Language and Literature (3)
Special topics for advanced students only; admission by permission of instructor.

\section*{COURSES COMMON TO ALL LANGUAGES}

\section*{Lan 301 Teaching of Modern Languages (3)}

Problems, methods, and materials of the teaching of modern languages. Observation of foreign language classes in session. Prereq: completion of intermediate level in the chosen foreign language.

\section*{Lan 303 Foreign Languages in the Elementary School (3)}

Techniques and materials used in teaching foreign languages in the elementary school. Practice in the application of these techniques and observation of foreignlanguage classes in the Laboratory School. Prereq: completion of intermediate level in the chosen foreign language.

Lin 201 [also Eng 201] Introduction to Linguistics (3)
Basic concepts of language description, classification, change, reconstruction, dialectology, and socio-linguistics.

Lin 360 [also Phi 360] Philosophy of Language (3)
Questions of meaning in communication. Emphasis on contemporary discussion of theories of natural language.

Lin 380 Language and Culture (3)
Language as an aspect of culture; linguistic-perceptual-cognitive categories; social and psychological aspects of language. Prereq: Lin 201 or permission of instrictor.

\title{
DEPARTMENT OF GEOGRAPHY
}

\author{
Alvin S. Keinard, Chairman
}

\section*{Geo 100 Physical Geography (3)}

Basic principles of physical geography in relation to the total geographic concept. The total earth physical environment.

\section*{Geo 101 World Geography (3)}

Varied patterns of the natural environment throughout the world. Man's economic and cultural responses to environmental situations.

\section*{Geo 200 Geography of World Cultures (3)}

An examination of selected geographic areas, representing different stages of development, in the contemporaneous world. Emphasis is on environmental adaptation and the resultant problems and prospects confronting the human occupants of these areas. Prereq: Geo 101.

\section*{Geo 201 Conservation of Natural Resources (3)}

The wise use of our natural resources and the problems of resource management. Prereq: Geo 101.

\section*{Geo 202 Geography of the United States and Canada (3)}

A regional study of the United States and Canada; man's adjustment to his physical environment. Political adjustments to the geographic environments and relations between the two countries. Prereq: Geo 101.

\section*{Geo 203 Applied Economic Geography (3)}

Modern trends and problems of the economic growth of the United States. The changing wants and needs of man in regard to agriculture, industry, and world resources. Prereq: Geo 101.

\section*{Geo 204 Geography of Pennsylvania \\ (3)}

A regional study of Pennsylvania; man's cultural and economic responses to environmental factors. Urbanization, people, agriculture, landforms, resources, and industries.

\section*{Geo 205 Geomorphology (3)}

Dynamic constructive and gradational forces which have shaped the present landforms and are constantly reshaping and modifying them. Interpretation of geologic and topographic maps; field studies. Field trips required. Prereq: Geo 100.

\section*{224/Geography}

\section*{Geo 206 Introduction to Climatology (3)}

A basic study of the atmosphere. Analysis of the laws and principles of atmospheric change in relation to weather and climate. Practical experience with weather instruments, weather maps, and data. A survey of classification of world climates.
Prereq: Geo 100.

\section*{Geo 207 Geography of Europe (3)}

A regional study of Europe. Geographic relationships underlying land uses, international problems, and boundary disputes. The Soviet Union is not included. Prereq: Geo 101.

\section*{Geo 208 Geography of Latin America (3)}

A regional study of Middle and South America; man's responses to environmental factors such as climate, landforms, and resources. Prereq: Geo 101.

\section*{Geo 210 Geographic Influences in American History (3)}

Geographic characteristics which bore prominently on the discovery and colonization of America and the progressive development of the United States up to the twentieth century.

\section*{Geo 21I Map Interpretation (3)}

The appreciation and understanding of maps. Reading and interpreting largescale topographic maps; special purpose maps.

\section*{Geo 212 Geography of Modern Industry and Commerce (3)}

Economic geography: marketing, industrial trends, locational theory, trading area patterns, and developing aspects of the commercial world in the perspective of geographic factors.

\section*{Geo 213 Location of Economic Activity (3)}

An introduction to basic theoretical models of agricultural, industrial, and settlement geography and fundamental methods of geographic analysis. Prereq: Geo 203.

\section*{Geo 214 Urban Growth Patterns (3)}

An analysis of the patterns, processes, and consequences of urban growth and development. Theory of systems, size, spacing, and functions of cities. Prereq: Geo 203.

\section*{Geo 302 Climatology (3)}

Climatic variations of the earth and their classification into regional types. Biological soil and cultural relationships of the climatic types. Prereq: Geo 206.

\section*{Geo 303 Cartography (3)}

Utilizing modern map-making techniques, the geography major develops and constructs maps and other graphic tools which serve special purposes in teaching and research. Four hours lecture.

\section*{Geo 304 Geography of Asia (3)}

Southwestern and Southeastern Asia; the cultural aspects of race, religion, economic and political factors. Prereq: Geo 101.

\section*{Geo 305 Geography of the Far East (3)}

A detailed study of China and Japan. Other areas included: Korea, the Philippine Islands, Taiwan, and the Outer Pacific Islands. Prereq: Geo 101.

\section*{Geo 306 Geography of Africa (3)}

Historic and present-day aspects of race, religion, tribal organizations, and other elements of African life as geography relates to them. Prereq: Geo 101.

Geo 307 Geography of the U. S. S. R. (3)
European and Asiatic U.S.S.R. Positive and negative factors in the geography of Russia in relation to its strengths and weaknesses as a world power. Prereq: Geo 101.

\section*{Geo 308 Trade and Transportation (3)}

International trade and transportation systems for this trade. Economic trading blocs. Prereq: Geo 101.

\section*{Geo 309 Political Geography (3)}

Major world problems in terms of their geographic settings. Problems of population growth, economically underdeveloped nations, control and development of natural resources, keeping the peace, etc. Prereq: Geo 101.

\section*{Geo 310 Geography Field Study Methods (3)}

Introduction to the methods and materials of field research in geography. Field trips required. Prereq: Geo 101.

\section*{Geo 311 Teaching Geography in Secondary Schools (3)}

Modern techniques of teaching geography, current curricula, and the tools of geography. Experience in teaching geography lessons and classroom observance are required. Prereq: Geo 101 and six additional geography credits.

\section*{Gec 313 Population Problems (3)}

Regional variations in the distribution of man. Numbers, past and present, in relation to demographic characteristics of the population and migrations of populations, Prereq: Geo 101.

\section*{Geo 315 Aerial Photographic Interpretation (3)}

Identifying objects and conditions in aerial photography; determining their significance. Both physical and cultural qualities are emphasized. Prereq: Geo 211 or consent of instructor.

\section*{Geo 316 Political and Military Geography of the United States}

An introduction to basic political geography with emphasis on the geography of World War II and geographic aspects of more recent conflicts affecting the United States. Prereq: Geo 101.

Geo 317 Methods and Models of Regional Analysis (3)
Instruction in the collection and use of data, spatial models, statistical procedures, and computer techniques in regional analysis. Prereq: Geo 203.

\section*{Geo 400 Senior Seminar in Geography (3)}

Research in geography. Methodology, bibliography, and presentation, both written and oral. The research paper for the seminar must be acceptable as a required departmental Senior Research Paper. Required of all geography majors.

Geo 410 Independent Studies in Geography (1 to 3)
Special research projects, reports, readings in geography. Open to seniors and Honors Program students only. Prereq: permission of department chairman.

\section*{Geo 412 Geography of Australia and Associated Islands (3)}

Native and introduced flora and fauna in and near Australia. The importance of agriculture and the grawing industrialization of Australia. Prereq: Geo 101.

\section*{Geo 414 Urban and Regional Planning (3)}

The regional method of analysis of the problems of urban and regional planning. Systems, housing, recreation, industry, and commerce. Prereq: Geo 101.

\section*{Geo 415 Geography Area Field Study (3, 6, or 9)}

Field courses for travel and study in the United States and foreign countries. Analysis of field study findings compiled into term reports. Costs vary with each course offering. Admission by approval of department chairman.

\section*{Geo 416 Seminar in Special Studies in Geography (2 to 3)}

A specialized course in a phase of geography, taught by a specialist in the area of study. For seniors (and, in some cases, juniors). Admission by approval of department chairman.

GEOLOGY See Earth, Space, and General Sciences

\section*{GERMAN See Department of Foreign Languages}

\section*{GREEK See Department of Foreign Languages}

\title{
SCHOOL OF HEALTH AND \\ PHYSICAL EDUCATION
}

Edwin L. Youmans, Dean
Edward N. Norris, Associate Dean for Graduate Studies
Edwin B. Cottrell, Assistant to the Dean

\section*{DEPARTMENT OF HEALTH EDUCATION}

Walter E. Funk, Chairman, Department of Health Education

Principles and practices of personal health, with attention to desirable attitudes for healthful living.

HEd 152 Personal Health II (3 hrs. 3 cr.) Extension of HEd 151, covering the fundamental knowledge necessary to prevent, recognize, and correct personal health problems. Prereq: HEd 151.

HEd 252 First Aid and Care and Prevention of Athletic Injuries
(3 hrs. 2 cr.)
Administering first aid in the school situation; preventing injury during sports activities; care for the injured.

HEd 253 The School Health Program
(3 hrs. 2 cr.)
School health services, school environment, and health instruction. Organization and administration of a school health program.

HEd 350 Health for the Elementary Grades
(3 hrs. 3 cr .)
Principles and procedures for meeting the health needs of the child in the school, home and community.

\section*{228/Health-Physical Education}

HEd 351 Human Development (3 hrs. 3 cr .)
A study of growth from conception through adolescence. Methods of studying pupils, influences on growth, and characteristic development at various age levels. Implications for the health and physical education program are stressed.

HEd 352 Methods and Materials in Health Education (3 hrs. 2 cr.)
A comprehensive study of school health instruction. Files of curriculum materials and instructional aids are completed in this course as a prerequisite to student teaching.

\section*{HEd 353 First Aid for Teachers}
(2 hrs. 2 cr .)
Advanced first aid and techniques for teaching first aid. Successful completion of this course may qualify the student as a first-aid instructor.

\section*{HEd 354 Seminar in Health Education}
(3 hrs. 3 cr.)
A course for health and physical education seniors. Basic concepts in health education, with emphasis on readings, discussions, and projects. Prereq: completion of the student-teaching experience.

\section*{HEd 355 Nutrition}
(2 hrs. 2 cr.)
A practical approach to the role foods play in relationship to growth, development, and general well being. Classifications of foods and their values at different life stages. Food fads; fallacies about foods.

HEd 356 Family Life Education
(2 hrs. 2 cr.)
Includes the basic concepts and objectives of such a program for students at different age levels. The roles played by the school, the home, and religion. Organizing, launching, and evaluating a family life education program.

HEd 357 Community Health
(2 hrs. 2 cr.)
Principles and problems of community health. Community health problems and health services on the local, state, national, and international levels are considered.

HEd 358 Field Experience in Community Health
(2 hrs. I cr.)
Practical experience in work with existing community health agencies in the area. Majors in Health Education are required to take HEd 357 and HEd 358 concurrently.

HEd 359 Field Experience in Health Education
(2 hrs. 1 cr.)
Exposure to the practical problems of health education in the classroom. An opportunity to observe and aid the established classroom teacher, prior to student teaching. Majors in Health Education are required to take HEd 352 and HEd 359 concurrently.

HEd 451 Community and School Health Education Workshop
(3 hrs. 3 cr .)
A study of common problems in health education for the home, community, and school.

\section*{HEd 452 Mental Health Workshop}
(3 hrs. 3 cr.)
A workshop designed to help educators improve their understanding of themselves and their students. Emphasis is on ways to recognize mental-health problems.

\section*{DEPARTMENT OF PHYSICAL EDUCATION}

Melvin M. Lorback, Chairman, Department of Physical Education

\section*{PEd IOI Physical Activities I \\ (2 hrs. I cr.)}

Offers a program of activities selected from the following categories: aquatics, individual sports, physical conditioning, and team sports.

PEd 102 Physical Activities II
(2 hrs. I cr.)
Offers a program of activities selected from the following categories: aquatics, individual sports, physical conditioning, and team sports.

PEd 107 Eurythmics
(2 hrs. I cr.)
Survey of dance with experience in fundamental locomotor and axial movement. Specific dance forms such as square, round, contra, folk, and social dancing.

PEd 110 Introduction to Formal Gymnasium Activities (3 hrs. I cr.) (Men)
An introductory course in marching, gymnastic exercises, games, weight and circuit training, rope climbing, Indian clubs, wands, etc.

PEd III Soccer, Speedball, and Basketball (3 hrs. I cr.) (Women)
Foundations course stressing skills in basketball; individual skills, team tactics, and officiating techniques in soccer and speedball.

PEd 112 Introduction to Tumbling and Vaulting (3 hrs. I cr.) (Men)
An introduction to tumbling and vaulting, including trampoline and springboard.

\section*{230/Health-Physical Education}

PEd 113 Gymnastics and Fundamental Exercises
(3 hrs. I cr.) (Women)
Apparatus skills for beginners, with stunts, tumbling, and pyramids for different age levels.

PEd 120 Individual Sports for Men
(3 hrs. I cr.) (Men)
Individual sports and recreational activities, including tennis, golf, volleyball, softball, tetherball, table tennis, handball, winter sports.

PEd 121 Lacrosse and Track and Field
(3 hrs. I cr.) (Women)
Foundations course stressing skills in lacrosse and track and field.

\section*{PEd 122 Soccer and Wrestling (Men)}

Teaching soccer and wrestling with emphasis on units of instruction for the elementary, junior high, and senior high levels. Lead-up games, related activities, fundamental skills and techniques, drills, and experience in cohesive team effort.

\section*{PEd 123 Hockey and Volleyball (Women)}
(3 hrs. I cr.)

Foundations course stressing skills in field hockey; individual skills, team tactics, and officiating techniques in volleyball.

\section*{PEd 130 Aquatic Fundamentals (Men)}

Analysis and practice of the basic swimming strokes; introduction to diving and competitive swimming; speed strokes, racing starts, turns, and relay races; floating and endurance swimming; games, stunts, and exhibitions; recreational aquatics and synchronized swimming formation.

PEd I31 Aquatic Fundamentals
(3 hrs. I cr.)
(Women)
Basic principles of swimming for all age and ability levels. The organization and administration of competitive swimming for women is studied.

PEd 132 Life Saving and Water Safety
(3 hrs. 1 cr.) (Men)
Diagnosis and practice of life saving skills and techniques. Boating, canoeing, and other waterfront activities are studied. Successful completion of this course may enable the student to receive senior life saving certification from the American Red Cross.

\section*{PEd 133 Life Saving and Water Safety (Women)}

Continued emphasis on basic principles, and advanced skills in swimming. Life saving practices, safety and survival techniques. Synchronized swimming, stunts, formations, and routines. The course may lead to certification by the American Red Cross.

\section*{PEd 201 Practice and Theory in Elementary Physical Education \\ (2 hrs. 1 cr .)}

The basic organization of the physical education program in elementary schools. Principles in teaching games and other recreational activities. Planning and directing the physical education period in the elementary school program.

PEd 202 Dance Activities in the Elementary Program (2 hrs. 1 cr.) Fundamental rhythm, creative rhythms, singing games, and folk dances on the elementary level. Students acquire skills in these areas and are given leadership experience in class situations.

PEd 210 (Men) Preparation for Teaching Elementary Physical Education
Methods for teaching games, story plays, self-testing activities, tumbling, and stunts on apparatus at the elementary level.

PEd 211 (Women) Preparation for Teaching Elementary Physical Education (3 hrs. I cr.)
See description for PEd 210 above.
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PEd 212 Introduction to Heavy Apparatus (3 hrs. I cr.) (Men)

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Fundamentals of movement and apparatus including rings, parallel bars, horizontal bars, side horse, and floor exercises.

PEd 213 Advanced Gymnastics (3 hrs. I cr.)
(Women)
Advanced apparatus, tumbling, pyramids, rhythmical exercises.
PEd 220 Football and Track and Field (3 hrs. I cr.) (Men)
Teaching football and track and field, with emphasis on units of instruction for the elementary, junior high, and senior high levels. Lead-up games, related activities, fundamental skills and techniques, drills, and experience in cohesive team effort.

PEd 221 Advanced Hockey, Lacrosse, Track and Field (3 hrs. I cr.) (Women)
Advanced fundamertals and team tactics in hockey, lacrosse, and track and field.

\section*{PEd 222 Basketba!! and Baseball (Men)}
(3 hrs. 1 cr.)
Teaching basketball and baseball, with emphasis on units of instruction for the elementary, junior high, and senior high levels. Lead-up games, related activities, fundamental skills and techniques, drills, and experience in cohesive team effort.

(3 hrs. 1 cr.)
Advanced fundamentals and team tactics in basketball; fundamental skills in tennis.

PEd 240 (Men) Elementary Rhythms and Folk Dancing (3 hr. ! cr.) Fundamental locomotor and axial movements; music and rhythm in relationship. Rhythmical activities for the elementary program, with suggested teaching methods.

PEd 241 (Women) Elementary Rhythms and Folk Dancing (3 hrs. I cr.) See description for PEd 240 above.

PEd 242 (Men) Social and Square Dance
(3 hrs. I cr.) Rounds, squares, contras, mixers and social dancing. Curricula implications and teaching methods integrated into the course.

PEd 243 (Women) Social and Square Dance (3 hrs. 1 cr.) See description for PEd 242 above.

PEd 261 History and Philosophy of Physical Education (2 hrs. 2 cr.) A study of past and present concepts of physical education; philosophy and principles of modern physical education programs.

\section*{PEd 310 (Men) Preparation for Teaching} Secondary Physical Education (3 hrs. I cr.) Class practice in teaching games, athletics, sports, and gymnastic activities, and developments of activity lesson plans suitable for grades 7-12.

> PEd 311 (Women) \(\begin{aligned} & \text { Preparation for Teaching } \\ & \text { Secondary Physical Education }\end{aligned}\) See description for PEd 310 above.

Planning and executing special events such as May Days, festivals, sports days, assembly programs, and field days.

\section*{PEd 322 Advanced Team Sports I \\ (3 hrs. I cr.) (Men)}

Both PEd 322 and PEd 324 concentrate intensively on theoretical and practical approaches to teaching selected activities for advanced levels of performance such as interscholastic sports. In either course, students choose two of the four activities offered. The nine-week concentration on each selection includes study of physiological requirements specific to the activity, refined drills, analysis of positions, tactics, etc. Officiating and scouting procedures are included. Sports offered in PEd 322 are: advanced basketball, football, soccer, track and field.
\begin{tabular}{ll} 
PEd 323 & \begin{tabular}{l} 
Tennis, Softball; Basic Officiating of \\
Hockey and Basketball \\
(Women) ( 3 hrs. I cr.)
\end{tabular}
\end{tabular}

Advanced strategy, individual skills, and officiating techniques in tennis. Techniques and team tactics in softball. Basic officiating techniques and practical experience in hockey and basketball.

PEd 324 Advanced Team Sports II
(3 hrs. I cr.) (Men)
See above description for PEd 322. Sports offered in PEd 324 are: advanced baseball, golf and tennis, gymnastics, and wrestling.

PEd 325 Badminton, Golf, and Archery (3 hrs. I cr.) (Women)
Development of skills in archery, golf, and badminton.
PEd 331 Aquatic Leadership (3 hrs. 2 cr.)
Leadership procedures in aquatic activities for schools and school camps. Swimming strokes and life saving techniques are analyzed. The student has an opportunity to qualify as a waterfront safety instructor.

\section*{PEd 341 Modern Dance 1}
(2 hrs. 1 cr.)
Techniques and fundamentals of modern dance on a beginner level. Methods and materials to prepare teachers for a public school program.

\section*{PEd 342 Modern Dance II}
(2 hrs. 2 cr.)
Intermediate and advanced technique, choreography, and rhythmic training. Experience in organizing and participating in dance concerts.

\section*{234/Health-Physical Education}

PEd 343 Principles of Choreography
(2 hrs. 2 cr.)
The art of dance composition. Basic elements of space, rhythm, and motion dynamics. Students design original movement, progressing from simple to complex solo and group forms.

PEd 344 Dance in Theater Arts
(2 hrs. 2 cr .)
Dance as a performing art. Past and contemporary theatrical dance forms; accompaniment, costume, sets, and lighting. Students stage complete theatrical productions.

\section*{PEd 345 Advanced Folk Dance}
(2 hrs. 2 cr.)
Review of all basic folk dance steps and their use in advanced folk dance. Study of folk dance as a vivid picture of national life. Opportunities for staging the folk dance.

PEd 346 Advanced Social and Square Dance
(2 hrs. 2 cr .)
Advanced forms of social and square dance. Development of techniques for leading, following, and refinement of style. Opportunities for staging both social and square dance.

\section*{PEd 347 History of Dance}
(2 hrs. 2 cr.\()\)
Evolution of dance as an art form in relation to man and his society. Physiological, sociological, and psychological implications; dance forms and types. Films and other materials focus on parallel developments in related arts.

\section*{PEd 355 Kinesiology}
(2 hrs. 2 cr.\()\)
Fundamentals of human movement; application to physical education skills.
PEd 361 Tests, Measurements, and Statistics in Health and Physical Education
(3 hrs. 3 cr .)
Selecting, administering, scoring, and evaluating tests of physical fitness, general motor ability, motor educability, and skill and knowledge in sports.

PEd 362 Physical Education for the Elementary Grades (7 hrs. 3 cr.) Students are assigned to elementary schools in the service area for observation and teaching. The course includes a weekly seminar on theory and problems.

PEd 363 (Women) \(\begin{array}{l}\text { Organization and Administration of } \\ \text { Physical Education and Athletics }\end{array}\) ( 3 hrs .2 cr ) \()\) Principles of program building in curricular and extracurricular physical education; organizing, administering, and supervising intramural and interscholastic athletic programs. Prereq: PEd 361.

PEd 364 (Men) Organization and Administration of Physical Education and Athletics
(3 hrs. 2 cr.) See description for PEd 363 above.

PEd 365 Physical Activities for Atypical Children I
(2 hrs. 2 cr.) An introductory course in adapted physical education. Common childhood disabilities are studied, with emphasis on problems of a chronic nature.

PEd 367 Arts and Crafts in Recreation
(3 hrs. 3 cr.)
Theoretical and practical applications of arts and crafts as recreative outlets for all age groups. Arts and crafts materials customarily found in school, camp, and community recreation programs are used.

PEd 370 Camping and Outing
(3 hrs. 3 cr .)
Theory and practice in camping and outing programs, approached from viewpoints of the camper, the counselor, the supervisor, the specialist, and the director.

PEd 375 Officiating Women's Sports
(3 hrs. 2 cr .) Ethics and techniques of officiating at secondary school and college games. An official's rating in at least one sport may be acquired.

PEd 377 Theories and Practices of Training and Conditioning
(2 hrs. 2 cr.)
Theory of sports medicine; administration of an athletic training program including medical coverage, facilities, equipment, and diet; prevention and care of common injuries. Prereq: HEd 252.

PEd 378 Facilities and Equipment in Health and Physical Education
(2 hrs. 2 cr.) Principles and procedures of planning. Practical and functional design of indoor and outdoor areas and facilities. Attention is given to the Pennsylvania Department of Education's regulations governing planning for public school facilities.

PEd 390 Physical D:sabilities of Childhood
(3 hrs. 2 cr.) A course designed for students in special education. Common orthopedic and neurological disabilities of childhood, especially chronic deviations. Emphasis is on understanding the medical aspects and problems of rehabilitation.

PEd 391 Psychology of the Physically Handicapped
(3 hrs. 3 cr.) A course designed for students in special education. Psychology applied to physical disability; personal and cultural implications of handicaps; the psychodynamics of disability.

PEd 392 Introduction to Physical Therapy
(2 hrs. 2 cr.) An introductory course for men and women planning to enter a graduate school of physical therapy. Emphasis is on basic biological and physical science pertinent to physical therapy. Prereq: Bio 209, 309.

PEd 455 Applied Physiology and Kinesiology
(3 hrs. 3 cr.)
Principles and analysis of mechanical movement and neuromuscular coordination. Through a practical approach, the student is acquainted with basic aspects of strength and endurance development, motor learning, and mechanics of motion. Prereq: Bio 209, 309.

PEd 461 Physical Activities for Atypical Children II
(2 hrs. 2 cr.)
Continued study of adapted physical education, including screening and practical training in working with physically and mentally handicapped children.

\section*{PEd 462 Principles of Recreation}
(2 hrs. 2 cr .)
Historical background of the play movement; theoretical explanations of play; the need for it in modern life and its place in education and recreation. Methods of recreation leadership.

PEd 463 (Women) Principles of Coaching
(2 hrs. 2 cr.)
Principles and methods of coaching sports in the school program.
PEd 464 (Men) Principles of Coaching (2 hrs. 2 cr .)
See description for PEd 463 above.
PEd 465 Elementary Physical Education Curriculum ( 3 hrs. 3 cr.) Constructing and evaluating the curriculum in elementary physical education. Progression and continuity, along with developmental needs and interests of children, are considered.

PEd 466 Self-Tes'ing Activities in Elementary School Physical Education
(2 hrs. 2 cr .)
For elementary education majors. Supplements PEd 201 and PEd 202. Stunts, tumbling, apparatus, mimetics and sports skills. Testing procedures for determining physical fitness and motor skills.

PEd 467 Supervised Camping Leadership
(3 cr.) A program in camp leadership at children's summer camps. This field experience aids the student's professional growth through work with children in the informal atmosphere of camp. Prereq: consent of instructor.

\section*{PEd 471 Student Teaching in the Secondary School, including Professional Practicum}
(12 cr.)
Observation and participation in teaching situations in the junior and senior high schools under qualified cooperating teachers and college supervisors. A program of professional conferences and visitations is provided throughout this teaching semester.

\section*{HIGHWAY SAFETY AND \\ GENERAL SAFETY EDUCATION}

\section*{PEd 481 Education for Safe Living}
(3 hrs. 3 cr .)
Survey of safety education. Philosophy, need, history, and psychology of accident prevention, with emphasis on the safety program in school, industry, community, and traffic. Legal responsibilities of the teacher for maintaining a safe environment are considered.

\section*{PEd 482 Principles and Practices of Driver} Education and Traffic Safety
(3 hrs. 3 cr.)
Fundamentals of driver education. Techniques for assessing the knowledge, skill, and psycho-physical characteristics of beginning drivers.

\section*{PEd 483 Preparation for Teaching Driver and Traffic Safety Education}
( 3 hrs. 3 cr .)
Techniques for effective teaching in the automobile and classroom. Opportunities to teach in the classroom and on the road. These experiences are evaluated and analyzed by the instructor.

PEd 484 Methods and Materials of Safety Education (3 hrs. 3 cr.)
A study of the total safety program, with emphasis on the teaching of safety. Each student prepares a practice lesson.

PEd 485 Safety Concepts, Emergency Procedures, and Injury Management
( 3 hrs. 3 cr )
Functions and responsibilities of teachers during natural and man-made disasters. First aid for accidents or sudden illness in the school; care and prevention of athletic injuries.

\section*{DEPARTMENT OF HISTORY}

Donn C. Riley, Interim Chairman

\section*{GENERAL}

\section*{SSc 300 Seminar in Contemporary European Culture (6)}

A fully guided six-week summer tour which offers a cross-section of Europe, past and present, through visits to museums, galleries, cathedrals, universities, music festivals, and operas. Seminars and lectures by European academicians. Summer.

\section*{SSc 331 Teaching Social Studies in Secondary Schools (3)}

Designed to expose prospective secondary school teachers to methods and materials of teaching social studies. Emphasis is on the "New Social Studies" and on instructional materials drawn from the social sciences. Taken by social science education majors in their junior year.

\section*{HISTORY}

\section*{His 101 Hisiory of Civilization 1 (3)}

The evolution of man's cultural elements and social institutions in the West and the East from earliest times through the Renaissance.

\section*{His 102 History of Civilization II (3)}

Developments in civilizations from 1500 to the present, with emphasis on Western Civilization and its interrelationships with the non-Western world.

\section*{His 111 Western Civilization to 13C0 A.D. (3)}

A study of the civilization of the river valleys of the Ancient Near East, Greece, and Rome, and the Medieval Pattern of Western Civilization. Open only to history majors in liberal arts or with American history or world cultures concentrations in teacher education, or by permission of the chairman.

\section*{His 112 Western Civilization, 1300 -1815 (3)}

The Renaissance, Reformation, Commercial Revolution and Rise of Capitalism, Enlightenment, modern Nation-State, Industrial Revolution, Age of Political Revolutions. A continuation of His 111. Open only to history majors in liberal arts or with American history or world cultures concentrations in teacher education, or by permission of the chairman.

\section*{His 113 Western Civilization, 1815-Present (3)}

A survey of the European World in the nineteenth and twentieth centuries with focus upon such common European movements as industrialism, nationalism, democracy, and socialism. A continuation of His 111 and 112. Open only to history majors in liberal arts or with American history or world cultures concentrations in teacher education, or by permission of the chairman.

\section*{His 211 History of United States I (3)}

A survey of the social, economic, political, and intellectual development of the United States from the beginning of the Colonial period to the end of the Civil War. Required of all history and social sciences majors. Prereq: His 101, 102 or \(111,112,113\).

\section*{His 212 History of United States II (3)}

A survey of the social, economic, political, and intellectual development of the United States from 1865 to the present, with emphasis on the new industrialism and on foreign affairs. Required of all history and social sciences majors. Prereq: His 101, 102 or \(111,112,113\).

\section*{His 218 The Ancient World (3)}

Classical Greece and Rome with consideration of economic, social, intellectual, and political history. Selected writings of the ancients. Prereq: His 101 or 111.

\section*{His 219 Medieval Europe (3)}

Western Europe from the fall of Rome to approximately 1300. Economic, social, political, and intellectual developments in the major kingdoms of the West; the history of the Universal Church. Prereq: His 101 or 111.

His 220 Renaissance and Reformation (3)
Political, economic, social, and cultural forces which emerged during 1300 to 1650 in Europe. The evolution of modern states and the rise of the middle class. Prereq: His 101 or 102 or 112.

\section*{His 313 History of Pennsylvania (3)}

The founding and development of Pennsylvania from its Colonial beginnings to the present time, with emphasis on the relation of the past to the present. Prereq: His 211, 212.

His 314 Diplomatic History of the United States (3)
A survey of the theory and practice of American diplomacy from Colonial times to the present. The major segment covers 1900 to the present. Prereq: His 211, 212.

\section*{His 315 Economic History of the United States (3)}

The economic development of the American nation as it evolved from a frontier, agricultural country into an urban industrial power. Prereq: His 211, 212.

His 316 History of the American Frontier (3)
The westward movement and expansion from Colonial times to the end of the nineteenth century. The frontier forces which shaped American democratic institutions and ideals. Prereq: His 211, 212.

\section*{His 317 History of American Science and Technology (3)}

The importance of science, invention, and technology in the rise of the American nation from 1607 to the present. The transition from domestic manufacture to the machine age. Prereq: His 211, 212.

\section*{His 318 Constitutional History of the United States (3)}

The development of the Constitution of the United States from the Philadelphia Convention to the present with emphasis on major Supreme Court decisions. Prereq: His 211, 212.

\section*{His 319 Social and Cultural History of the United States (3)}

The evolution of American society from the eighteenth through the twentieth centuries. Emphasis on the impact of improving material conditions upon labor, the arts, education, religion, social mores, and family life. The changing status of minority groups, including women, the Negro, and the immigrant. Prereq: His 211, 212.

\section*{His 320 History of the South (3)}

The social, economic, political, and intellectual forces that have made the American South. Prereq: His 211, 212.

\section*{His 322 History of South Asia (3)}

Primarily designed as a historical study of developments on the Indian sub-continent (India and Pakistan), the course also considers those areas of Southeast Asia (Burma and Thailand) which have been traditionally influenced by the course of Indian events. Prereq: His 101, 102 or 114.

His 323 History of the Middle East (3)
Recent history of the major Middle Eastern countries. Geographical, cultural, economic, and religious factors which have influenced the history of the area. Special attention to Middle East problems which affect international relations. Prereq: His 101, 102 or 113.

\section*{His 325 History of the Twentieth Century World (3)}

A survey of the political, economic, social and intellectual developments in the world since 1919. Special attention given to the period between the World Wars; the failure of appeasement; and the eclipse of imperialism. Prereq: His 102 or 113.

\section*{His 326 History of Africa to 1800 \\ (3)}

A survey of the traditional culture and of the historical development of the African continent prior to the 19th century. Emphasis is upon the length and diversity of Africa's history prior to European colonization. Prereq: His 101, 102 or 111, 112.

\section*{His 328 History of Subsaharan Africa since 1800}

A survey of Black Africa's development in the nineteenth and twentieth centuries. Emphasis is upon Africa's colonial experience as the background for the emergence of independent Africa. Prereq: His 102 or 113.

\section*{His 329 History of East Asia (3)}

Survey of the historical and cultural background of China, Japan, and Korea. Emphasis is given to the significance of the modern period of East Asia and its impact on world affairs. Prereq: His 101, 102 or 114.

\section*{His 331 History of England to 1688 (3)}

The development of political, constitutional, economic, religious and social institutions in England from Roman times to the Glorious Revolution. Prereq: His 101 or 111 or 112.

His 332 History of England Since 1688 (3)
England as a world leader during the Commercial and Industrial Revolutions, the evolution of the democratic process, and the emergence of liberalism followed by the democratic welfare state. Prereq: His 102 or 112 or 113.

His 333 History of Latin America to 1825 (3)
The development of Latin America during its colonial times and wars of independence. Prereq: His 102 or 112 or 211. Fall.

His 334 History of Latin America Since 1825 (3)
The national period in the Latin American world. Prereq: His 102 or 113 or 212.
His 339 History of the Afro-American
Study of the Afro-American: origins, the period of slavery, the industrialization of the South, the migration to northern industrial urban centers, the civil rights movement, and the evolution of "Black Power." Prereq: His 211, 212.

\section*{His 340 Modern Germany (3)}

Germany in the nineteenth and twentieth centuries: Napoleonic era, rise of Prussia, nationalism and unification, imperialism and World War I, National Socialism, World War II, and Divided Germany. Prereq: His 102 or 113.

His 350 Russian History to 1917 (3)
Survey of Russian history from ninth-century Kiev to the end of the Imperial period. Major emphasis is on the continuing religious, economic, social, and political tradition peculiar to the Russian State. Prereq: His 102 or 112.

\section*{His 351 Soviet Russia (3)}

Political, economic, social, and cultural aspects of Soviet society in the light of traditional Russian patterns and the goals of Communism. Prereq: His 102 or 113.

His 360 Diplomatic History of Europe Since 1815 (3)
A study of the theories and practices of power politics in Europe; age of Metternich; revolutions of 1848 ; unifications of Germany and Italy; era of Bismarck, formation
of alliances and counter-alliances; diplomacy of colonial imperialism; first World War and Versailles peace settlements; emergence of totalitarian ideologies; World War II; and post-war Europe. Prereq: His 102 or 113.

His 400 Senior Seminar in History
Research in history. Methodology, bibliography, and presentation, both written and oral. The research paper for the seminar must be acceptable as a required departmental Senior Research Paper. Required of all history majors.

His 410 Independent Studies in History (1 to 3)
Special research projects, reports, readings in history. Open to seniors and Honors Program students only. Prereq: permission of chairman.

HUMANITIES See Department of English
ITALIAN See Department of Foreign Languages
LATIN See Department of Foreign Languages
MANAGEMENT See Department of Business and Economics

\section*{DEPARTMENT OF MATHEMATICS}

\author{
Richard G. Branton, Chairman
}

\section*{Mat 101 Introduction to College Mathematics I (3)}

An introduction to the nature and spirit of mathematics and its cultural significance. Includes topics in number theory, set theory, and geometry.

\section*{Mat 102 Introduction to College Mathematics II (3)}

Selected topics, chosen on the basis of student background and interest. Prereq: Mat 101.

\section*{Mat 105 College Algebra and Trigonometry (3)}

A unified course in algebra and trigonometry. Absolute value, inequalities, functions, equations, and identities. Prereq: 3 years of high school mathematics.

\section*{Mat 106 Foundations of Mathematics (3)}

Fundamental concepts. Set theory, structure of number systems, mathetical induction, permutations, combinations, probability, and theory of equations.

\section*{Mat 107 Mathematics for the Management Sciences 1 (3)}

Sets, relations, functions, and model building with business applications. Solution of linear equations in variables. Vectors, matrices, and introduction to linear programming including the simplex method.

\section*{Mat 108 Mathematics for the Management Sciences II}

Conic sections, exponential and logarithmic functions, and geometric series with business applications. Limits, continuity, and elements of differential and integral calculus.

\section*{Mat 121 Statistics (3)}

Basic concepts of statistics. Frequency distributions, measures of central tendency and variability, correlation, probability and theoretical distributions, significance of differences, and hypothesis testing. For non-mathematics majors. Prereq: 2 years of high school mathematics.

\section*{Mat 141 Calculus 1 (3)}

An introduction to the calculus. Properties of real numbers, limits, continuity, differentiation, the integral of a continuous function, and exponential and logarithmic functions. Prereq: Mat 105 or 4 years of high school mathematics.

\section*{Mat 142 Calculus II (3)}

A continuation of Mat 141. Trigonometric functions, analytic geometry, and integration techniques and applications. Prereq: Mat 141.

\section*{Mat 211 Linear Algebra (3)}

An introduction to linear algebra. Matrices and determinants, systems of linear equations, vectors, and linear transformations. Prereq or concurrent: Mat 142.

\section*{Mat 231 Concepts of Euclidean Geometry (3)}

Geometric foundations from an advanced viewpoint. Absolute geometry, parallelism, metric functions, coordinates, constructions and construction criteria, and axiom sets.

\section*{Mat 24I Calculus III (3)}

A continuation of Mat 142. Applications, sequences and series, improper integrals, and certain supplementary topics. Prereq: Mat 142.

\section*{Mat 242 Calculus IV (3)}

An introduction to the calculus of several variables. Partial differentiation, multiple integration, implicit function theorems, and selected topics. Prereq: Mat 241.

\section*{244/Mathematics}

\section*{Mat 311 Algebra for Elementary Teachers (3)}

Among topics studied are properties of real numbers, equations and inequalities, systems of equations, modular arithmetic, complex numbers, and algebraic structures.
Prereq: Mat 101 or consent of instructor.

\section*{Mat 321 Combinatorics and Graph Theory (3)}

Introduction to set theory, graph theory, and combinatorial analysis. Includes set algebra, order relations, cardinality, directed graphs, elementary combinatorics, principles of inclusion and exclusion, recurrence relations, zero-one matrices, partitions, and Polya's Theorem. Prereq: CSc 101, Mat 211, 242.

\section*{Mat 331 Geometry for Elementary Teachers (3)}

Modern informal approach to two- and three-dimensional geometric figures, measurement, similarity, congruence, coordinate geometry, and the postulational method. Prereq: Mat 101 or consent of instructor.

\section*{Mat 343 Differential Equations (3)}

The theory, solution, and application of ordinary differential equations. First order equations and linear nth order equations. Applications are taken from physics, chemistry, economics, and operations research. Prereq or concurrent: Mat 242.

\section*{Mat 350 Teaching Mathematics in Secondary Schools (3)}

Modern techniques; aims of mathematics instruction, motivation, methods of instruction, and evaluation in mathematics. The new mathematics and modern courses of study. Opportunities are provided for students to plan and present lessons in mathematics and to observe mathematics classes in secondary schools. Prereq: Mat 241.

\section*{Mat 351 Teaching Mathematics in Elementary Schools (3)}

Concepts, learning aids, syllabi, texts, and methods in elementary school mathematics. Prereq: Mat 101.

\section*{Mat 401 History of Mathematics (3)}

Development of mathematics from the Babylonian era to the eighteenth century. Some modern topics are also included. Prereq: Mat 241.

\section*{Mat 405 Special Topics in Mathematics (3)}

Content variable; announced at the time of offering.

\section*{Mat 4II Modern Algebra I (3)}

Abstract algebra. The axiomatic approach to algebraic systems; relations, mappings, groups, rings, integral domains, and fields. Prereq: Mat 241.

\section*{Mat 412 Modern Algebra II (3)}

A continuation of Mat 411. Cosets, normal subgroups, subrings, and polynomials. Prereq: Mat 411.

\section*{Mat 414 Theory of Numbers (3)}

Properties of the integers; primes, factorization, congruences, and quadratic reciprocity. Prereq: Mat 242.

\section*{Mat 42I Mathematical Statistics I (3)}

Primarily a course in probability theory. Representative topics are discrete and continuous random variables, probability distributions, moment generating functions, and an introduction to statistical sampling theory. Prereq: Mat 242.

\section*{Mat 422 Mathematical Statistics II \\ (3)}

A continuation of Mat 421. Statistical sampling theory, point and interval estimation, tests of hypotheses, regression, and correlation. Prereq: Mat 421.

\section*{Mat 425 Numerical Analysis (3)}

Numerical methods for the approximate solution of applied problems. Interpolation theory, curve fitting, approximate integration, and the numerical solution of differential equations. Prereq: CSc 101, Mat 211, 242.

\section*{Mat 427 Introduction to Optimization Techniques (3)}

The nature of optimization problems: deterministic and stochastic, discrete and continuous. Computer methods of solution: systematic and random search, linear programming, quadratic programming, dynamic programming, and others. Prereq: Mat 425.

\section*{Mat 431 Topics in Geometry}

Introducton to various branches of geometry. Includes affine, projective, and finite geometries and geometry from a linear algebraic viewpoint. Prereq: Mat 211.

\section*{Mat 432 Topology (3)}

Elements of point set topology. Separation axioms, connectedness, compactness, and metrizability. Prereq: Mat 242.

\section*{Mat 433 Differential Geometry (3)}

Classical differential geometry from a modern viewpoint. Included for study are curves and surfaces, shape operators, and an introduction to Riemannian geometry. Prereq: Mat 211, 242.

\section*{Mat 441 Advanced Calculus 1}

Foundations of real analysis. Rigorous treatment of limits, sequences, continuity, the theory of integration, and infinite series. Prereq: Mat 242.

\section*{Mat 442 Advanced Calculus II (3)}

A continuation of Mat 441. Infinite series of functions, functions of several variables, partial differentiation, implicit function theorems, transformations, multiple integration, and other topics. Prereq: Mat 441.

\section*{Mat 445 Complex Variables (3)}

Introduction to functions of a complex variable. Analytic functions, mappings, differentiation and integration, power series, and conformal mappings. Prereq: Mat 242.

\section*{Mat 490 Seminar in Mathematics (3)}

Topics in mathematics selected for their significance and student-instructor interest. Independent study and student reports, oral and written. Prereq: Senior Standing and consent of department chairman.

\section*{COMPUTER SCIENCE}

\section*{CSc 101 Introduction to Computers (3)}

Prepares students to use the computer as a tool. Examines the scope of computer applications as well as current limitations. Skill is acquired in the use of a generalpurpose programming language..

\section*{CSe 102 Introduction to Computers-Business (3)}

Students apply the computer to business problems and processes. A course designed primarily for majors in business administration.

\section*{CSc 201 Computer Organization and Programming (3)}

Computer input-output hardware, mass storage units, and internal components. A concentrated study of machine and symbolic language is included. Prereq: CSc 101 or 102.

\section*{CSc 202 Algorithmic Languages and Compilers (3)}

Formal description of algorithmic languages and techniques used in their compilation. Syntax, semantics, ambiguities, procedures, replication, iteration, and recursion in these languages. Prereq: CSc 201.

\section*{CSc 305 Business Dała Processing (3)}

EDP systems design; documentation techniques, packaged programs for linear programming, critical data analysis, business games, and simulation. Provides student with background needed to design, program, document, and implement an EDP system. Prereq: CSc 102.

\section*{CSc 311 Logic and Switching Theory (3)}

Symbolic logic and Boolean algebra for description and analysis of switching circuits; simplification of switching circuits; error detecting and correcting codes; storage elements defined logically; basic sequential circuits, and digital system design principles. Prereq: CSc 202, Phy 101.

\section*{CSc 321 Information Processing (3)}

Study of information representations and relationships between the form of representation and processing techniques. Transformation between storage media. Structure of semi-formal languages and models for representation. Prereq: CSc 202.

\section*{CSc 331 Computational Linguistics (3)}

Study of certain languages and grammar which can be specified in precise mathematical terms. Various types of formal languages are defined and their properties derived. Prereq: CSc 202 or permission of the instructor.

\section*{CSc 350 Computers in Education (3)}

Analysis of the use of computers in educational systems. The course supplies the technical knowledge and skills required for the successful use of the computer as a supportive tool of education in elementary and secondary school classes. Prereq: CSc 101 or 102.

CSc 461 Monte Carlo Methods and Simulation - (3)
Computer simulation utilizing logical, numerical, and Monte Carlo modeling to represent systems. Use of special languages to simulate actual systems. Prereq: Mat 421, CSc 101.

\title{
SCHOOL OF MUSIC
}

Lloyd C. Mitchell, Dean
Alexander Antonowich, Associate Dean
Charles A. Sprenkle, Associate Dean for Graduate Studies and Research

\section*{DEPARTMENT OF THEORY AND COMPOSITION}

Wright, Chairman; Beatty, Gangemi, McClellan, Munger, Sullivan, Wilkinson, and Staff.

\section*{Mus III Foundations of Music I (3)}

Fundamentals of music theory for non-music majors. An integrated course developing basic skills in ear training, sight singing, keyboard harmony, and music writing.

\section*{Mus 112 Theory of Music I (3)}

Fundamentals of music theory. Music writing, keyboard harmony, and the elements of form in music. The fundamental triads in root position and inversions.

Mus 113 Theory of Music II (3)
Continuation of Mus 112. Harmonization of melodies using diatonic triads; composition in the smaller forms. The rondo and sonata form. Prereq: Mus 112.

\section*{Mus 114 Aural Activities I (2)}

Development of basic hearing skills, chiefly through sight singing and dictation activities based upon the subject matter of Mus 112. Scheduled concurrently with Mus 112 or with Mus 112 as a prerequisite.

Mus 115 Aural Activities II (2)
Continued development of basic hearing skills. Scheduled concurrently with Mus 113 or with Mus 113 as a prerequisite.

Mus 211 Foundations of Music II (3)
For non-music majors. Continuation of the basic skills developed in Mus 111.
Mus 212 Theory of Music III (3)
Modulation and diatonic seventh chords. Variation form and fugue. Prereq: Mus 113.

\section*{Mus 213 Theory of Music IV (3)}

Altered triads and seventh chords; chords of the ninth, eleventh, and thirteenth. Foreign modulation. The concerto form. Prereq: Mus 212.

\section*{Mus 214 Aural Activities III (2)}

Material of advanced difficulty involving chromatic alteration, foreign modulation, and intricate rhythms. Scheduled concurrently with Mus 212 or with Mus 212 as a prerequisite.

\section*{Mus 215 Aural Activities IV}

Continuation of Mus 214 and activities involving non-tonal music. Scheduled concurrently with Mus 213 or with Mus 213 as a prerequisite.

\section*{Mus 312 Counterpoint 1}
(2)

The contrapuntal techniques of tonal music. Chorale prelude and invention. Prereq: Mus 212.

\section*{Mus 313 Counterpoint II}

Advanced contrapuntal forms including canon and fugue. Prereq: Mus 312.

\section*{Mus 314 Musical Form (2)}

The standard forms of tonal music based on the treatises of Goetschius and Salzer. Prereq: Mus 212.

\section*{Mus 315 Orchestration (2)}

The orchestra; use of instruments individually and in combination. Prereq: Mus 212.
Mus 318 Techniques of Twentieth Century Composition (2)
A study of the technical aspects of contemporary music. Writing "in the style of," etc. Prereq: Mus 212.

\section*{Mus 412 Composition 1 (2)}

Creative writing in the forms, styles, and media best suited to the capabilities and needs of the student. Prereq: Mus 212.

\section*{Mus 413 Composition II}

Further application of Mus 412, stressing contemporary techniques. Prereq: Mus 412.

\section*{Mus 414 Musical Acoustics (3)}

The study of sound: its production, transmission, and reception. Musical instruments, the acoustics of rooms, and the physical basis of scales.

\title{
DEPARTMENT OF MUSIC HISTORY AND LITERATURE
}

Thomson, Chairman; Cohen, Pflieger, Schick, Schmidt, Wells, and Staff.

\section*{Mus 121 Fine Arts [Music] (3)}

An introductory course in the history and appreciation of music from the Middle Ages through the Contemporary Period. Not open to music majors or elementary education students with an Area of Interest in music. Usually taken to meet the music requirement in General Requirements. Students may substitute Mus 122 or 123; those who have sufficient musical background may, under advisement, substitute Mus 221 or 222.

\section*{Mus 122 Music History I (3)}

The history and appreciation of music from the earliest times through the Baroque Period. Musical forms, aesthetic concepts, and practices. Analysis and listening experience. A course intended primarily for students in arts and letters. Students with sufficient musical background may, under advisement, substitute Mus 221.

Mus 123 Music History II (3)
The history and appreciation of music from the Classical through the Contemporary Period. Continuation of Mus 122. Students with sufficient musical background may, under advisement, substitute Mus 222.

\section*{Mus 221 Music in Western Civilization I (3)}

A history of music from earliest known times through the Baroque Period-to 1750. Analysis of styles, forms, aesthetic concepts, and practices.

Mus 222 Music in Western Civilization II (3)
A history of music from the Classical through Contemporary Period. Analysis of styles, forms, aesthetic concepts, and practices.

\section*{Mus 224 Keyboard Literature I (2)}

A survey of literature for keyboard instruments from the Baroque Period through the late Classical Period. The various styles in solo and ensemble literature are illustrated by recordings and performance by keyboard majors.

Mus 225 Keyboard Literature II (2)
A continuation of Mus 224. Performance by keyboard majors and recordings. Literature from the Romantic through the Contemporary Period is studied.

\section*{Mus 226 Art Song \\ (2)}

Origins and development of the art song.
Mus 320 Contemporary Styles
Trends in modern music from about 1900 to the present. Analysis and listening experience. Designed for non-music majors. Prereq: Mus 121.

\section*{Mus 322 American Music \\ (2)}

A cursory examination of music from the Puritan Era to 1880. Analysis of art music from MacDowell to the contemporary scene. Aimed toward developing keener aural perception of the creative process, both for the musician and the layman.

\section*{Mus 323 Aesthetics and Music Criticism (2)}

The nature of aesthetic experience and various problems in the philosophy of art. Principles of criticism related to music and its performance.

Mus 324 String Literature 1 (2)
A survey of literature for string instruments from the pre-Baroque through the Classical Period. Study of style, form, and analysis; performance. Students, performing on their major instruments, and pertinent recordings provide ilustrative literature.

\section*{Mus 325 String Literature II (2)}

A continuation of Mus 324, pursuing the same format and considering literature of the Romantic and Contemporary Periods.

Mus 326 Woodwind Literature I
A survey of literature for flute, oboe, clarinet, and bassoon from the Baroque and Classical Periods. Recordings and performance by woodwind majors.

Mus 327 Woodwind Literature II (2)
A continuation of Mus 326. The Romantic and Contemporary Periods are studied.

\section*{Mus 328 Brass Literature I (2)}

The nature and development of brass instruments, observed in the solo, ensemble, and orchestral literature of the sixteenth, seventeenth, and eighteenth centuries.

Mus 329 Brass Literature II (2)
A continuation of Mus 328 , beginning with the introduction of pistons and valves in the nineteenth century and proceeding through the twentieth century to the present.

\section*{Mus 342 Baroque Music (2)}

Styles and forms of Baroque repertoire; contributions of the major Baroque composers; role of music and musicians in the society of the Period.

\section*{Mus 343 Late Eighteenth Century Music (2)}

Changing styles and forms in: the sons of J. S. Bach; the Viennese pre-classicists; the Mannheim School; opera; Joseph and Michael Haydn, Mozart, and their contemporaries; the early works of Beethoven.

\section*{Mus 421 Literature of the Musical Theater (2)}

The literature of the musical theater from Singspiel to Broadway Musical. Changes in style are observed and analyzed.

\section*{Mus 422 Musico-Dramatic Production I}(2)

A study of the .arts and crafts required in a musical production: coaching, set designing and construction, stage movement, choreography, and costuming.

Mus 423 Musico-Dramatic Production II (2)
A continuation of Mus 422 with emphasis on student direction.
Mus 424 Development of the Opera (2)
A basic course in the origin and development of the opera and its dissemination throughout the Western World.

Mus 425 Literature of Orchestral Music (2)
A study of representative orchestral works: symphonies, concerti, suites, overtures, and others, from the Baroque Period to the present. Appreciation and analysis.

Mus 426 Choral Repertoire (2)
The development and performance style of the choral repertoire.
Mus 428 Chamber Music Literature (2)
Analysis of style and form of chamber music repertoire from the Baroque through Modern Period. Emphasis on appreciation as well as structure.

\title{
DEPARTMENT OF MUSIC EDUCATION
}

Carey, Chairman; Collins, Merrell, Miller, Northeimer, Singleton, Stouffer, and Staff.

\section*{Mus 030 Fundamentałs of Music (no credit)}

For elementary education students who do not meet minimum requirements on a Music Fundamentals test. For these students the course is a prerequisite for Mus 231 and Mus 232. Intervals, scales, key signatures, and other fundamentals of musical notation are stressed.

\section*{Mus 231 Music for the Primary Grades (3)}

Designed to equip the graduate to participate, under supervision, in the music program in the primary grades. Emphasis on basic keyboard skills, voice production, elements of music, and teaching procedures and materials. Prereq: passing grade on a music fundamentals test.

\section*{Mus 232 Music for the Intermediate Grades (3)}

Designed to equip graduates to participate, under supervision, in the music program in the intermediate grades. Emphasis on basic keyboard skills, voice production, elements of music, and teaching procedures and materials. Prereq: passing grade on a music fundamentals test.

\section*{Mus 331 The Music Curriculum, K-I2: Methods-Materials (4)}

The study of music and the learning process: the music continuum; the listening program; intercultural music; programs and performances; basics of administration; related arts; the high school music major; evaluative techniques. Depth of study of specific aspects of the music program is altered to the needs of the student's teaching concentration.

\section*{Mus 332 Elementary Music Methods (3)}

For elementary education majors with an Area of Interest in music. Human growth and musical development of children in the elementary grades. Emphasis on selection and analysis of materials, effective teaching procedures, and evaluative techniques.

\section*{Mus 333 Instrumental Methods \\ (2)}

Fundamentals underlying the development of instrumental programs in the public schools. Emphasis upon program organization and administration, teaching procedures, and materials.

Note that Mus 331 and Mus 333 are scheduled concurrently, normally in the junior year, in order to permit regular and ample opportunity for observation in area public schools.

\title{
Mus 334 Teaching Music Appreciation in the Elementary Grades
}

Designed to enrich the music program throughout the grades, with emphasis on listening experiences. Effective materials and procedures as well as unit organization.

\section*{Mus 335 Choral Materials and Practices (2)}

Designed to acquaint the student with the vast amount of choral music suitable for school use. Program building and rehearsal techniques are demonstrated.

\section*{Mus 336 Piano Methods [Class] (2)}

For piano teachers and supervisors in the organization and teaching of piano classes in the public schools. Suitable teaching materials are examined and discussed. Demonstrations and student teaching.

\section*{Mus 337 Instrumental Techniques and Materials (2)}

For juniors and seniors who desire to specialize in instrumental music. Considers rehearsal procedures, effective materials, minor repairs of instruments, competitions and festivals, and marching band procedures. Prereq: Mus 333.

Mus 431 Student Teaching, Practicum, and Direction of Student Activities (12)
Observation and participation in teaching vocal and instrumental music in situations ranging from the primary grades through senior high school. Undertaken in conjunction with qualified cooperating teachers. Professional conferences and visitations are an integral part of the experience.

\section*{DEPARTMENT OF KEYBOARD MUSIC}

Whitten, Chairman; Bedford, Carl, Farese, Fletcher, Gottlieb, Hales, Hays, Pennington, Pethes, Veleta, Voois, Weiss, and Staff.

\section*{NUMBERING SYSTEM}

Private and class lessons given by the Department of Keyboard Music are shown by the following numbers, together with the appropriate prefix:
Pia - Piano Org - Organ
\begin{tabular}{ll} 
105-106 & Private instruction in minor performance area, \\
Elementary Education students with Area of \\
Interest in music
\end{tabular}
\begin{tabular}{ll} 
107-109 & Private instruction in major performance area, \\
Elementary Education students with Area of \\
Interest in music
\end{tabular}
111-412 Private instruction in major performance area, Music Education program ..... 1
121-422 Private instruction for Music Education students with Advanced Standing ..... 1
131-432 Private instruction in major performance area, B.A. program ..... 1 or 2
141-442 Private instruction in major performance area, B.Mus. program ..... 2
Mas 311-314 Master Class [Keyboard] (I)

For keyboard majors. Experience in performing memorized literature. Class members also play two-piano compositions and ensemble music for piano and other instruments. Keyboard trios, quartets, and quintets are analyzed and performed.

\section*{Mus 338 Piano Pedagogy (2)}

Designed as preparation for studio teaching. Emphasis is on materials and varied approaches for the early stages of instruction.

\section*{Pia 400 Piano Class [Elementary Teachers] (3)}

Piano accompaniments for classroom music activities; teaching of practical classroom materials.

\title{
DEPARTMENT OF VOCAL AND CHORAL MUSIC
}

\author{
Sweet, Chairman; Alt, Cheesman, Conaway, Frenz, Friday, Kreuger,
} Markow, Sheppard, Vandever, Wagner, Williams, and Staff.

\section*{NUMBERING SYSTEM}

Private and class lessons given by the Department of Vocal and Choral Music are shown by the following numbers, together with this prefix:

> Voi - Voice

Course Number
Semester Hours
001-002 Class instruction in minor performance area \(1 / 2\)
101-402 Private instruction in minor performance area 1
\(\begin{array}{ll}\text { 105-106 } & \text { Private instruction in minor performance area, } \\ \text { Elementary Education students with Area of } \\ \text { Interest in music }\end{array}\)
107-109 \(\begin{aligned} & \text { Private instruction in major performance area, } \\ & \text { Elementary Education students with Area of } \\ & \text { Interest in music }\end{aligned}\) 1
111-412 Private instruction in major performance area,
Music Education program
121-422 Private instruction for Music Education students
with Advanced Standing
131-432 Private instruction in major performance area, 1 or 2
B.A. program
141-442 Private instruction in major performance area,
B.Mus. program

\section*{MxC 111-412 Mixed Chorus ( \(\frac{1}{2}\) )}

Designed to acquaint the student with choral literature for Mixed Chorus, Women's Chorus, and Men's Chorus. Program performance included.

\section*{MCh |II-I|2 Madrigal Choir ( \(\frac{1}{2}\) )}

Performance of music of the Renaissance and Baroque Periods. The performing choir is selected by audition.

\section*{OpC III-1|2 Opera Chorus \(\left(\frac{1}{2}\right)\)}

An elective course devoted to the training of a choral group which participates in opera or operetta productions. May not be used to satisfy choral credits. Membership by audition.

\section*{Cho 311-412 Choir ( \(\frac{1}{2}\) )}

Designed to give the student a wide association with the choral literature for mixed chorus. Music of high-school level as well as more difficult literature.

\section*{CCh 121-422 Concert Choir ( \(\frac{1}{2}\) )}

Devoted to acquiring a fine technique in choral singing through the preparation of programs for performance. Membership by audition.

\section*{WGC III-4I2 Women's Glee Club \(\left(\frac{1}{2}\right)\)}

An opportunity for non-music students to learn the choral literature for Women's Chorus. Membership by audition.

\section*{CCo 211 Choral Conducting I (2)}

A practical application of conducting and vocal techniques in choral direction through practice in conducting a choral group.

\section*{CCo 212 Choral Conducting II (2)}

Continued development of conducting techniques with stress on conducting of polyphonic choral music and on the musical styles of the various choral periods. Prereq: CCo 211.

Mas 32I-324 Master Class [Voice] (I)
Standard repertoire for various types of voices is performed and discussed.

\section*{DEPARTMENT OF INSTRUMENTAL MUSIC}

Carson, Chairman; Barrow, Boerlin, Breuninger, Goebel, Guidetti, Johns, Klein, Laudermilch, Roper, Smith, Southall, Swartley, and Staff.

\section*{NUMBERING SYSTEM}

Private and class lessons given by the Department of Instrumental Music are shown by the following numbers, together with the appropriate prefix:
\begin{tabular}{lll} 
Vln - Violin & Flu - Flute & FrH - French Horn \\
Vla - Viola & Obo - Oboe & Tpt - Trumpet \\
Vcl - Cello & EnH - English Horn & Trb - Trombone \\
Bas - Bass & Clt - Clarinet & Bar - Baritone \\
& Bsn - Bassoon & Tba - Tuba \\
& Hrp - Harp & Per - Percussion
\end{tabular}

Course Number
Semester Hours
001-002 Class instruction in minor performance area
(Except Vln 001-002: 1 credit each)
101-402 Private instruction in minor performance area 1
\(\begin{array}{ll}\text { 105-106 } & \text { Private instruction in minor performance area, } \\ & \text { Elementary Education students with Area of } \\ \text { Interest in music }\end{array}\)
\(\begin{array}{ll}\text { 107-109 } & \text { Private instruction in major performance area, } \\ \text { Elementary Education students with Area of } \\ \text { Interest in music }\end{array}\)
\(\begin{array}{ll}111-412 & \text { Private instruction in major performance area, } \\ \text { Music Education program }\end{array}\)
\(\begin{array}{ll}\text { 121-422 } & \begin{array}{l}\text { Private instruction for Music Education students } \\ \text { with Advanced Standing }\end{array}\end{array}\)
131-432 Private instruction in major performance area,
B.A. program
141-442 Private instruction in major performance area,
B.Mus. program

SEn |l|-4|2 String Ensemble ( \(\frac{1}{2}\) )
Principles of ensemble playing through the performance of various types of chamber music.

\section*{WEn III-4I2 Woodwind Ensemble ( \(\left(\frac{1}{2}\right)\)}

Principles of ensemble playing through the performance of various types of chamber music.

\section*{BEn III-4I2 Brass Ensemble ( \(\frac{1}{2}\) )}

Principles of ensemble playing through the performance of various types of chamber music.

\section*{Per 1II-4I2 Percussion Ensemble ( \(\frac{1}{2}\) )}

Principles of ensemble playing through the performance of compositions limited to instruments of the percussion family.

\section*{EIO |||-412 Elementary Orchestra ( \(\frac{1}{2}\) )}

Music for the beginning orchestra through performance. Emphasis on beginners' problems, organization, and techniques of string performance.

\section*{SyO 111-412 Symphony Orchestra \(\left(\frac{1}{2}\right)\)}

Emphasis on performance of a wide variety of orchestral literature for concerts, accompanying student soloists, opera, and oratorio.

\section*{EIB 111-4I2 Elementary Band ( \(\frac{1}{2}\) )}

Music for the beginning band through performance. Emphasis on beginners' problems, organization, and techniques of wind and percussion playing.

\section*{CMB ||l-4|2 Concert and Marching Band ( \(\frac{1}{2}\) )}

Performance of the band literature suitable for junior high and senior high levels. Program building, balance, and rehearsal techniques are stressed. Members participate in Marching Band activities.

\section*{SMB 111-412 Symphonic and Marching Band ( \(\frac{1}{2}\) )}

The Symphonic Band emphasizes performance of a variety of band literature: standard repertoire, recently published compositions, and selections from festival lists. The Marching Band performs precision and theme drills at football games and plays for community and college functions.

\section*{Win 1||-4|2 Wind Ensemble ( \(\frac{1}{2}\) )}

A band of 50 or 60 members composed of outstanding campus wind instrumentalists and percussionists. The ensemble performs difficult music selected mainly from contemporary works.

\section*{260/Nursing}

\section*{ICo 31I Instrumental Conducting I (2)}

Development of conducting skills and techniques, score reading, and terminology. Works from the late eighteenth century are studied and conducted. Prereq: CCo 211.

IC. 312 Instrumental Conducting II (2)
Continued development of conducting skills and score reading of more advanced music literature. Works from the Romantic and Contemporary Periods are studied and conducted. Prereq: ICo 311.

\section*{Mas 331-334 Master Class [Strings] (I)}

Standard repertoire for combinations of string instruments, including trios, quartets, quintets, and other groups involving piano, organ, and other instruments.

\section*{Mas 341-344 Master Class [Woodwinds] (I)}

Repertoire from the Baroque Period to the present, performed by ensembles of woodwind instruments. Solos are performed and discussed.

\section*{Mas 351-354 Master Class [Brasses] (I)}

Repertoire for brass solo, homogeneous ensemble, and mixed ensemble is performed and discussed.

Mas 361-364 Master Class [Percussion] (1)
Repertoire for solo and ensemble music for percussion is performed and discussed.

\section*{DEPARTMENT OF NURSING}

Doris R. Schoel, Chairman

PSN 300 Public School Nursing (2)
Introductory principles of school nursing as a related specialty of public health nursing.

\section*{PSN 302 Public Health Nursing I (3)}

A survey of public health work in Europe, England, and America. Social changes in public health nursing, medicine, population trends, sanitation, housing engineering and other contemporary public health problems.

A survey of the fundamental principles, past and present. Patterns, definitions, and processes of public health nursing practice as it relates to generalized public health nursing and the school nurse. Prereq: PSN 302.

\section*{PSN 304 Foundations of Nutrition (3)}

Principles of normal nutrition for the family, schools, and other community agencies. The nurse's role as a nutritional resource person in the family, school, and community.

\section*{PSN 306 Prevention and Control of Communicable Diseases (3)}

An epidemiological approach to the prevention and control of communicable diseases. Communicable disease problems of our society.

PSN 320 Problems in School Nursing (3)
Special physical, emotional, and social health problems of children which affect the school, home, and community. Principles, methods, and materials in health education which help the nurse to function more effectively as a health teacher with families and.as a health resource person on the school health team.

\section*{PSN 370 Mental Hygiene (3)}

The psychology of mental hygiene including the dynamics of personality adjustment as they relate to the normal individual. Special mental health problems of the child, school, family, and community.

\section*{DEPARTMENT OF PHILOSOPHY}

\section*{George S. Claghorn, Chairman}

Phi 280 Introduction to Philosophy
An introduction to the chief problems and methods of philosophic thought, with a survey of some typical solutions. The place and influence of philosophy in the life of man today.

\section*{Phi 360 (Also Lin 360) Philosophy of Language (3)}

Questions of meaning in communication. Special emphasis on contemporary discussions of theories of natural language.

\section*{Phi 374 Aesthetics (3)}

Interpretation of beauty and art. Effects of motivation; problems in media and goals. A background of meaning for the evaluation of specific works of painting, sculpture, music, and architecture.

\section*{Phi 380 Ethics (3)}

Great ethical systems of history, and their application to personal and social life. The right and the good, the nature of values, and critical ethical dilemmas.

Phi 461 Indian Thought (3)
The religious and philosophical heritage of India, from Vedic times to the present. Examination of major classics, such as Rig Veda, Upanishads, Bhagavad-Gita, and Yoga-sutras, with some attention also given to recent writers such as Tagore, Gandhi, and Radhakrishnan.

Phi 462 Chinese and Japanese Thought (3)
An examination of Far Eastern religion and philosophy, emphasizing the Oriental outlook on man, nature, and society. Classics such as Confucian Analects, Tao teh Ching, and I Ching are read and discussed; attention is given to Zen and other schools of Mahayana Buddhism.

\section*{Phi 463 History of Hebrew Thought (3)}

Hebrew concepts of God, man, and the universe. Biblical origins; Philo; the Rabbinic writings; medieval traditions and interpretations; Maimonides, Spinoza, Mendelssohn, and Buber; contemporary problems.

\section*{Phi 464 History of Islamic Thought (3)}

The chief principles of Mohammedanism, seen in their historical development. Major thinkers, reaction and reform, impact on medieval and modern thought in the West; the contemporary outlook and influence of Islam.

\section*{Phi 465 History of Christian Thought (3)}

Christian views of God, man, society, culture, and their inter-relations. Classic controversies, such as faith and reason, culture and faith, determinism and freedom.

Phi 470 History of Philosophy, Ancient (3)
A survey of the major figures of ancient philosophy, from the pre-Socratics through Plato, Aristotle, the Epicureans, and Stoics, to the Skeptics and NeoPlatonists.

\section*{Phi 471 History of Philosophy, Medieval (3)}

The history of philosophy from the early Church fathers to the late Middle Ages. St. Augustine, St. Thomas, mysticism, Jewish and Mohammedan influences, humanism, and the rise of science.

\section*{Phi 472 History of Philosophy, Modern (3)}

From Descartes to Hegel. The social, political, and scientific impact of the philosophers.

\section*{Phi 475 Nineteenth Century Philosophy (3)}

Hegel and German Idealism; decisive influences on European and American literature and thought. Survey of the chief themes of Schopenhauer, Comte, Mill, Spencer, Marx, Kierkegaard, Darwin, and Nietzsche.

\section*{Phi 483 Philosophy of History (3)}

Classic philosophies of history, including those of Augustine, Vico, Hegel, Marx, Spengler, Toynbee, and Collingwood. Definitions of civilization, norms of progress and decadence, determinism and indeterminism, causality, and pattern.

\section*{Phi 484 American Philosophy (3)}

Leaders in science, literature, religion, and government who have shaped American thought. Philosophers of Puritanism, the Revolution, Transcendentalism, and native schools of Realism, Idealism, and Pragmatism.

\section*{Phi 485 Contemporary Philosophy (3)}

Philosophic trends since 1850, including the process philosophy, Pragmatism, Positivism, Existentialism, and the Analytic School.

\section*{Phi 486 Philosophy of Religion (3)}

Religion and the religious experience as viewed by major Western thinkers. The existence of God, immortality, religious knowledge, evil, miracles, and science and religion.

\section*{Phi 487 Philosophy of Science (3)}

The nature of scientific method and scientific theory, with reference to presuppositions, inference, explanation, prediction, applications, and verification.

\section*{Phi 488 Theory of Knowledge (3)}

Theories of truth, perception, and understanding. Classic and contemporary discussions on the nature of the self, in relation to the known world.

Phi 490 Logic (3)
The art of critical thought and of sound reasoning. Formal and classical logic; propaganda; introduction to the scientific method.

\section*{Phi 491 Advanced Logic (3)}

Symbolic logic and its relation to contemporary philosophy and scientific thought. Two-valued sentential and qualificational logic. Many-valued logics, modal logic, and natural deduction. Prereq: Phi 490.

\section*{Phi 498 Seminar in Ancient Philosophy (3)}

Directed study of a topic in ancient philosophy as it relates to vital questions of our time. Required of all philosophy majors. Prereq: 6 hours of philosophy or permission of instructor.

\section*{Phi 499 Seminar in Modern Philosophy (3)}

An intensive study of some major theme of modern philosophy. Required of philosophy majors. Prereq: 6 hours of philosophy or permission of instructor.

\section*{DEPARTMENT OF PHYSICS}

Stanley J. Yarosewick, Chairman

\section*{Phy 100 Introduction to Physics (2)}

Introduction to contemporary physics. Readings and discussion on the development of physical concepts, limitations of physical laws, and influences of physical thought upon other aspects of man's culture.

\section*{Phy 101 Physics I (4)}

An introductory course. Mechanics of solids and fluids; heat; temperature; thermodynamics; the kinetic theory; and wave motion. Two hours lecture, two hours recitation, two hours lab. Prereq: Mat 141.

\section*{Phy 102 Physics II (4)}

An extension of Phy 101. Electricity and magnetism; geometrical and physical optics; and modern physics. Two hours lecture, two hours recitation, two hours lab. Prereq: Phy 101, Mat 142.

\section*{Phy 103 General Physics I (4)}

An introductory course. Mechanics of solids and fluids; wave motion; heat and temperature; thermodynamics; and kinetic theory. Uses algebra and trigonometry but no calculus.

\section*{Phy 104 General Physics II (4)}

An extension of Phy 103. Electricity and magnetism; geometrical and physical optics; and modern physics. Prereq: Phy 103.

Phy 110 Acoustics for Speech and Hearing (3)
Energy of waves, waveforms, resonance, interference, and superposition. Basic amplifier circuits and types of distortion. Includes concepts from mechanics needed to support these topics.

\section*{Phy 201 Intermediate Physics (3)}

Topics from classical mechanics and electricity and magnetism that reflect the mathematical similarities between the two fields. A vector-analytic approach is used. Topics include Newton's laws, gravitation, electrostatics, damped harmonic motion, LRC circuits, and Gauss' law. Prereq: Phy 102 or 104, Mat 241.

\section*{Phy 212 Mechanics (3)}

An intermediate course. Kinematics and dynamics of particles and rigid bodies; work and energy; the conservation principles; harmonic oscillations; and properties of solids and liquids. Vector analysis is introduced as an integral part of the course. Three hours lecture. Prereq: Phy 102, Mat 241.

Phy 233 Introduction to Modern Physics (3)
An intermediate course. Special relativity, quantum effects, atomic structure and spectra, nuclear structure and reactions, molecular and solid state physics. Three hours lecture. Prereq: Phy 102, Mat 142.

Phy 251 Intermediate Physics Laboratory I (I)
A course to familiarize students with laboratory equipment and methods. Normally accompanies Phy 233.

Phy 252 Infermediate Physics Laboratory II (I)
A continuation of Phy 251. Normally accompanies Phy 212.
Phy 4I3 Analytical Dynamics (3)
An advanced undergraduate course. Wave propagation; Lagrange's equations and Hamilton's principle, rigid body motion; and special relativity. Prereq: Phy 212, Mat 343.

Phy 414 Heat and Thermodynamics (3)
Equations of state; first and second laws of thermodynamics; ideal and real gases; entropy; and statistical mechanics. Prereq: Phy 102, Mat 343.

\section*{Phy 4I5 Mathematical Physics I}

Selected topics in mathematics applied to problems in physics: ordinary differential equations, complex variables, hyperbolic functions, vector calculus, and numerical analysis. Prereq: Mat 343 or consent of instructor.

Phy 416 Mathematical Physics II (3)
Selected topics in mathematics applied to problems in physics: matrix algebra, Fourier series and harmonic analysis, eigen values and eigen functions, and partial differential equations.

\section*{Phy 421 Electricity and Magnetism I (3)}

An intermediate course. D.C. circuit analysis, electrostatics of point charges and extended charge distributions, fields in dielectrics, magnetic fields due to steady currents, Ampere's Law, and induced emfs. Three hours lecture. Prereq: Phy 212, Mat 242.

\section*{Phy 422 Optics (3)}

An intermediate course. Theory and laboratory practice in geometrical and physical optics. Reflection and refraction at surfaces, lenses, interference and diffraction, spectroscopy, polarization, and the applications of electromagnetic theory to light. Three hours lecture. Prereq: Phy 421.

\section*{Phy 423 Electronics (4)}

A laboratory course. Electron emission, rectification, voltage and power amplification, oscillators, and test circuits. Vacuum tube and solid state circuits. One hour lecture and six hours lab. Prereq: Phy 102.

\section*{Phy 424 Electricity and Magnetism II (3)}

An extension of Phy 421. Further development of electrostatics, further treatment of dielectric materials, magnetic materials, ferromagnetism, transients, alternating currents, transmission lines, and electromagnetic radiation. Properties of materials and the field approach to electrodynamics. Prereq: Phy 421, Mat 343.

\section*{Phy 432 Introduction to Nuclear Physics (4)}

An advanced undergraduate course. Basic nuclear properties, nuclear structure, alpha and beta decay, gamma radiation, nuclear reactions, particle accelerators, detection equipment, and elementary particles. Three hours lecture and three hours lab. Prereq: Phy 421.

Phy 440 Introduction to Research (1 to 3)
Theoretical and experimental work in the library and laboratories. Specific problems in consultation with the faculty adviser. Prereq: consent of instructor.

\section*{Phy 444 Seminar in Physics (I)}

Oral and written reports on approved topics. Variation in topics from year to year depending on the interests and needs of students. Prereq: Senior Standing.

Phy 451 Advanced Physics Laboratory 1 (I)
A course to familiarize students with contemporary laboratory equipment and methods. Normally accompanies Phy 421.

Phy 452 Advanced Physics Laboratory II (I)
A continuation of Phy 451. Normally accompanies Phy 422.

\section*{SCIENCE}
(Sci 150 and Sci 251 are not intended for physics majors.)

\section*{Sci 150 Basic Physical Science (4)}

Interpretation of selected phenomena and data supporting selected theories. Astronomy, Newton's laws of motion, conservation laws, energy, and structure of matter. Not open to science majors. Three hours lecture and two hours lab.

\section*{Sci 251 Matter and Energy (3)}

Recommended for students in elementary education. Chemical reactions, electricity, and structure of matter. Cannot be used to satisfy requirements for science majors. Prereq: Sci 150.

See also English (under Humanities) for description of Hum 370—Seminar in Science and Human Values.

\section*{DEPARTMENT OF POLITICAL SCIENCE}

\author{
Clifford H. Harding, Chairman
}

\section*{PSc 201 Introduction to Political Science (3)}

Introduction to the study of political phenomena: Society, state and man; political theory; modern governmental systems; international relations; administration; political organizations; and methodology and approaches in the study of politics.

\section*{PSc 231 American Government (3)}

General principles of the American system of government: organization and functions of the national government - legislative, executive, and judicial; the rights and duties of citizenship; the electorate, political parties, civil rights, and the growing regulatory functions of agencies.

PSc 331 State and Local Government
(3)

Organization, theory, functions, and politics of state and local government. The role of state government in a changing federal system: finances, services, civil liberties, economic development. Prereq: PSc 231.
P.Sc 332 Governments and Politics of Western Europe (3)

Primary attention is focused upon France, West Germany, and Great Britain with secondary attention given to other European systems. Consideration of political cultures, popular participation, political parties, and formal institutions of government. Prereq: PSc 231.

\section*{PSc 333 International Politics (3)}

Politics among nations (including politics carried on through international organizations). Power politics, techniques of diplomacy, and methods of current international organizations. Special attention to the interests and policies of the United States. Prereq: His 102 or consent of instructor.

\section*{PSc 334 American Political Parties (3)}

Patterns, functions, and history of the American political party system at national, state, and local levels. Theoretical and empirical studies of political interest groups, public opinion, and voting behavior. Prereq: PSc 231.

\section*{PSc 335 American Political Ideas (3)}

Ideological treatment of major elements of American politics: constitutionalism, federalism, checks and balances, rights under law, equality and liberty, laissez faire, and the welfare state. Prereq: PSc 231.

\section*{PSc 336 Soviet Government and Politics (3)}

Concepts of interest and political power within the framework of Soviet history and ideology. Analysis of Soviet national interest, world revolution, and ultimate goals of Soviet policy. Internal politics as shaped by Lenin, Stalin, Khrushchev, and their successors. Prereq: PSc 231.

\section*{PSc 337 American Foreign Policy (3)}

Theories, goals, and methods of American Foreign Policy in the twentieth century. While the historical development of American Foreign Policy is given attention, emphasis is on current foreign policy problems and goals. Prereq: PSc 231.

PSc 338 Introduction to Political Thought (3)
A survey of great political thinkers of Western Civilization from Plato to the present: Aristotle, Polybius, Cicero, St. Thomas Aquinas, Machiavelli, Hobbes, Locke, Montesquieu, Rousseau, Burke, Mill, and others. Historical background of Western thought; its relevancy to the present. Prereq: PSc 231.

\section*{PSc 339 Elements of Public Administration (3)}

United States public administration, using texts and case studies illustrating organizational theory, administrative law, budgeting, personnel functions, human behavior and motivation, and techniques of organizational rationality. Prereq: PSc 201 or 231.

\section*{PSc 340 American Constitutional Law (3)}

The development of the American Constitutional System as reflected in leading decisions of the United States Supreme Court. Emphasis on national powers, federalism, and the bill of rights. Prereq: PSc 231.

\section*{PSc 341 International Law (3)}

The nature, sources, and subjects of international law. The methods and practices of international legal action. The case method of analysis is employed to gain insight into basic areas of international law. Prereq: PSc 231.

\section*{PSc 342 Public Opinion and Propaganda (3)}

The dynamics of the public opinion process and the role of public opinion in democratic and non-democratic political systems: conformity to public opinion, the "mass mind," the tyranny of the majority, censorship, and the efficacy of public opinion. Prereq: PSc 201 or 231.

\section*{PSc 343 Municipal Government (3)}

Municipal politics, problems, and government. Theory and functions of cities, suburbs, and regional areas. Anthropological, sociological, and psychological study of urban man and politics. Prereq: PSc 331 or consent of instructor.

PSc 351 The Politics of the Non-Western Areas (3)
Emphasis upon the problems of nation-building, political participation, and elitemass relationships in the less developed nations. Latin American, Asian, or African nations may be stressed as a case study. Prereq: PSc 231.

\section*{PSc 352 Civil Liberties and Civil Rights (3)}

A survey of the sources of civil liberties and civil rights in the United States with an inquiry into contemporary problems and their solutions through statutory and constitutional developments. Prereq: PSc 231.

\section*{PSc 400 Senior Seminar in Political Science (3)}

Research in political science. Methodology, bibliography, and presentation, both oral and written. The research paper for the seminar must be acceptable as a required departmental Senior Research Paper. Required of all political science majors.

\section*{PSc 410 Independent Studies in Political Science (1 to 3)}

Special research projects, reports, readings in political science. Open to seniors and Honors Program students only. Prereq: permission of department chairman.

\section*{DEPARTMENT OF PSYCHOLOGY}

\author{
Jay L. Clark, Chairman
}

\section*{Psy 100 Introduction to Psychology (3)}

A comprehensive study of the origins, motives, and modifications of human behavior. The scientific approach in analyzing behavior patterns; the importance of man's biological inheritance, and the significance of social environment in influencing human living. The simpler techniques in psychological experimentation.

\section*{Psy 352 Child and Adolescent Psychology (3)}

Practical understanding of personality development, maturation, and problems of the child and adolescent. The interrelationship of physical, emotional, and social growth within the context of such social institutions as the home, school, and community. Prereq: Psy 100.

\section*{Psy 354 Social Psychology (3)}

The individual in his social setting, including social norms and frames of reference, and the influence of groups and subcultures on personality and social behavior. A comparison and evaluation of research studies in the field of social psychology. Prereq: Psy 100.

\section*{Psy 355 Experimental Psychology (3)}

A laboratory course to introduce planning, performing, and evaluating psychological experiments. Students carry out both original and classical experiments in the main areas of psychology. The experimental literature is reviewed. Two lectures plus a double-period laboratory per week. Prereq: Psy 100.

\section*{Psy 356 The Study of Personality (3)}

Designed primarily to provide insight into the meaning, development, and structure of the normal human personality. A number of approaches are investigated, representative theories examined, and techniques for assessing personality characteristics evaluated. Emphasis is on developing propositions established from various points of view. Prereq: Psy 100.

\section*{Psy 361 Applied Psychology (3)}

Survey of basic psychological principles as applied to industry, engineering, and other professions. Prereq: Psy 100.

\section*{Psy 362 History of Psychology (3)}

History of the development of psychology from the nineteenth century to the present. The emergence of modern experimental psychology. Prereq: Psy 100.

\section*{Psy 363 Psychology of Learning (3)}

Basic principles of learning and conditioning. Critical analysis of learning theories and their application to problems of normal and abnormal behavior. Prereq: Psy 100.

\section*{Psy 364 Physiological Psychology (3)}

Neurological, endrocrinological, and other physiological processes underlying human behavior. Effects of drugs on behavior. Electrode implantation and other techniques for direct study of brain-behavior relationships. Current problems in the physiology of motivation, emotion, learning, memory, and attention processes. Prereq: Psy 100.

\section*{Psy 370 Mental Hygiene (3)}

Analysis of the individual from several standpoints according to the principles of mental hygiene. The application of these principles to the individual's problems of adjustment to the school and society. Field trips. Prereq: Psy 100.

\section*{Psy 375 Abnormal Psychology (3)}

The nature and manifestations of normality and abnormality, mental mechanisms and symptoms, psychoneuroses, psychoses, and the psychopathic personality. Typical cases; functions of both professional and lay people in dealing with abnormality. Prereq: Psy 100 or equivalent.

\section*{Psy 400 Senior Seminar in Psychology (3)}

Research in psychology. Methodology, bibliography, and presentation, both written and oral. The research paper required for the seminar must be acceptable as a required departmental Senior Research Paper. Required of all psychology majors.

\section*{Psy 410 Independent Studies in Psychology (1 to 3)}

Special research projects, reports, readings in psychology. Open to seniors and Honors Program students only. Prereq: permission of department chairman.

\section*{Psy 415 Verbal Behavior (3)}

Methods, materials, and theoretical issues in the study of verbal behavior and verbal learning. Serial, paired-associate, and free-recall learning; assessment of the effects of existing language habits and "higher-order" processes, such as coding behavior, on memory, transfer, and the acquisition of verbal habits. Prereq: Psy 100.

\section*{Psy 420 Statistics for the Behavioral Sciences (3)}

An advanced course covering statistical topics of special interest to the behavioral scientist such as nonparametric tests, chi square, analysis of variance.

\section*{Psy 425 Psychological Testing and Measurement (3)}

Principles of psychological measurement including standardization, scale transformation, reliability, validity, and item-analysis. Emphasis on the use of tests for
the solution of problems in industrial, business, and educational settings. Prereq: Psy 100.

\section*{Psy 430 Human Sexual Behavior (3)}

An intensive study of those variables under which human sexual behavior functions. Research from sociological and medical studies is integrated with psychological knowledge. Prereq: six hours in psychology and Upper Division or Senior Standing.

Psy 470 Psychology of Perception and Cognition (3)
Principles underlying perception, cognition, and cognitive organization, based on current research and theory. Application of these principles to present social problems and various areas of psychology. Prereq: six hours in psychology.

PUBLIC SCHOOL NURSING See Department of Nursing
RUSSIAN See Department of Foreign Languages

SCIENCES For Sci 150 and Sci 251 see Physics. For Sci 250 and Sci 350 see Earth, Space, and General Sciences.

SOCIAL SCIENCE See Department of History

\title{
DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY
}

Glenn W. Samuelson, Chairman

\section*{ANTHROPOLOGY}

\section*{Ant 200 Introduction to Archaeology (3)}

Methods and theories of prehistory. Interpretation of culture through analysis of archaeological remains. Prereq: Ant 231.

\section*{Ant 231 Introduction to Anthropology (3)}

Man's biological and cultural evolution; comparative and functional analysis of culture.

\section*{Ant 305 Historical Archaeology (3)}

Methods and aims of historical research through archaeology. Chester County is emphasized through problems in local research projects. Prereq or concurrent: Ant 200.

Ant 331 Human Evolution (3)
Evolutionary thought, origin, and antiquity of the primates; fossil man, and living races. Prereq: Ant 231. (Some background in biology recommended.)

\section*{Ant 332 Social Organization \\ (3)}

Types of social groups, their structure and function. Kinship-based groupings, bands, villages, and larger units, associations, and secret societies. Forms of organization characteristic of preliterate cultures. Prereq: Ant 231.

\section*{Ant 333 Cultural Dynamics (3)}

An empirical and theoretical study of culture changes. Impact of Western civilization on preliterate cultures. Prereq: Ant 231.

\section*{Ant 334 World Ethnography (3)}

Selective survey of the preliterate cultures of the world, especially those of Oceania, Tropical Africa, and the American Indian. Emphasis on the cultures as they were before the changes wrought by contact with Western civilization. Various levels of societal complexity. Prereq: Ant 231.

\section*{Ant 335 Personality and Culture (3)}

Social and cultural factors in personality formation. Cross-cultural variations in the definitions and handling of deviant behavior. The psychological stresses of acculturation and accelerated cultural change. Prereq: Ant 231.

\section*{Ant 336 Social Anthropology \\ (3)}

Comparative study of the structure, development, and function of human society: social, economic, political, and religious institutions. Prereq: Ant 231.

Ant 400 Senior Seminar in Anthropology(3)

Research in anthropology. Methodology, bibliography, and presentation, both oral and written. The research paper for the seminar must be acceptable as a required departmental Senior Research Paper.

\section*{Ant 410 Independent Studies in Anthropology (1 to 3)}

Special research projects, reports, readings in anthropology. Open to Seniors and Honors Program students only. Prereq: permission of department chairman.

\section*{SOCIOLOGY}

\section*{Soc 200 Introduction to Social Research (3)}

The logic of social research. Fundamentals of research design, data collection and reduction, and non-statistical analysis. Prereq: Soc 231.

\section*{Soc 231 Introduction to Sociology}

A course in the liberal arts tradition, designed to enrich the student's intellectual resources by equipping him with the sociological perspective on human behavior and the basic tools of sociological analysis.

\section*{Soc 332 Contemporary Social Problems (3)}

Theories of the nature of man, society, and culture. The conditions, causes, and possible corrections and prevention of current social disorders: urban unrest, racial tension, poverty, addictions, crime, and delinquency. Prereq: Soc 231.

\section*{Soc 333 The Family (3)}

A comparative, historical, and cross-cultural approach to the family as an institution. Theories and empirical research on mate selection, courtship, marital adjustment, parent-child relationship, and family crisis. Prereq: Soc 231.

\section*{Soc 334 Juvenile Delinquency (3)}

Nature and extent of delinquency; theories of delinquency; evaluation of programs for its prevention and control; role of social agencies and their effect on delinquency. Prereq: Soc 231.

\section*{Soc 335 Racial and Cultural Minorities (3)}

The history of immigration to America; problems of assimilation for minority groups such as American Indians, Mexican Americans, Puerto Ricans, and Negro Americans; the meaning of, responses to, and reduction of prejudice and discrimination. Prereq: Soc 231.

\section*{Soc 336 Urban Sociology (3)}

Historical development of cities; characteristics of urban institutions; urban ecology; demographic patterns; the city's races, nationalities, and social classes; problems of the city and city planning. Prereq: Soc 231.

Soc 337 Sociological Theory
A survey of historical and contemporary theories of society and social behavior. The logic of systematic theory construction, and relationship between theoretical models and empirical research in substantive fields of sociology. Prereq: Soc 231.

\section*{Soc 338 Criminology (3)}

The development of criminology as a discipline. Contemporary theories, empirical research, and the systematic study of the causation and prevention of criminal behavior. Prereq: Soc 231.

\section*{Soc 339 Social Stratification (3)}

A critical survey of major theories of stratification (Plato, Marx, Weber, Parsons, etc.) Analysis of social inequality in contemporary societies. Prereq: Soc 231.

\section*{Soc 341 Social Change (3)}

Measuring and explaining social change. Modernization of traditional societies; sources, dimensions, and consequences of trends in industrial societies; strategies for planning and guiding change. The social sciences as agents of induced change. Prereq: Soc 231.

\section*{Soc 342 Community Analysis and Applied Social Change (3)}

Social and cultural change in modern and emerging nations. The rate, degree, direction, mechanisms, and planning of change are emphasized. Prereq: Soc 231, 341.

\section*{Soc 343 Sociology of Smal! Groups (3)}

Review of literature, with emphasis on experimental findings and models; critical survey of methods, such as group dynamics and group therapy, which are designed to change human behavior through the use of interpersonal or collective experiences. Prereq: Soc 231.

\section*{Soc 344 Sociology of Complex Organizations (3)}

Theory and research of large-scale formal organizations: industrial, governmental, religious, military, political, and educational, with an emphasis on analysis of bureaucracy as the significant form of social organization in the West. Prereq: Soc 231, 336.

\section*{Soc 345 Sociology of Religion (3)}

Theoretical analysis of religion; history and internal structure of religious institutions; their relationships with other institutions. Prereq: Soc 231.

\section*{Soc 400 Senior Seminar in Sociology (3)}

Research in sociology. Methodology, bibliography, and presentation, both oral and written. The research paper for the seminar must be acceptable as a required departmental Senior Research Paper. Required of all sociology majors.

Soc 410 Independent Studies in Sociology ( 1 to 3)
Special research projects, reports, readings in sociology. Open to seniors and Honors Program students only. Prereq: permission of department chairman.

\section*{SOCIAL WELFARE}

SWo 200 Introduction to Social Work (3)
History and theory of social casework, group work, and community organization. Prereq: Soc 231.

\section*{SWo 300 Social Welfare Systems I (3)}

Overview of the social agency as an institutional societal response to defined need. Its origins. Development of its functions in the context of political, social, and economic realities. Prereq: SWo 200.

SWo 301 Social Welfare Systems II (3)
Continuation of SWo 300. A fuller exploration of the history, philosophy, structure, and nature of social-work programs within the fields of corrections, child welfare, family welfare, and mental health services. Prereq: SWo 300.

SWo 320 Principles and Methods of Social Work (3)
Examines casework, group work, and community organization as generic methodologies. Principles, direction, and framework of the social-work helping process. Prereq: SWo 200.

SWo 400 Senior Seminar in Social Work (3)
Integration of field and classroom experience into a professional framework for the social-work helping process.

SWo 420 Field Experience in Social Welfare I (3)
A supervised work experience in a social agency or a related project offering an opportunity for seniors to test out theory learned.

SWo 421 Field Experience in Social Welfare II (3)
Continuation of SWo 420.

SPANISH See Department of Foreign Languages

\title{
DEPARTMENT OF SPEECH AND THEATRE
}

\author{
William M. Morehouse, Chairman
}

\section*{SPEECH}

Sph 100 Bases of Speech (3)
Social, physiological, neurological, physical, phonetic-linguistic, psychological, and semantic bases of speech. An introduction to terms and concepts.

\section*{Sph 101 Fundamentals of Speaking (2)}

Development of poise and confidence in formal and informal speaking situations. Emphasis on audience analysis, finding materials, organization, and delivery.

\section*{Sph 102 Advanced Public Speaking (3)}

Experience in developing more extended public addresses for students who have had elementary work. Emphasis on content, structure, and style. Prereq: Sph 101 or consent of instructor.

\section*{Sph 103 Discussion (3)}

Effective leadership and participation in small groups: committees, conferences, panels, symposia. Topics vital to contemporary society are discussed.

\section*{Sph 105 Voice and Diction (3)}

Theory and practice in techniques leading to more effective communication: better use of voice, articulation, and rhythm.

Sph 106 Introduction to Phonetics (3)
Study of the sounds of the English language. Development of skills in their recognition, production, and transcription.

\section*{Sph 201 Public Address (3)}

The place of public speaking in the social, political, economic, and religious life at selected historical occasions through the study of representative speakers and their speeches.

Sph 203 Argumentation and Debate (3)
Function of debate in a democracy. Principles of argumentation and debate, including analysis, briefing, evidence, reasoning, and refutation. Class debating on vital issues. Prereq: Sph 101 or consent of instructor.

\section*{Sph 204 General Semantics (3)}

The study of meaning: its development and its variability in communication. The influence of signs and symbols on everyday behavior.

Sph 230 Business and Professional Speech Communication (2)
Communication theory. Practice in effective speaking and listening; reports and sales presentations; policy speeches, conference leadership techniques, group dynamics, radio and television speaking; interpersonal communication in the business and professional setting.

\section*{Sph 303 Advanced Argumentation and Debate (3)}

Experience in various types of debating. Emphasis on educational debating. Practice in debating before invited informed and critical audiences and before the general public. Prereq: Sph 203 or consent of instructor.

\section*{Sph 305 History of Rhetorical Theory: Classical (3)}

Development of rhetoric, ancient Greece through second century A.D., and Roman rhetoric. Early Sophists, Socrates, Aristotle, Isocrates, Cicero, and Quintilian.

Sph 306 History of Rhetorical Theory: Medieval to Modern
Rhetoric from St. Augustine to modern communication theory. Emphasis on 1600 1850 (Ramus, Bacon, Campbell, Blair, and Whately) and 1900 to present (Winans, Woolbert, Monroe).

\section*{Sph 317 Directing Forensics (3)}

Study in the philosophy of forensics. Initiating, developing, and administrating a forensics program. Coaching and judging debate and individual events.

\section*{Sph 399 Directed Studies in Speech and Theatre (1-3)}

Special research, creative projects, reports, readings in Speech and Theatre. Students must make application for the course to their advisers one semester in advance of registration, for final approval by the department chairman. Open to juniors and seniors only.

\section*{Sph 401 Psychology of Speech (3)}

Communication as a psychological phenomenon. Emotional and mental processes in human communication. Function of the senses, motivation, and personality. Barriers to understanding. Confrontation.

Sph 402 Teaching Speech and Drama (3)
Theory and practice in teaching junior and senior high school speech and drama courses and in directing co-curricular programs in junior and senior high school.

\section*{Sph 403 Persuasion (3)}

Current theories of attitude and attitude change. Practice in speaking to modify behavior through appeals to the drives and motives of the listener. Prereq: Sph 101 or consent of instructor.

\section*{SPEECH PATHOLOGY AND AUDIOLOGY}

SpP 000 Speech Improvement ( 2 clock hours - no credit)
Emphasis on problems of articulation, voice, and rhythm. Required of all students whose speech falls below a minimal standard.

\section*{SpP 170 Speech and Language Development (3)}

Theoretical origin of speech in mankind and the development of speech in the individual. Normal development of speech is stressed.

\section*{SpP 201 Introduction to Speech Problems (3)}

Survey of speech problems in children. The teacher's role in therapy. Emphasis on speech improvement in the classroom.

SpP 202 Speech Pathology I (3)
A study of the characteristics, etiology, diagnosis, and treatment of speech disorders associated with articulation, delayed language, and voice. Prereq: Sph 100 or consent of instructor.

\section*{SpP 203 Speech Pathology II (3)}

A study of the characteristics, etiology, diagnosis, and treatment of speech disorders associated with stuttering, cleft palate, cerebral palsy, and aphasia. Prereq: SpP 202.

SpP 204 Clinical Principles in Speech and Hearing (3)
A study of evaluative and therapeutic materials and methods applicable to the professional setting. Prereq: Sph 106, SpP 202.

\section*{SpP 301 Introduction to Audiology (3)}

An introduction to audiology and its relationship to other medical and educational fields concerned with hearing impairments. Developmental, medical, social, physical, and psychological properties of hearing and sound are explored. Evaluative techniques are introduced with opportunity for limited practical experience.

\section*{SpP 303 Clinical Practicum (1 or 2)}

Supervised practice in the Speech and Hearing Clinic, designed to prepare the student to evaluate and provide therapy for individuals having communication problems. Practicum provides a graduated series of experience with both children and adults. No more than 2 credits may be taken in any semester. Prereq: permission of instructor.

\section*{280/Speech and Theatre}

\section*{SpP 304 Aural Rehabilitation (3)}

Medical, prosthetic, and educational approaches to aural rehabilitation for children and adults are considered. A comparative analysis of prevailing theories and techniques is made. A combined approach is stressed. Prereq: SpP 301.

\section*{SpP 305 Audiometry (2)}

A lecture-laboratory course designed to explore the measurement of hearing. Opportunities to develop competencies in administering basic measures are provided during lab periods. Prereq: SpP 301.

\section*{SpP 399 Directed Studies in Speech and Theatre (1-3)}

Special research, creative projects, reports, readings in Speech and Theatre. Application must be made to advisers by students one semester in advance of registration. Approval of the department chairman is required. Open to juniors and seniors only.

\section*{SpP 402 The School Speech and Hearing Program (3)}

Orientation to the professional situation. Organization and administration of a speech and/or hearing program (K-12). For speech pathology majors with consent of instructor.

\section*{SpP 404 Inter-Professional Seminar in Speech and Hearing (2)}

Explores the interrelationship between the speech and hearing therapist and members of other professions who diagnose or treat basic or allied problems of the person with a speech or hearing problem. Prereq: permission of instructor.

\section*{SpP 412 Therapy in the Public Schools (Student Teaching) (12)}

Observation and participation in teaching and activities related to the performance of a therapist's work in the area of Speech Pathology and Audiology. Prereq: satisfactory completion of all speech, hearing, and psychology courses through the sixth semester and Senior Standing. Students must have at least a 2.0 cumulative average and 2.5 average in the major field.

\section*{THEATRE ARTS}

\section*{ThA 100 Theatre Practice (1)}

Laboratory experience in technical aspects of play production. Majors must take three semesters of this course.

\section*{ThA 101 Introduction to the Theatre (3)}

Survey of the arts and crafts used in play production: writing, directing, scene design, lighting, costuming, and makeup. Criticism of plays and productions. This is the basic course and must be taken the first semester after declaring intention to complete one of the theatre arts degree programs.

\section*{ThA 102 Oral Interpretation (3)}

Theory and practice of oral presentation of various types of literature to an audience. Attention to teachers' problems in selection and presentation of material.

\section*{ThA 103 Beginning Acting (3)}

Theory and practice in creating the character through development of the actor's physical and emotional responses to imaginary stimuli. Participation in studentdirected productions required. One hour of lab.

\section*{ThA 104 Stage Lighting (3)}

Elementary electrical and optical theory. Analysis of stage lighting equipment and control systems. Principles and practices in effectively lighting the play.

ThA 201 Stage Makeup
(2)

Theory and practice in design and application of makeup for the stage.

ThA 202 Advanced Oral Interpretation (3)
Advanced work in oral presentation of literature with emphasis on the theory and technique of Readers Theatre. Prereq: ThA 102.

ThA 203 Intermediate Acting (3)
Continuation of ThA 103. Participation in student-directed productions required. One hour lab. Prereq: ThA 103.

ThA 204 Stagecraft and Production Management (3)
Planning, construction, painting, rigging, and shifting of scenery. Management of all operations backstage and in the house. Practical experience in college productions.

ThA 205 History of Costume and Design I (3)
The history of European costume from Greek to Elizabethan. Students are required to design costumes for periods studied.

\section*{ThA 206 Educational Theatre Production}

Selection of plays suitable for elementary schools and junior and senior high schools. Techniques for effective minimal staging.

\section*{ThA 207 Creative Dramatics (3)}

Theory and practice in the use of impromptu dramatizations as a teaching device and as a means of developing expressiveness in children. The class works with children.

\section*{ThA 217 Television Production Techniques (2)}

Analysis of studio practices. Survey of basic television tools; cameras, sound and control equipment.

\section*{ThA 300 The Art of Oral Reading for Teachers (3)}

The teacher's analysis and preparation of written materials for oral presentation in the classroom.

\section*{ThA 301 Play Direction (3)}

Theory and practice in play production: play selection, preparation of the script, casting, rehearsing. Direction of a one-act play before an invited audience required of each student. Prereq: ThA 103.

\section*{ThA 302 Directing and Producing the Instructional Television Program (3)}

Planning the non-dramatic television production. Practice in the use of television equipment. Production of an original instructional television program required of each student.

\section*{ThA 304 Scene Design (3)}

Principles and practice in designing an appropriate and expressive milieu for the play. Perspective sketches, working drawings, and models. Historical development of stage scenery. Prereq: ThA 204.

\section*{ThA 305 History of Costume and Design II (3)}

The history of European and American costume from the 17th century to the present day. Students are required to design costumes for each of the periods studied.

ThA 308 History of the Theatre to the Sixteenth Century (3)
Development of the theatre from primitive times through pre-Shakespearean period. Analysis of theatrical productions as indications of the life style of each historical period.

> ThA 309 History of the Theatre, Sixteenth Century to Present (3)
> Development of theatre from Renaissance to Contemporary period.

ThA 310 History and Aesthetics of the Oriental Theatre (3)
Impact of oriental theatrical traditions on Western thought and art. Oriental integration of form and content, especially in the theatres of India, China, and Japan.

ThA 399 Directed Studies in Speech and Theatre (1-3)
Special research, creative projects, reports, readings in Speech and Theatre. Application must be made to advisers by students one semester in advance of registra-
tion. Approval of the department chairman is required. Open to juniors and seniors only.

\section*{ThA 401 Advanced Directing (3)}

Directing as a creative aspect of play production. Problems in directing actors in varied styles and forms of plays. Direction of a full-length play required of each student. One hour lab. Prereq: ThA 301.

ThA 402 Directing and Producing the Dramatic Television Program (3) Planning the program. Preparing the shooting script. Practice in rehearsing with actors and cameras. Production of a short television drama required of each student. One hour lab. Prereq: ThA 301.

\section*{ThA 403 Advanced Acting (3)}

Styles of acting. Fully staged acting projects presented and defended before an invited audience. Participation in campus plays required. One hour of lab. Prereq: ThA 203.

\section*{ThA 404 Advanced Scene Design (3)}

Analysis of excellent scene designs of the past. Practice in maximizing the visual impact of stage scenery. Design projects for selected visually challenging plays. Siudents design for both student-directed and major productions on campus and in the area. One hour of lab. Prereq: ThA 304.

\section*{ThA 405 Advanced Costume Design and Construction (3)}

This course emphasizes the unrealistic and stylized approaches for costume design and construction. Prereq: ThA 205 or ThA 305 and/or permission of instructor.

\section*{ThA 409 Advanced Makeup (2)}

Theory, development, and application of theatrical makeup according to: the play, its period, the style of production, the actor, and the character. Students must have previous knowledge of the basic two and three dimensional makeup devices. Prereq: ThA 201 and/or permission of instructor.

\section*{PRESIDENT}

Paul W. Rossey

\section*{VICE PRESIDENT FOR ACADEMIC AFFAIRS}

Assistant to the Vice President for Academic Affairs
Dean of Undergraduate Studies
Assistant Dean of Undergraduate Studies
Director of Scheduling and Academic Records
Dean of Graduate Studies
Assistant to the Dean of Graduate Studies
Dean, School of Arts and Letters
Associate Dean for Graduate Studies, School of Arts and Letters
Dean, School of Education
Associate Dean, School of Education
Associate Dean for Graduate Studies, School of Education
Principal of the Laboratory School
Director of Student Teaching
Dean, School of Health and Physical Education
Assistant to the Dean, School of Health and Physical Education
Associate Dean for Graduate Studies, School of Health and Physical Education
Director of Athletics
Dean, School of Music
Associate Dean, School of Music
Associate Dean for Graduate Studies and Research, School of Music
Dean, School of Sciences and Mathematics
Dean, School of Social and Behavioral Sciences
Associate Dean, School of Social and Behavioral Sciences
Associate Dean for Graduate Studies, School of Social and Behavioral Sciences
Director of Curriculum Enrichment

\author{
Albert E. Filano
}

\author{
Bernard F. Siegel \\ Emil H. Messikomer \\ John C. Lewis \\ William U. Hodgson \\ Willard J. Trezise \\ William C. Skillen \\ John W. Clokey \\ Powell S. Thomas \\ Harold W. Benda \\ John A. Lander \\ Michael F. Bannon \\ Gerald B. Cartright \\ Mark M. Evans \\ Edwin L. Youmans \\ Edwin B. Cottrell \\ Edward N. Norris \\ Robert W. Reese \\ Lloyd C. Mitchell \\ Alexander Antonowich \\ Charles A. Sprenkle \\ Russell K. Rickert \\ Byron Y. Fleck \\ Joseph M. Thorson \\ Robert E. Carlson \\ Jody M. Harris
}

Director of Summer Sessions
Director of Admissions
Assistant to the Director of Admissions
Assistant to the Director of Admissions
Director of the Educational Development Center
Assistant Director, Educational Development Center
Director of Research and Related Services
Associate Research Director for Computer Services
Associate Research Director for Grants
Director of Library Services
Assistant to the Director of Library Services
Director of Educational Media Services

\section*{Dean of Students}

Dean of Men
Assistant Dean of Men
Assistant Dean of Men
Dean of Women
Assistant Dean of Women
Assistant Dean of Women
Assistant Dean of Women
Director of Student Activities
Director of Guidance and Counseling
Director of the Student Union
Manager, College Bookstore

Louis F. Weislogel
John W. Harrington
James M. Auch
Robert S. Kurzinski
Bernice Bernatz
Barbara K. Biner
Dorothy DePew
Anne Speisz
Robert H. Jensen
Thomas B. Williams
Kenneth F. Burda
Richard Fitzgerald

Dean of Administration
Director of Cultural Affairs
Director of Public Relations and Publications
Publications Editor
Director of Financial Aid to Students
Assistant Director of Financial Aid to Students
Director of Placement and Career Services
Assistant Director of Placement and Career Services
Director of Medical Services
Assistant Director of Medical Services

Walter E. Buechele
R. Godfrey Studenmund

Herbert Lee
William E. Kipp
Everett A. Landin
Donald Jenkins*
Martin J. Higgins
Wesley Fasnacht
Ernest L. Peters
Frank Q. Helms
Mary E. Nehlig
Richard L. Strayer

Director of Business Affairs
Assistant Director of Business Affairs
Personnel Officer
Purchasing Agent
Budget Analyst

Everett E. Shaefer
David E. Hickman
Hilary R. Missimer
Emily C. Haines
Robert E. Holm

Director of Facilities
Assistant Director of Facilities
Chief, Physical Plant Department
Chief, Supply and Equipment Department Chief, Housekeeping Department

Robert C. Hannum
Lloyd W. Black
Alfred Sykes
Harold C. Davidson
Agnes Speakman


\title{
Faculty
}
[as of January 1, 1971]

The following symbols indicate absences from the College:
(1) Sabbatical Leave-1971-72
(3) Sabbatical Leave-Spring, 1972
(2) Sabbatical Leave-Fall, 1971
(4) Leave of Absence-1971-72

Paul W. Rossey (1969) President, Professor of Education
B.S. Jersey City State College, M.A., Ed.D. New York University

Albert E. Filano (1956) Vice President for Academic Affairs, Professor of Mathematics
B.S., M.S. University of Pennsylvania, Ph.D. Pennsylvania State University

Thomas J. Ahlborn (1967) Associate Professor of Mathematics
B.S. California State College, M.A. Kent State University, University of Rochester, University of Delaware

Peter Aizupitis (1967) Assistant Professor of History
B.A. Swarthmore College, M.S.M. University of Notre Dame, University of Delaware

Roger K. Alford (1968) Assistant Professor of Health Education
B.S. West Virginia University, Physical Therapy Certificate Ohio State University

Lois W. Alt (1966) Associate Professor of Voice
B.S. Indiana State College, B.Mus. University of Michigan, Allegheny College, M.Mus. University of Michigan, University of Southern Florida, University of Michigan

James E. Andrews, Visiting Professor of English from Cheyney State College
A.B. (Political Science), A.B., A.M. (English) University of Wichita, University of Chicago, University of Pennsylvania

Alexander Antonowich (1945) Associate Dean, School of Music, Professor of Music
B.S. Juilliard School of Music, M.A., Ed.D. Columbia University

Eleanor W. Ashkenaz (1968) Professor of Chemistry
B.S., Ph.D. University of Pennsylvania

James M. Auch, Jr. (1970) Assistant Dean of Men, Assistant Professor
B.S. in Ed. West Chester State College, M.A. in Ed. St. Joseph's College, Villanova University

\section*{288/Faculty}

Harold Babson, Jr. (1969), Associate Professor of Business Administration
B.S. in Bus. Adm., M.B.A. Northeastern University, University of Pennsylvania

Dorothy D. Batley (1958) Professor of English
B.A. Our Lady of the Lake College, M.A. University of Texas, Ph.D. University of Wisconsin

George H. Baldwin (1967) Associate Professor of Health and Physical Education B.S. Bowling Green University, M.A., Professional Diploma Columbia University

Michael F. Bannon (1955) Associate Dean for Graduate Studies, School of Education, Professor of Education
B.S. Troy State University, M.A. Columbia University, Ed.D. George Peabody College for Teachers

Paul A. Banyacski (1965) Assistant Professor of Philosophy
B.A. Eastern Baptist College, Eastern Baptist Seminary, Bryn Mawr College

Edward A. Barrow (1956) Associate Professor of Brass
B.Mus., M.Mus. Eastman School of Music-University of Rochester, West Virginia University

Luther R. Barth (1964) Associate Professor of Secondary Education and Professional Studies
B.S. Pennsylvania State University, M.Ed. Loyola University, Pennsylvania State University

Elise Bartholomew (1970) Associate Professor of Psychology
B.A. Swarthmore College, M.A., Ph.D. Radcliffe College

Alex M. Baumgartner (1970) Assistant Professor of English
B.A. Brown University, M.A. University of Pennsylvania, University of Pennsylvania
(3)Elizabeth B. Beatty (1960) Assistant Professor of Music Theory and Composition/Piano/Music Education
B.Mus. University of Michigan, Curtis Institute of Music, Ed.M. Temple University

Marshall J. Becker (1968) Associate Professor of Anthropology B.A., M.A. University of Pennsylvania, University of Pennsylvania

Carol M. Becknell (1970) Assistant Professor, Bureau of Research and Related Services
B.A. Western College, M.A. University of Arkansas

Robert M. Bedpord (1966) Associate Professor of Piano B.Mus., M.S. Juilliard School of Music

Harold W. Benda (1956) Dean, School of Education, Professor of Education B.A. University of Northern Iowa, M.A. University of Iowa, Ed.D. New York University

Carol R. Bensel (1970) Associate Professor of Biology
B.S. University of Maryland, M.S. West Virginia University, Rutgers University

Alan D. Benson (1970) Associate Professor of Mathematics
B.S.M.E., M.S.M.E., Ph.D. Drexel Institute of Technology

Jere S. Berger (1969) Associate Professor of English (Part-time)
B.A. Oberlin College, S.T.B. Episcopal Theological Seminary, S.T.M. Union Theological Seminary, M.F.A. Carnegie-Mellon University

Jay H. Berkowitz (1969) Associate Professor of Speech and Theatre
B.S., M.A. Temple University, Temple University

Bernice H. Bernatz (1954) Dean of Women, Associate Professor
B.A. Iowa State Teachers College, M.A. University of Michigan

Robert W. Bernhardt (1965) Associate Professor of Biology
B.S., M.S. Syracuse University
(2) Thomas E. Berry (1946) Professor of English
A.B., A.M. University of Pennsylvania, Ph.D. University of Pittsburgh

Floyd R. Bielski (1961) Associate Professor of Geography
B.S. Indiana State College, M.A. University of Illinois, Pennsylvania State University

Barbara K. Biner (1970) Assistant Dean of Women, Instructor
B.A. University of Colorado, M.A. University of Denver

Barbara R. Black (1970) Instructor of Elementary Education and History
B.S. Cheyney State College, Newark State College, Montclair State College

Lloyd W. Black (1960) Assistant Director of Facilities, Assistant Professor B.S., M.S. Temple University, Temple University

Walter R. Blair (1966) Assistant Director of Placement and Career Services, Associate Professor
B.S. West Chester State College, M.Ed., Temple University, Bucknell University, Temple University

Mary M. Bliss (1952) Assistant Professor of Biology
A.B. Swarthmore College, M.S. Temple University

Richard A. Boerlin (1961) Assistant Professor of Woodwinds
B.S., M.S. University of Illinois, Pennsylvania State University

Vincent J. Bonkoski (1968) Assistant Professor of English
B.S. West Chester State College, M.A. Glassboro State College

Dale R. Bonsall (1969) Assistant Professor of Physical Education
B.S. West Chester State College, M.Ed. Temple University, Pennsylvania State University Extension Center

John Bosworth-Fling (1965) Associate Professor of English
A.B. West Virginia University, M.A. Columbia University, M.S.J. Northwestern University, Harvard University

Valerie E. Boylan (1968) Assistant Professor of English
B.A., M.A. Trinity College-University of Dublin

Thomas J. Brady (1967) Associate Professor of Political Science
B.S. West Chester State College, Drexel Institute of Technology, J.D. Temple University

Harold Bram (1965) Assistant Professor of Sociology
B.A., M.A. University of New Mexico, University of Pennsylvania

Richard G. Branton (1962) Chairman, Department of Mathematics, Professor of Mathematics
B.S. West Chester State College, M.S. University of Delaware, Ph.D. University of Pennsylvania

Justo B. Bravo (1964) Professor of Chemistry
B.S. Adamson University (Manila), Ph.D. University of Kansas

Tyrone Breuninger (1965) Instructor of Brass (Part-time)
B.S. West Chester State College, Temple University

James B. Brice (1968) Supervisor of Student Teaching, Associate Professor of Education
B.S., M.Ed. West Chester State College, M.A. Villanova University, Pennsylvania State University, University of Pennsylvania

Eleanor B. Briggs (1970) Assistant Librarian, Instructor
B.A. University of Delaware, M.L.S. Rutgers University

Emma Lee Brown (1969) Head, Library Acquisitions Department, Associate Professor
A.B. in Ed. Fairmont State College, West Virginia University, M.S.L.S. Drexel Institute of Technology

Relis B. Brown (1969) Chairman, Department of Biology, Professor of Biology A.B. Albion College, Ph.D. Yale University

Robert H. Brown (1969) Supervisor of Student Teaching, Associate Professor of Education
B.S. Springfield College, M.A. Columbia University, Ph.D. Yale University

Roger J. Brown (1966) Instructor of French
B.S. West Chester State College, West Chester State College, Wells College, University of Delaware

William C. Brown (1968) Assistant Professor of Biology
B.S., M.Ed. Bloomsburg State College

Joseph P. Browne (1966) Associate Professor of English
B.S. St. Joseph's College, M.A. University of Pennsylvania, University of Pennsylvania

Julia M. Browne (1970) Instructor, Laboratory School
B.S. Glassboro State College

Stella P. Bruton (1964) Associate Professor of English
A.B., M.A. Stanford University, University of North Carolina

Walter E. Buechele, Jr. (1962) Director of Summer Sessions, Associate Professor of Secondary Education and Professional Studies
B.S. West Chester State College, Ed.M. Temple University

Howard James Burgwin, Jr. (1968) Assistant Professor of History
B.A. Swarthmore College, M.A. University of Pennsylvania, Ph.D. University of Pittsburgh

Mary Anne Burns (1969) General Reference and Special Collections Librarian, Instructor
A.B. Immaculata College, M.S.L.S. Drexel Institute of Technology

William F. Burns (1964) Associate Professor of Political Science
B.A. Allegheny College, M.A. Western Reserve University, University of Pennsylvania
A. Wayne Burton (1965) Associate Professor of Political Science
B.A. Brigham Young University, M.A. University of Pennsylvania, Brigham Young University, University of Pennsylvania

Theodore H. Butcher (1970) Director of Financial Aid to Students, Associate Professor
B.A. Lincoln University, M.B.A. Drexel University, Howard University Law School
J. William Butler (1966) Associate Professor of Health and Physical Education B.S. West Chester State College, M.Ed. Pennsylvania State University

Margaretta A. Carey (1968) Chairman, Department of Music Education, Professor of Music Education
B.S. Lebanon Valley College, M.Mus. Eastman School of Music, Ed.D. Pennsylvania State University

Robert L. Carl (1946) Assistant Professor of Piano
B.S. Johns Hopkins University, B.Mus., M.Mus. Peabody Conservatory of Music

Robert E. Carlson (1961) Associate Dean for Graduate Studies, School of Social and Behavioral Sciences, Professor of History B.A., M.A., Ph.D. University of Pittsburgh

Cecily G. Carmichael (1962) Children's Librarian, Instructor
B.S. Simmons College, Drexel Institute of Technology

\section*{292/Faculty}

Paul E. Carson (1946) Chairman, Department of Instrumental Music, Associate Professor of Woodwinds
B.S. Central Missouri State College, M.F.A. Carnegie Institute of Technology, Professional Diploma Teachers College-Columbia University

Jeanette D. Carter (1969) Cataloging Librarian, Assistant Professor B.A. Baylor University, M.L.S. University of Texas

Gerald B. Cartright (1961) Principal, Laboratory School, Supervisor of Student Teaching, Associate Professor of Education
B.S. Lock Haven State College, M.Ed. Pennsylvania State University, Temple University

Diane O. Casagrande (1968) Assistant Professor of Speech and Theatre
A.B. Wayne State University, M.A. Temple University

Louis A. Casciato (1963) Associate Professor of Earth, Space, and General Sciences
B.S. St. Joseph's College, M.S. Villanova University, University of Pennsylvania

Gary D. Celain (1968) Instructor of Health and Physical Education B.Mus. with major in Dance Philadelphia Musical Academy

Conrad E. Chalicx (1962) Guidance Counselor, Associate Professor B.A. Pennsylvania Military College, M.A. Villanova University

David S. Charters (1968) Associate Professor of Physical Education B.S., M.S. Temple University, Pennsylvania State University, University of Colorado, University of New Mexico

Frank T. Cheesman (1947) Professor of Voice
B.Mus.Ed., B.Mus., M.Mus. Northwestern University, Ed.D., Columbia University

Nona E. Chern (1968) Assistant Professor of Elementary Education
B.S. Temple University, M.S. University of Pennsylvania, Temple University, University of Chicago, Pennsylvania State University

Kathryn Childs (1969) Assistant Professor of Mathematics
B.S. West Chester State College, M.S. University of Pennsylvania

Albert Chirichella (1969) Associate Professor of English B.A. University of Colorado, M.S. University of Wisconsin

Susan K. Christian (1970) Instructor of English (Part-time)
B.A. Barnard College, West Chester State College

Carmela L. Cinquina (1963) Professor of Biology
B.S. West Chester State College, Temple University, Johns Hopkins University, M.S. Villanova University, Ph.D. Rutgers University
(3)George S. Claghorn (1963) Chairman, Department of Philosophy, Professor of Philosophy
B.A. University of Chattanooga, Ph.D. University of Pennsylvania, Columbia University

Jay L. Clarx (1967) Chairman, Department of Psychology, Professor of Psychology B.A. University of Delaware, M.A., Ph.D. University of Minnesota

Joyzelle Clark (1965) Associate Professor of Counselor Education B.A., Ed.M. University of Buffalo, Pennsylvania State University, Gettysburg College, University of Pennsylvania

Mary Elizabeth Cleary (1967) Associate Professor of Secondary Education and Professional Studies
B.A. St. Joseph's College for Women, St. John's University, Trenton State College, A.M. George Washington University, George Washington University

John W. Clokey (1946) Dean, School of Arts and Letters, Professor of English B.S. West Chester State College, Ed.M. Temple University, Temple University

Barbara J. Coates (1954) Associate Professor of Health and Physical Education B.S. Lock Haven State College, M.A. Allegheny College

Norman A. Cochran (1956) Professor of Health and Physical Education B.S. West Chester State College, M.A., Ed.D. University of Maryland

Irving Hersch Cohen (1969) Professor of Music History and Literature B.A., M.A., Ph.D. New York University

Milton R. Collier (1967) Associate Professor of Health and Physical Education B.S., M.A. East Carolina University

John C. Collins (1968) Assistant Professor of Voice/Music Education B.S. Juilliard School of Music, M.A. Montclair State College

Uel W. Combs, Jr. (1967) Assistant Professor of English B.A. Adams State College, M.A. Temple University

Stella F. Conaway (1966) Assistant Professor of Voice
B.Mus., M.Mus. Philadelphia Conservatory of Music, Philadelphia Musical Academy

Geraldine C. Conbeer (1946) Head, Library Technical Processing Department, Associate Professor
B.S. Millersville State College, B.S. in L.S. Drexel Institute of Technology, M.Ed. University of Pittsburgh

Robert T. Constable (1970) Associate Professor of Sociology and Anthropology A.B. Georgetown University, M.S.W. Loyola University, University of Pennsylvania School of Social Work

William F. Cope (1963) Associate Professor of Speech and Theatre
B.F.A. University of Oklahoma, M.A. Columbia University, State University of Iowa, Biarritz American University (France)

Sally C. Coronway (1970) Instructor of Geography (Part-time)
B.A. Eastern Baptist College, West Chester State College

Thomas J. Corr (1966) Associate Professor of English
A.B. St. Joseph's College, M.A. John Carroll University, Duquesne University

Ronald E. Cote (1969) Associate Professor of Mathematics
B.A., M.S. University of New Hampshire, Pennsylvania State University,

University of Kansas
Edwin B. Cottrell (1955) Assistant to the Dean, School of Health and Physical Education, Professor of Health and Physical Education B.S. Slippery Rock State College, M.Ed. University of Pittsburgh, Ed.D. Pennsylvania State University
Jon A. Cowen (1967) Assistant Professor of Sociology
B.A. University of Massachusetts, A.M. University of Pennsylvania
W. Stephen Croddy (1969) Assistant Professor of Philosophy
B.A. University of Southern California, M.A. Temple University, Ph.D. Brown University
Florence Joseph Crowley (1968) Associate Professor of History
B.A., M.A. Brooklyn College, Ph.D. University of Florida

Georgann Cullen (1964) Associate Professor of Biology
B.S., M.A. Kent State University, University of Pennsylvania

Howard W. Cunningham (1970) Assistant Professor of Health and Physical Education
B.S. Temple University, M.S. Bucknell University

Alma C. Curry (1970) Assistant Professor of Biology
B.S. University of Philippines, M.S. University of Pennsylvania, M.S. University of Philippines

Alvin B. Davis (1948) Associate Professor of Health and Physical Education B.S. Panzer College, M.A. Montclair State College

Harry H. Deischer (1966) Supervisor of Student Teaching, Associate Professor of Education
B.S., M.A., M.S., Ed.D. University of Pennsylvania

John L. De Million, Jr. (1970) Associate Professor of Health Education B.S. Slippery Rock State College, M.Ed. University of Pittsburgh, University of Michigan, University of Pittsburgh, California State College, West Virginia University

Thomas DeMott (1969) Professor of Biology A.M.E. Penn-Morton Colleges, V.M.D. University of Pennsylvania

Veronica Dempsey (1967) Assistant Professor of Health and Physical Education B.S., M.Ed. Ohio University, Colorado College of Modern Dance

Dorothy H. Depew (1967) Assistant Dean of Women, Instructor
B.S. West Chester State College, Bucknell University, Pennsylvania State University, Lebanon Valley College, West Chester State College

Vernon H. W. Dessenberger (1970) Professor of Secondary Education and Professional Studies
B.S., Ed.M., Ed.D. Temple University, University of Pennsylvania, Pennsylvania State University

Phillip B. Donley (1965) Associate Professor of Health and Physical Education B.S., M.S. West Virginia University, Certificate in Physical Therapy D. T. Watson School of Physiatrics

John E. C. Dorchester (1961) Professor of Biology
B.A., M.A. University of British Columbia, Ph.D. University of Toronto

Raymond A. Doyle (1965) Associate Professor of History
B.S. West Chester State College, University of Delaware, Temple University
A. Scott Dunlap (1967) Assistant Professor of Elementary Education
B.A. King's College, M.Div. Eastern Baptist Theological Seminary, University of Pennsylvania

Marc L. Durand (1968) Associate Professor of Chemistry
B.S. Holy Cross College, Ph.D. University of New Hampshire

John L. Eberhart (1969) Assistant Professor of Speech Pathology and Audiology B.S. Bloomsburg State College, Temple University, M.A. Syracuse University, Syracuse University

Carol A. Eckman (1967) Assistant Professor of Health and Physical Education B.S. Lock Haven State College, M.S. West Virginia University

Jack P. Edwards (1968) Director, Higher Education Opportunity Program, Assistant Professor
B.S., M.Ed. West Chester State College

Thomas Egan (1968) Assistant Professor of Mathematics
B.S., M.S. West Chester State College, Temple University, University of Pennsylvania

John E. Ehleiter (1969) Associate Professor of Earth, Space, and General Sciences A.B. Franklin and Marshall College, Millersville State College, University of Pennsylvania, Lehigh University, M.A. Wesleyan University, Franklin and Marshall College

Ralph A. Eisenstadt (1965) Assistant Professor of German
B.A. University of Pennsylvania, M.A. University of Illinois, Princeton University

David S. Eldredge (1967) Associate Professor of Political Science
B.A. Yale University, A.M.T., C.A.S. Harvard University, University of Pennsylvania

\section*{296/Faculty}

Jorge Escorcia (1968) Associate Professor of Spanish
Lic. Universidad Pedagogica del Caribe, Instituto Linguistico Colombo-Americano, M.A. Boston University, University of Pennsylvania

Mark M. Evans (1947) Director, Student Teaching, Professor of Education
B.Ph. Dickinson College, M.Ed., Ph.D. University of Pittsburgh

Edward G. Everett (1954) Professor of History
B.S. Indiana State College, M.A., Ph.D. University of Pittsburgh

Joseph Falgie (1970) Associate Professor of English
B.A. Temple University, M.A., Ph.D. University of Pennsylvania

Donna P. Farese (1968) Assistant Professor of Piano
B.A. Dunbarton College, M.Mus. Catholic University of America, Catholic University of America

Wesley E. Fasnacht (1967) Associate Research Director of Computer Services, Assistant Professor of Mathematics
B.S. Millersville State College, M.S. State University of New York at Buffalo

Ruth C. Feldman (1967) Professor of Psychology
B.A., M.A. Ohio State University, M.S.S. Western Reserve University, Ed.D. Temple University

John E. Ferling (1970) Associate Professor of History
B.A. Sam Houston State College, M.A. Baylor University, West Virginia University

John P. Field (1970) Associate Professor of English
A.B. Baldwin College, M.S.A. Harvard University, M.A. University of Cincinnati, Ph.D. University of Cincinnati
Judith S. Finkel (1968) Instructor, Laboratory School
B.S. Temple University, West Chester State College

Joseph T. Fisher (1968) Associate Professor of Health Education
B.S. Slippery Rock State College, M.S. University of Illinois, Temple University

Byron Y. Fleck (1953) Dean, School of Social and Behavioral Sciences, Professor of History and Political Science
Franklin and Marshall College, B.A., M.A., Ph.D. University of Iowa
Arnold Fletcher (1946) Professor of Piano
B.S., Ed.M. Temple University, Juilliard School of Music, Columbia University, Ed.D. University of Pennsylvania

Frank B. Ford (1965) Assistant Professor of English
B.A., M.A. University of Connecticut

William D. Fordyce (1968) Associate Professor of English
A.B., A.M.T., A.M., Ph.D. Harvard University

Virginia A. Forsyth (1966) Instructor of Health and Physical Education (Parttime)
B.S. West Chester State College, Physical Therapy Certificate Program, U. S. Army

Claude R. Foster, Jr. (1967) Professor of History
B.A. Eastern Baptist College, Zeugnis fuer die deutsche Sprache und KulturUniversity of Freiburg, M.A. University of Delaware, Th.M. Crozer Theological Seminary, Ph.D. University of Pennsylvania

Frank Fox (1967) Professor of History
B.S. Temple University, M.A. University of Pennsylvania, Ph.D. University of Delaware

Thomas J. Francella (1965) Associate Professor of Secondary Education and Professional Studies
A.B. Syracuse University, M.A. Villanova University

Albert J. Franz (1970) Instructor of Instructional Media Education (Part-time) B.S. West Chester State College

Howard Freeman (1961) Professor of Special Education B.S. Millersville State College, M.A. University of Wyoming, Ed.D. University of Pennsylvania

Mary Lou Frenz (1967) Associate Professor of Voice
B.Mus., M.Mus. Westminster Choir College, Juilliard School of Music, Academy of Vocal Arts, Temple University, Beaver College
H. Raymond Friday (1969) Associate Professor of Vocal and Choral Music B.S. West Chester State College, M.Mus. Oberlin College, Diploma Academy of Vocal Arts
(3)Walter E. Frieman, Jr. (1961) Professor of Classical Languages
B.S. New York University, S.T.B. General Theological Seminary, S.T.M. Philadelphia Divinity School, Th.D. Philadelphia Divinity School

Walter E. Funk (1966) Chairman, Department of Health Education, Associate Professor of Health and Physical Education
B.S. Pennsylvania State University, University of Pennsylvania, M.Ed. University of Delaware

John J. Furlow (1961) Associate Professor of Health and Physical Education B.S. West Chester State College, Temple University, M.Ed. West Chester State College, Pennsylvania State University

Charles D. Gangemi (1961) Associate Professor of Piano/Music Theory and Composition
B.A., M.A. University of Pennsylvania

William N. Garrett (1966) Professor of English
A.B. Columbia University, Ph.D. Columbia University

John L. Gaunt (1970) Assistant Professor of English
A.B., M.A. Tulane University, University of Maryland

Hara Georgiou (1969) Instructor of French (Part-time)
B.A. Washington Square College, Bryn Mawr College

Lois L. Gerchman (1966) Associate Professor of Chemistry
B.A. Harpur College, M.Ed. Temple University, M.S. University of Pennsylvania

Edward B. German (1966) Supervisor of Student Teaching, Associate Professor of Education
B.S. Kutztown State College, University of Pennsylvania, M.Ed. Temple University, Temple University

Edward H. Gibson (1967) Assistant Professor of Elementary Education
B.S. West Chester State College, Villanova University, M.Ed. Lehigh University

Loutse S. Giunta (1963) Assistant Professor of Health and Physical Education B.S. West Chester State College, M.Ed. Temple University

Richard C. Gleockler (1967) Associate Professor of Secondary Education and Professional Studies
B.S. Bloomsburg State College, M.Ed. Bucknell University, Pennsylvania State University
(1)Dusan P. Glumac (1963) Associate Professor of Russian
M.Div., M.S., M.A. University of Belgrade, University of Pennsylvania

Joseph A. Goebel, Jr. (1968) Instructor of Percussion (Part-time)
B.S. Millersville State College
\(\mathrm{J}_{\mathrm{Acob}}\) Golany (1970) Assistant Professor of Geography (Part-time) B.S., M.U.P. Wayne State University

Charles W. Good (1966) Supervisor of Student Teaching, Associate Professor of of Education
B.A. Pennsylvania State University, M.A. University of Pennsylvania, Temple University

Charlotte M. Good (1965) Associate Professor of Elementary Education B.S. Bucknell University, M.Ed. Pennsylvania State University, Temple University, University of Hawaii, University of Chicago

Henry E. Goodwin (1960) Associate Professor of Health and Physical Education B.S. Lock Haven State College, M.S. Pennsylvania State University, Pennsylvania State University

Miriam S. Gottlieb (1946) Associate Professor of Piano
A.B. University of Denver, M.A. Columbia University, Juilliard School of Music

Ronald L. Gotrshall (1966) Associate Professor of Counselor Education
B.S. Shippensburg State College, M.A. Michigan State University, Michigan State University

Ronald L. Gougher (1969) Associate Professor of German
B.A. Muhlenberg College, Albright College, Stanford University, M.A. Lehigh University, Harvard University, Goethe Institut (Munich), University of Pennsylvania

John H. Grafton (1961) Supervisor of Student Teaching, Assistant Professor of Education
B.S. West Chester State College, M.A. Scarritt College, Temple University

Charles W. Grassel (1968) Associate Professor of Geography
B.S., M.S. University of Pennsylvania, West Chester State College, University of Pennsylvania

Patricia E. Grasty (1970) Assistant Professor of Elementary Education
B.S. West Chester State College, M.Ed Temple University, Columbia University, Temple University, University of Minnesota

Andrew W. Green (1970) Associate Professor of Business Administration and Economics
B.S. New York University, L.L.B. Dickinson School of Law, M.B.A., Ph.D. University of Pennsylvania, University of Amsterdam
(2)Saul H. Greenberg (1963) Associate Professor of Counselor Education and of Special Education
B.S., M.Ed. Pennsylvania State University, Gallaudet College, Rutgers University, Temple University

Seymour S. Greenberg, (1964) Chairman, Department of Earth, Space, and General Sciences, Professor of Earth, Space, and General Sciences
B.S. Brooklyn College, A.M., Ph.D. Indiana University

Robert Greene (1967) Assistant Professor of French
A.B., A.M. University of Pennsylvania

Mildred L. Greenwood (1965) Associate Professor of Health and Physical Education A.B. Wheaton College, M.Ed. Temple University, Temple University, Pennsylvania State University

Catherine E. Gregg (1954) Professor of Psychology
B.A. Oberlin College, M.A. Western Reserve University, Ph.D. Columbia University

Rita Griffith (1967) Professor of Speech Pathology and Audiology
B.A. Nazareth College, A.M. Cornell University, Ph.D. Ohio State University

Yvonne Gros (1963) Assistant Professor of Health and Physical Education B.S. Ursinus College

Bernard M. Gross (1969) Associate Professor of Secondary Education and Professional Studies
B.S. in Ed., M.Ed. Temple University, Temple University

Terry E. Guidetti (1966) Assistant Professor of Clarinet
B.Mus.Ed., M.Mus. Northwestern University, Indiana University

Judith R. Gumerman (1969) Professor of Mathematics
B.A., M.A. University of Pennsylvania, Ph.D. University of Illinois

Madelyn Gutwirth (1966) Professor of French
B.A. Brooklyn College, M.A., Ph.D. Bryn Mawr College

Ethel G. Haas (1953) Associate Professor of Elementary Education B.S. Plattsburgh State Teachers College, M.Ed. University of Maryland, University of Maryland, University of Pennsylvania

James E. Habecker (1964) Associate Professor of Elementary Education
A.B. Franklin and Marshall College, M.Ed. Western Maryland College, Pennsylvania State University, University of Pennsylvania

Helen E. Hales (1962) Associate Professor of Piano
B.Mus. Peabody Conservatory of Music, Johns Hopkins University, M.Mus. Peabody Conservatory of Music

Saundra Hall (1964) Assistant Professor of Speech and Theatre B.A., M.A. Ohio State University

Josephine C. Hampson (1963) General Reference and Interlibrary Loan Librarian, Assistant Professor
B.S. West Chester State College, Philadelphia Museum School of Art, M.S.L.S. Drexel Institute of Technology

Robert C. Hannum (1966) Director of Facilities, Associate Professor B.S. Michigan State University, M.S. University of Pittsburgh

Hubert E. Harber (1970) Associate Professor of Earth, Space and General Sciences B.S. Louisiana State University, M.B.S. University of Colorado, New Mexico State University, M.A.T. Brown University

Nancy Marie Hardigan (1967) Instructor of English (Part-time)
B.A. Jackson College of Tufts University, M.A. Boston College

Clifford H. Harding (1953) Chairman, Department of Political Science, Professor of Political Science and History
A.B. Nebraska State College, M.A. State University of Iowa, Ph.D. New York University

John W. Harrington, Jr. (1969) Dean of Men, Assistant Professor
B.S. West Chester State College, M.Ed. Temple University

Jody M. Harris (1970) Director of Curriculum Enrichment, Professor
B.S. Tuskegee Institute, M.A. Teachers College-Columbia University, Ed.D. Pennsylvania State University

Yoко Нashimoto (1969) Associate Professor of Speech and Theatre
A.B., A.M. Aoyama Gakuin University (Japan), A.M. University of Michigan

Joan Hasselquist (1968) Supervisor of Student Teaching, Assistant Professor of Elementary Education
B.S., Ed.M. Temple University, University of Pennsylvania

Eugene W. Hassler (1969) Associate Professor of Accounting
B.S. Albright College, M.B.A. Indiana University, C.P.A. State of Indiana, New York University, University of Pennsylvania
J. Bernard Haviland (1968) Professor of English
B.A. Princeton University, M.A. Harvard University, Ph.D. Dublin University
(3)Robert W. Hawkes (1962) Associate Professor of Physics
B.S. West Chester State College, M.S. Pennsylvania State University, University of Delaware
(3)Arthur S. Hawthorne (1949) Associate Professor of Geography
B.S. California State College, M.A. University of Pittsburgh, University of Pittsburgh

Jack G. Hawthorne (1965) Associate Professor of Art
B.A. Philadelphia College of Art, M.Ed., M.F.A. University of Pennsylvania

Harold L. Hayes (1967) Professor of Speech and Theatre (Part-time)
B.F.A., M.F.A., Ph.D. State University of Iowa

Phyllis J. Hays (1966) Associate Professor of Piano
B.Mus., M.Mus. Peabody Conservatory of Music, Peabody Conservatory of Music, Indiana University, Johns Hopkins University.

Wayne Hayward (1969) Professor of English
B.A. University of Washington, M.A. Cornell University, Ph.D. University of Birmingham (England)

Thelma J. Heller (1969) Associate Professor of Health Education
B.S. West Chester State College, Ed.M. Temple University, Temple University, West Chester State College, University of Delaware

Frank Q. Helms (1966) Director of Library Services, Associate Professor
B.A. University of Delaware, M.L.S. Rutgers University, Rutgers University

Pamela Hemphill (1970)Associate Professor of Art
B.A. Manchester University, Ph.D. University of Pennsylvania

William H. Henry (1960)Professor of English
A.B. University of Pennsylvania, Ed.M., A.M., Ph.D. Temple University

Robert W. Herres (1961) Associate Professor of Elementary Education B.S. State University College at Oswego, M.A. Syracuse University

Leonard S. Heverly (1967) Head, Library Serials Department, Associate Professor B.S. West Chester State College, M.A. University of Pennsylvania, M.S.L.S. Villanova University

Martin J. Higgins (1967) Director of Research and Related Services, Professor of Educational Research
B.S. University of Dayton, M.A., Ph.D. University of Maryland

Julius M. Hill (1955) Professor of Counselor Education
B.S. Northern Michigan University, M.A., Ph.D. University of Michigan

Perry F. Hoberg (1965) Associate Professor of Art
B.F.A., B.S. Pennsylvania Academy of Fine Arts, Tyler School of Fine Arts, M.A. University of Delaware

William U. Hodgson (1968) Director of Scheduling and Academic Records, Assistant Professor of Mathematics
B.S. University of Pittsburgh, M.Ed., West Chester State College

Philip Hoggard (1968) Supervisor of Student Teaching, Associate Professor of Education
B.S. Jersey City State College, Ed.M. Rutgers University, Harvard University, Seton Hall University

John Holingjak, Jr. (1965) Supervisor of Student Teaching, Associate Professor of Education
B.S. Kutztown State College, Ed.M. Temple University, University of Pennsylvania

Mary M. Holland (1969) Cataloging Librarian, Instructor (Part-time)
A.B. Birmingham-Southern University, M.S.L.S. Drexel Institute of Technology

Diana G. Holowecky (1970) Instructor of Geography (Part-time)
B.S. West Chester State College, West Chester State College

William P. Houpt (1963) Director of Public Relations and Publications, Professor of History
A.B., M.A. (History), M.A. (Literature), Ph.D. University of Pennsylvania

Carole A. Houseman (1970) Assistant Professor of Elementary Education B.S., M.A. West Virginia University

Kathie S. HSI (1969) Cataloging Librarian, Instructor
B.A. Cheng Kung University, M.S.L.S. Villanova University

Virginia M. Huffman (1967) Associate Professor of Health and Physical Education B.S. East Stroudsburg State College, Edinboro State College, M.S. Pennsylvania State University, Indiana University

Claude Hunsberger (1967) Associate Professor of English
B.A. Temple University, M.A. Michigan State University, University of Wisconsin

Lawbence V. Iacono (1966) Assistant Professor of Political Science
B.S. St. Joseph's College, M.Ed. West Chester State College, Temple University

Helen T. Ivins (1946) Assistant Professor of History
B.S. West Chester State College, M.S. University of Pennsylvania, University of Delaware

John M. Jacecko (1967) Supervisor of Student Teaching, Associate Professor of Education
B.S., M.Litt. University of Pittsburgh, West Virginia University, Western Reserve University, Florida State University
(2)Suzanne T. Jacobs (1962) Associate Professor of Speech
A.B. University of Pennsylvania, Ed.M. Temple University, Pennsylvania State University, Delaware University

Robert H. Jensen (1969) Director of Student Activities, Assistant Professor
B.A. Randolph-Macon College, M.A. University of Pennsylvania, Temple University

Constantine Johns (1954) Director of Cultural Affairs, Professor of Music History and Literature/Strings
B.S. Southeast Missouri State College, M.A., Ed.D. Columbia University

Patricia C. Johnson (1966) Professor of History
B.A. Chestnut Hill College, Ph.D. University of Rochester

Emlyn H. Jones (1968) Assistant Professor of Physical Education
B.S., M.A. West Chester State College, Pennsylvania State University

Harry G. Jones (1960) Assistant Professor of Biology
B.S. Millersville State College, M.S. University of Pennsylvania

Ruby J. Jones (1961) Supervisor of Student Teaching, Assistant Professor of Education
B.S. West Chester State College, M.S. Temple University, University of Pennsylvania

Leah E. Jordan (1962) Professor of English
B.A. Swarthmore College, M.A., Ph.D. University of Pennsylvania

George F. Kane (1966) Guidance Counselor, Associate Professor
B.A. Ursinus College, M.Ed. Temple University, Temple University, University of Pennsylvania

Ralph H. Kapilian (1970) Associate Professor of Health and Physical Education B.S. Sppingfield College, M.S., Ph.D. University of Illinois

\section*{Brent Kaplan (1968) Associate Professor of Physics}
B.M.E., M.M.E. New York University

Carolyn B. Keefe (1969) Assistant Professor of Speech and Theatre
A.B. Oberlin College, University of Minnesota, M.A. Temple University

Alvin S. Keinard (1948) Chairman, Department of Geography, Professor of Geography
B.A. Juniata College, M.Ed., Ed.D. Pennsylvania State University

James T. Kelleher (1968) Associate Professor of English
B.A. PMC Colleges, M.A. University of Pennsylvania

John T. Kelly (1969) Associate Professor of English
B.S. St. Louis University, M.A., Ph.D. University of Oklahoma

Ammon G. Kershner, Jr. (1965) Professor of English
B.A., M.S., A.M., Ph.D. University of Pennsylvania, Temple University
(3)Charlotte E. King (1955) Chairman, Department of Elementary Education, Professor of Elementary Education
B.S., Ed.M., Ed.D. Temple University

William E. Kipp (1969) Assistant to the Director of Admissions, Associate Professor of Secondary Education and Professional Studies
B.A., Ed.M. University of Pittsburgh, Villanova University, Temple University, University of Toledo, University of Rochester
Eugene Klein (1967) Associate Professor of Cello
B.M.E. Temple University, M.M.E. Indiana University, Yale University

Mary L. Kline (1968) Assistant Professor of Nursing
B.S. West Chester State College, M.S.N. University of Pennsylvania

Sebastian S. Коh (1970) Professor of Mathematics
B.S. National Taiwan University, M.A. Wayne State University, Ph.D, University of California

William V. Krouse (1970) Instructor of Health and Physical Education (Part-time) B.S. West Chester State College, West Chester State College

Fritz K. Krueger (1961) Assistant Professor of Voice
A.B. Midland•College, B.S. Wittenberg University, B.Mus. Curtis Institute of Music, M.Mus. Philadelphia Musical Academy
Alla S. Kuhlmann (1965) Associate Professor of German
M.A. University of Belgrade (Yugoslavia), Universite Catholique de Louvain (Belgium), University of Pennsylvania

Marianne H. Kulaski (1966) Associate Professor of French
B.A. Ursinus College, University of Geneva (Switzerland), M.A. Villanova University

Alois H. Kulhanek (1961) Assistant Professor of German
B.S. Institute of Technology (Prague), M.A. University of Political and Social Science (Prague), Charles University (Prague), Cornell University

Carrie C. Kulp (1958) Associate Professor of Elementary Education
A.B. Wheaton College, M.Ed. University of Delaware

Daniel Lee Kuruna (1968) Chairman, Department of Art, Professor of Art
B.F.A. Carnegie Institute of Technology, M.A. University of Pittsburgh, Pennsylvania State University

Robert S. Kurzinsky (1970) Assistant Dean of Men and Assistant Director of Financial Aid to Students, Instructor
B.S. Bloomsburg State College, West Chester State College

John A. Lander (1965) Associate Dean, School of Education, Professor of Education B.S., A.M. Temple University, Ph.D. University of Pennsylvania

Everett A. Landin (1967) Director of Educational Development Center, Professor of Education
A.B., M.Ed. Alfred University, Ed.D. Pennsylvania State University

William R. Landrum (1953) A ssociate Professor of English
B.A. Virginia Military Institute, M.A. Temple University, University of Oklahoma

George Langdon (1956) Professor of Geography
B.S., M.S. Pennsylvania State University, Ph.D. Clark University

Monita M. Lank (1970) Associate Professor of Health and Physical Education B.S., M.A. Wichita State University, Ph.D. University of Iowa

Barbara J. Lappano (1970) Instructor of Health and Physical Education B.S. West Chester State College, West Chester State College

Victor Lasuchin (1970) Associate Professor of Art B.F.A., M.F.A. University of Pennsylvania

Kenneth L. Laudermilch (1968) Assistant Professor of Brass
B.S. Lebanon Valley College, M.Mus. New England Conservatory of Music

Herbert Lee (1968) Assistant to the Director of Admissions, Supervisor of Student Teaching, Associate Professor of Education
B.S., M.Ed. West Chester State College, Temple University
F. William Leeds (1963) Associate Professor of Urban Education
A.B. Temple University, M.A. University of Pennsylvania, University of Pennsylvania

Barbara R. Leighton (1966) Associate Professor of Health and Physical Education B.S. West Chester State College, West Chester State College

John D. Lemcke (1965) Professor of Health and Physical Education
B.S. Brockport State College, M.Ed. Temple University, Ed.D. Temple University

John C. Lewis (1967) Assistant Dean of Undergraduate Studies, Supervisor of Student Teaching, Assistant Professor of Education
B.S. West Chester State College, M.A. Villanova University, Pennsylvania State University, Temple University

Dawn P. L'heureux (1969) Instructor of English (Part-time)
B.A. University of Massachusetts, M.A. Louisiana State University

James E. L'heureux (1969) Associate Professor of Mathematics
B.S., M.S., Ph.D. Louisiana State University

Mattlda Lipscomb (1969) Resident Director, Junior Year Abroad, Assistant Professor of French
B.S. New York University, M.A. Washington University
(2Ronald P. Lombardi (1962) Associate Professor of Romance Languages
B.S., M.A. University of Pennsylvania, University of Pennsylvania, Central Connecticut State College

Melvin M. Lorback (1957) Chairman, Department of Physical Education, Associate Professor of Health and Physical Education
B.S. State University of New York at Brockport, M.S. Pennsylvania State University, Pennsylvania State University

John M. Lowe (1970) Associate Professor of Health and Physical Education
B.S., M.S. West Virginia University, University of Toledo

Alberta M. McAfee (1970) Assistant Librarian, Assistant Professor
B.S. Kutztown State College, M.L.S. Drexel Institute of Technology
B. Randall McClellan (1969) Associate Professor of Music Theory and Composition
B.Mus. College-Conservatory of Music (Ohio), M.Mus. University of Cincinnati, Ph.D. Eastman School of Music-University of Rochester
E. Isabella McClure (1965) Associate Professor of Secondary Education and Professional Studies
B.S., M.Ed. Temple University, Temple University, Columbia University, University of Pennsylvania, Stanford University, University of Washington, University of Rhode Island

Ruth L. McCoach (1969) Instructor, Laboratory School
B.S. West Chester State College, Pennsylvania State University

Barbara R. McDevitt (1970) Instructor of Physics (Part-time)
B.S. Pennsylvania State University, Pennsylvania State University

James M. McDonnell (1953) Associate Professor of Biology
A.B., M.A. Temple University, University of Connecticut

Elliott W. McDowell (1964) Associate Professor of English (Part-time)
A.B. Centre College, M.A. University of Wisconsin, Yale University, University of Illinois

Lynette F. McGrath (1968) Assistant Professor of English
B.A. University of Sydney, B.A., M.A., Ph.D. University of Illinois

William McKendry (1967) Assistant Professor of Secondary Education and Professional Studies (Part-time)
B.A. Gettysburg College, M.S. Columbia University

David E. McKenty (1961) Chairman, Department of English, Professor of English B.S. Temple University, M.A., Ph.D. University of Pennsylvania

Robert D. McKinney (1952) Associate Professor of Art
B.S. Edinboro State College, M.Ed. Pennsylvania State University, Pennsylvania State University, University of New Hampshire

Michael F. McKonly (1970) Instructor of Health and Physical Education (Parttime)
B.S. West Chester State College, George Washington University

Chester L. McTavish (1965) Professor of Instructional Media Education
B.S. Juniata College, M.S., Ed.D. Pennsylvania State University

Eli M. Mandelbaum (1964) Professor of Mathematics
B.A. Temple University, M.A. University of Pennsylvania, Ph.D. University of Pennsylvania

Katherine A. Margerum (1959) Associate Professor of Health and Physical Education
B.S. West Chester State College, Ed.M. Temple University, Temple University, University of Colorado

Alice B. Markow (1965) Professor of English
A.B. University of Delaware, A.M. University of Maryland, Ph.D. University of Pennsylvania

Emil M. Markow (1965) Associate Professor of Voice
B.S., M.A. Teachers College-Columbia University, Temple University

Myles Martel (1967) Associate Professor of Speech
B.A. University of Connecticut, M.A. Temple University, Temple University

Rachel A. Martin (1969) Associate Professor of Physical Education
B.S. West Chester State College, M.Ed. Temple University, Temple University, Columbia University, University of Colorado, Pennsylvania State University

Margaret Y. Martinez (1967) Associate Professor of Biology
A.B. University of Pennsylvania, M.A. Columbia University, University of Pennsylvania Medical School, West Chester State College, University of Rhode Island, Colorado State University

\section*{308/Faculty}

Robert G. Mathews, Jr. (1967) Assistant Professor of English
B.A. Ohio State University, Bread Loaf School of English, M.A. Middlebury College

Susan Maxwell (1969) Associate Professor of Speech Pathology and Audiology B.A. Whittier College, M.A. Ohio University, University of Minnesota, Duke University Medical School

Robert W. Medeiros (1968) Professor of Chemistry
B.S. University of Maine, M.S., Ph.D. University of Delaware

Lauren B. Meiswinkel (1967) Associate Professor of Speech
B.S. Pennsylvania State University, B.D. Drew University, M.A. (History), M.A. (Rhetoric Public Address) Temple University, Pennsylvania State University

John E. Mercer (1970) Instructor of Mathematics (Part-time)
B.S. West Chester State College, West Chester State College

Richard C. Merrell (1969) Associate Professor of Music Education
B.S. West Chester State College, M.Mus. Eastman School of Music-University of Rochester, Columbia University, Temple University, Pennsylvania State University, West Chester State College

Emil H. Messikomer (1946) Dean of Undergraduate Studies, Professor of Health and Physical Education
B.S. West Chester State College, M.A. Columbia University, Temple University

Roberta M. Milgram (1969) Associate Professor of Psychology
B.A. Boston University, B.J.Ed. Boston Hebrew Teachers College, M.A. Boston University, Ed.D. American University

Robert J. Miller (1968) Associate Professor of English
B.S. Wilkes College, M.A. Columbia University, University of Lausanne (Switzerland), University of Pennsylvania

Stephanie Miller (1968) Assistant Professor of Music Education B.S., M.Ed. West Chester State College
(3)Frank E. Milliman (1960) Associate Professor of Mathematics
B.N.S. College of Holy Cross, A.B. Hobart College, A.M. Columbia University, Columbia University

James S. Milne (1969) Associate Professor of Political Science
B.S. Kutztown State College, M.A. Villanova University, Temple University

Kegham A. Mississyan (1970) Associate Professor of Secondary Education and Professional Studies
B.A., M.A. American University (Beirut, Lebanon), Ph.D. University of Pennsylvania

Lloyd C. Mitchell (1936) Dean, School of Music, Professor of Music
B.Mus., M.Mus. Peabody Conservatory of Music, Ed.D. Pennsylvania State University
(3)Robert M. Mitten (1953) Professor of Health and Physical Education A.B., M.A. University of North Carolina, Ed.D. Temple University

Paul M. Moisiades (1967) Associate Professor of English
B.A. Lycoming College, M.A. Lehigh University

Michael Montemuro (1965) Professor of Mathematics
B.A. LaSalle College, M.A. Temple University, Stanford University, Beloit College, Maryland University, Ed.D. Temple University

William M. Morehouse (1969) Chairman, Department of Speech and Theatre,
Professor of Speech and Theatre
B.S., M.S., Ph.D. Purdue University

Clifton E. Morgan (1956) Associate Professor of History
B.S. East Stroudsburg State College, M.A. Rutgers University, University of Delaware

John J. Morgan, Jr. (1970) Instructor of Instructional Media Education (Part-time) B.A. St. Bonaventure University

Mary Ann Morgan (1962) Instructor of Elementary Education and Instructor in Laboratory School
B.S. East Stroudsburg State College

Ronald B. Morrow (1966) Assistant Professor of Geography
B.S., M.Ed. West Chester State College, Temple University

Walena C. Morse (1968) Assistant Professor of Psychology
A.B. Duke University, M.A., Ph.D. Bryn Mawr College

Joseph G. Moser (1966) Associate Professor of Mathematics
B.S. Rose Polytechnic Institute, M.S. Purdue University, Bryn Mawr College

Shirley A. Munger (1968) Professor of Music Theory and Composition/Piano/ Music History and Literature
B.A., M.A. University of Washington, D.M.A. University of Southern California, Conservatoire Nationale de Musique (France)

Martin H. Murphy (1966) Assistant Professor of Anthropology
A.B., A.M. University of Michigan, University of Michigan, University of New Mexico

Kostas Myrsiades (1969) Assistant Professor of English
B.A. State University of Iowa, M.A. Indiana University, Certificate University of Athens, Indiana University

Mary E. Nehlig (1967) Assistant to the Director of Library Services, Assistant Protessor
A.B. Wilson College, M.S.L.S. Drexel Institute of Technology, Drexel Institute of Technology

Janet T. Newham (1970) Assistant Professor of Elementary Education
B.S. in Ed. Massachusetts State Teachers College, M.Ed. West Chester State College, Temple University

Billy S. Newman (1969) Assistant Professor of Art
B.S. in A. Ed., M.Ed. Kutztown State College, Kutztown State College

Katharine D. Newman (1967) Professor of English
B.S. Temple University, M.A., Ph.D. University of Pennsylvania

Deborah Nickles (1969) Assistant Professor of Special Education B.S. West Chester State College, M.S. Syracuse University

Edward N. Norris (1958) Associate Dean for Graduate Studies, School of Health and Physical Education, Professor of Health and Physical Education
B.S. West Chester State College, University of Kansas, M.S. Medical College of Virginia, Michigan State University, Ed.D. Temple University

Sara M. Northeimer (1969) Assistant Professor of Music Education
B.S. in Ed. Temple University, Temple University, West Chester State College, Ed.M. Temple University, Ithaca College

Benjamin Nunez (1967) Professor of Spanish and Linguistics
B.A. Salta (Argentina), Licenciado en Letras National Buenos Aires University, M.A., Ph.D. Columbia University

Robert P. Nye (1968) Instructor of Health and Physical Education A.B. Gettysburg College, M.Ed. West Chester State College

Mary Ann O’Connell (1970) Instructor, Bureau of Research and Related Services B.A. Emmanuel College, Central Connecticut State College, Harvard Divinity School

Paul G. O'Grady (1967) Assistant Professor of History
B.A., M.A. Trinity College-University of Dublin, University of Delaware

Bernard S. Oldsey (1969) Professor of English
B.A., M.A., Ph.D. Pennsylvania State University

William R. Overlease (1963) Professor of Biology
B.S., B.S.F., M.S., Ph.D. Michigan State University

Jack A. Owens (1956) Professor of Physical Education
A.B. Concord College, M.S. West Virginia University, Ed.D. Pennsylvania State University

Reynold D. Paganelli (1967) Associate Professor of Secondary Education and Professional Studies and of Counselor Education
B.S. Bloomsburg State College, M.A. Catholic University, C.A.S. Johns Hopkins University

Charles W. Pagano (1967) Assistant Professor of Health and Physical Education B.S. West Chester State College, M.Ed. Ohio University

Willie E. Page, Jr. (1967) Associate Professor of English
A.B. East Carolina College, M.A. Florida State University, Pennsylvania State University

Donald H. Painting (1970) Associate Professor of Special Education (Part-time)
A.B. University of Rochester, M.A., Ph.D. University of Kentucky

Stephen Parker (1968) Associate Professor of English
B.A. Ohio University, M.A., M.F.A. University of Iowa, Ohio University

Susan B. Parkinson (1968) Assistant Professor of Physical Education
B.S. Pennsylvania State University, M.Ed. West Chester State College

Charles W. Patterson (1946) Associate Professor of Secondary Education and Professional Studies
B.S. Shippensburg State College, M.Ed. Duke University, University of Pennsylvania

Helen G. Peace (1970) Associate Professor of Health and Plysical Education B.S. in Ed., M.Ed. Temple University, M.S.N. University of Pennsylvania, West Chester State College, Temple University, University of Pennsylvania

Michael A. Peich (1968) Assistant Professor of English
B.A. Wartburg College, M.A. University of Pennsylvania, University of Delaware

Robert E. Pennington (1966) Professor of Piano
B.Mus., M.Mus. Northwestern University, Indiana University, Mus.D. Northwestern University

Austin O. Perego (1968) Associate Professor of Speech and Theatre
B.F.A. Drake University, M.A. University of Iowa, University of Iowa

Gene K. Perry (1970) Instructor of Mathematics
B.S., M.Ed. Bloomsburg State College

Erminio J. Peta (1967) Associate Professor of Elementary Education
B.S. Kutztown State College, M.Ed. University of Florida, Lehigh University

Amalia T. Peters (1969) Instructor of Spanish (Part-time)
Institute of Juan Ramon Fernandez (Argentina), M.Ed. West Chester State College

Ernest L. Peters (1969) Associate Research Director for Grants, Professor of Educational Research
A.B. Lafayette College, M.A. Villanova University, Ed.D. University of Denver

Frank E. Peterson (1962) Associate Professor of-Speech Pathology and Audiology B.S. Edinboro State College, M.A. Columbia University

Shirley T. Pethes (1968) Associate Professor of Piano
A.R.C.T. Artist Diploma University of Toronto, M.Mus. Indiana University

Ruth B. Petkofsky (1968) Assistant Professor of Elementary Education
A.B. Hunter College, M.A. University of Minnesota, West Chester State College

Frederick C. Pflieger (1961) Associate Professor of Music Education
B.S. West Chester State College, M.Mus. University of West Virginia, Eastman School of Music-University of Rochester

Harry W. Pfund (1967) Professor of German (Part-time)
A.B. Haverford College, A.M., Ph.D. Harvard University, Universities of Munich, Berlin, and Heidelberg (Germany)

Thomas W. Platt (1968) Professor of Philosophy
B.A. Washington and Jefferson College, M.A. University of Pittsburgh, Ph.D. University of Pennsylvania

Margaret Plemmons (1968) Instructor of Physics (Part-time)
B.A. George Washington University, George Washington University, West Chester State College

Jack Porter (1968) Associate Professor of Psychology
B.S., M.Ed., Ed.D. Temple University

Elizabeth H. Pottieger (1965) Assistant Professor of Psychology
B.A. Albright College, M.A. Temple University, West Chester State College

William G. Prater (1969) Associate Professor of English
B.S. East Stroudsburg State College, M.A. Pennsylvania State University, Ph.D. Ohio University

Sandra F. Pritchard (1967) Assistant Professor, Laboratory School B.S., M.Ed. West Chester State College

Julia Puerta (1968) Associate Professor of Spanish
B.S. Escuela Magisterio (Leon, Spain) B.A. University of Madrid, Consejo Superior Investigaciones Cientificas (Madrid), M.A. University of Pennsylvania, University of Pennsylvania

Michael R. Rachinsky (1968) Associate Professor of Chemistry
B.S. Fordham University, Ph.D. Purdue University

William J. Rahn (1965) Associate Professor of Counselor Education
B.S. Villanova University, M.Ed. Temple University, Temple University

William J. Rampon (1967) Associate Professor of Geography
B.A. Indiana State College, M.A. University of Oklahoma, University of North Carolina

William J. Rarick (1968) Assistant Professor of Art
B.A. Philadelphia College of Art, M.F.A. Tyler School-Temple University
(2)Lester N. Recktenwald (1962) Associate Professor of Secondary Education and Professional Studies
B.S., M.A. University of Minnesota, University of Wisconsin, Columbia University

David L. Redmond (1963) Associate Professor of Instructional Media Education
B.S. West Chester State College, Pennsylvania State University, M.S. Syracuse University

George F. Reed (1966) Professor of Earth, Space, and General Sciences B.S. St. Joseph's College, M.S., Ed.D. University of Pennsylvania
(3)N. Ruth Reed (1953) Associate Professor of Health and Physical Education
B.S. East Stroudsburg State College, M.Ed. Pennsylvania State University, University of Delaware

Thomas G. Reed (1967) Instructor, Laboratory School
B.S. West Chester State College, Temple University, Pennsylvania State University

Robert W. Reese (1951) Director of Athletics, Associate Professor of Health and Plyysical Education
B.S. East Stroudsburg State College, M.S. University of Pennsylvania, Temple University, Pennsylvania State University

Russell E. Reis, Jr. (1967) Assistant Professor of Instructional Media Education
B.S. West Chester State College, West Chester State College

Mary-Ann Reiss (1969) Assistant Professor of Spanish (Part-time)
B.A. Temple University, M.A. Villanova University, Pennsylvania State University, University of Pennsylvania

Barry G. Remley (1968) Assistant Professor of Health and Physical Education B.S., M.Ed. West Chester State College

Donald R. Rentschler (1970) Instructor of Instrumental Music
B.S. Pennsylvania State University, M.S. Temple University, Millersville State College
(2)Francis J. Reynolds (1961) Chairman, Department of Chemistry, Professor of Chemistry
B.S. Pennsylvania State University, Ph.D. University of Pennsylvania

Charles D. Rice (1970) Associate Professor of Reading
B.S. Clarion State College, M.Ed. Indiana University of Pennsylvania, University of Pittsburgh

Russell K. Rickert (1956) Dean, School of Sciences and Mathematics, Professor of Physics
B.S. West Chester State College, M.S. University of Delaware, Ed.D. New York University

Walter N. Ridley (1968) Chairman, Department of Secondary Education and Professional Studies, Professor of Secondary Education and Professional Studies A.B., M.A. Howard University, University of Minnesota, Ohio State University, Ed.D. University of Virginia

Donn C. Riley (1966) Interim Chairman, Department of History, Professor of History
A.B., M.A., Ph.D. St. Louis University

Robert D. Rimel (1966) Assistant Professor of English
B.S. West Chester State College, M.A. University of Delaware, University of Delaware

Frances W. Ring (1960) Associate Professor of Art
B.S. Columbia University, Ed.M. Temple University, University of Delaware

Stanley Riukas (1968) Professor of Philosophy
A.B. Classical Gymnasium (Lithuania) Ph.B., Th.B., Ph.L. Loyola University, Columbia University, Ph.D. New York University

Sarah E. Rivoir (1964) Head, Library Reference Department, Assistant Professor B.S. Temple University, M.S.L.S. Drexel Institute of Technology

Alfred D. Roberts (1959) Chairman, Department of Foreign Languages, Professor of French
B.A. Ursinus College, M.A., Ph.D. University of Pennsylvania
L. Douglas Robertson (1970) Assistant Professor of English
A.B., M.A. Temple University, University of London, Temple University

Ronald F. Romig (1967) Associate Professor of Biology
B.S. Bloomsburg State College, M.Ed. University of Delaware, Pennsylvania State University

Harrison C. Roper (1969) Assistant Professor of Instrumental Music
B.A. Haverford College, M.Mus. Catholic University

Mildred E. Ross (1968) Professor of Elementary Education
B.S. West Chester State College, M.S., Ed.D. Pennsylvania State University, Temple University

Sara L. Rowe (1963) Instructor of English
A.B. Dickinson College, Drexel Institute of Technology, University of Delaware

Philip B. Rudnick (1968) Associate Professor of Chemistry
B.A. Yeshiva University, B.A., Ph.D. Rutgers University

Glenn W. Samuelson (1965) Chairman, Department of Sociology-Anthropology, Professor of Sociology
A.B. Wheaton College, M.R.E. Eastern Baptist Theological Seminary, Ed.D. University of Maryland, University of Pennsylvania, Temple University, University of Delaware

Harold R. Sands (1969) Associate Professor of Psychology
B.A. Rutgers University, M.Ed. Temple University, Ph.D. Pennsylvania State University

Mae D. Sandy (1970) Instructor of Chemistry (Part-time)
B.S. Duquesne University, M.Ed. University of Delaware

Robert H. Saunders (1970) Associate Professor of Chemistry (Part-time)
A.B. University of Illinois, M.S., Ph.D. Illinois Institute of Technology

Harry G. Schalck (1964) Professor of History
A.B. Ursinus College, M.A., Ph.D. Clark University
C. Kenneth Scheid (1970) Assistant Professor of German
B.A. Franklin and Marshall College, M.Ed. West Chester State College

Robert Schick (1961) Professor of Music History and Literature/Piano
B.A. Swarthmore College, M.A. Columbia University, A.Mus.D. Eastman School of Music-University of Rochester
A. Hugh Schintzius (1970) Instructor of Health and Physical Education (Part-time) Ed.B. State University of New York at Buffalo

David Schlosberg (1970) Assistant Professor of Mathematics
B.S. Massachusetts Institute of Technology, Ph.D. Johns Hopkins University

Liselotte M. Schmidt (1970) Professor of Music History and Literature
B.Mus. Converse College, M.A. New York University, M.Mus. Manhattan School of Music, Ed.D. Teachers College-Columbia University

Richard A. Schneider (1967) Associate Professor of German
University of Tubingen (Germany), University of Heidelberg (Germany), University of Barcelona (Spain), University of Erlangen (Germany), University of Frankfurt (Germany), University of Montpellier (France)
(2) Doris R. Schoel (1963) Chairman, Department of Nursing, Associate Professor of Nursing
R.N. Bryn Mawr Hospital, B.S. in Nursing Villanova University, M.S. in Ed. University of Pennsylvania, Temple University
R. Gerald Schoelkopf (1969) Head, Circulation Department, Instructor
B.A. Villanova University, M.S.L.S. McGill University

Eugene W. Schooler (1961) Professor of Economics
B.S. Fort Hays Kansas State College, M.B.A. University of Kansas, A.M., Ph.D. Harvard University

Dale V. Schurr (1969) Assistant Professor of Secondary Education and Professional Studies (Part-time)
A.B. Ursinus College, M.S., M.A. University of Pennsylvania, West Chester State College, Temple University

Neil Serpico (1967) Professor of Health and Physical Education
B.A. University of New Hampshire, Ed.M. Boston University, Ed.D. University of Alabama

Anne Sessa (1968) Associate Professor of History
B.A. Swarthmore College, Columbia University, University of Delaware

William H. Seybold, Jr. (1967) Associate Professor of Mathematics
B.S. Temple University, M.A. Northwestern University, University of San Francisco, Montclair State College, University of Utah

Harold E. Shaffer (1952) Associate Professor of History
A.B. Susquehanna University, Litt.M. University of Pittsburgh, Pennsylvania State University

Ahmad H. Shamseddine (1970) Associate Professor of Economics
B.A., M.A. Howard University, Ph.D. George Washington University

Bernice Shapiro (1969) Instructor of Art
B.F.A. Philadelphia College of Art, M.Ed. Temple University

Faye F. Shaw (1967) Instructor of Chemistry (Part-time)
B.S. University of California, University of Buffalo, West Chester State College

John C. Shea (1967) Associate Professor of Political Science
B.A. Allegheny College, M.A. University of PennsyIvania, University of Pittsburgh

Jane E. Sheppard (1953) Associate Professor of Voice and Choral Music B.Mus.Ed. Westminster College, Juilliard School of Music, M.A. Columbia University, M.Mus. Indiana University

Robert R. Shinehouse (1966) Associate Professor of Psychology
B.S. Ursinus College, M.A. Temple University, University of Pennsylvania

Margaret Shivers (1968) Assistant Professor of Physics (Part-time) B.A., M.A. Duke University

Mary L. Shoaf (1966) Professor of Physics
B.A. The Cardinal Stritch College, M.S. University of California, Ph.D. Purdue University

Irene G. Shur (1956) Associate Professor of History
B.S. Ohio State University, M.Ed. University of Delaware, University of Pennsylvania

Bernard F. Siegel (1967) Assistant to the Vice President for Academic Affairs, Associate Professor
B.S. Pennsylvania State University, M.A. University of Pennsylvania, Bucknell University, University of Maryland

Carolyn G. Simmendinger (1958) Associate Professor of Art
B.S. Kutztown State College, M.F.A. Temple University, Pennsylvania State University

Ira C. Singleton (1970) Professor of Music Education
B.S. West Chester State College, Ed.M. Temple University, Ph.D. New York University

Harold L. Skelton (1968) Associate Professor of Physics
B.S. Case Institute of Technology, M.S. University of Delaware

William C. Skillen (1947) Assistant to the Dean of Graduate Studies, Associate Professor of Biology
B.S. Temple University, M.S. University of Pennsylvania, Temple University

\section*{Judith A. Smiley (1968) Assistant Professor of Physical Education \\ B.S. Ursinus College, M.Ed. West Chester State College}

Elizabeth L. Smith (1967) Associate Professor of English
B.A. Blue Mountain College, M.S. University of Southern Mississippi

Frank A. Smith (1964) Associate Professor of Physics
B.S. Villanova University, M.A. Temple University

James E. Smith (1967) Associate Professor of Violin
B.Mus., M.Mus. Eastman School of Music-University of Rochester

Jane G. Smith (1955) Associate Professor of English
B.S. Millersville State College, M.Ed. Pennsylvania State University, M.L.S. Columbia University

Jeanne B. Smith (1970) Instructor of Physics (Part-time)
B.S. in Ed. West Chester State College, M.Ed. West Chester State College

Lida Nelson Smith (1966) Assistant Professor of Health and Physical Education
A.B. Bard College, University of Wisconsin, M.A. Sarah Lawrence College

Philip D. Smith, Jr. (1967) Director-Language Projects, Professor of Spanish
B.A. George Pepperdine College, M.A. University of Nevada, Ph.D. Ohio State University

Robert L. Snyder (1969) Assistant Professor of Mathematics
B.S. Georgia Institute of Technology, M.A. Johns Hopkins University

Norbert C. Soldon (1963) Professor of History
B.A., M.A. Pennsylvania State University, Ph.D. University of Delaware

\section*{318/Faculty}
H. Lee Southall (1967) Assistant Professor of Brass
B.S. West Chester State College, M.A. Trenton State College

Joseph M. Spiecker (1968) Associate Professor of Instructional Media Education B.S. West Chester State College, M.S. Temple University, West Chester State College

Anne Spiesz (1968) Assistant Dean of Women, Assistant Professor
A.B. University of Michigan, M.A. University of Iowa

Charles A. Sprenkle (1955) Associate Dean for Graduate Studies and Research, School of Music, Professor of Music
B.S. Johns Hopkins University, B.Mus., M.Mus., D.M.A. Peabody Conservatory of Music, University of Pennsylvania

Ruth S. Stanley (1959) Assistant Professor of Mathematics
B.S., M.A. University of Oklahoma

Edward Stein (1969) Associate Professor of Art
B.S. Indiana University, M.F.A. University of Guanajuato (Mexico), Alfred University

Jay P. Steinmetz (1967) Assistant Professor of Instructional Media Education B.S. Millersville State College, M.Ed. West Chester State College

John Robert Steinmetz (1965) Associate Professor of Health and Physical Education B.S., M.Ed. Temple University

Sandra S. Stouffer (1970) Instructor of Music Education
B.S. Lebanon Valley College, M.Mus. University of Michigan

Richard L. Strayer (1956) Director, Educational Media Services, Professor of Instructional Media Education
B.S. West Chester State College, M.Ed. University of Delaware, Ed.D. Temple University

Paul A. Streveler (1970) Assistant Professor of Philosophy
B.A. St. John's University (Minnesota), Ph.D. University of Wisconsin

Frederick R. Struckmeyer (1966) Professor of Philosophy B.A. King's College (New York), A.M., Ph.D. Boston University

Charles H. Stuart (1968) Professor of History
B.A. Houghton College, M.A. Bradley University, Pennsylvania State University, Ph.D. Boston University
R. Godfrey Studenmund (1956) Director of Admissions, Associate Professor of Education
B.S. Shippensburg State College, Ed.M. Temple University

Russell L. Sturzebecker (1946) Professor of Health and Physical Education B.S. West Chester State College, Ed.M., Ed.D. Temple University

James D. Sullivan (1967) Assistant Professor of Music Theory and Composition B.S. West Chester State College, M.A. Eastman School of Music-University of Rochester

Vincent V. Suppan (1964) Associate Professor of Speech Pathology and Audiology B.S. West Chester State College, M.A. Columbia University

Jane B. Swan (1965) Professor of History
B.A. Swarthmore College, M.A., Ph.D. University of Pennsylvania

Emily T. Swartley (1970) Instructor of Instrumental Music (Part-time)
B.Mus. Eastman School of Music, M.Mus. Temple University

Roy D. Sweet (1953) Chairman, Department of Voice and Choral Music, Associate Professor of Voice and Choral Music
B.S. Fredonia State College, M.Mus. Eastman School of Music-University of Rochester, Temple University
(1)Julian M. Swiren (1964) Acting Chairman, Department of Counselor Education, Associate Professor of Counselor Education B.S., M.S. University of Pennsylvania, Temple University

Patrick J. Sylvester, Jr. (1968) Associate Professor of Economics
B.A. St. Francis Xavier University, M.A. University of New Brunswick, M.A. University of Pennsylvania, Bryn Mawr College

John C. Tachovsky (1970) Associate Professor of Geography B.S., M.Ed. West Chester State College, University of Cincinnati

William A. Talley (1959) Supervisor of Student Teaching, Associate Professor of Education
B.S. West Chester State College, M.Ed. Harvard University

Elinor Z. Taylor (1955) Dean of Administration, Associate Professor
B.S. West Chester State College, Columbia University, Ed.M. Temple University, Temple University
S. Keith Taylor (1968) Professor of English
B.A. Ursinus College, M.A. University of Pennsylvania, Ed.D. Temple University
R. Scott Teets (1970) Instructor of Health and Physical Education
B.S. West Virginia University, D.T. Watson School of Physiatrics of the University of Pittsburgh

George M. Thomas (1966) Professor of Secondary Education and Professional Studies
B.S. West Chester State College, M.Ed. University of Delaware, Ed.D. Temple University

\section*{320/Faculty}

Powell S. Thomas (1946) Associate Dean for Graduate Studies, School of Arts and Letters, Professor of English
B.A. Gettysburg College, A.M., Ph.D. University of Pennsylvania

Andrew R. Thompson (1965) Associate Professor of Geography
B.S., M.Ed. West Chester State College, Rutgers University

James C. Thomson (1968) Chairman, Department of Music History and Literature, Professor of Music History and Literature
A.B. Middlebury College, Federal Music Academy (Berlin), M.A. Baylor University, M.A. Yale University, Ph.D. New York University

Joseph M. Thorson (1968) Associate Dean, School of Social and Behavioral Sciences, Chairman, Department of Business and Economics, Professor of Management L.L.M. University of Lwow (U.S.S.R.), M.A. Seton Hall University, Ph.D. Indiana University
(2)David G. Thurbon (1963) Assistant Professor of English
A.B., M.Litt. University of Pittsburgh

Thomas W. Treadwell (1968) Assistant Professor of Secondary Education and Professional Studies
B.A. Morris Harvey College, M.S. University of Bridgeport, Pennsylvania State University, Moreno Institute and Academy

John N. Trezise (1969) Associate Professor of Physical Education
B.S. West Chester State College, M.Ed. University of Pittsburgh

Willard J. Trezise (1938) Dean of Graduate Studies, Professor of Biology
B.S. Lebanon Valley College, M.S., Ph.D. Johns Hopkins University

Milan Trnka (1962) Assistant Professor of Health and Physical Education
A.B. Syracuse University, M.S. University of Illinois

Eugenta R. Truesdell (1969) Curriculum Laboratory Librarian, Assistant Professor A.B. Elmira College, B.S. Syracuse University

John J. Turner, Jr. (1965) Professor of History
A.B. Muhlenberg College, M.A. University of Rhode Island, Ph.D. Columbia University

Edward T. Twardowski (1951) Director of Placement and Career Services, Professor B.S. West Chester State College, M.S. University of Pennsylvania, Ed.D. Temple University

Judith A. Tyndall (1970) Instructor of Health and Physical Education (Part-time) B.S. West Chester State College, West Chester State College

Joy Vandever (1964) Assistant Professor of Voice/Theory and Composition B.S., M.Ed. West Chester State College, Indiana University

Richard K. Veleta (1965) Professor of Piano
B.Mus., M.Mus., D.M. Northwestern University, University of Colorado
C. Ralph Verno (1966) Associate Professor of Mathematics
B.A. University of Pittsburgh, B.D. Westminster Theological Seminary, M.S. in Ed. University of Pennsylvania

Jacques C. Voois (1969) Associate Professor of Piano
B.Mus. Oberlin Conservatory, M.Mus. Manhattan School of Music, Indiana School of Music, Peabody Conservatory

Marcia G. Voois (1970) Assistant Professor of English (Part-time)
B.A. College of Mt. St. Vincent, M.A. Kansas State University, University of Delaware
G. Alan Wagner (1967) Assistant Professor of Voice
B.Mus. Northwestern University, M.F.A. Carnegie Institute of Technology Academy of Vocal Arts

Charles R. Walker (1970) Assistant Professor of Health and Physical Education B.S. Hamline University, M.Ed. West Chester State College, Towson State College, University of Delaware

Aaron Wallenstein (1970) Associate Professor of Biology
B.S. Brooklyn College, Ph.D. University of Rhode Island
(2)Shirley Ann Walters (1963) Supervisor of Student Teaching, Associate Professor of Education
B.S. Millersville State College, M.A. University of Michigan, Purdue University, Bucknell University

John W. Ward (1961) Associate Professor of English A.B., M.A. Miami University

Martin A. Watkins (1967) Associate Professor of English
B.A. University of North Carolina, M.A. Indiana University, University of Pennsylvania

Richard P. Weagley (1954) Chairman, Department of Instructional Media Education, Professor of Instructional Media Education B.S. Lebanon Valley College, M.Ed., Ed.D. Pennsylvania State University

Carol Weber (1966) Assistant Professor of Health and Physical Education
B.S. Temple University, University of Maryland

Richard J. Webster (1967) Associate Professor of History
A.B. Lafayette College, M.A. University of Delaware, A.M. University of Pennsylvania

Susan W. Webster (1967) Assistant Professor of Biology
A.B. Bucknell University, M.Ed. West Chester State College

\section*{322/Faculty}

\section*{Ruth I. Weidner (1967) Music Librarian, Assistant Professor}
B.A. Hood College, M.S.L.S. Drexel Institute of Technology

Louls F. Weislogel (1970) Dean of Students, Associate Professor
A.B. Gettysburg College, M.S. Rutgers University, M.A. Villanova University, University of Pennsylvania

Naomi L. Weiss (1967) Associate Professor of Piano
B.S., M.S. Juilliard School of Music, Bard College, Chicago Musical College, St. Hochschule fuer Musik-Munich

Robert H. Weiss (1967) Professor of English
A.B. University of Pennsylvania, M.A., Ph.D. Temple University

Sol Weiss (1964) Associate Professor of Mathematics
B.S. Brooklyn College, M.A. Columbia University, University of Southern California, Temple University, University of Pennsylvania

James R. Wells (1968) Associate Professor of Instrumental Music/Music History and Literature
B.S. West Chester State College, M.Ed. Temple University, Professional Diploma Columbia University

Theocora Lee West (1963) Professor of English
B.A. University of Akron, M.A. Ohio State University, University of London, Ph.D. University of Pittsburgh

Linwood J. White (1968) Assistant Professor of Art
B.F.A. The Maryland Institute College of Art, M.F.A. University of Pennsylvania
(1)W. Benjamin Whitten (1959) Chairman, Department of Keyboard Music, Associate Professor of Piano
B.Mus., M.Mus. Peabody Conservatory of Music

Paul R. Widick (1967) Associate Professor of Earth, Space, and General Sciences B.A., M.Ed. Wayne State University, Northern Illinois University, M.A. Eastern Michigan University, Temple University

Mark F. Wiener (1965) Assistant Professor of Mathematics
B.S. West Chester State College, A.M. University of Illinois, University of Delaware, University of California at Santa Barbara

Linda D. Wiley (1970) Instructor of English (Part-time)
B.S. Towson State College, West Chester State College

Harry Wilkinson (1948) Professor of Music Theory and Composition/Organ B.S., Ed.M. Temple University, Ph.D. Eastman School of Music-University of Rochester
(3)Lloyd C. Wilkinson (1960) Associate Professor of Health and Physical Education B.S. West Chester State College, M.A. University of Miami, Villanova University, Pennsylvania State University

Ardis M. Williams (1967) Associate Professor of Chemistry
A.B. Mount Holyoke College, A.M. Vassar College, Columbia University

Edwin L. Williams (1968) Instructor of Philosophy
B.A. West Chester State College, University of New Mexico, Bryn Mawr College

Lois M. Williams (1955) Associate Professor of Music History and Literature/Voice and Choral Music
B.Mus. Western Michigan University, Hochschule fur Musik (Germany), M.A. Columbia University, Indiana University

Thomas B. Williams (1961) Director, Guidance and Counseling, Professor
B.S. Salisbury State College, Ed.M., Ed.D. Temple University

John M. Wintermute (1966) Associate Professor of Health and Physical Education B.S. Ithaca College, Ed.M. State University of New York at Buffalo, State University of New York at Buffalo, Temple University

Jack E. Wise (1968) Associate Professor of English
B.S., M.Ed. Shippensburg State College, West Virginia University, University of Pittsburgh

Richard I. Woodruff (1966) Assistant Professor of Biology
B.S. Ursinus College, M.Ed. West Chester State College

Ronald B. Woods (1967) Associate Professor of Health and Physical Education B.S. East Stroudsburg State College, M.S. University of Massachusetts

James J. Wright (1945) Chairman, Department of Music Theory and Composition, Professor of Music Theory and Composition
B.S. West Chester State College, Ed.M. Temple University, Ph.D. Eastman School of Music-University of Rochester

Naomi O. Wright (1970) Assistant Librarian, Associate Professor
B.S. in Ed., Ed.M. Rutgers University, B.L.S. Trenton State College, Columbia University, University of Delaware

Dorothy I. Yanisch (1947) Associate Professor of Health and Physical Education B.S. West Chester State College, Ed.M. Temple University

Stanley J. Yarosewick (1969) Chairman, Department of Physics, Associate Professor of Physics
B.S. University of New Hampshire, M.S., Ph.D. Clarkson College of Technology

Daniel Yeh (1968) Cataloging Librarian, Assistant Professor
B.A. National Taiwan University, M.S.L.S. Drexel Institute of Technology

\section*{324/Faculty}

Richard B. Yoder (1962) Associate Professor of Health and Physical Education
B.S. West Chester State College, M.A. Villanova University, Temple University

Edwin L. Youmans (1960) Dean, School of Health and Physical Education, Professor of Health and Physical Education
B.A. State College of Iowa, M.A., Ph.D. University of Iowa

Margaret Young (1968) Guidance Counselor, Professor
B.A. State University of Iowa, M.A. University of Minnesota, Ph.D. State University of Iowa

Robert J. Young (1965) Associate Professor of History
B.S. Temple University, M.A., Ph.D. University of Pennsylvania

Carlos R. Ziegler (1969) Assistant Chairman, Department of Elementary Education, Associate Professor of Elementary Education A.B. Elizabethtown College, M.Ed. Temple University, Temple University

Elsie B. Ziegler (1965) Associate Professor of English
B.S. Elizabethtown College, M.S.L.S. Villanova University, Ph.D. Temple University.


\section*{EMERITI PROFESSORS}

Faye A. Collicott, Librarian
George Cressman, Education
Katherine M. Denworth, Education
Marion Farnham, Art
Robert B. Gordon, Sciences
Thelma J. Greenwood, Biology
Thomas J. Heim, Social Sciences
Muriel Leach, Health and Physical Education
Dorothy Ramsey, English
B. Paul Ross, Education

Gertrude Schmidt, Music
Earle C. Waters, Health and Physical Education
Josephine E. Wilson, English
Edward Zimmer, Music

\section*{West chester state college \\ ALUMNI ASSOCIATION OFFICERS (1970-1971)}

Donald S. Pitt, President West Chester
Thomas Snyder, Vice President
Downingtown
Janice W. Etshied, Secretary
William R. Benner, Treasurer
Lawson S. Earl, Executive Director

Camp Hill
West Chester
West Chester

\section*{PICTURE CREDITS}
M. S. Mock, College Photographer William R. McAdoo, '71, Quad Angles
Dennis L. Fahringer, '72, Quad Angles

Arthur W. Wilkinson, '72, Quad Angles (Front Cover and others)
The Serpentine


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\section*{Map of the Campus}


\section*{Request for Application Forms}
[Secondary school students are asked to send this request as soon as possible following completion of their junior year.]
\(\begin{array}{lllll}\text { Miss } & \square & & & \\ \text { 1. Name } & \\ \text { Mrs. } & \square & \text { (Last) } & \text { (First) } & \text { (Second) }\end{array}\)
2. Number and Street \(\qquad\) County \(\qquad\)
3. City \(\qquad\) State \(\qquad\) Zip Code \(\qquad\)
4. When do you wish to enter West Chester? \(\qquad\) 19
(State the month: September, January, or June)
5. In what curriculum do you wish to enroll?
\begin{tabular}{llcl} 
ELEMENTARY EDUCATION & \(\square\) & ARTS AND SCIENCES \(\quad \square\) \\
SECONDARY EDUCATION & \(\square\) & List Major \\
\hline
\end{tabular}

BUSINESS ADMINISTRATION
MUSIC
Check the music degree
you wish to pursue:
B.S. in Music Education \(\square\)

Bachelor of Arts \(\square\)
Bachelor of Music

6. Have you attended any other college? \(\qquad\)

If so, give name of the college
How many semesters did you spend there? \(\qquad\)
7. Do you intend to apply as a Resident Student?

Day Student?
8. When will you (or when did you) graduate from secondary school?

Month \(\qquad\) Year \(\qquad\)

Send to:
Director of Admissions
West Chester State College
West Chester, Pennsylvania 19380
Note: When this information is received, instructions for completing your application will be sent to you. Do not send application fee with this form.

To telephone, dial 436 plus number in parentheses. Area Code: 215 Office/Telephone

Admission/Catalogues
Athletic Events
Audio-Visual Aids
Books/Student Supplies
Business/Fiscal Matters
Certification/Curricula/
Graduation/Selective Service
Computer Services
Counseling
Cultural Affairs
Curriculum Enrichment
Film Service
Financial Aid/Student Jobs
Graduate Studies/Catalogues
Higher Education Opportunity Program
Infirmary
Library Services
Music Events (College)
Placement/Careers
Public Relations/Publications
Research/Grants
Reservations for Facilities
Room Assignments (Men)
Room Assignments (Women)
Speech/Hearing Clinic
Student Teaching
Theatre 208
Transcripts/Veterans

Director of Admissions (2933)
Director of Athletics (2743)
Educational Media Services (2233)
College Bookstore (2242)
Director of Business Affairs (2211)
Dean of Undergraduate Studies (2601)

Research and Related Services (2828)
Guidance and Counseling Center (2611)
Director of Cultural Affairs (2336)
Director of Curriculum Enrichment (2600)
Instruc'I Materials Ctr (436-0242)
Director of Financial Aid to Students (2627)
Dean of Graduate Studies (2243)
Guidance and Counseling Center (2741)

Health Services (2509)
Director, Library Services (2747)
School of Music (2739)
Director of Placement/Careers (2501)
Director of Public Relations (2882)
Research and Related Services (2835)
Director of Student Activities (2840)
Dean of Men (2531)
Dean of Women (2537)
Dept. of Speech/Theatre Clinic (2237)
Director of Student Teaching (2316)
Dept. of Speech and Theatre (2533)
Director of Scheduling/Records (2337)

\section*{Building}

Administration
H/PEd Cir
Anderson
Recitation
Philips
Administration

Learning/Research
Ramsey
Administration
Administration
Anderson
Lawrence
Administration
Ramsey

Reynolds
Library
Swope
Reynolds
Administration
Learning/Research
Lawrence
Sanderson
Ramsey
620 S. High
628 S. High
Recitation
Administration

\section*{Administrative Offices of Schools}

Arts and Letters (2338)
Education (2428)
Health/Phys Ed (2825)

Art (2755)
Biology (2538)
Business/Economics (2236)
Chemistry (2631)
Earth/Space (2788)
Education (2428)
Reading (2861)
English (2335)
Foreign Languages (2700)
Geography (2343)
Health/Phys Ed (2825)
History (2681)

Anderson
Anderson
H/PEd Ctr

Music (2739)
Sciences/Math (2540)
Social and Behavioral Sciences (2930)

\section*{Curricula}

Mitchell
Schmucker
Anderson
Schmucker
Schmucker
Anderson
809 Roslyn
Anderson
Recitation
Anderson
H/PEd Cfr
Anderson

Mathematics (2440)
Music (2739)
Nursing/Dental
Hygienists (2219)
Philosophy (2841)
Physics (2573)
Political Science (2746)
Psychology (2945)
Sociology/Anthro (2657)
Special Education (2362)
Speech and Theatre (2500)

Swope
Schmucker
Anderson

Anderson
Swope
Schmucker

104 Rosedale
Schmucker
Anderson
Administration
Old Library
Special Ed
106 Rosedale

MAILING ADDRESS: West Chester State College, West Chester, Pa., 19380



\section*{Undergraduate Studies}

\section*{SUMMER 1972}

\section*{West Chester State College Catalogue}

Pre-Registration begins March 15, 1972, and continues until termination date given below for each Session.

\section*{PRE SESSION}

Pre-Registration ends 4 p.m. Registration*

Thursday, May 25
Monday, June 5
Students will register alphabetically according to last name:
\begin{tabular}{lr} 
A thru \(F\) & 8:30 a.m. to \(9: 45\) a.m. \\
G thru \(L\) & \(9: 45\) a.m. to \(11: 00\) a.m. \\
M thru \(R\) & \(12: 30\) p.m. to \(1: 45\) p.m. \\
S thru \(Z\) & \(1: 45\) p.m. to \(3: 00\) p.m.
\end{tabular}

Classes begin 8:00 a.m.
Classes end

Tuesday, June 6
Friday, June 23

\section*{REGULAR SESSION}

Pre-Registration ends 4 p.m.
Registration*
Friday, June 16
Students will register alphabetically according to last name:
\begin{tabular}{lr} 
A thru \(F\) & \(8: 30\) a.m. to \(9: 45 \mathrm{a} . \mathrm{m}\). \\
\(G\) thru \(L\) & \(9: 45\) a.m. to \(11: 00\) a.m. \\
M thru \(R\) & \(12: 30\) p.m. to \(1: 45\) p.m. \\
S thru \(Z\) & \(1: 45\) p.m. to \(3: 00\) p.m.
\end{tabular}

Classes begin 8:00 a.m.
Holiday
Holiday
Make-up for evening classes
Make-up for day classes
Classes end
Tuesday, June 27
Monday, July 3
Tuesday, July 4
Friday evening, July 7
Saturday, July 8
Friday, August 4

\section*{POST SESSION}

Pre-Registration ends 4:00 p.m.
Registration*
Friday, July 28
Monday, August 7
Students will register alphabetically according to last name:
\begin{tabular}{lr} 
A thru \(F\) & \(8: 00 \mathrm{a} . \mathrm{m}\). to \(9: 00 \mathrm{a} . \mathrm{m}\). \\
G thru \(L\) & \(9: 00 \mathrm{a} . \mathrm{m}\). to \(10: 00 \mathrm{a} . \mathrm{m}\). \\
M thru \(R\) & \(10: 00 \mathrm{a} . \mathrm{m}\). to \(11: 00 \mathrm{a} . \mathrm{m}\).
\end{tabular}

Classes begin 8:00 a.m.
Classes end

Tuesday, August 8
Friday, August 25

\footnotetext{
* No student may register in advance of his scheduled hour and date. Employed students should arrange with their employers for time off in order to register at their designated time.
}

WEST CHESTER STATE COLLEGE CATALOGUE

UNDERGRADUATE STUDIES

SUMMER SESSIONS 1972


\section*{ACCREDITATION}

The Middle States Association of Colleges and Secondary Schools/The National Council for Accreditation of Teacher Education/The American. Association for Health, Physical Education, and Recreation/The National Association of Schools of Music.

\section*{Administration}

\author{
PRESIDENT \\ \section*{VICE PRESIDENT FOR ACADEMIC AFFAIRS} \\ Director of Summer Sessions \\ Associate Vice President for \\ Academic Affairs \\ Dean of Undergraduate Studies \\ Dean of Graduate Studies \\ Dean, School of Arts and Letters \\ Dean, School of Education \\ Dean, School of Health and Physical Education \\ Dean, School of Music \\ Dean, School of Sciences and Mathematics \\ Dean, School of Social and Behavioral Sciences \\ Director of Admissions \\ Director of Scheduling and Academic Records
}

Dean of Students
Dean of Men
Dean of Women
Summer Sessions Recreation Director

\section*{Dean of Administration}

Director of Financial Aid to Students
Director of Placement and Career Services

Director of Business Affairs

Director of Facilities

PAUL W. ROSSEY

\author{
ALBERT E. FILANO
}

Walter E. Buechele

\author{
Dennis D. Bell \\ Emil H. Messikomer \\ Willard J. Trezise \\ John W. Clokey \\ Harold W. Benda \\ Edwin L. Youmans \\ Charles A. Sprenkle \\ Russell K. Rickert \\ Byron Y. Fleck \\ R. Godfrey Studenmund \\ William U. Hodgson
}

Louis F. Weislogel
Kenneth F. Burda
Bernice Bernatz
Robert W. Reese

Elinor Z. Taylor
Theodore H. Butcher
Edward T. Twardowski

Everett E. Shaefer

Robert C. Hannum

\section*{Contents}

2 The Administration
4 Chart of Curricula Offered
5 West Chester State College: An Overview
8 Undergraduate Summer Sessions
9 Registration Requirements and the Pre-Registration Procedure

10 Fees and Expenses
12 General Information
13 Academic Information
16 Pre-Registration and Registration Instructions for 1972 Summer Sessions

18 Pre Session Offerings
22 Regular Session Offerings
34 Post Session Offerings
37 Summer Workshops and Other Special Offerings Described

Inside
Front
Cover Calendar for Undergraduate Summer Sessions
Inside
Back
Cover Map of North Campus

The provisions of this Catalogue are not to be considered an irrevocable contract between the student and the College. West Chester State College reserves the right to change any provisions or requirements at any time within the student's term of attendance.
Undergraduate Degree Programs Offered at West Chester
\begin{tabular}{|c|c|}
\hline Teacher Education & Arts and Sciences \\
\hline  & \begin{tabular}{ll} 
ARTS AND LETTERS & MUSIC \\
Art & B.A. Degree \\
Foreign Languages & B.Mus. Degree \\
\multicolumn{1}{l}{ French Russian } & SOCIAL AND \\
German SPanish & BEHAVIORAL SCIENCES \\
Latin & Economics \\
Literature & Geography \\
Philosophy & History \\
Speech Arts & Political Science \\
Theatre Arts & Psychology \\
& Sociology-Anthropology \\
SCIENCES & Social Welfare \\
Biology & BUSINESS \\
Chemistry & ADMINISTRATION \\
Physics & INTERDISCIPLINARY \\
& PROGRAMS \\
MATHEMATICS & American Studies \\
& Latin-American Studies \\
NURSING & Russian Studies
\end{tabular} \\
\hline
\end{tabular}

\section*{West Chester State College: An Overview}

West Chester is a multi-purpose college with a student body of nearly 5,700 full-time undergraduates. Almost one thousand additional undergraduates attend the College as part-time students and still another 1,600 are enrolled (mainly part-time) for graduate studies. West Chester is thus the second largest link in the system of fourteen institutions of higher learning which the Commonwealth owns and maintains for the youth of Pennsylvania. The College's objectives are to prepare teachers for Pennsylvania's public schools and to provide a liberal arts education for its youth.

West Chester traces back to the West Chester Academy, founded in 1812. Since then, an educational institution named West Chester has been in existence. The College has acquired its present dimensions through changes largely determined as the Commonwealth assumed increasing responsibility for the education of young Pennsylvanians. The Academy became West Chester State Normal School in 1871, West Chester State Teachers College in 1927, and West Chester State College in 1962. A program of graduate studies, begun in 1959, offers the Master of Education, Master of Arts, and Master of Science degrees in a number of disciplines.

West Chester has expanded into North Campus and South Campus, where the new facilities of the School of Health and Physical Education are beautifully situated. The widened educational resources of the College include the new Francis Harvey Green Library, with more than 275,000 volumes; a Learning Research Center, housing a modern laboratory school and a computer center; Schmucker Science Center; and Lloyd C. Mitchell Hall, a fine-arts classroom building completed in 1970. A complex of six handsome new high-
rise residence halls spans the western side of North Campus near Lawrence Center, which provides modern dining halls, a student lounge and snack bar, and other student facilities.

The total program at West Chester is comprehensive and designed to satisfy the intellectual, physical, and spiritual needs of all students. A wide range of extracurricular activities provides students with opportunities for full expression of their talents and interests.

\section*{Location of the College}

The College is in West Chester, the county seat of Chester County. With a population of about 17,000 , West Chester is small enough to have the pleasant aspects of a tree-shaded American town, large enough to contain essential services and the substance of a vigorous community, and old enough to give the student first-hand touch with America's early history.

West Chester was settled largely by members of the Society of Friends in the early years of the eighteenth century. The town retains many charming traces of their culture. Today, West Chester is part of the rapidly growing suburban complex adjoining Philadelphia. Students have abundant opportunities to study local, county, and regional government in an era of dynamic change and growth.

The proximity of Philadelphia ( 25 miles to the east) and Wilmington ( 15 miles to the south) puts the libraries, museums, and other cultural and historical resources of the two cities in convenient range. West Chester is near Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historic attractions of Chester County. The College itself has a rich cultural program, including its All-Star Series, the William Pyle Philips Lecture Foundation Series, and the recitals and concerts of its own School of Music.

\section*{Degrees Offered}

The Bachelor of Science in Education degree is given in four bas:c curricula-elementary, secondary, music education, and health and physical education-and in one area (speech pathology and audiology) of special education. The College has a program of courses designed to meet certification requirements in the field of safety education and in the special education fields which train for the teaching of mentally retarded and physically handicapped children.

The liberal arts program leads to the Bachelor of Arts degree in arts and letters, social sciences, sciences, mathematics, and music; to the Bachelor of Music; and to the Bachelor of Science in chemistry. A Bachelor of Science degree is also given in business administration, and in the 1972 fall semester a program leading to the Bachelor of Science in nursing will be introduced. A cooperative degree program for dental hygienists is also available.

\section*{Program for In-Service Teachers}

West Chester also maintains an extensive two-track program for teachers in service. One phase is composed of late-afternoon and evening courses for those desiring to satisfy various professional needs, including certification requirements. The second phase is the graduate program.

\section*{Admission to West Chester (Academic Year)}

Admission to the fall or spring semester involves a number of steps, the first of which is the filing of application forms which may be secured from the Office of Admissions.

Candidates for admission must meet the following requirements:
1) Acceptable scholarship as evidenced by graduation from an approved secondary school or equivalent preparation as determined by the Credentials Evaluation Division of the Pennsylvania Department of Education. All candidates for admission must take the College Entrance Examination Board's Scholastic Aptitude Test and English Composition Achievement Test, or the tests given by the American College Testing Program.
2) Recommendation by the high school principal, guidance counselor, or other school official acquainted with the student, in addition to a personal interview with a member of the College staff.
3) For admission to special curricula, the College may require the candidate to take an aptitude test in the special field in crder to obtain further evidence of ability to succeed.

\section*{Housing}

The majority of West Chester's undergraduate students live on campus. Upon admission, students who intend to reside at the College will need to make arrangements with the Dean of Men or the Dean of Women for their housing at the earliest opportunity.

\section*{Obtaining Catalogues}

The undergraduate annual and Summer Session catalogues may be obtained from the Director of Admissions. Catalogues for Graduate Studies during the academic year and the Graduate Summer Sessions may be obtained from the Office of Graduate Studies.

\section*{West Chester Undergraduate Summer Sessions}

In 1877 West Chester held one of the nation's first summer sessions for teachers. Since then, the College has been known to generations of students in the area as an ideal place for summer study.

The 1972 Summer Sessions will be divided into a Pre Session of three weeks, a Regular Session of six weeks, and a Post Session of three weeks.

For undergraduate students, the schedule includes courses in both liberal arts and teacher education. For teachers in service, the summer program offers an opportunity to satisfy various professional needs, including certification requirements. A number of special offerings and workshops for in-service teachers are made available each summer.

In 1971, 1,463 attended the Pre Session, 2,227 the Regular Session, and 1,032 the Post Session.

\section*{Social and Recreational Program}

Summer study at West Chester is pursued under pleasant circumstances. The tree-shaded campus with its conveniently located buildings provides a beautiful and restful environment. Various recreational activities include softball, tennis, and swimming. Social hours, when students meet informally with faculty members, are a feature of the Pre and Post Sessions. Philadelphia, with its historic and scenic interest and its full summer program of art, music, and theater, is a distinct attraction. New York and Atlantic City are within easy access, and the famed fountains and beautiful outdoor theater at Longwood Gardens are only a few miles from the campus.

\section*{Registration Requirements}

\section*{The Pre-Registration Procedure}

Registration in any Summer Session does not establish priority or privilege for admission as a student for the regular academic year.

Graduation from an approved secondary school or its equivalent is a basic requirement to attendance at West Chester Summer Sessions.

Present and former West Chester students need not obtain permission to register at West Chester Summer Sessions. They simply follow the Pre-Registration Procedure described below.

All other applicants must obtain permission to register from the Director of Admissions at least one week before the close of each Pre-Registration period. (See calendar at front for dates.)

Students currently enrolled in other colleges follow the PreRegistration Procedure except that they must file with their preregistration forms an approval-of-attendance statement from the Dean of Instruction of their own college. Pre-registration forms will not be accepted from students enrolled elsewhere without such a statement.

\section*{Pre-Registration Procedure}

Application for admission to any or all of the Summer Sessions is made by completing and submitting to the Director of Admissions the pre-registration information forms contained in this catalogue, or available from the Office of Admissions. (Students currently enrolled at West Chester may submit the forms directly to the office of the Dean of Undergraduate Studies.) Once these forms are submitted, no further application procedure is required until the date of registration when all students report to Lawrence Center.

The Pre-registration period begins March 15. See calendar for Pre-registration closing dates for each Session.

\title{
Summer Sessions Fees and Expenses
}

Fees are subject to change without notice. All charges for a session must be paid on the doy of registration.

\section*{Basic Fee (Pennsylvania Residents)}
(Check or money order poyoble to Commonwealth of Pennsylvanio)
\(\$ 26\) per semester hour of credit.
Minimum Fee for Regular Session: \(\$ 78\)
Minimum Fee for Pre or Post Session: \$39

\section*{Basic Fee (Out-of-State Students)}
\(\$ 43\) per semester hour of credit.
Minimum Fee for Regular Session: \$129
Minimum Fee for Pre or Post Session: \(\$ 64.50\)

\section*{Housing Fee (Room and Meals)}

Regular Session: \(\$ 120\)
Pre or Post Session: \$60
No reduction is made for absences of a few days. At the discretion of the College, a student may occupy a double room by paying an additional \(\$ 12\) for the Regular Session or \(\$ 6\) for the Pre or Post Session.

Charges for separate meals are: breakfast 65 cents, lunch 85 cents, dinner \(\$ 1.25\).

\section*{Special Fee (Health and Physical Education)}

In addition to the basic fee, health and physical education majors pay a special fee of \(\$ 3\) for the specialized health and physical education courses.

Special Fee (Music)
In addition to the basic fee, Regular Session students in any of the three music curricula pay special fees based on the college-semester music fee of \(\$ 45\).

\author{
Rental and Practice Fees for Music Majors \\ Pipe Organ for Practice \\ Regular Session: \$12 \\ Pre or Post Session: \$6
}

Rental of Orchestral Instruments
Regular Session: \$2
Pre or Post Session: \$1
(No charge for piano for practice.)

\section*{Private Music Instruction Fee For All Other Curricula}

Non-music majors who elect private instruction (two half-hour lessons per week) in piano, organ, voice, or an instrument pay an applied-music fee of \(\$ 45\) for Regular Session. Practice and rental charges: same as for music majors except for \(\$ 2\) fee for a practice piano in Regular Session and \(\$ 1\) fee in Pre or Post Session.

\section*{Late Registration Fee}

A fee of \(\$ 10\) is required of students who register after the pre-registration period or after registration day for any of the three sessions. The Tuesday after each registration day is the last day to register for each session and will be counted as Late Registration.

\section*{Books}

Books (available at the College Bookstore) must be purchased. The cost varies, but averages about \(\$ 10\) per course.

\section*{Student Activities Fee}

> (Check or money order payable to Introcolleglate Governmental Association)

Regular Session: \$3.50
Pre or Post Session: \(\$ 1.75\)

\section*{Resident Council Dues (Men)}
(Check or money order payable to Intracollegiote Governmental Association)
Dues of \$1 are charged men students living in residence halls during the Regular Session (50 cents for the Pre or Post Session).

\section*{Refunds}

For the Summer Sessions, refunds will not be made to students who voluntarily withdraw or are indefinitely suspended or dismissed from the College; these regulations apply after the first day of class attendance.

In cases of personal illness, certified by an attending physician, or for other emergency reasons which may be approved by the Trustees, the College will refund the portion of the basic fees for the part of the Session which the student does not spend in the College.

\section*{General Information}

\section*{Housing}

Housing in the men's and women's residence halls is available to students for any or all of the Sessions. After filing his application for admission, a student who wishes to reside on campus must make written application for room reservations, either to the Dean of Women or Dean of Men, at least one week prior to the opening of a Session. Rooms may be occupied between 7 p.m. and 9 p.m. on the Sunday preceding the Session.

The College has no housing accommodations for married couples or families.

\section*{Placement and Career Services}

The College maintains an active Placement and Career Service for its students. Excellent opportunities for employment in teaching and other careers are offered to graduates and graduating seniors without cost and counseling in career planning is available to all students.

\section*{Opportunities for Employment and Loans}

Students who desire part-time or hourly work in the community or on campus should communicate with the Director of Financial Aid to Students. Information about student loans is also furnished in his office.

\section*{Cultural and Social Events}

Among the varied cultural and recreational events offered in the summer months are trips to the Robin Hood Dell Concerts, excursions to Longwood Gardens, a campus cinema series, swimming, and tennis. Dances in Hollinger Field House, an All-College picnic for faculty and students, and a series of faculty-student coffee hours are additional attractions. The Summer Sessions Recreation Director may be consulted.

\section*{Academic Information}

\section*{Credits}

Credits for the summer sessions may be earned at the rate of one semester hour per week of work. Thus, a student attending all three sessions may earn twelve credits.

Students are not permitted to carry more than six semester hours of work in the Regular Session unless permission is secured in advance from the Dean of Undergraduate Studies.

\section*{Reinstatement to Fall Semester}

If a West Chester student does not attain the required scholastic index by the end of the spring semester, he may attend Summer Sessions at West Chester in order to improve his academic average. Unless he attains the required scholastic index by the end of the Summer Sessions, he will incur academic dismissal. If he achieves the required scholastic index, he will be notified by letter from the Office of Undergraduate Studies. He will not need to apply for readmission through the Office of Admissions.

\section*{Academic Dismissal}

The recommendations of the department chairman concerned and the Dean of Women or Dean of Men are considered when the question of a student's dismissal for academic reasons is under study.

Any student dismissed twice for academic reasons automatically terminates his degree candidacy at West Chester. Any courses taken as a non-degree student, following a second academic dismissal, shall not be included in his cumulative grade average, nor imply the right to readmission to the College.

\section*{Withdrawal}
1) All withdrawals from class must be initiated by the student. who must report his intention to withdraw to his instructor.
2) A student who finds it necessary to withdraw from a class must file letters with the Office of Undergraduate Studies and the Office
of Business Affairs, giving the date of last class attendance and the reason for withdrawal.
3) If a student withdraws from a class or classes without following the official procedures, his registration is continued until the end of the particular Session, and he will receive an F grade in the course or courses pursued.

See also Fees and Expenses for refund policy regarding withdrawals.

\section*{Course Changes After Registration Day}

The Tuesday following each registration day of each Session will be set aside for course changes (fee of \(\$ 5.00\) ). All late changes must be made by this day. (Students desiring to change a course prior to registration day may do so with no fee incurred, provided the change is made before the pre-registration deadline of the particular Session.)

\section*{Teacher Certification}

Instructional I Certificate. A student who satisfactorily completes one of the teacher education curricula offered by the College receives his degree from the College and qualifies for an Instructional I Certificate (formerly described as a Provisional College Certificate) which is issued to him by the Pennsylvania Department of Education. This certificate is valid for three years from the date of issue.

Instructional II Certificate. The Permanent College Certificate requires three years of successful teaching in the public schools of Pennsylvania under the Instructional I Certificate and the satisfactory completion of 24 semester hours of additional work of collegiate grade, completed subsequent to the issuance of the baccalaureate degree. This certificate is a permanent license to teach in Pennsylvania. When prepared for the Instructional II Certificate, teachers may obtain application instructions from superintendents of schools.

Either of these certificates may be extended to include other fields by completing the requirements of the College for that other field. See Undergraduate Studies catalogue for further information.

\section*{Citizenship Requirement for Teachers}

To be eligible for a teacher's certificate in Pennsylvania, a student must be a citizen of the United States. Exception is made for foreign languages, which citizens of other countries may be certified to teach on a three-year basis.

\section*{College Regulations}

The regulations which pertain to student procedure and conduct during the academic year at West Chester are also in effect for Summer Sessions.

\section*{Enrollment}

Each course offered for the Summer Sessions is contingent upon adequate enrollment and the judgment of the Dean of the School offering the course.

\section*{Summer Graduation}

Students who expect to graduate at the end of a Pre, Regular, or Post Session are urged to attend the spring Commencement exercises preceding Summer Sessions. It is the student's responsibility to notify the Office of Undergraduate Studies in person of his anticipated graduation and to see that his name, written as he desires, is placed upon the list of prospective graduates which the Office prepares.

\section*{Class Meetings and Periods}

Class days and hours are shown under Pre, Regular, and Post Session offerings.

The class-absence policy for the academic year applies to the Summer Sessions.

The time and days of classes are subject to change by administrative decision.

\section*{1972 Pre-Registration and Registration}

\section*{PRE-REGISTRATION INSTRUCTIONS}

All prospective Summer Session students must fill out the set of Pre-Registration forms enclosed in this catalogue. This material must be filled out in its entirety. Please supply all information requested, as well as the courses desired. Return the forms to the Office of Admissions.

Pre-registration for the Pre Session will terminate Thursday, May 25. Pre-registration for the Regular and Post Sessions will terminate two Fridays prior to their General Registration and Payment dates, as follows:
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{3}{|c|}{Pre-Registration Deadlines} & \multicolumn{2}{|l|}{General-Registration and-Payment Dates} \\
\hline Pre: & Thursday, May 25 & & Pre: & June 5 \\
\hline Regular: & Friday, June 16 & & Regular: & June 26 \\
\hline Post: & Friday, July 28 & (2) & Post: & August 7 \\
\hline
\end{tabular}

Students who fail to furnish Pre-Registration Information forms to the College by the Pre-Registration deadlines will be subject to a Late Pre-Registration fee of \(\$ 10\).

There will be a change-of-course fee of \(\$ 5\) on Registration Day for any change of course made after the Pre-Registration deadline.

\section*{NOTE WELL}

All Summer Session fees must be paid at Registration.
Payments by mail are NOT acceptable for Undergraduate Summer Session fees. For underdergraduates, the payment-by-mail system applies only to the academic year, not to Summer Sessions.

\section*{REGISTRATION INSTRUCTIONS \\ Place of regisfration: Lawrence Center \\ Proceed from station to station in order shown}

\section*{Station I. Foyer}
1. Secure calendar for session.
2. Secure classroom assignment sheet.

\section*{Station II. Northeast Dining Room}
1. When you enter, secure registration materials.
2. Undergraduate Table-Change of Course or Late Registration
a) If you wish to change or drop a course, report here.
b) If you have not pre-registered, report here.
3. Scheduling and Academic Records Table
a) If you are a senior planning to graduate in August, 1972, sign here for diplomas. (Please designate graduation date as Pre, Regular, or Post Session.)
b) If you are a senior in Teacher Education planning to graduate in August, 1972, secure application for your Instructional I Certifciate.
c) If you receive Veterans' benefits, secure form here.
d) If you wish to have credits transferred to another college, secure special form here.
4. Fill out your registration materials at designated writing tables.
5. Dean of Men's and Dean of Women's Table
a) Mark your status (resident, commuting, or independent housing).
b) If you are a residence hall student, obtain your room assignment and write it on your registration form. (Note that all residence hall students must take their meals in the College dining hall.)
6. Checking Table
a) Registration cards will be checked here for accuracy and collected.
b) Proceed to Station III.

\section*{Station III. Northwest Dining Room}
1. Pay basic fee and room-and-board fee.
2. Automobile Regulations Station

Obtain automobile decals here. (This applies to both commuting and resident students.)
3. Student Activities Fee Table

Pay your student activities fee. Please have your check made out, ready to submit. Make it payable to "Intracollegiate Governmental Association." Fees are \(\$ 1.75\) for Pre or Post Session and \(\$ 3.50\) for Regular Session.

\section*{Pre Session \\ Monday, June 5 through \\ Friday, June 23}

Each class meets 8-9:30 a.m. and 10:30-12 Noon, unless otherwise shown.

See Undergraduate Studies catalogue for course descriptions. Course listings are correlated with the 1971-72 catalogue. NEW indicates a course not described in the catalogue.
Offerings listed are contingent upon sufficient enrollment.

\section*{SCHOOL OF ARTS AND LETTERS}
\begin{tabular}{|c|c|c|c|}
\hline Cours & e Number & \(r\) Course Title & Credits \\
\hline \multicolumn{4}{|c|}{Art} \\
\hline Art & 101 & Fine Arts [Art] & 3 \\
\hline Art & 360 & Function of the Museum in Art & 3 \\
\hline \multicolumn{4}{|c|}{English} \\
\hline Eng & 101 & English Composition I & 3 \\
\hline Eng & 102 & English Composition II & 3 \\
\hline Eng & 201 & Introduction to Linguistics (olso Lin 201) & 3 \\
\hline Eng & 230 & Business Communications & 3 \\
\hline Lit & 121 & General Literature I & 3 \\
\hline Lit & 122 & General Literature II & 3 \\
\hline Lit & 223 & American Literature I & 3 \\
\hline Lit & 225 & English Literature I & 3 \\
\hline Lit & 333 & Shakespeare I & 3 \\
\hline Lit & 350 & Children's Literature & 3 \\
\hline \multicolumn{4}{|c|}{Foreign Languages} \\
\hline Lin & 201 & \begin{tabular}{l}
Introduction to Linguistics \\
(Also Eng 201)
\end{tabular} & 3 \\
\hline \multicolumn{4}{|c|}{Philosophy} \\
\hline Phi & 280 & Introduction to Philosophy & 3 \\
\hline Phi & 374 & Aesthetics & 3 \\
\hline \multicolumn{4}{|c|}{Speech and Theatre} \\
\hline Sph & 100 & Bases of Speech & 3 \\
\hline Sph & 101 & Fundamentals of Speaking & 2 \\
\hline Sph & 103 & Discussion & 3 \\
\hline SpP & 201 & Introduction to Speech Problems & 3 \\
\hline
\end{tabular}

\section*{SCHOOL OF EDUCATION}
EdA 344 Problems in Special Education ..... 2(EVENING: 6:30-8:30 p.m. Mon. thru Thurs.)
EdE 401 Current Trends in Elementary Education ..... 2
EdF 100 School and Society ..... 3
EdM 300 Audio-Visual Education ..... 2
EdP 250 Psychology of Learning and Development ..... 3
EdU 360 The Disadvantaged Child ..... 3(EVENING: 6:30-9:30 p.m. Mon. thru Thurs.)
SCHOOL OF HEALTH AND PHYSICAL EDUCATION
Health Education
HEd 252 First Aid and Care and Prevention of ..... 2
Athletic Injuries
HEd 356 Family Life and Sex Education ..... 2
Physical Education
(Evening Classes)
PEd 361 Tests, Measurements, and Statistics in Health and Physical Education ..... 3(7:00-10:00 p.m. Mon. thru Thurs.)
PEd 390 Physical Disabilities of Childhood ..... 2 (7:00-9:00 p.m. Mon. thru Thurs.)
PEd 481 Education for Safe Living ..... 3(7:00-10:00 p.m. Mon. thru Thurs.)PEd 482 Principles and Practices of Driver Educationand Traffic Safety3(7:00-10:00 p.m. Mon. thru Thurs.)
SCHOOL OF MUSIC
Mus \(121 \quad\) Fine Arts [Music] ..... 3
Mus 221 Music in Western Civilization I ..... 3
Mus 334 Teaching Music Appreciation in the Elementary Grades ..... 3

\section*{SCHOOL OF SCIENCES AND MATHEMATICS}

\section*{Biology}
Bio \(100 \quad\) Basic Biological Science (01) ..... 418:00 to 12:30 Mon. thru Fri. including Lab)
Bio \(100 \quad\) Basic Biological Science (02) ..... 418:00 to 12:30 Mon. thru Fri. including Lab)
Bio 209 Human Anatomy ..... 4
(La's 1:00 to 3:00 Mon. thru Thurs.)
Bio 330 Genetics ..... 4
ILab 1:00 to 3:00 Man. thru Thurs.)
Bio 378 Ornithology ..... 3
ILab 1:00 ta 3:00 Mon. thru Thurs.1
Chemistry
Che \(100 \quad\) Principles of Chemistry ..... 4
ILab 1:00 ta 3:00 Mon. thru Thurs.)
Earth, Space, and General Sciences
MARINE SCIENCE CONSORTIUM (See "Workshops/Other SpecialOfferings")
Sci 250 Science for the Elementary Grades ..... 3
ESS 101 Earth Science ..... 4
(Lab 1:00 to 3:00 Mon. thru Thurs.)
ESS 111 General Astronomy ..... 4
(Lab 1:00 to 3:00 Mon. thru Thurs.)
ESS 311 Geochemistry ..... 3(EVENING: 6:00-9:00 p.m. Mon. thru Thurs.)
Mathematics
Mat 101 Introduction to College Mathematics 1 (01) ..... 3
(Elementary Majors only)
Mat 101 Introduction to College Mathematics I (02) ..... 3
(Majors olher than Elemenlary)
Mat 105 College Algebra and Trigonometry ..... 3
Mat 107 Mathematics for the Management Sciences I ..... 3
Mat 141 Calculus I ..... 3
Mat 351 Teaching Mathematics in Elementary Schools ..... 3
Physics
Sci 150 Basic Physical Science ..... 4
(Lab 1:CO to 3:00 Mon thiru Thurs)

\section*{SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES}
Anthropology
Ant 102 Introduction to Anthropology: Cultural ..... 3
(Replaces Ant 231)
Business
BAc 201 Principles of Accounting I ..... 3
Economics
Eco 201 Principles of Economics-Survey ..... 3
Eco 231 Principles of Economics I ..... 3
Geography
Geo \(101 \quad\) World Geography ..... 3
Geo 210 Geographic Influences in American History ..... 3
Geo 416 Seminar on the New Emerging Southeast Asia ..... 3
History
His 101 History of Civilization I ..... 3
His 102 History of Civilization II ..... 3
His 211 History of United States I ..... 3
His 212 History of United States II ..... 3
His 220 Renaissance and Reformation ..... 3
Political Science
PSc 231 American Government ..... 3
PSc 340 American Constitutional Law ..... 3
Psychology
Psy 100 Introduction to Psychology ..... 3
Psy \(352 \quad\) Child and Adolescent Psychology ..... 3
Psy 365 Industrial Psychology ..... 3NEW
Social Welfare
SWo 200 Introduction to Social Work ..... 3
Sociology
Soc 231 Introduction to Sociology ..... 3

\section*{Regular Session}

\section*{Monday, June 26}
through
Friday, August 4

Classes meet daily, Monday through Friday, unless otherwise indicated.

Holidays: Monday-Tuesday, July 3-4.
Make-up Classes: Friday night, July 7, for night classes. Saturday, July 8, for day classes.

See Undergraduate Studies catalogue for course descriptions. Course listings are correlated with the 1971-72 catalogue. NEW indicates a course not described in the catalogue.
Offerings listed are contingent upon sufficient enrollment.
SCHOOL OF ARTS AND LETTERS
1:00-4:30 p.m.
\begin{tabular}{llll}
\hline SSc & 380 & \(\begin{array}{c}\text { Ethnic Cultures Institute (June 26-July 14) } \\
\text { (See "Workshops/Other Special Offerings") }\end{array}\) & 3
\end{tabular}
Art
8:00-9:30 a.m.
Art 101 Fine Arts [Art] (01) ..... 3
Art 106 Drawing I: Perspective, Proportion, Composition ..... 3
Art 111 Design I: Color Theory and Two-Dimensional Techniques ..... 3
Art 222 Sculpture II: Additive Techniques ..... 3
Art 347 Crafts: Fabric Design ..... 3
9:30-11:00 a.m.
Art 216 Painting I: Fundamental Techniques- Basic Composition ..... 3
Art 226 Water Color: Basic Water-Based Techniques ..... 3
Art 241 Graphics I ..... 3
Art 251 Art in the Elementary School 1 ..... 3
Art 266 Crafts: Three-Dimensional Media for Elementary Education ..... 3
11:00 a.m.-12:30 p.m.
Art 101 Fine Arts [Art] (02) ..... 3
Art 221 Sculpture I: Subtractive Techniques ..... 3
Art 231 Ceramics I: Basic Techniques and Glaze Calculations ..... 3
Art 232 Ceramics II: Intermediate Techniques and
Glaze Calculations ..... 3
Art 386 Western Art V: 20th Century ..... 3
English
8:00-9:30 a.m.
Eng 101 English Composition I (01) ..... 3
Eng 102 English Composition II (01) ..... 3
Eng 315 Modern English Grammar ..... 3
Lit 121 General Literature I (01) ..... 3
Lit 122 General Literature II (01) ..... 3
Lit 338 Modern Irish Literature ..... 3
Lit 350 Children's Literature (01) ..... 3
9:30-11:00 a.m.
Eng 102 English Composition II (02) ..... 3
Eng 314 History of Language ..... 3
Eng 316 Teaching English in Secondary Schools ..... 3
Lit 122 General Literature II (02) ..... 3
Lit 223 American Literature I ..... 3
Lit 356 Modern Continental Drama ..... 3
Lit 372 Development of the American Novel ..... 3
Lit 373 Modern British Novel ..... 3
11:00 a.m.-12:30 p.m.
Eng 101 English Composition I (02) ..... 3
Lit 121 General Literature I (02) ..... 3
Lit 226 English Literature II ..... 3
Lit 334 Shakespeare II ..... 3
Lit 348 Short Story ..... 3
Lit 350 Children's Literature (02) ..... 3
Lit 380 Modern Poetry I ..... 3
12:30-2:00 p.m.
Eng 000 English Composition [Remedial] (01) ..... 0
6:30-8:30 p.m.
Eng 000 English Composition [Remedial] (02) 0 (EVENING: Mon. thru Thurs.)
Lit 224 American Literature II ..... 3
(EVENING: Mon. thru Thurs.)

\section*{Foreign Languages}
8:00-9:30 a.m.
Fre 201 Intermediate French I ..... 3
Ger 101 Elementary German I ..... 3
Spa 101 Elementary Spanish I ..... 3
9:30-11:00 a.m.
Fre 101 Elementary French I ..... 3
Ger 201 Intermediate German I ..... 3
Spa 201 Intermediate Spanish I ..... 3
Philosophy
8:00-9:30 a.m.
Phi 280 Introduction to Philosophy (01) ..... 3
9:30-11:00 a.m.
Phi 280 Introduction to Philosophy (02) ..... 3
Phi 490 Logic ..... 3
11:00 a.m.-12:30 ..... p.m.
Phi 475 Nineteenth Century Philosophy ..... 3
Speech and Theatre
8:00-9:30 a.m.
SpP 201 Introduction to Speech Problems ..... 3
SpP 303 Clinical Practicum ..... 1 or 2
(Speech Clinic. Time to be arranged.)
ThA 308 History of the Theatre to the Sixteenth Century ..... 3
9:30-11:00 a.m.
Sph 101 Fundamentals of Speaking (01) ..... 2
SpP 170 Speech and Language Development ..... 3
ThA 103 Beginning Acting ..... 3
11:00 a.m.-12:30 ..... p.m.
Sph 101 Fundamentals of Speaking (02) ..... 2
Sph 106 Introduction to Phonetics ..... 3
ThA 300 The Art of Oral Reading for Teachers ..... 3
1:00-2:30 p.m.
ThA 302 Directing and Producing the Instructional Television Program ..... 3

\section*{SCHOOL OF EDUCATION}

\section*{EdE 411 Student Teaching (Elementary Majors) 6 (June 26-August 4) \\ (Application should be filed prior to May 1)}

\section*{8:00-9:30 a.m.}

EdA 241 Psychology of Exceptional Children (01) 3
EdE 251 Human Development: Childhood (01) 3
EdE \(332 \quad \begin{gathered}\text { Teaching Social Studies in the } \\ \text { Elementary School (01) }\end{gathered}\)
EdE 401 Current Trends in Elementary Education (01) 2
EdE 403 Early Childhood Education I 3
EdE 441 Workshop in Elementary Education 4
(8:00 to 11 a.m.)
(See "Summer Workshops/Other Special Offerings")
EdF 100 School and Society (01) 3
EdM 300 Audio-Visual Education (01) 2
EdO 420 Organization and Administration of Outdoor
Education 3

NEW
EdP 250 Psychology of Learning and Development (01) 3
EdS 306 Field Experience in Secondary Education 3

\section*{9:30-11:00 a.m.}

EdA 241 Psychology of Exceptional Children (02) 3
EdE 251 Human Development: Childhood (02) 3
EdE 309 Language Arts in the Elementary School (01) 6 (9:30 a.m. to 12:30 p.m.)
EdE 309 Language Arts in the Elementary School (02) 6 (9:30 a.m. to 12:30 p.m.)
EdE 309 Language Arts in the Elementary School (03) 6 (9:30 a.m. to \(12: 30\) p.m.)
EdE 319 Reading in the Elementary School 3 (Open only by permission of the Chairman. Department of Elementary Education)
EdE 332 Teaching Social Studies in the Elementary School (02)3
EdM 300 Audio-Visual Education (02) ..... 2
EdP 250 Psychology of Learning and Development (02) ..... 3
EdP 351 Evaluation and Measurement (01) ..... 2

11:00 a.m.-12:30 p.m.
    EdC 150 Introduction to Guidance and Counseling 3
    EdE 401 Current Trends in Elementary Education (02) 2
    EdE 404 Early Childhood Education II 3
    EdF 100 School and Society (02) 3
    EdP 250 Psychology of Learning and Development (03) 3
    EdP 351 Evaluation and Measurement (02) 2
    EdU 361 Teaching in Urban Schools 3
    SCHOOL OF HEALTH AND PHYSICAL EDUCATION
    Health Education
8:00-9:30 a.m.
    HEd 350 Health for the Elementary Grades (01) 3
8:30-11:30 a.m.
    HEd 451 Community and School Health Education
    Workshop
                                3
        (June 26-July 14)
        (See "Workshops/Other Special Offerings'")
    HEd 452 Mental Health Workshop (July 17-August 4) 3
    (See "Workshops/Other Special Offerings")
9:30-10:30 a.m.
    HEd 150 Health2
HEd 373 Preparation for Classroom Teaching ..... 2NEW
9:30-11:00 a.m.
    HEd 350 Health for the Elementary Grades (02) 3
                    Physical Education
Note that a 1-hour physical education course may be taken in addition
to a full (6-credit) load.
8:00-9:30 a.m.
    PEd 482 Principles and Practices of Driver
    Education and Traffic Safety (01)3
PEd 483 Preparation for Teaching Driver and Traffic Safety Education (01) ..... 3
9:30-11:00 a.m.
PEd \(482 \quad\) Principles and Practices of Driver Education and Traffic Safety (02) ..... 3
PEd 483 Preparation for Teaching Driver and Traffic Safety Education (02) ..... 3
11:00 a.m.-12:30 p.m.
PEd 463 Principles of Coaching (Women) ..... 2
PEd 464 Principles of Coaching (Men) ..... 2
11:30 a.m.-12:30 p.m.
PEd 101 Physical Activities I ..... 1
PEd 102 Physical Activities II ..... 1
12:30-1:30 p.m.
PEd 120 Individual Sports for Men ..... 1PEd 201 Practice and Theory in ElementaryPhysical Education1
PEd 223 Basketball and Tennis (Women Only) ..... 1
PEd 325 Badminton, Golf and Archery (Women Only) ..... 1
SCHOOL OF MUSIC
8:00-9:30 a.m.
Mus 112 Theory of Music I ..... 3
Mus 113 Theory of Music II ..... 3
Mus 121 Fine Arts [Music] ..... 3
Mus 214 Aural Activities III ..... 2
Mus 225 Keyboard Literature II ..... 2
Mus 231 Music for the Primary Grades ..... 3
9:30-11:00 a.m.
Mus 213 Theory of Music IV ..... 3
Mus 222 Music in Western Civilization II ..... 3
Mus 336 Piano Methods [Class] ..... 2
10:30-11:30 a.m.
Mus 422 Musico/Dramatic Production I ..... 2
Mus 423 Musico/Dramatic Production II ..... 2
11:00 a.m.-12:30 p.m.
Mus 212 Theory of Music III ..... 3
11:30 a.m.-12:30 p.m.
CCo 212 Choral Conducting II ..... 2
Mus 114 Aural Activities I ..... 2
Mus 115 Aural Activities II ..... 2
Mus 215 Aural Activities IV ..... 2
Mus 344 Music of Nineteenth Century Romanticism ..... 2new
SyO 111-412 Symphony Orchestra ..... \(1 / 2\)
1:00-2:00 p.m.Mus 424 Development of the Opera2
2:00-3:00 p.m.
Cho 311-312 Choir ..... \(1 / 2\)
ICo 311 Instrumental Conducting I ..... 2
3:00-4:00 p.m.
CMB 111-412 Concert Band ..... \(1 / 2\)
By AppointmentPrivate Instruction in Piano, Organ, Voice, andInstruments. (Contact School of Music fordetails.)
SCHOOL OF SCIENCES AND MATHEMATICS
Biology
8:00-9:30 व.m.
Bio 100 Basic Biological Science ..... 4(Lab 1:00 to 3:00 Tues. and Thurs.)
9:30-11:00 a.m.
Bio 309 Human Physiology ..... 4(Lab 1:00 to 3:00 Tues. and Thurs.)
Chemistry
8:00-10:00 a.m.Che 103 General Chemistry I (June 26 thru July 21) 4(Lab 10:00 to 1:00 Mon. thru Thurs.)Che 104 General Chemistry II and QualitativeAnalysis (July 24 thru Aug. 18)4(Lab 10:00 to 1:00 Mon. thru Thurs.)
10:00 a.m.-12:30 p.m.
Che \(231 \quad \begin{gathered}\text { Organic Chemistry I (June } 26 \text { thru July 21) } \\ 3\end{gathered}\) (NO LAB)
10:00 a.m.-12:00 Noon
Che 232 Organic Chemistry II (July 24 thru Aug. 18) ..... 4
(Lab 1:00 to 4:00 Mon. thru Thurs.)
11:00 a.m.-12:30 p.m.
Che 230 Introduction to Organic Chemistry ..... 4
(Lab 1:30 ta 4:30 Tues. and Thurs.)

\section*{Earth, Space, and General Sciences}

MARINE SCIENCE CONSORTIUM (See "Workshops/Other Special Offerings")
8:00-9:30 a.m.
ESS 111 General Astronomy ..... 4(Lab. 1:00 to 3:00 Mon. ond Wed.)
ESS 211 Historical Geology ..... 4
(Lob. 1:00 to 3:00 Man. and Wed.)
Sci \(250 \quad\) Science for the Elementary Grades (01) ..... 3
9:30-11:00 a.m.
Sci \(250 \quad\) Science for the Elementary Grades (02) ..... 3
Sci 350 Teaching Science in Secondary Schools ..... 3
11:00 c.m.-12:30 p.m.
ESS 101 Earth Science ..... 4(Lab 2:00 to 4:00 Tues. and Thurs.)
ESS 201 Physical Geology ..... 4
(Lob 2:00 to 4:00 Tues. ond Thurs.)
Sci \(250 \quad\) Science for the Elementary Grades (03) ..... 3
Mathematics
8:00-9:30 a.m.
Mat 101 Introduction to College Mathematics I ..... 3(Majors other thon Elementary)
Mat 106 Foundations of Mathematics ..... 3
Mat 108 Mathematics for the Management Sciences II ..... 3
Mat 350 Teaching Mathematics in Secondary Schools ..... 3
9:30-11:00 a.m.
Mat 101 Introduction to College Mathematics I ..... 3(Elementary Moiors only)
Mat 142 Calculus II ..... 3
Mat 411 Modern Algebra I ..... 3
CSc 101 Introduction to Computers ..... 3
11:00 a.m.-12:30 p.m.
Mat 121 Statistics ..... 3
Mat 211 Linear Algebra ..... 3
Mat 331 Geometry for Elementary Teachers ..... 3
Mat 351 Teaching Mathematics in Elementary Schools ..... 3
Mat 421 Mathematical Statistics I ..... 3

\section*{Nursing}
8:00-9:30 a.m.
PSN 303 Public Health Nursing II ..... 3
9:00 a.m.-12:00 Noon
Nsg 481 Hearing Problems Summer Workshop ..... 3 (June 26-July 14)
(See "Warkshops/Other Special Offerings")
Physics
8:00 ..... a.m.-12:30 p.m.
Phy 103 General Physics I (June 26 thru July 21) ..... 4
Phy 104 General Physics II (July 24 thru August 18) ..... 4IGeneral Physics I and II da nat meet requirementsfor Physics and Mathematics Majors.I
9:30-11:00 a.m.
Phy 233 Introduction to Modern Physics ..... 3
ILab to be arranged. Lab adds 1 s.h. of credit, making total credit 4. s.h.l
11:00 a.m.-12:30 p.m.
Sci 150 Basic Physical Science ..... 4
(Lab 1:30 to 3:30 Tues. and Thurs.)
SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES
1:00-4:30 p.m.
SSc 380 Ethnic Cultures Institute (June 26-July 14) 3
(See "Warkshaps and Other Special Offerings"'
Anthropology
8:00-9:30 a.m.
Ant 102 Introduction to Anthropology: Cultural ..... 3 (Replaces Ant 231)
9:30-11:00 a.m.
Ant 200 Introduction to Archaeology ..... 3
12:45-2:00 p.m.
Ant 305 Historical Archaeology ..... 3
Business
(Evening Classes)
7:00-9:40 p.m.
BAc 201 Principles of Accounting I ..... 3(Meets M-W-F first week; T-Th secondweek; alternately thereafter.)
BAc 202 Principles of Accounting II ..... 3(Meets T-Th first week; M-W-F secondweek; alternately thereafter.)
BAc 403 Federal Taxation ..... 3
(See BAC 201 for meeting nights)
BAd 201 Business Organization and Management ..... 3
(See BAc 201 for meeting nights)
BAd 221 Principles of Marketing ..... 3
(See BAC 202 for meeting nights)
BAd 302 Personnel Management ..... 3(See BAC 202 for meeting nights)
Economics
8:00-9:30 a.m.
Eco 232 Principles of Economics II ..... 3
11:00 a.m.-12:30 p.m.
Eco 333 Consumer Economics ..... 3
Geography
8:00-9:30 a.m.
Geo 101 World Geography ..... 3
Geo 319 Problems and Potentials ofTropical Regions3
new
9:30-11:00 a.m.
Geo 202 Geography of the United States ..... 3
Geo 301 Environmental Crises and Ethics ..... 3
NEW
11:00 a.m.-12:30 p.m.
Geo 201 Conservation of Natural Resources ..... 3
Geo 420 Field Studies in Geography ..... 3
History
8:00-9:30 a.m.
His 101 History of Civilization I (01) ..... 3
His 102 History of Civilization II (01) ..... 3
His 211 History of United States I (01) ..... 3
His 350 Russian History to 1917 ..... 3
9:30-11:00 a.m.
His 102 History of Civilization II (02) ..... 3
His 212 History of United States II ..... 3
His 316 History of the American Frontier ..... 3
11:00 a.m.-12:30 p.m.
His 101 History of Civilization I (02) ..... 3
His 211 History of United States I (02) ..... 3
His 323 History of the Middle East ..... 3
6:30-8:30 p.m.
His 101 History of Civilization I (03) ..... 3
(EVENING: Mon. thru Thurs.)
Political Science
8:00-9:30 a.m.
PSc 201 Introduction to Political Science ..... 3
PSc 231 American Government (01) ..... 3
9:30-11:00 a.m.
PSc 231 American Government (02) ..... 3
PSc 333 International Politics ..... 3
11:00 a.m.-12:30 p.m.
PSc 231 American Government (03) ..... 3
6:30-8:30 p.m.
PSc 231 American Government (04) ..... 3(EVENING: Mon. thru Thurs.)
Psychology
8:00-9:30 a.m.
Psy 345 Research Methods and Statistics I ..... 3
NEW
9:30-11:00 a.m.
Psy 100 Introduction to Psychology (01) 3
Psy 356 The Study of Personality ..... 3
11:00 a.m.-12:30 p.m.
Psy 354 Social Psychology ..... 3
Psy 375 Abnormal Psychology ..... 3
6:30-8:30 p.m.
Psy 100 Introduction to Psychology (02) ..... 3
(EVENING: Mon. thru Thurs.)

\section*{Social Welfare}
8:00-9:30 a.m.
SWo 320 Principles and Methods of Social Work ..... 3
SWo 420 Field Experience in Social Welfare I ..... 6
SWo 421 Field Experience in Social Welfare II ..... 6
2:30-5:00 p.m.
SWo 400 Senior Seminar in Social Work ..... 3 (Mon., Tues., Thurs.)
SWo 401 Social Work Process Seminar (Mon.) ..... 1 ..... NEW
Sociology
8:00-9:30 a.m.
Soc 231 Introduction to Sociology (01) ..... 3
Soc 332 Contemporary Social Problems ..... 3
9:30-11:00 a.m.
Soc 231 Introduction to Sociology (02) ..... 3
Soc 338 Criminology ..... 3
11:00 a.m.-12:30 p.m.
Soc 333 The Family ..... 3
Post Session
Monday, August 7throughFriday, August 25Each class meets 8:00-9:30 a.m. and 10:30-12 Noon,unless otherwise shown.
See Undergraduate Studies catalogue for course descriptions.Course listings are correlated with the 1971-72 catalogue. NEWindicates a course not described in the catalogue.
Offerings listed are contingent upon sufficient enrollment.
SCHOOL OF ARTS AND LETTERS
Art
Art 101 Fine Arts [Art] ..... 3
English
Eng 000 English Composition [Remedial] (01) ..... 0 (12:30-2 p.m.)
Eng 000 English Composition [Remedial] (02) ..... 0
(EVENING: 6:30-8:30 p.m. Mon. thru Thurs.)
Eng 101 English Composition I ..... 3
Lit 121 General Literature I ..... 3
Lit 122 General Literature II ..... 3
Lit 224 American Literature II ..... 3
Lit 226 English Literature II ..... 3
Lit 336 The Romantic Movement ..... 3
Lit 348 Short Story ..... 3
Lit \(350 \quad\) Children's Literature ..... 3
Foreign Languages
Fre 102 Elementary French II ..... 3
Fre 202 Intermediate French II ..... 3
Ger 101 Elementary German I ..... 3
Ger 202 Intermediate German II ..... 3
Spa 102 Elementary Spanish II ..... 3
Spa 202 Intermediate Spanish II ..... 3
Philosophy
Phi 280 Introduction to Philosophy ..... 3
Phi 380 Ethics ..... 3
Speech and Theatre
Sph 101 Fundamentals of Speaking ..... 2

\section*{SCHOOL OF EDUCATION}
EdA 243 Psychology of the Mentally Retarded ..... 3
EdE 332 Teaching Social Studies in the Elementary School ..... 3
EdE 401 Current Trends in Elementary Education ..... 2
EdF 100 School and Society ..... 3
EdM 300 Audio-Visual Education ..... 2
EdO 410 Methods of Conservation Education ..... 3NEW
EdP 250 Psychology of Learning and Development ..... 3
EdP 351 Evaluation and Measurement ..... 2
SCHOOL OF HEALTH AND PHYSICAL EDUCATION
Health Education
HEd 150 Health ..... 2
Physical Education
PEd 455 Applied Physiology and Kinesiology ..... 3
PEd 481 Education for Safe Living ..... 3
PEd 484 Methods and Materials of Safety Education ..... 3
SCHOOL OF MUSIC
Mus 121 Fine Arts [Music] ..... 3
Mus 231 Music for the Primary Grades ..... 3
Mus 414 Musical Acoustics ..... 3
SCHOOL OF SCIENCES AND MATHEMATICS
Biology
Bio 100 Basic Biological Science ..... 4
(8:00 to 12:30 Mon. thru Fri. including Lob)
Chemistry
Che 100 Principles of Chemistry ..... 4
(Lab 1:00 to 3:00 Mon. thru Thurs.)
Earth, Space, and General Sciences
MARINE SCIENCE CONSORTIUM (See "Workshops/Other SpecialOfferings")
ESS 321 Structural and Field Geology ..... 3
Mathematics
Mat 101 Introduction to College Mathematics I (01) ..... 3
(Elementary Majors only)
Mat 101 Introduction to College Mathematics I (02) ..... 3
(Majors ather than Elementary)
Mat 105 College Algebra and Trigonometry ..... 3
Mat 311 Algebra for Elementary Teachers ..... 3
Nursing
PSN 300 Public School Nursing ..... 2
SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES
Business
BAc 202 Principles of Accounting II ..... 3
Economics
Eco 201 Principles of Economics-Survey ..... 3
Eco 333 Consumer Economics ..... 3
Geography
Geo 101 World Geography ..... 3
Geo 204 Geography of Pennsylvania ..... 3
Geo 422 Area Field Study in Puerto Rico ..... 3
Geo 423 Field Study of United States ..... 3(New towns, industrial parks, andnew residential areas)
History
His 101 History of Civilization I ..... 3
His 102 History of Civilization II ..... 3
His 211 History of United States I ..... 3
His 212 History of United States II ..... 3
His 218 The Ancient World ..... 3
Political Science
PSc 231 American Government ..... 3
Psychology
Psy 100 Introduction to Psychology ..... 3
Psy 352 Child and Adolescent Psychology ..... 3
Psy 370 Mental Hygiene ..... 3
Soc 231 Introduction to Sociology ..... 3
Soc 335 Racial and Cultural Minorities ..... 3

\title{
Summer Workshops and other \\ Special Offerings
}

\author{
For all communications mentioned below, show name and title plus: \\ West Chester State College \\ West Chester, Pennsylvania 19380
}

\section*{Laboratory School}

The Laboratory School in the new Learning Research Center will be open during the Regular Session for the purpose of demonstrating teaching at the elementary level. Experience in elementary student teaching will be available for a limited number of students who file applications early in the spring.

\section*{Workshop in Elementary Education (EdE 441)}

June 26 - August 4
A workshop open to experienced teachers and college graduates, providing opportunity for study of newer practices in elementary education. Current problems will be shared by the members of the group. An experienced coordinator will lead discussions. Master teachers and the facilities of the Laboratory School will be utilized for demonstration and observance. Regular Session; 8 to 11 a.m. Four semester hours of credit. Students may elect an additional 3-credit course.

\section*{Workshop in Community and School Health Education (HEd 451)}

June 26 - July 14
A workshop for rural teachers, school nurses, health education specialists, and others in health work. Three semester hours of credit. No additional courses may be carried during this three-week session. For information contact Mr. Walter E. Funk, Chairman, Department of Health Education, School of Health and Physical Education.

\section*{Mental Health Workshop (HEd 452)}

July 17 - Augus! 4
A workshop designed to help educators improve their understanding of themselves and their students. Emphasis is on ways to recognize and cope with mental-health problems. Three semester hours of credit. No additional courses may be carried during this three-week session. For information contact Mr. Walter E. Funk, Chairman, Department of Health Education, School of Health and Physical Education.

\section*{Athletic Training Education Program \\ June 19 - August 18}

The following courses can be taken as partial fulfillment of the National Athletic Trainer's Association's approved program for preparation toward National Certification. The total program consists of a 15 -hour block, with prerequisites. Nine of these hours are being offered during the period indicated. They will run concurrently and must be taken as a block from 8 a.m. to 12 Noon, Monday through Friday.

PED 358 Advanced Athletic
Training I
PED 359 Advanced Athletic
Training II
Students interested should contact Mr. Phillip B. Donley, Associate Professor, School of Health and Physical Education. Applications must be received by Mr. Donley before April 20.

\section*{Ethnic Cultures Institute (SSc 380)}

June 26 - July 14
Jointly sponsored by the Schools of Arts and Letters and Social and Behavioral Sciences, the Ethnic Cultures Institute will consider the contributions of ethnic groups to the culture of the United States. Educators and community leaders with extensive personal experience will lecture, take part in panel discussions, and serve as resource people. Open to juniors and seniors with permission of the Dean of the School of Social and Behavioral Sciences. The Institute is also open to teachers and community action personnel. Three semester hours of credit. Hours: 1 to \(4: 30\) p.m., Monday through Friday. For details contact Dr. Jody M. Harris, Director of Curriculum Enrichment.

\section*{International String Conference and Chamber Music Workshop}

Augusः 12 - Augusi 20
The Eleventh Annual String Conference and Chamber Music Workshop, held in Swope Hall under the sponsorship of the School of Music and the Pennsylvania String Teachers Association. Master classes in
each of the string instruments for both young people and adults, under a faculty of distinguished string authorities. Three string symphony orchestras (two for youth and one for adults) will be in daily rehearsal, culminating in gala performances. Chamber music ensembles, organized and coached by noted chamber music teachers; solo literature classes; guest lecturers and experts in many phases of string training and performance. The Conference will embrace complete programs for both adults and youth. For information and applications write to Dr. Constantine Johns, Executive Director of the String Conference, School of Music.

\section*{Eleventh Annual High School Music Workshop}
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July 5- July 28

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A summer music workshop for serious musicians of high school age, sponsored by the School of Music. Offerings will include: band, orchestra, chorus, individual lessons, music theory, music appreciation, ensembles and dance band. Also: master classes in repertoire and literature for students of voice and piano. Concerts, recitals, and special clinics, open to the public, are highlights. For brochure and application forms write to Dr. Frederick C. Pflieger, Workshop Director, School of Music.
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Music Workshop Fees (tenfative schedule): For commuting students (including accident insurance, individual lessons, activities fee, and full workshop privileges), $\$ 80$. For resident students (including above plus room and board on campus for four weeks), \$190.

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\section*{Marching Band Conference and Workshop}

August 1 - August 4
The West Chester State College Marching Band will hold its Third Annual Marching Band Conference and Workshop August 1-4. College and high school directors as well as students from high school and college bands from the eastern United States are invited to attend this conference, which will include clinics for flag corps, twirling corps, and drum majors. Among the clinicians will be authorities in the flag, twirling, and drum majoring areas. Heading the marching band clinic will be Professor George Cavender, of the University of Michigan. Professor Cavender's Michigan Band is considered one of the best in the nation and was the featured band at the 1972 Rose Bowl. Information may be obtained from Mr. James R. Wells, Director of Marching Band Conference, School of Music.

\section*{Piano Teachers Workshop and Master Class}
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June 22-June 23

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The Department of Keyboard Music and the Southeastern Division of the Pennsylvania Music Teachers Association will sponsor this forum featuring Department faculty members, a panel of teachers
from the PMTA, and a distinguished artist pianist in master classes and lecture-recitals. For information contact Mr. Robert M. Bedford, Associate Professor, School of Music.

\section*{Marine Science Consortium}

Summer, 1972
As a participant in the Delaware Bay Marine Science Consortium, West Chester will offer courses in oceanography and marine sciences at the Consortium field stations in Delaware and Virginia during five summer sessions. Course offerings and dates of sessions were not available for this catalogue but will be announced soon after March I. For details, contact Mr. John E. Ehleiter, Associate Professor, Department of Earth, Space, and General Sciences.

\section*{Hearing Problems Summer Workshop (Nsg 481)}

June 26 - July 14
The Department of Nursing will conduct this in-depth study of hearing problems associated with the school-age population. Multidisciplines will be utilized in presenting background information and current modalities of treatment. Three semester hours of credit. For further information contact Mrs. Mary Kline, Assistant Professor, Department of Nursing.

Map of North Campus
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[^0]:    Issued four times a year, January, February, March, and April, by the Trustees of West Chester State College at West Chester, Pennsylvania. Entered as second class matter March 31, 1931, at the Post Office at West Chester, Pennsylvania, under the Act of Congress of August 24, 1912. Second Class Postage paid at West Chester, Pa. 19380.

[^1]:    Administration Building (1899), formerly Old Demonstration, which contains the offices of Undergraduate Studies, Graduate Studies, Admissions, Scheduling and Academic Records, Cultural Affairs, and Public Relations.

[^2]:    * The basic fee covers registration, the keeping af student records, library services, student welfare, health service (ather than special nursing or quarantine), and laboratary facilities.

[^3]:    * May be counted toword credit for 36 -hour field requirement only upon approval by advisor.

[^4]:    - Foreign language majars receive no credit toward graduation for 101 and 102 except in the case of students who, having completed their language requirements in their major, lake the 101 and/or 102 level(s) of a second foreign language as free elective(s).

[^5]:    * Fareign language majors receive na credit taward graduatian for 101 and 102 except in the case of students wha, having campleted their language requirements in their maior, take the 101 and/ar 102 level(s) of a secand fareign language as free elective(s).

[^6]:    * Foreign language majars receive na credit toward graduatian for 101 and 102 except in the case af sfudents wha, having campleted their language requirements in their majar, take the 101 and/ar 102 level(s) of a secand fareign language as free elective(s).

[^7]:    * Foreign longuage majors receive no credit toward groduation for 101 and 102 excepl in the case of students wha, having completed their language requirements in their major, lake the 101 and/ar 102 level(s) of a second foreign language as free elective(s).

[^8]:    * Foreign language majors receive no credit toward graduation for 101 and 102 except in the case of students who, having completed their language requirements in their major, take the 101 and/or 102 level(s) of a second fareign language as free elective(s).

[^9]:    - Each of the special education pragrams alsa constitutes an area of interest in the elementary education curriculum.

[^10]:    Transfer Students - consult the paragraphs headed Admission of Transfer Students and Advanced Credit Requirement under Admission to West Chester.

