



Digitized by the Internet Archive  
in 2009 with funding from  
Lyrasis Members and Sloan Foundation







IUP UNDERGRADUATE CATALOG 80-82

**THIS BULLETIN CONTAINS ANNOUNCEMENTS OF COURSES FOR THE ACADEMIC YEARS 1980-82. IUP RESERVES THE RIGHT TO REPEAL, CHANGE, OR AMEND THE RULES, REGULATIONS AND COURSES CONTAINED IN THIS BULLETIN AT ANY TIME. TUITION AND FEES ARE ALSO SUBJECT TO CHANGE**

---

**INDIANA UNIVERSITY OF PENNSYLVANIA IS ACCREDITED BY THE NATIONAL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION, THE MIDDLE STATES ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS, AMERICAN HOME ECONOMICS ASSOCIATION, THE AMERICAN CHEMICAL SOCIETY, THE NATIONAL LEAGUE OF NURSING AND THE NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC.**

---

**INDIANA UNIVERSITY OF PENNSYLVANIA IS COMMITTED TO PROVIDING LEADERSHIP IN TAKING AFFIRMATIVE ACTION TO ATTAIN EQUAL EDUCATIONAL AND EMPLOYMENT RIGHTS FOR ALL PERSONS, WITHOUT REGARD TO SEX, HANDICAP, OR OTHER LEGALLY PROTECTED CLASSIFICATION. THIS POLICY IS PLACED IN THIS DOCUMENT IN ACCORDANCE WITH STATE AND FEDERAL LAWS INCLUDING TITLE IX OF THE EDUCATIONAL AMENDMENTS OF 1972 AND SECTION 503 AND SECTION 504 OF THE REHABILITATION ACT OF 1973. THIS POLICY EXTENDS TO DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA. PLEASE DIRECT EQUAL OPPORTUNITY INQUIRIES TO: AFFIRMATIVE ACTION OFFICE, 349 JOHN SUTTON HALL, INDIANA UNIVERSITY OF PENNSYLVANIA, INDIANA, PA 15705.**

# **Indiana University of Pennsylvania Bulletin**

## **1980-82 Undergraduate Catalog**

INDIANA UNIVERSITY OF PENNSYLVANIA  
INDIANA, PENNSYLVANIA 15705

---

COVER BY: LIZETTE WIELAND

TELEPHONE: (412) 357-2100

# Table of Contents

<b>UNIVERSITY CALENDAR</b>	<b>3</b>
<b>THE UNIVERSITY</b>	<b>5</b>
<b>THE BRANCH CAMPUSES</b>	<b>9</b>
<b>ADMISSION AND REGISTRATION</b>	<b>17</b>
<b>FINANCES</b>	<b>25</b>
<b>ACADEMIC POLICIES</b>	<b>41</b>
<b>STUDENT LIFE AND SERVICES</b>	<b>53</b>
<b>REQUIREMENTS FOR GRADUATION</b>	<b>69</b>
<b>THE SCHOOL OF BUSINESS</b>	<b>75</b>
<b>THE SCHOOL OF CONTINUING EDUCATION</b>	<b>101</b>
<b>THE SCHOOL OF EDUCATION</b>	<b>105</b>
<b>THE SCHOOL OF FINE ARTS</b>	<b>135</b>
<b>THE GRADUATE SCHOOL</b>	<b>155</b>
<b>THE SCHOOL OF HEALTH SERVICES</b>	<b>157</b>
<b>THE SCHOOL OF HOME ECONOMICS</b>	<b>181</b>
<b>MILITARY SCIENCE</b>	<b>199</b>
<b>THE SCHOOL OF NATURAL SCIENCES AND MATHEMATICS</b>	<b>203</b>
<b>THE SCHOOL OF SOCIAL SCIENCES AND HUMANITIES</b>	<b>251</b>
<b>DIRECTORY</b>	<b>313</b>

E60.30.1

# University Calendar

---

## FALL SEMESTER — 1980

Registration ..... Sept. 2-4  
 Classes begin ..... Sept. 5  
 Thanksgiving recess begins  
 at close of classes ..... Nov. 25  
 Classes resume at 8:00 a.m. Dec. 1  
 Final Examinations .... Dec. 13-19

## SPRING SEMESTER — 1981

Registration ..... Jan. 21-23  
 Classes begin ..... Jan. 24  
 Spring vacation begins at  
 close of classes ..... Apr. 11  
 Classes resume at 8:00 a.m. Apr. 27  
 Final Examinations .... May 16-22  
 Graduation ..... May 23

---

## SUMMER SESSION — 1981

1st ..... June 8-July 10  
 2nd ..... July 13-August 14

## FALL SEMESTER — 1981

Registration ..... Aug. 31-Sept. 2  
 Classes Begin ..... Sept. 3  
 Thanksgiving recess begins  
 at close of classes ..... Nov. 25  
 Classes resume at 8:00 a.m. Nov. 30  
 Final Exams ..... Dec. 14-19

## SPRING SEMESTER — 1982

Winter Interim ..... Jan. 4-16  
 Registration ..... Jan. 18-20  
 Classes begin ..... Jan. 21  
 Spring Vacation begins at  
 close of classes ..... Mar. 13  
 Classes resume at 8:00 a.m. Mar. 22  
 Spring Weekend begins at  
 close of classes ..... Apr. 8  
 Classes resume at 8:00 a.m. Apr. 13  
 Final Exams ..... May 10-14  
 Commencement ..... May 15

---

## SUMMER SESSION — 1982

1st ..... June 7-July 9  
 2nd ..... July 12-August 13

## FALL SEMESTER — 1982

Registration ..... Aug. 30-Sept. 1  
 Classes Begin ..... Sept. 2  
 Thanksgiving recess begins  
 at close of classes ..... Nov. 24  
 Classes resume at 8:00 a.m. Nov. 29  
 Final Exams ..... Dec. 13-18

## SPRING SEMESTER — 1983

Winter Interim ..... Jan. 3-15  
 Registration ..... Jan. 17-19  
 Classes Begin ..... Jan. 20  
 Spring Vacation begins at  
 close of classes ..... Mar. 12  
 Classes resume at 8:00 a.m. Mar. 21  
 Spring Weekend begins at  
 close of classes ..... Mar. 31  
 Classes resume at 8:00 a.m. Apr. 5  
 Final Exams ..... May 9-13  
 Commencement ..... May 14



# The University

## **A University Education**

---

As an institution of higher learning, Indiana University of Pennsylvania is a community of scholars of both faculty and students, committed to discover, preserve and impart truth in all its forms. Our primary concern is with the intellectual, moral, cultural, physical, social and aesthetic development and maturation of its students. To this end we are charged with providing a liberal education of both general and specialized studies which will allow our students to liberate themselves from narrow interests and prejudices, to broaden their intellectual horizons by increased cultural perspective, to develop the ability to think logically, critically, creatively, and to communicate their judgments clearly and forcefully. The curriculum involves a body of knowledge about the universe, about people, their nature, behavior and values. It also provides an opportunity to gain specialized knowledge as a preparation for graduate study and entry into professional life. Beyond this breadth and depth of knowledge, the university recognizes that such an education is only a beginning, and hopes to stimulate its students to pursue continuous development in the areas of human knowledge, to seek wisdom, to challenge the mysteries of life and examine its ultimate meaning, and to become useful members of society by embracing careers which will touch the whole community.

Approved by the University Senate in May, 1979.

## **HISTORY OF THE UNIVERSITY**

---

Throughout the history of IUP, great emphasis has been placed on maintaining high academic standards and providing facilities conducive to individual and group growth. The present record and reputation enjoyed by the University have evolved during a century's history. Having observed the need for a teacher training institution in Western Pennsylvania, the General Assembly passed an act in the legislative session of 1871 granting aid for the establishment of a Normal School in the Ninth District, at Indiana.

The first building, named John Sutton Hall in honor of the first president of the Board of Trustees, was opened for students on May 17, 1875.

In April, 1920, control and ownership of the school passed to the Commonwealth of Pennsylvania. In May, 1927, by authority of the General Assembly, the State Normal School became a college, with the right to grant degrees. The name was then changed to the State Teachers College at Indiana, Pennsylvania. With the development of a Liberal Arts program in 1960, the institution was renamed Indiana State College.

In December, 1965, Indiana was redesignated Indiana University of Pennsylvania and given the authority to expand its curriculum and to grant degrees at the master's level. At this time the first doctoral program was initiated.

Since the founding of the University in 1875, IUP has graduated over 40,000 students, and since the University became a degree-conferring institution in 1927, over 30,000 degrees have been granted. Many of the graduates are organized into a strong Alumni Association, with units active in many sections of Pennsylvania, as well as in New York, Michigan, and the District of Columbia. The Alumni Association cooperates with the University in many projects relating to the improvement of the institution and the welfare of the students.

## **ACCREDITATION**

---

IUP is a state-owned and state-controlled institution for higher education. It is an approved and fully accredited member of the Middle States Association of Colleges and Secondary Schools, the National Council for the Accreditation of Teacher Education, the American Home Economics Association, the American Chemical Society, the National League of Nursing. Membership in these organizations is of immediate personal importance to the student in two ways: first, the student may transfer college credits from one approved institution to another without loss of credit, but, more importantly, it insures the student of a quality education.

## **LOCATION**

---

IUP is located in Indiana Borough, Indiana County seat, in the foothills of the Alleghenies at an elevation of about 1,300 feet. It is easily accessible by automobile over state highway routes coming from all sections of the state. These leading routes are Route 422 east and west, Route 286 northeast and southwest, and Route 119 north and south. Bus passenger services operate on frequent schedules to and from Indiana and all nearby cities and towns, including Pittsburgh, Altoona, Johnstown, Butler, Punxsutawney, Kittanning, DuBois, Ridgway and New Castle.



## **BUILDINGS AND GROUNDS**

---

The campus at Indiana is frequently described as one of the most beautiful in the state. The main campus, originally consisting of 12 acres and one building, is now composed of a total of 106 acres on which are located 79 major buildings, and seven athletic fields. In the center of the campus is the historic Oak Grove, about which are grouped many of the main buildings, forming three sides of a quadrangle. The University Lodge, located a few miles from Indiana and surrounded by 280 acres of wooded hillside offers opportunity for nature study and such recreational activities as hiking and skiing.

## **COMPUTER CENTER**

---

The Computer Center, established in July, 1963, is located on the ground floor of Stright Hall. The Center provides computational support for undergraduate and graduate courses, faculty and student research, and the administrative requirements of the University. The computing capacity of the Center is provided by a large-scale disk oriented central processor which supports both time-sharing and batch processing services for the university community. Typewriter terminals, located both in the Computer Center and in various departments on campus, permit the use of the computer on a time-sharing basis. Terminal facilities and a full complement of tabulating equipment are available in the Computer Center for student use. Additional terminal facilities, along with remote job entry stations, are also available in many departments on campus. Aid in the use of the computer and facilities may be obtained from user assistants on duty at the Computer Center and from the Center's professional staff.

Indiana's Computer Center plays an active part in the daily functioning of the University. It is the principal laboratory facility for computer-oriented courses and is used as a teaching aid in many classes involving statistical and numerical analyses and computer simulations. The staff at the Center is actively involved in continuing work aimed at making computers a more effective and readily accessible tool for the academic, administrative, and research segments at IUP.

## **LIBRARY AND MEDIA SERVICES**

---

The University Library and Media Services are presently housed in three campus buildings, with a new facility, the Patrick J. Stapleton, Jr. Library, now scheduled for completion in 1981.

The Rhodes R. Stabley Library was completed in the spring of 1961. The three-story, air-conditioned building provides study room for approximately 500 students. Together with annex stacks in other campus buildings, it houses 465,000 volumes. The well-organized general holdings are enhanced by the reference collection and 1,100,000 units of microform as well as a media resources collection consisting of slides, filmstrips, recordings, filmloops, textbooks, courses of study and films. All of these media resources are housed in Stabley Library with the exception of the films, which are located in Davis Hall.

The Periodicals Reading Room, seating 150 persons, is located on the second floor of John Sutton Hall. Sutton Hall also houses the periodicals collection and the serials

offices and preparation areas on the ground floor. The library owns extensive files of bound periodicals and receives 3,500 current titles.

An instructional program in the use of library tools and reference books is presented by the staff to develop skills in library use.

Media services, operated from Davis Hall, consist of dial access, photographic services, sound recording and reproduction, design and production of conventional instructional materials and the procurement, inventory, maintenance and circulation of University multi-media equipment.



# The Branch Campuses

**Robert H. Doerr, Director Armstrong Branch**  
**Norman T. Storm, Director Punxsutawney Branch**

IUP operates two branch campuses, one in Punxsutawney, 28 miles north of Indiana Campus, and one in Kittanning, 28 miles west of the Indiana Campus. The first branch campus was established in September, 1962, in Punxsutawney. The following year the Armstrong County Campus in Kittanning was opened. Over 200 students are enrolled at the Punxsutawney Campus and 550 students at Armstrong County Campus.

Both campuses have University faculty members who teach full time at the branch campuses. To meet additional curriculum needs, other faculty from the main campus travel to the branch campuses. The branches provide one to two full years of college work which, if satisfactory, is transferable to the main campus of IUP or to other accredited colleges.

Control of the branch campuses is directly vested with the IUP Administration and Board of Trustees. Advisory Boards from the respective areas identify local needs. Both branch campuses carry full accreditation as integral parts of the undergraduate programs of IUP. This means that courses offered at the branch campuses are of the same quality as those offered at the main campus.

## **Programs of Study**

The branch campuses of IUP offer basic general education courses in most majors in the various undergraduate schools of the University. Thus students may schedule a full program for the freshman and sophomore years by pursuing work that will fulfill these general education requirements. In addition to these required courses a number of electives are offered in many fields.

In some majors, the student will be able to complete only one year's work at a branch campus instead of the two years which would qualify him/her for junior status; hence it will be necessary to continue studies at the main campus after the first year. This is true of students majoring in highly specialized fields. In any event, no student accepted at either of the branch campuses is eligible for transfer to the main campus at Indiana until he/she has completed two semesters and has achieved the necessary grade point average.

Students find many advantages in remaining at the branch campuses for two years providing they can obtain a full program of University credit. A smaller student body and a closer relationship among faculty members, administration, and students at the branch campuses are very beneficial to students.

Faculty advisers and administrators at the branch campuses are available to advise students on their instructional program and the proper time for continuing at the Indiana Campus whether it be after two, three or four semesters.

### **Business Associate Degree Program**

The two-year Associate of Arts Degree in Business is based upon a broad liberal arts program as well as professional competencies needed in the field of business. The program is offered only at the Punxsutawney campus of IUP. A student accepted for this program may concentrate in the accounting, retailing, administrative secretary, or correspondence secretary areas. Under the program the student will complete 30 credits in the field of business, including business electives, and 30 credits in general education courses. It is understood that students in the two-year program may not transfer into any other major offered by the University until completion of the program. At that time the student may apply for admission into a four-year baccalaureate degree program according to the availability of openings on the main campus of IUP. The credits earned in the two-year program will apply toward the four-year degree programs in Business.

### **Criminology Associate Degree Program**

This special two-year program in Criminology is offered only at the branch campuses and is not offered on the main campus of IUP. When a student is accepted for admission into this two-year program, it is understood that he/she will remain in the particular program at the branch campus until it is completed. It is further understood that the student in this special two-year program may not transfer into any other major offered by the University until completion of this program. At that time, the student may apply for admission into a four-year baccalaureate degree program according to the availability of openings on the main campus of IUP. Admission is not guaranteed. If accepted, however, the credits earned in the two-year program will apply toward the four-year degree program in Criminology.

### **Admission**

Any prospective student who wishes to attend either of the branch campuses instead of the Indiana Campus may apply for admission by requesting an application from the Admissions Office, or from the Director of either branch campus. The same standards and requirements used for admission at the main campus are applied at both University branch campuses. The mailing addresses for the respective branch campuses follow:

Armstrong County Branch Campus  
Indiana University of Pennsylvania  
Kittanning, Pa. 16201

Punxsutawney Branch Campus  
Indiana University of Pennsylvania  
Punxsutawney, Pa. 15767

## **Housing**

Both the branch campuses have privately-owned residence halls for students living beyond commuting distance. Students are free to choose their housing from all available sources which include the privately owned residence halls and private homes or apartments in the community. At the Punxsutawney Campus, the Punxsutawney Area College Trust maintains two residence halls: Pact Hall (women) and Trust Hall (men). There are two privately-owned residence halls at the Armstrong County Campus as well as rooms and apartments in private homes in the community adjacent to the branch campus. A list of rooms and apartments is available in each campus director's office.

Both branch campuses have residence halls with integral laundry facilities.

## **Food Service**

Each branch campus has its own dining hall within the residence hall. Meals are served seven days a week during the time when the University is in session. Residence hall students as well as students living in private homes and apartments may make arrangements to take meals in the dining halls. The dining service is operated by the same food service contractor as on the main campus.

## **Libraries**

The Armstrong County Campus Library, an integral part of Academic Hall, has more than 22,000 volumes. In addition, the library provides microfilm, 150 periodicals, and language and shorthand tapes and records. All books and magazines are displayed on open stacks. The library, which seats about 100 students, is open 70 hours per week.

The Punxsutawney library contains more than 13,500 volumes as well as 100 periodicals, recordings of music, poetry and dramas. There are 59 titles available on microfilm in addition to *The New York Times*, 1965-1970. The Punxsutawney library is open 56 hours a week.

The University employs professional librarians for both branch campuses. The libraries at the branch campuses are especially practical since the volumes are geared for the specific curricula. If volumes and other materials are not immediately available, the general holdings of the Rhodes R. Stabley Library on the Indiana campus are available to the students through inter-library loan.

## **Extra-Curricular Activities - Armstrong County Campus**

A large part of the extra-curricular activities at the Armstrong County Campus takes place in the Student Union which adjoins the two dormitories and the academic building. The Union is a two story building, the first floor of which is equipped for such activities as pool, ping pong, and dancing. The second floor is furnished as a lounge with television and a piano. Movies are scheduled bi-weekly and dances are scheduled on alternate Fridays.

Each Wednesday from 7:00 to 10:00 P.M. the students may participate at the local YMCA in a Gym-Swim sponsored by the branch campus and supervised by college faculty. The Gym-Swim physical activity includes swimming, gymnastics, volleyball, and basketball.

Each year two semi-formal dances for students and faculty are held, one during the Christmas season and the other in the Spring. A fall outing at the University Lodge on the outskirts of Indiana is supervised by faculty members. All three functions are organized and sponsored by student government.

The students of the Armstrong County Campus are encouraged to attend the University Artists-Lecture Series on the Indiana campus. Bus transportation is provided for those students who wish to attend these monthly activities.

Many of the students are active in Women's Judicial Board, Student PSEA, Big Brother and Big Sister, Newman Club, and other branch campus activities.

The churches, social and civic organizations of the area invite and encourage the students to take an active part in their projects and activities.

### **Extra Curricular Activities - Punxsutawney Campus**

The newly completed Student Union building is the scene of a major portion of extra-curricular activities at the Punxsutawney Campus. The new Union provides facilities for dances, pool, ping-pong, movies and also has a lounge area equipped with color television and piano.

Outstanding functions of the school year are the Christmas and Spring semi-formal dinner dances and an informal party at the University Lodge held in conjunction with the Kittanning Campus.

A campus van facilitates the transporting of small groups of students for such events as intramural athletic activities to both Main Campus and the Kittanning Campus. Bus transportation is provided for larger groups of students wishing to attend artist series performances, athletic events and other Main Campus activities.

Various clubs are active on the Punxsutawney Campus, especially the Circle K which is the college division of Kiwanis International. Circle K participates in many worthwhile community service projects. The elected Student Government supervises and arranges for all extra-curricular activities on the campus.

The churches and the social and civic organizations of the area invite and encourage students to take an active part in their functions.

### **Rules and Regulations Concerning Student Behavior**

Students at the Branch Campuses are subject to the same rules and regulations as students on the main campus.

### **Fees**

Branch Campus students pay the same basic fees as main campus students.

## **CONTINUING EDUCATION**

---

The School of Continuing Education plays a significant role in programming

community-university studies classes (non-credit), and academic workshops and institutes in the Punxsutawney and Kittanning Areas. While meeting the needs of the traditional students in the Criminology Extension Program, the School is also responsive to the needs of the local community through credit and non-credit activities.

A representative of the School maintains office hours at both branch campuses.

## **COURSE OFFERINGS AT THE BRANCH CAMPUSES**

---

### Anthropology-Sociology Department

- AN 110 Intro to Anthropology
- SO 151 Principles of Sociology

### Art Department

- Ar 101 Introduction to Art
- AR 116 Western Art: Renaissance to Baroque

### Biology Department

- BI 103 General Biology I
- BI 104 General Biology II

### Business Department

- BU 101 Business Organization and Management
- BE 111 Foundations of Business Mathematics
- BU 131 Principles of Typing
- BU 132 Intermediate Typing
- BU 221 Principles of Accounting I
- BU 233 Marketing
- BU 235 Introduction to Business Law
- BU 251 Principles of Accounting II
- BU 261 Shorthand Theory
- BU 262 Shorthand Dictation
- BU 271 Advanced Typing
- BU 272 Introduction to Word Processing
- BE 275 Filing and Records Administration
- BU 321 Business Communications
- DE 330 Merchandise Information
- DE 331 Modern Merchandising
- BU 332 Retail Management
- BU 333 Principles of Selling
- BU 335 Machines Mathematics
- BU 336 Law of Business Organization
- BU 339 Business Data Processing
- BU 352 Intermediate Accounting I
- BU 353 Cost Accounting
- BA 354 Intermediate Accounting II
- BU 363 Shorthand Transcription
- BU 364 Office Procedures
- BU 365 Advanced Transcription
- BE 433 Work Experience and Seminar in Office Occupations
- DE 434 Work Experience and Seminar in Retailing
- BU 439 Management Information Systems

Chemistry and Physics Department  
SC 105 Physical Science I  
SC 106 Physical Science II

Criminology Department  
CR 101 General Administration of Justice  
CR 102 Criminology  
CR 301 Criminal Law I  
CR 302 Criminal Law II  
CR 201 Police Administration I  
CR 202 Police Administration II  
CR 310 Criminal Investigation  
CR 340 Crime Prevention  
CR 350 Techniques of Interviewing  
CR 370 Community Relations  
CR 431 Etiology of Delinquent Behavior  
CR 432 Treatment and Control of Delinquency  
CR 440 Institutional Treatment of the Offender  
CR 445 Non-Institutional Treatment of the Offender  
CR 490 Crime in Modern Society

Economics Department  
EC 101 Basic Economics  
EC 121 Principles of Economics

English Department  
EN 101 English I  
EN 102 English II  
EN 201 English III  
EN 358 Modern American Fiction

Foreign Language Department  
SP 151 Spanish I  
SP 152 Spanish II  
SP 251 Spanish III  
SP 252 Spanish IV  
FR 151 French I  
FR 152 French II  
FR 251 French III  
FR 252 French IV  
GM 151 German

Geography Department  
GE 101 World Geography  
GE 251 Geog of United States and Canada

Health and Physical Education Department  
HE 101 Health

History Department  
HI 101 Hist of Civilization I  
HI 102 History of Civilization II  
HI 104 Hist of U. S. and Pa. II



Home Economics Department

- CS 113 Management and Equipment
- CS 315 Family Finance and Consumer Economics

Mathematics Department

- MA 110 Elementary Functions
- MA 121 Calculus 1 (Non-Math and Non-Physics Majors)
- MA 101 Foundations of Math
- MA 127 Calculus I (Math Majors)
- MA 151 Math for Elementary Teaching I
- MA 152 Math for Elementary Teaching II
- MA 217 Probability and Statistics

Military Science Department

- MS 101 World Military History (Fresh)
- MS 102 American Military History (Fresh)
- MS 203 Fundamentals of Tactical Operations With Applied Terrain Analysis & Military Topography (Soph)
- MS 204 National Security and Concept of Force (Soph)

Music Department

- MU 101 Introduction to Music

Philosophy Department

- PH 110 World Religions
- PH 120 Intro to Philosophy
- PH 221 Logic I - General Logic
- PH 222 Ethics

Political Science Department

- PS 111 American Politics
- PS 101 World Politics

Psychology Department

- PC 101 General Psychology
- EP 302 Educational Psychology
- PC 354 Developmental Psychology

Theater Department

- TH 101 Intro to Theater



# Admission and Registration

## ADMISSIONS POLICY

---

Any graduate of an accredited four-year high school or holder of GED equivalency diploma is qualified to apply for admission to IUP. Prospective students who have completed the third year of high school may file an application beginning the following July 1. Applications filed before completion of the junior year will be returned to the sender.

Requests for application papers and catalogs should be addressed to:  
The Admissions Office  
Indiana University of Pennsylvania  
Indiana, Pennsylvania 15705

Admission will be based on school quotas at IUP taking into consideration restrictions in some curriculums. The Admissions Committee, in reviewing the applications, will take the following into consideration: Academic excellence, giving equal opportunity to all students, needs and welfare of the students, high school grades, SAT/ACT scores, achievement tests, guidance counselors' recommendations, faculty recommendations, extra-curricular activities and other pertinent information that would help the Admissions Committee.

Although the University does not require a specific number of high school credits in certain subject matter fields, it does strongly urge all applicants to take the usual college preparatory program in high school. Applicants should also take all available work offered in the field in which they plan to major.

Applicants are expected to name their major field upon application, but a change in major can be made during the freshman year without loss of credit. A change of major after the freshman year (restricted areas are excluded) usually entails a loss of credit and results in a program of more than four years to satisfy graduation requirements.

Applicants to the departments of Art and Music will be admitted to the University by the Admissions Office, subject to the acceptance by the Department of Art after the portfolio review and by the Department of Music after the audition. It is the responsibility of the student to contact the department chairperson and make the necessary arrangements.

## **APPLICATION FEE**

---

A CHECK or MONEY ORDER (cash will not be accepted) for \$10.00, payable to Indiana University of Pennsylvania must accompany each application. This fee is non-refundable and will be used to meet the cost of filing and processing applications.

The application form, the \$10 application fee and the high school transcript must be mailed to: The Accounts Receivable Office, Indiana University of Pennsylvania, Indiana, Pennsylvania 15705.

## **FRESHMAN APPLICANTS**

---

### **The Scholastic Aptitude Test**

All persons expecting to apply for admission as freshmen should plan to take the Scholastic Aptitude Test (College Boards) on or before the November test date of the senior year of high school. The Admissions Committee recommends that the applicant first take the test in the spring of the junior year because the application, if complete, may receive early consideration in the fall of the senior year. If applicant has an excellent high school record and high College Board Scores, the application for admission may be approved by November 30 of the senior year.

Whether or not the applicant takes the College Boards in the junior year, it is recommended that the College Boards also be taken no later than the November testing date of the senior year. The Admissions Committee gives the applicant the benefit of the highest total Board scores from all test dates. It is, therefore, in many instances, to the applicant's advantage to take the Boards in the senior year. However, the Committee will use the Boards completed in the junior year if the senior Boards are not available at the time admissions decisions are being made.

The applicant should arrange to take the College Boards through the high school principal or guidance counselor, or, by writing to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540 for an information pamphlet and test application. IUP will accept the test battery of the American College Testing Program (ACT) in lieu of College Boards (SAT).

When the applicant receives the information and test application, he/she should fill out the test application and designate Indiana University of Pennsylvania as one of the schools he/she desires to receive a copy of the test scores. The test application is to be returned to the Princeton, New Jersey, address.

## The Admission Application

Applications for admission will be available after June 1 following the students junior year of high school.

The applicant may fill out and submit the application and accompanying forms to the guidance counselor after July 1 of the summer following completion of the junior year. The deadline for applications for early consideration is October 1.

The application deadline depends on the number of available vacancies in the freshman class and the number of applications received. Students are encouraged to submit an application and the required supportive information by December 31. Students who have an outstanding high school record and apply to the main campus after December 31, therefore, may run the risk of not being awarded admission to the Indiana Campus Fall Program. Deadlines for the branch campuses vary from year to year depending on the number of applications received and the academic quality of the students who apply. The University reserves the right to close admissions when it feels that it has offered a sufficient number of acceptances to academically qualified students.

The applicant should give the completed application form and the \$10 application fee to his/her high school principal or guidance counselor for completion of the high school record portion of the application. The principal or counselor must then mail the complete packet of admissions materials to the Accounts Receivable Office, Indiana University of Pennsylvania, Indiana, Pennsylvania 15705.

The student's application is complete when the Admissions Committee receives the Junior College Board and/or Senior College Board or ACT test results, the high school record, the completed application form, and the application fee. In some cases the Committee may request additional information, such as a list of senior year subjects or a senior grade report.

This university uses the Social Security Account Number (SSN) as the basis for all student recordkeeping. Although disclosure of the SSN is not mandatory, its use will facilitate the coordination of your national test results, your financial aid awards, and the maintenance of accurate records. The SSN will be used solely for identification and/or record-keeping purposes.

## Processing the Application

- (1) The Admissions committee reviews, with care and understanding, each of the several thousand applications that are submitted each year.
- (2) Those persons who, in the Committee's judgment, satisfy the standards for early admission will receive notification by November 30 of their senior year. Decisions on most applications are deferred until later in the year. Final action on a completed application takes from eight to sixteen weeks, depending on the number of applications that must be processed. This delay is necessary if each application is to be examined carefully. Applicants who are not given early admission can expect a decision by January 31 of their senior year.
- (3) The applicant who is admitted to an entering class is required to visit the campus on an appointed date to discuss his/her academic and career plans with the School Dean and other advisers. Choosing a major and possible

career is an important problem for young men and women. It is hoped that early consultation with knowledgeable advisers will help the applicant make these crucial decisions. The date of this appointment for the orientation interview accompanies the notice of acceptance.

- (4) A medical examination is required of every applicant after the student is admitted.
- (5) Attendance at the orientation interview and payment of the \$15 orientation fee signifies the applicant's interest, but NOT commitment, to attend Indiana University of Pennsylvania.
- (6) Around April 1 a \$100 advance is required of all incoming freshmen. This advance payment will be credited to the applicant's housing charges and basic fees. Fifty percent of the \$100 is refundable if applicant cancels admission before July 1. Exceptions to refund policy may be made by application to Admissions Committee in cases of unusual circumstances.

## **EARLY ADMISSIONS PROGRAM**

---

The Early Admissions Program permits students to enroll as college freshmen after completing the junior year in high school. Student applications for acceptance must originate with the student's high school guidance counselor and principal. Admission consideration will be given to those applications which contain a statement indicating explicit approval by the high school principal. The applicant must rank in approximately the top tenth of his/her class and have a SAT score of approximately 1150. The University Admissions Committee will exercise the final judgment as to University acceptance after a personal interview with the applicant. The University strongly recommends prior summer school attendance by all students admitted through the Early Admissions Program.

## **TRANSFER STUDENTS**

---

A student who has been attending another institution of higher education and wishes to transfer to IUP must submit an application, official transcripts of all post-secondary educational work and a statement from his/her dean certifying that he/she is in good academic standing and entitled to honorable separation from that institution. Transfer students are not required to submit their high school transcript or SAT/ACT scores.

Applications will be accepted for consideration for the fall and spring semesters after July 1 of the preceding year. The application deadline depends on the number of available vacancies in the transfer program and the number of applications received. Students are encouraged to submit an application, \$10 application fee and the required supportive information by February 15 for the fall semester and September 15 for the spring semester. Students who have an outstanding college academic record but who apply after the above designated dates risk not being awarded admission to the University because of space limitations.

The evaluation of credits from other institutions of higher education is the responsibility of the Director of Testing Services and the undergraduate school dean who has jurisdiction over the student's desired major. Normally, courses considered

for transfer are only those taken from institutions which are accredited by the six regional accrediting agencies. Each course is usually evaluated separately. The evaluation normally includes a review of the description, semester hours, and grade of each course along with the applicability of the course to the student's major at IUP. However, only credits transfer, not grade point average. It has been the policy of the University that only courses with a C or higher grade will be accepted for two-year associate degree graduates of state-supported community colleges in Pennsylvania. No matter how many credits are transferable, the student must satisfy all of the degree requirements falling into the categories of (1) University requirements, (2) school requirements and (3) department requirements.

University requirements. Since all students are obliged to fulfill a basic program in General Education consisting of 52 semester credit hours and there is a reasonable degree of flexibility in the General Education requirements, the Director of Testing Service and the school deans will look to this area first for applicable credits for transfer. Most introductory courses are generally equivalent.

Residency requirements. The University requires that the last 30 crédits in a student's curriculum must be earned by enrollment in courses at IUP. It should also be noted that for community college graduates, a maximum of 60 credit hours are transferable to this institution for the purpose of fulfilling a specific program of study. Excess credits, if any, may be transferred but cannot be used for fulfilling the minimum requirements for the degree.

The articulation policy as adopted by the Board of State College and University Directors on September 20, 1973, and transmitted by memorandum by Commissioner Ziegler on December 7, 1973, to the State College and University Presidents, and whereby the D grade obtained by two-year Associate Degree graduates of state-owned community colleges should be treated by the senior institution in the same manner as the senior institution treats the D of its indigenous students is applicable.

## **PART-TIME STUDY**

---

Any high school graduate is eligible for part-time study.

Students who plan to participate in the part-time study must obtain an application from the Admissions Office.

Applications and official transcripts from high school and other institutions attended must be submitted to the Admissions Office by August 15 for the Fall Semester and December 15 for the Spring Semester.

At the end of 15 credit hours of course work taken at IUP, a part-time student must have a 1.8 cumulative quality point average to continue. At the end of 30 credit hours taken at IUP, a part-time student must have a cumulative quality point average of 2.0 to continue.

A part-time student **MAY** apply for degree candidacy after the completion of 15 credit hours of C-work or better in academic subjects and maintenance of a cumulative quality point average of 2.0 or better. A part-time student **MUST** apply and be approved for degree candidacy by the time he/she has earned 30 credit hours. **STUDENTS WHO HAVE NOT BEEN APPROVED FOR DEGREE CANDIDACY**

AFTER THE COMPLETION OF 30 CREDIT HOURS OF PART-TIME STUDY WILL NOT BE PERMITTED TO CONTINUE AT THE UNIVERSITY.

Degree candidates who wish to continue as part-time students, must file a part-time application with their undergraduate School Dean each semester prior to the application deadline.

## **PROGRAM FOR HIGH SCHOOL JUNIORS**

Honor students who have completed the junior year of high school with at least a B average in all college entrance subjects taken in the sophomore and junior years may preview University life and earn regular college credit by enrolling in two or three lower division courses. Students seeking admission to this program should write to the Registrar for further details.

## **CERTIFICATION STUDENTS**

(Students who graduated with other than B.S. in Education degree)

A student who wishes to be admitted to complete requirements for an Instructional I certificate must submit an application and official transcript of college work showing degree attained. One semester on campus is a prerequisite to Student Teaching.

## **READMISSION POLICY FOR STUDENTS WHO WITHDRAW FROM THE UNIVERSITY VOLUNTARILY**

A student who withdrew from the University on a voluntary basis for reasons of health, financial difficulty, etc., and who wishes to re-enter, must notify, in writing, the Dean of the School in which the student was enrolled at the time of his/her withdrawal before April 1, if requesting readmission for that year's summer sessions or for the Fall semester (starting in September). Written requests must be made to the above-mentioned offices before November 1, if requesting readmission for the Spring semester starting in January.

## **PRE-SCHEDULING AND PRE-REGISTRATION**

Students who are in full-time enrollment status are given the opportunity to pre-schedule for the next semester of attendance. Regularly enrolled students will pre-schedule and pre-register during the middle of the first semester for the second semester, and during the middle of the second semester for the following first semester, and in May for the Summer Sessions.

Prospective freshmen will prepare a program of studies with departmental advisers during interview dates preceding the semester of entrance.

All students will be billed and pay fees by mail for the first and second semesters of each year.



## **THE SUMMER SESSIONS**

---

The Summer School is an integral part of the year's work. Students from other colleges, new students, teachers in-service, and students in regular attendance can secure, in the summer sessions, credits toward any certificate offered or toward graduation in curriculum. The courses are planned for a wide range of student needs. There are courses for those who wish to begin their higher education courses, for those who wish to accelerate their program of studies, for students from other colleges or universities who wish to transfer IUP credits, and for those who find it necessary to use the summer program to make up deficiencies in courses in which they previously earned unsatisfactory grades.

All courses given in the summer session require the same amount of time and are granted the same credit as if taken during a regular semester. The Summer Bulletin will be mailed to anyone desiring more complete information regarding the courses to be offered.

Three sessions, two of three weeks and one of six weeks, are generally offered during the summer. The pre-session opens the first week of June. Main session begins the last of June and continues into the first of August. The post-session opens in early August and usually closes a week prior to the end of the month. It is thus possible for a student to secure three to 12 credits by attending summer school.

Address the Registrar to obtain the Summer Sessions Bulletin which indicates courses and activities of the Summer Session. Normally, Summer Sessions Bulletins are available after March 1.



ENTRE

FATHERS: IT'S A MAJOR...

# Finances

## **\*BASIC FEES (as of March, 1980)**

---

The fees set forth in this section were those in effect in March 1980. Since this is a two-year catalog and the fee schedule is subject to change, these figures are to be considered simply as an estimate. You may request a current fee schedule by writing to the Admissions Office, IUP, or by phoning (412) 357-2230.

The basic fee for all full-time in-state students is \$550.00 per semester. This fee covers registration and the keeping of student records, use of the library, student welfare, and laboratory facilities. An additional \$46.00 per credit will be charged for credits scheduled in excess of 18.

Out-of-state full-time students pay a basic fee of \$965.00 per semester. An additional \$81.00 per credit will be charged for credits in excess of 18.

The basic fee for part-time in-state students is \$46.00 per semester hour. A part-time student is one taking 11 or fewer semester hours. See the section on Admission and Registration and on University Policies for further information concerning part-time students.

The basic fee for part-time out-of-state students is \$81.00 per semester hour.

An in-state student is defined as one who is a bona fide resident of and domiciled within the State of Pennsylvania for a reasonable period, not less than one year, immediately preceding his or her registration for a term or semester in any State-

\*The University reserves the right to change its fees without notice.

supported college or university in the State of Pennsylvania. A minor will generally be presumed to be a resident of the place of his/her parents' or guardian's domicile.

The establishment of domicile is primarily a matter of continued residence and intention. Generally, Pennsylvania domicile is considered to be established upon the completion of at least 12 months of continuous residence within the State at the time of registration for courses. For special cases, the University has a committee to review individual circumstances.

## **\*OTHER FEES**

---

**ADVANCE REGISTRATION FEE-** A non-refundable confirmation fee of \$15 must be paid by each student accepted for enrollment. This confirmation fee will be used to cover the cost incurred by the University on the students' behalf during Freshman Orientation Day on campus and Fall Freshman Orientation.

**AUDIT FEE -** Full standard fees will be assessed for each course audited. Those on social security or equivalent retirement benefits will be given remission of basic fees for audited courses where space in such classes is available.

**HEALTH FEE -** The student health fee of \$25.00 per semester is assessed for each full-time undergraduate or graduate student at the University. All students enrolled in Summer Sessions will be assessed a student health fee of \$8.00 per session. This fee covers most services provided by the IUP Health Center. Students will be assessed an additional amount, upon use, for certain medications and laboratory tests. In-patient cost in the Health Center will be \$6.00 per night if the student does not have a valid meal-card. No charge for in-patient care at the IUP Health Center will be assessed for students with valid meal-cards. Part-time undergraduates and graduate students have the option of paying the \$25.00 per semester health fee or they may choose the Fee-for-Service schedule available at the IUP Health Center.

**HOUSING FEE -** The housing fee for students living in commonwealth residence halls is \$370.00 per semester and the meal fee is \$310.00 per semester; thus students who reside in a commonwealth residence hall and have their meals in one of the University dining halls pay a total of \$680.00 per semester. This includes room and meals in one of the University dining halls. This applies only to full-time students, as part-time students are not permitted to live in University dormitories or residences, except during summer sessions.

See the section on Housing for details concerning housing policies at the University.

**STUDENT ACTIVITY FEE -** An activity fee is collected from all students and administered through the Student Cooperative Association under regulations approved by the Board of Trustees. This fee is \$42.00 per semester, covers the cost of student activities in athletics, lectures, entertainment, student publications, etc., and is payable in one sum for the semester at the time of registration. The Student Activity Fee is \$16.00 for part-time students. Included in the Student Activity Fee is a \$1.00 Commonwealth Association of Students (CAS) membership fee.

\*The University reserves the right to change its fee without notice.

**LATE REGISTRATION FEE** - Each student registering after the date officially set for registration is required to pay \$1.00 for each day thereafter to a maximum of \$10.00 (except when permission for late registration has been secured in advance from the President because of illness or other unavoidable causes). The same regulation shall apply to approved intersemester payments.

**BAD CHECK CHARGE** - Students making checks payable to Indiana University of Pennsylvania which are not acceptable to the bank because of insufficient funds will be charged \$5.00 for each bad check in the amount of \$.01 to \$9.99 and \$10.00 for bad checks written for \$10.00 or more.

**MILITARY SCIENCE FEE** - An Activity Fee of \$5.00 is required for ROTC Cadets to cover the cost of Cadet Corps functions. A uniform deposit fee of \$10.00, which is refundable, is required of all cadets. These fees are payable directly to the Military Science Department.

**STUDENT STUDYING ABROAD** - Students enrolled in the studies abroad program will pay a \$50.00 administrative fee per semester to the University. All other fees assessed by the foreign institution will be paid directly to the foreign institution by the student.

**MED-TECH STUDENTS** - During the clinical year a fee may be levied and collected by the participating hospital. The only other cost to these students shall be an administrative fee of not more than \$100 to be collected by the University. The total fees charged by the hospital and the University shall not exceed the basic fee costs paid by other students for the same academic year. Room and board shall be the responsibility of the student.

**FINANCIAL DELINQUENCY POLICY** - Registration is not in fact complete until a student pays the fee for such registration and the University reserves for itself the right to bar such a student from classes. When it has been determined during the course of a semester that a student's account has been delinquent from accrued charges, the Registrar's office will be notified of this delinquency and advised to refrain from reporting the student's grades and from issuance of any transcripts for that student's work until the delinquent account has been satisfied. Faculty members will continue to submit a grade for the financially delinquent student, however, only after the student has cleared his account or established a payment plan satisfactory to the Accounts Receivable Office will requests from and official reports to students be honored by the Registrar's office.

**MISCELLANEOUS COSTS** - In some courses students are required to obtain supplies and materials to complete course projects. In many courses, a student may make a voluntary contribution to a cooperative fund established for the purpose of obtaining these supplies and/or services at a lower cost. Examples are art courses, field trips, and etc.

**MUSIC** - University-owned instruments for certain classes are usually available for a modest rental fee. For each Applied Music course, the fee is \$50.00 per half-hour of instruction. This charge is in addition to credit hour costs.

\*The University reserves the right to change fees without notice.

## ESTIMATED EXPENSES PER SEMESTER

	<b>In-State</b>	<b>Out-of-State</b>
Basic Fee	\$ 550.00	\$ 965.00
Housing Fee	370.00	370.00
Meal Fee	310.00	310.00
Student Activity Fee	42.00	42.00
Health Fee	25.00	25.00
Books and Supplies (estimated)	50.00	50.00
	<b>\$1,347.00</b>	<b>\$1,762.00</b>

Miscellaneous and travel expenses would be in addition to the above.

## SUMMER SESSIONS FEES

---

**BASIC FEE** - The basic fee for students enrolled for any of the regular summer sessions is \$46.00 per semester hour.

**HOUSING FEE** - Summer session rates will be calculated based upon the number of weeks within the session. Weekly summer rates are \$22.00 per week for residence hall room, double occupancy, and \$34.00 per week for single occupancy, and \$20.00 per week for meals in one of the University dining halls.

See the section on Housing for housing-policy details at the University.

**STUDENT ACTIVITY FEE** - The fee will be \$15.00 per session.

**STUDENT HEALTH FEE** - Each undergraduate and graduate student enrolled in IUP Summer Sessions will be assessed the following fees for Student Health Services: \$8.00 per session.

## SPECIAL FEES

---

**PART-TIME STUDENT HEALTH FEE** - Part-time undergraduate and graduate students have the option of paying the \$25.00 per semester Student Health Fee. Part-time students choosing NOT to pay the \$25.00 per semester Student Health Fee will be assessed for services obtained from the IUP Health Center according to the current Fee-for-Service schedule. This schedule is available at the IUP Health Center.

**DEGREE FEE** - A fee of \$5.00 to cover the costs of a diploma and processing must be paid by each candidate for a degree.

**TRANSCRIPT FEES** - Applications for official transcripts must be made **ONLY IN WRITING** to the Registrar, either by U.S. Mail, or on forms available at the Transcript Window in Clark Hall. Such requests **MUST** include:

- (1) Your full name and social security number as of your graduation or termination of enrollment at IUP. (Please note any name changes since graduation);
- (2) Your present address;

\*The University reserves the right to change fees without notice.

- (3) Whether you are requesting a transcript of your undergraduate and/or graduate work;
- (4) Whether you graduated, or if not, when you were enrolled;
- (5) The full and clearly stated name(s) and address(es) of person(s) to whom you wish the transcript(s) sent;
- (6) The first transcript is free with a charge of \$1.00 for each subsequent copy requested. (Checks or money orders should be made out to Indiana University of Pennsylvania).

Any requests which are not accompanied by the proper fees or information will be returned to the senders for inclusion of them. No transcript requests will be processed without the payment of transcript fees.

**DAMAGE FEE** - Students are responsible for damages, breakage, loss, or delayed return of University property.

### **BILLING AND PAYMENTS**

All bills, including basic fee and housing fee, are payable as specified on the bill for at least the first nine weeks. Checks or money orders, in the exact amount of the account, should be made payable to the account designated on the bill. Book Store purchases are on a cash basis.

It is desired that payments for the entire semester be made in August for the first semester and in December for the second semester; however, the half-payment option may be exercised, if necessary.

### **Delinquent Accounts**

Students will not be permitted to enroll for any semester nor to graduate, until all bills previously incurred have been paid; nor will credit be certified to any other institution or the Department of Education until all overdue accounts have been paid. A late payment fee of \$1.00 for each day thereafter will be assessed for delinquent accounts up to a maximum of \$10.00.

Undergraduate students desiring to leave school before the close of a semester must report to the Vice President of Student Affairs, and to the Accounts Receivable Office to settle all unpaid accounts. Graduate students report to The Graduate School Dean.

## **UNIVERSITY REFUND POLICY**

---

The University must engage its faculty, assign Residence Hall space and arrange for meal contracts in advance of each term in accordance with the number of students who expressed their intent to be enrolled. When students withdraw from the University, they create vacancies which cannot be filled and financial commitments for salaries and services by the University must be honored. The refund policy at Indiana University of Pennsylvania applies to all students enrolled in credit producing programs at the University either full-time or part-time.

## **WITHDRAWALS FROM THE UNIVERSITY**

---

Undergraduate students withdrawing from the University must process such withdrawal through the Dean of Student Services Office, 202 Pratt Hall. The official withdrawal date will be established by this office.

Students totally withdrawing from courses, Residence Halls and/or meal contracts upon receiving approval from the Dean of Student Services will forfeit a portion of the semester charges in accordance with the following schedule:

From the first full day of semester classes to and including the fourteenth (14th) calendar day following the start of classes.	Forfeit twenty (20) percent of the student's total semester charges.
---	--

From the fifteenth (15th) calendar and including the twenty-first (21st) calendar day following the start of classes.	Forfeit thirty (30) percent of the student's total semester charges.
---	--

From the twenty-second (22nd) calendar day to and including the twenty-eighth (28th) calendar day following the start of classes.	Forfeit forty (40) percent of the student's total semester charges.
---	---

From the twenty-ninth (29th) calendar day to and including the thirty-fifth (35th) calendar day following the start of classes.	Forfeit fifty (50) percent of the student's total semester charges.
---	---

After the thirty-fifth (35th) calendar day following the start of classes.	No refund will be granted and all semester fees forfeited.
--	--

The start of days is defined as the first day of classes to begin as scheduled.

Refunds made during summer sessions will be governed by the following schedule. Students totally withdrawing from courses, resident halls and/or meal contracts upon receiving approval from the applicable office (Student Affairs or Graduate Office) will forfeit a portion of the total session charges in accordance with the following schedule:

From the first day of arena registration through the fourth (4th) calendar day following arena registration for Pre and Post Sessions. From the first day of arena registration through the eighth (8th) calendar day following arena registration for Main Session	Forfeit fifty (50) percent of the student's total session charges.
---	--

After the fourth (4th) calendar day in Pre and Post Sessions and the eighth (8th) calendar day of Main Session	No refunds will be granted and all semester fees forfeited.
--	---



## **REFUNDS**

---

Refunds for students receiving financial assistance from scholarships and/or grants will be returned to the source of aid in an appropriate portion, except in those cases in which a full refund to the source is required.

\*No refunds will be granted unless formal withdrawal procedure has been initiated by the student or his family within 60 days of the date of withdrawal.

\*No refund will be made for reduced credit loads.

\*No refunds will be granted for students suspended or expelled by the University.

\*Students who withdraw from the University Student Services (Residence Hall, meal contracts, etc.), but do not totally withdraw from the University will not be granted a refund.

The Dean of Student Services may make exception to these policies and grant pro-rated refunds when circumstances justify it. (Example: death, medical reasons, military obligation).

## **FINANCIAL AID**

---

The Financial Aid Office, located at 308 Pratt Hall, offers financial information and counseling to all students attending IUP. The types of financial assistance offered by the Financial Aid Office include student employment, loans, grants, and scholarships. In most cases, a Pennsylvania State (PHEAA) Grant Application is used to determine eligibility for these programs.

## **STATEMENT OF STUDENT'S RIGHTS**

---

The Financial Aid Office of IUP is providing the following information in compliance with HEW guidelines for the dissemination of financial aid information.

In order to be considered for financial aid administered through the University, a Pennsylvania State (PHEAA) Grant Application must be submitted to PHEAA, Harrisburg, PA. Students will be awarded assistance based on demonstrated financial need. In order to be eligible for continued funding, the applicant must remain in satisfactory academic standing at the University and show continued satisfactory progress.

The appeal process regarding financial aid decisions is through the Vice President of Student Affairs.

Payment of financial aid awards is done on a semester basis. All financial aid with the exception of the private scholarships, work-study, and the guaranteed student loans are credited to the student's bill in advance.

The cost of attending IUP and the University's refund policy are listed in this catalog. Please refer to the index for further information.

**EMPLOYMENT** provides an opportunity for students to earn money to help finance

their educational expenses. Students may be employed on campus for up to twenty (20) hours per week. The University encourages students to participate in the on-campus student employment program since studies have demonstrated that part-time employment provides a positive stimulus to students in their adjustment to campus life and the maintenance of their academic averages. All campus employment is administered by the Financial Aid Office.

ROTC - Students participating in the Advanced ROTC Program, junior and senior years, are given a subsistence allowance of \$100 per month for up to ten months per academic year. Additionally, the student will earn approximately \$500 plus room and board, travel expense and medical and dental care for six weeks summer camp between the junior and senior years. This is approximately \$2,400 for the two years.

Students enrolled in ROTC may apply for ROTC Scholarships. Recipient benefits include all tuition, University fees, all books and expense costs, in addition to \$100 per month subsistence for each ten month academic year during the period of the scholarship. Three year, two year, and one year scholarships are applied for in the freshman, sophomore, and senior years, respectively. For winners, upon graduation, a four year active duty obligation is incurred as an officer in the U.S. Army.

LOANS are a form of aid for which repayment must begin upon termination of the student's University education. Interest rates normally range to 7%.

GRANTS are funds which carry no obligation for repayment. These funds are awarded to the student on the basis of financial need.

SCHOLARSHIPS are funds which carry no obligation for repayment. They are gifts awarded to the student on the basis of ability.

Federal aid administered through the University is available for both the regular academic year and the summer sessions. The application deadline for upper-classmen for these federal aid programs is normally May 1 for the following academic year. Freshmen may apply for aid upon acceptance to the University. For the summer sessions, the application deadline is also May 1.

A Financial Aid Fact Sheet containing specific information about financial aid may be obtained at the Financial Aid Office. In addition, the director and assistant directors of Financial Aid are available for student consultation from 1:00 to 4:00 p.m. Monday through Friday. The F.A. Office recommends that students with questions contact the office at (412) 357-2218.

## **EMPLOYMENT**

---

Campus part-time employment for students is available in the academic offices, residence halls, library, administrative offices, student co-op, and dining halls.

The University operates two student employment programs under which students may be employed:

FEDERAL - To be employed under the Federal College Work-Study Program (CWSP), a student must show financial need as determined by the Pennsylvania State (PHEAA) Grant Application. A student employed under the Federal College Work-Study Program may work up to a maximum of twenty (20) hours per week when

classes are in session and forty (40) hours per week when classes are not in session.

**STATE** - The State University Employment Program (UE) employs students. Under this program, a student may work up to twenty (20) hours per week when classes are in session and forty (40) hours per week when classes are not in session. No application is necessary for this program.

The Financial Aid Office offers placement assistance to students. When an employment opening is located, the potential employer indicates his intention of employing the student by giving him an employment assignment card. The student takes this card to the Financial Aid Office and is then placed on the appropriate student payroll. There is no provision to have employment earnings deducted from student accounts. Students are paid directly by check every two weeks.

## LOANS

---

### Government-Sponsored Loan Programs

**NATIONAL DIRECT STUDENT LOAN PROGRAM** - The application for the National Direct Student Loan Program is the Pennsylvania State (PHEAA) Grant Application. The loan is awarded to students on the basis of financial need. It is interest-free and nonrepayable until nine months after termination of education, at which time it becomes repayable at 3% interest with a minimum \$30 payment per month and up to ten years to repay.

**GUARANTY STUDENT LOAN PROGRAM** - Applications for the Guaranty Student Loan are obtainable from lending institutions. These include banks, savings and loan associations, credit unions, etc. Through this program, undergraduate students may borrow up to \$2500 per academic year (\$5000 graduate). The loan is interest-free until nine months after termination of education, and is then repayable directly to the lending institution at 7% simple interest.

### University-Sponsored Loan Programs

The Financial Aid Office administers various loan funds in behalf of the University. Applications for and additional information on these programs are available to students in the Financial Aid Office. These loans are generally not available to students until after they are enrolled and taking classes at the University. Listed below are various loan programs sponsored through the Financial Aid Office at Indiana University of Pennsylvania:

**JENNIE E. ACKERMAN LOAN FUND** - By action of the Executive Committee of IUP's Alumni Association, the Jennie E. Ackerman Loan Fund was established in 1962, by contributions from alumni and friends, in memory of Jennie E. Ackerman, who served as Supervisor of Student Teachers at IUP for many years. Loans are available to sophomores, juniors and seniors who are maintaining satisfactory academic records at the University. The maximum outstanding amount extended to any one student cannot exceed \$200. Interest is at the rate of 2% payable at maturity of the loan. Notes extended beyond that time will carry a 6% interest charge.

**ROBERT BELLIS LOAN FUND** - This loan fund has been established at IUP by friends and relatives of Robert G. Bellis, a graduate of Indiana State college. The fund is used to grant loans to deserving students, preferably to junior and seniors.

**ELLA C. BENDIX LOAN FUND** - This fund was established by students and faculty of the School of Home Economics in memory of Ella C. Bendix, who served as dean of the School of Home Economics. Worthy students with financial need enrolled in the School of Home Economics are eligible to receive a \$250 loan for each year of a two-year period. Interest is 2% payable at maturity of the loan. Notes extended beyond that time carry a 6% interest charge. Loan applications are available from the School of Home Economics.

**MARY EDNA FLEGAL LOAN FUND** - A loan fund has been established at IUP by Alpha Chapter of Delta Kappa Gamma Society International, an honorary society for distinguished women educators, in memory of Mary Edna Flegal who graduated from Indiana Normal School in 1899 and served for some time as Director of Art at IUP. Loans up to \$200 are available to upper class students enrolled in the School of Education, preference being given to women. Notes are interest free for one year for seniors and two years for juniors, and carry a 6% interest charge if repayment is extended.

**COLETTE CROMER GERSHMAN LOAN FUND** - Family and friends of Colette Cromer Gershman have established this fund in memory of Colette Cromer Gershman, a home economics education graduate. Students enrolled in the School of Home Economics are eligible for the loan. Interest is at the rate of 2%, payable at maturity of the loan. Notes extended beyond that time will carry a 6% interest charge. Apply to the Financial Aid Office.

**SUZANNE MARSHALL HARTMAN LOAN FUND** - A loan fund has been established at IUP by family and friends in memory of Suzanne M. Hartman, a graduate of Indiana in home economics. This fund is used to grant loans to deserving students in their sophomore, junior, and senior years. Interest is at the rate of 2%, payable at the maturity of the loan. Notes extended beyond that time will carry a 6% interest charge.

**JOHN HAYS MEMORIAL FUND** - In honor of Dr. John Hays of the IUP Educational Psychology Department, a memorial loan fund has been established by the Hays family and friends. Dr. Hays a faculty member of Indiana University of Pennsylvania for 21 years, retired August 14, 1977. This fund is primarily for students in the School of Education at IUP. Loans up to \$250 will be made to worthy applicants, interest free for one year.

**OLIVER W. HELMRICH MEMORIAL SCHOLARSHIP LOAN FUND** - This fund has been established at IUP by the Helmrich family and friends in memory of Mr. Helmrich, a member of the Indiana faculty at the time of his death. In an effort to continue his desire to help young people in education, loans of up to \$250 are available, according to need, to full-time seniors and graduate students enrolled in the School of Education. Notes are interest-free for one year, and carry a 6% interest charge if repayment is extended.

**WILLIAM HENZELMANN MEMORIAL FUND** - This loan is available to junior and senior students majoring in German or Russian in the Department of Foreign Languages. The maximum loan is \$250. Notes will be interest-free for one year, after which they will carry a 3% interest charge. The total repayment period for the loan will not exceed twenty-four months. This loan has been established in memory of William Henzelmann, a faculty member in German of the Foreign Languages department at IUP.

**MARY ANNE KOLESSAR LOAN FUND** - Mary Anne Kolessar Loan Fund, established in the memory of Mary Anne Kolessar, a student at IUP, by the family and friends, is a short-term loan fund available to Consumer Services students. \$200 may be borrowed for up to 60 days, interest free.

**MACK LOAN AND SCHOLARSHIP FUND** - A loan and scholarship fund has been established by members of the Mack family to be used for making loan and scholarship grants to worthy students with financial need. Preference is given to freshmen and sophomores who can give evidence of academic excellence, financial need, and promise as a future member of the teaching profession. At the present time, the maximum loan available is \$200 per year. Interest is at the rate of 2%, payable at maturity of the loan. Notes extending beyond that time will carry a 6% interest charge.

**ETHYL V. OXLEY - HELEN C. MERRIMAN LOAN FUND** - Interest from money bequeathed to the School of Home Economics by these former faculty is available for student loans. Worthy students with financial need enrolled in the School of Home Economics are eligible to receive a \$300 loan for each year of a two-year period. Interest is 2% payable at maturity of the loan. Notes extended beyond that time carry a 6% interest charge. Loan applications are available from the School of Home Economics.

**RUSTY PREISENDEFER MEMORIAL LOAN FUND** - This fund was established as a gift from Mrs. Suzanne Preisendefer Brickner in memory of her husband, who was killed in action in South Viet Nam. Preference in granting loans from this fund shall be given to members of the advanced ROTC and upperclassmen. Loans will be made up to a maximum of \$400 per individual, with the first note carrying a 2% interest charge. Notes extending beyond that time will carry a 6% interest charge.

**FLOSSIE WAGNER SANFORD STUDENT LOAN FUND** - The Pennsylvania Federation of Women's Clubs has established a student loan fund in honor of Flossie Wagner Sanford, an alumna and former member of the faculty of Indiana. Loans from this fund are made by the Faculty Loan and Scholarship Committee to students who need financial assistance. Interest is at the rate of 2%, payable at the maturity of the loan. Notes extended beyond that time will carry a 6% interest charge.

**NORAH ZINK FOREIGN STUDENT LOAN FUND** - This loan fund has been established by friends of former geography professor, Dr. Norah E. Zink. Loans may be secured by undergraduate foreign students in the amount of \$250 for a period of 90 days.

## **GRANTS**

---

**BASIC EDUCATIONAL OPPORTUNITY GRANTS (BEOG)** are available for eligible students. Applications for and information on deadlines for this program are available from the Financial Aid Office or high school counselors. All students are urged to apply for this grant.

**PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY GRANTS (PHEAA)** are available for both regular academic year and the summer sessions. Contact the Financial Aid Office to determine the application deadlines for the PHEAA Grant Program.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG) are available to eligible students who demonstrate financial need as based on the PHEAA Grant Application.

## **SCHOLARSHIPS**

---

The Financial Aid Office administers various scholarship programs in behalf of the University. These scholarships have been established by alumni and friends of the University to recognize outstanding students and assist them in financing their educational expenses. Listed below are the University scholarships which are administered through the Financial Aid Office:

**AETNA LIFE AND CASUALTY SCHOLARSHIP** - A \$100 award is presented each semester to a Safety Management Major under this scholarship established by the Aetna Life and Casualty Insurance Company. The award is to be given for academic excellence with strong consideration for women and minority students. Applications should be made to the Chairperson, Safety Sciences Department.

**JEMIMA S. BOYD SCHOLARSHIP** - The Jemima S. Boyd Scholarship has been established from the estate of Grace Noble Lacock. Each year, the interest from the account is awarded to a female student who intends to teach in schools in Pennsylvania and whose parents are American born. The scholarships are granted to a student or students who will be entering their senior year at Indiana University of Pennsylvania.

**BRAMAN MUSIC SCHOLARSHIP FUND** - Interest, up to an amount of \$100, will be granted as a single scholarship to an eligible prospective freshman music major, whose performing area is one of the following: violin, viola, cello or double bass. Selection of grantee is made by the string area music department faculty and awarded for the second semester. Application and information are available from the music department.

**M. VASHTI BURR MEMORIAL AWARD** - The sum of \$125 is awarded annually to that student of IUP who is deemed by the faculty to be most deserving, having in mind his or her economic need and the excellence of his or her industry and scholarship. This award is given through the generosity of Mr. William V. Whittington, Washington, D.C.

**HOWARD B. BUTERBAUGH SCHOLARSHIP FUND** - This scholarship money was a gift to the University from Dr. Howard Buterbaugh's estate. The scholarship is to be given to a student/s based on his or her academic performance at IUP.

**CLARK SCHOLARSHIP** - The Lieutenant Alpheus Bell Clark Memorial Scholarship was established by Mr. and Mrs. Steele Clark, Cherry Tree, Indiana County, in memory of their son. The sum of \$100 is awarded each semester to that young man or woman, a senior in the University and a resident of Indiana County, who in the opinion of a committee chosen by the President, best qualifies for the honor in terms of academic ability, leadership, and service to the University, with preference going to a veteran, or a son or a daughter of a veteran.

**JACK CROSSAN MEMORIAL SCHOLARSHIP FUND** - Established in Jack Crossan's honor by fellow athletes, classmates and friends, this scholarship shall be

awarded at the discretion and good judgment of the head basketball coach to a basketball player of good character and sound academic standing.

**ROY A. DAUGHERTY SCHOLARSHIP** - Scholarships in the amount of \$100 will be given to worthy student with preference given to sons and daughters of members of Sigma Phi Epsilon Fraternity who attended IUP with Mr. Daugherty.

**CHARLES DAVIS SCHOLARSHIP** - This scholarship is awarded each year to a music major who has shown outstanding ability. The amount of the award will be determined by the funds available from Phi Mu Alpha, the professional music fraternity at IUP.

**EXTENSION HOMEMAKER SCHOLARSHIP** - Homemakers participating in the Home Economics Extension Program contribute funds annually for scholarships to be given to sophomores, juniors, or seniors who are majoring in home economics in several colleges in the state. Indiana is allotted several each year, to be awarded on the basis of 4-H experience, need, scholarship, and other outstanding characteristics. Each award is for \$250 per year.

**THOMAS V. FRAZIER MEMORIAL SCHOLARSHIP** - A senior student interested in the theater arts is the recipient of this award. The student may be a drama student or just active in off-stage roles. Financial need will be a consideration, with the Chairperson of the Theater Department and members of the Financial Aid Office selecting the recipient.

**GORRELL EDUCATION FUND** - Established by the Gorrell family, these scholarships are awarded to students with exceptional need.

**MARGARET FLEGAL HARTE SCHOLARSHIP** - Ten \$300 Margaret Flegal Harte Scholarships are awarded to top students of each freshman class for the first year. Eligibility is based on academic achievement and financial need. Scholastic achievement is measured by the computation of high school rank and College Entrance Examination Board scores. Financial need is determined through the Pennsylvania State (PHEAA) Grant Application. No application required. All freshman are automatically screened for eligibility.

**PATTI HURLEY SCHOLARSHIP** - A four year scholarship of \$150 per year is awarded to a female graduate of Indiana Area High School attending the University, based upon academic achievement, participation in school activities, and economic need. This memorial scholarship was established by the family and friends of Patti Hurley, a 1970 graduate of Indiana Area High School who was killed in an automobile accident two weeks after high school graduation and prior to entering college.

**SALLY JOHNSON MEMORIAL SCHOLARSHIP FUND** - This scholarship will go to a female junior student, based upon her outstanding athletic abilities. Information and applications available through the physical education department.

**ALAN P. MEWHA MEMORIAL FUND** - Used for annual scholarships to students in the geography and regional planning department, the grant selection will be made by a three-member geography and regional planning scholarship committee. The scholarships are unrestricted as to use or purpose, and flexible in the amount awarded and time presented. For further information, contact the Geography and Regional Planning Department.

**MORRIS SCHOLARSHIP** - The Helen Wood Morris Scholarships were established by Lieutenant-Colonel L.M. Morris of Altoona, in memory of his wife, a graduate of the University. Sums of \$175 each are awarded annually to students selected by a committee named by the University, one award to a sophomore, the other to a junior. Students chosen must be in the highest quarter of their class, must be in need of financial assistance, and must have demonstrated worthiness in terms of character, personality, leadership, and American citizenship.

**MARY MULDOWNEY SCHOLARSHIP** - A scholarship in the amount of \$100 for any junior or senior student majoring in music with an emphasis on voice, this award is governed in amount and number of scholarships given, by the music department.

**MUSIC FACULTY SCHOLARSHIP** - One scholarship is made available by the music faculty each year to a student enrolled in the music department. The scholarship committee makes the selection based on scholarship, need and participation. The scholarship is awarded for the second semester. Application and information available through the music department.

**TOM NORMAN SCHOLARSHIP** - This money will be available to a soccer player in financial need. All disbursements will be controlled by the soccer coach, in the amount he feels necessary.

**ETHYL V. OXLEY, OPAL T. RHODES AND HELEN C. MERRIMAN SCHOLARSHIPS** - Each year the Home Economics Alumni Association honors three former faculty by awarding \$200.00 scholarships. The Opal T. Rhodes Scholarship is awarded to a home economics education major; the Ethyl V. Oxley scholarship to a food and nutrition major; and the Helen C. Merriman scholarship to a Consumer Services major. Announcements concerning applying for these scholarships are made in the Daily Bulletin and in the School of Home Economics during the Fall semester.

**MARGARET M. PATTON FOUNDATION SCHOLARSHIP** - This scholarship has been established at IUP to assist students attending the University who are worthy and in need of such assistance. Preference will be given to students attending the Armstrong County Campus.

**ALBERT PECHAN SCHOLARSHIP** - This is a scholarship for a science major. The amount of the award depends on the money available in the scholarship fund. Selection of a recipient is made by the science department faculty.

**LENORA PECHAN SCHOLARSHIP** - The Lenora Pechan Scholarship was established by the late Dr. Albert R. Pechan, a former member of the Senate of the Commonwealth of Pennsylvania and of the Board of Trustees of IUP, to provide funds for students who are members of the Reserve Officer Training Corps and who have been outstanding students in the ROTC, and whose other academic work is satisfactory. First priority will be given to students from Armstrong County, selected by the officers of the ROTC and the Faculty Scholarship and Loan Committee.

**EDNA B. PIERCE MEMORIAL FUND** - An Indiana High School student, accepted at IUP, and enrolled in a teacher education curriculum, will be awarded a one-year scholarship.

**WILLIAM E. PIERCE SCHOLARSHIP** - This scholarship has been established to



award a one-year grant to the junior ROTC cadet having the highest standing in his/her sophomore ROTC class.

**WILLIS E. PRATT AWARD** - The Savings and Trust Company of Indiana has established an athletic scholarship in the name of Dr. Willis E. Pratt, Chancellor Emeritus and President of IUP from 1948 to 1968. It will be awarded to athletes chosen on the basis of scholastic and athletic ability and financial need.

**DAVID SCHWARTZ MEMORIAL JOURNALISM SCHOLARSHIP** - The David Schwartz Memorial Scholarship is being established in memory of David Schwartz, a graduate of IUP, by his parents, the Indiana Evening Gazette, the Journalism Department, and friends at IUP. The scholarship will be available to outstanding students majoring in Journalism. Contact the English/Journalism Department for further information.

**SAM SMITH FOOTBALL SCHOLARSHIP FUND** - The solicited funds are to be used for football scholarships. All the funds are to be distributed as scholarships in accordance with the rules and regulations of the University and its memberships.

**GREGORY SPINELLI MEMORIAL FUND** - This fund provides a meaningful award and recognition for students with exceptional promise and commitment to a career in the criminal justice system of the U.S. An award of \$100 will be made annually to a second semester senior enrolled in the IUP criminology department.

**STUDENT ART SCHOLARSHIP** - Students of the department of art and art education contribute art works to be sold. Funds thus received permit awards of \$50 to be made periodically. Application for these awards are received and screened and awards made by a committee of art students. This award is confined to students of the art department.


**STUDENT GOVERNMENT FOREIGN STUDENT SCHOLARSHIP** - The Student Government Association grants four full scholarships annually to foreign students who have not previously been in the United States and who can complete their proposed program of study in one academic year. Applications should be submitted to the Foreign Student Adviser no later than March for the following year.

**CORRINE MENK WAHR SCHOLARSHIP** - Awarded to the top 25 students of each incoming freshman class, this is a \$500 scholarship for the first year without regard to financial need. Scholarship achievement is established by the computation of high school rank and College Entrance Examination scores. **ALL FRESHMEN ARE AUTOMATICALLY SCREENED FOR ELIGIBILITY.**

**ZUCHELLI SCHOLARSHIP FUND** - This \$100 scholarship will be awarded to a female IUP student majoring in physical education. Information and applications available through the Health and Physical Education Department.

## **VOCATIONAL REHABILITATION ASSISTANCE**

Students who have substantial physical or mental handicaps may receive educational benefits through the Bureau of Vocational Rehabilitation Assistance. In order to be eligible, students must satisfy the physical and financial requirements of the Agency. For further information regarding this assistance, the student should contact his local bureau of Vocational Rehabilitation Assistance office or representative.



L. LEONARD STRIGHT HALL

# Academic Policies

## CLASSIFICATION OF STUDENTS

In order to be classified as FULL-TIME, undergraduate students attending any regular academic year semester must be currently enrolled in at least 12 semester hours of credit.

In the IUP summer sessions, a student must be currently enrolled in at least three semester hours during the Pre or Post Session, and/or six semester hours during the Main Session in order to be certified as a FULL-TIME enrollee for any one of those scheduled instructional periods.

Full-time certification for students enrolled in instructional periods which do not conform to the regularly scheduled academic sessions will be based upon the number of semester hours enrolled in during that period of enrollment (e.g., one semester hour in one week of instruction would equal the minimum full-time certification standard).

For purposes of designating students by class, the following credit hour classification ranges are used:

Freshmen.....	28 semester hours or less
Sophomores .....	29-56 semester hours
Juniors .....	57-90 semester hours
Seniors.....	91 semester hours or more

Class designations are based on credits EARNED, rather than credits ATTEMPTED.

Persons holding a degree and working for a second baccalaureate degree may be classified as seniors.

## **GRADES AND QUALITY POINTS**

---

**GRADING SYSTEM** - The following grades are used in reporting the standing of students at the end of each semester or summer term: A, excellent; B, good; C, average; D, passed; F, failed; I, incomplete; R, deferred; P, pass/fail (option). Regarding the option of pass/fail courses, if a student fails the course, he/she will be awarded an F and the terms of failing a course will prevail. The grade of R is used to indicate deferred status for certain types of continuing study courses. It must be converted within one calendar year after issuance.

The grade of I is used to record work which, so far as covered, is of **PASSING GRADE**, but is incomplete because of **PERSONAL ILLNESS** or other **UNAVOIDABLE REASON**. It must be made up within 180 calendar days after issuance of the grade. The grades of W, WP and WF are used to designate that the student has voluntarily withdrawn from a course within a specified period after the beginning of any regular semester. The W, WP and WF grades carry no credits or quality points for the courses in which they are reported, but do appear on the student's record.

**QUALITY POINTS** - Quality points are assigned as follows: Grade A, 4 quality points per semester hour; B, 3 quality points per semester hour, C, 2 quality point per semester hour; D, 1 quality point per semester; F, no quality points.

Quality points are not counted on grades from other schools, and a student transferring from another school is held responsible for quality points only on work taken in this University.

**CUMULATIVE QUALITY POINT AVERAGE** is determined by multiplying the credit hours per course by the grade in quality point received for that course, repeating this procedure for each course attempted, totaling the credit hour quality points thus obtained, and dividing by the total number of credit hours attempted.

**COURSE REPEATS** - The semester hours for a course repeated after January 1, 1974, shall be counted only **ONCE** for all attempts; and it is this number of hours that will be used in quality point average (QPA) computation. (In the case where a course is repeated for a different number of hours of credit than when taken initially, the number of hours corresponding to the highest grade will be used in the QPA computations.)

The total quality points for all attempts of the repeated course will be the number assigned for the highest grade earned.

The QPA for the repeated course will be determined by dividing the number of quality points by the number of semester hours earned. Only courses with a D or F grade may be repeated and then only with the approval of the student's adviser. Only six repeat attempts may be made subsequent to the adoption of this policy during a Baccalaureate Degree Program.

**GRADE REPORTS** - Shortly after each semester or summer session, a full grade report is mailed to each student at his home address. Parents do not receive reports,

as it is assumed that University students are sufficiently mature and trustworthy to report facts to their parents.

## **CRITERIA GOVERNING CONTINUANCE AT IUP**

To be in good academic standing, an undergraduate student must maintain a 2.0 cumulative quality point average.

Freshmen entering the University any time after June 1, 1971, must have attained a 1.8 cumulative quality point average upon the completion of their first full-time academic year to remain at the University. A cumulative quality point average of 2.0 is required for an undergraduate's remaining years. To achieve the stipulated average, the Pre and Main Summer Sessions immediately following the year's Spring semester may be used. Students who fail to be in good academic standing at the end of any summer's Main Session will be dismissed from the University for at least one academic year.

All courses taken at IUP become a part of the student's permanent academic record. The record shall show hours attempted, hours earned, and quality points earned.

The academic standing of all students is computed on the basis of courses attempted at this University only. Credit is granted for work completed in other institutions in accordance with the stipulations set forth under Admission and Registration.

At IUP, a student is considered to be making SATISFACTORY PROGRESS when he or she is permitted to enroll in credit-bearing classes in a curriculum leading to a degree or certificate. Such continued enrollment is subject to the academic policies of the institution.

**READMISSION AFTER ACADEMIC DISMISSAL** - Students who have been dismissed from the University for academic reasons and who desire to return after the dismissal interval must file a formal application for readmission with the Dean of the School in which they were enrolled at the time of their dismissal.

In addition to filing the formal application, students must improve their academic average to meet the minimum requirements of the University which are 1.8 and 2.0 for freshmen and upperclassmen respectively. For exceptions, refer to Criteria Governing Continuance at the University. Filing must be before April 1, if requesting readmission for the following summer sessions or for the Fall semester starting the following September. Filing must be before November 1, if requesting readmission for the following Spring semester.

## **CANCELLED SEMESTER POLICY**

This policy shall apply only to students who have attended IUP and have not been enrolled for at least TWO CONSECUTIVE CALENDAR YEARS. Upon application for readmission (or within one year after readmission) the student may request that one particular semester completed before readmission be cancelled from his/her Cumulative Quality Point Average (C.Q.P.A.). Any semester (full or part time; with the summer sessions altogether counting as one semester) may be cancelled from the

C.Q.P.A.; however, all grades received in that semester (good or bad) must be cancelled from the C.Q.P.A. All grades remain on the record and credit toward graduation for courses passed remains on the record. A student may never cancel more than one semester from his/her C.Q.P.A. under this policy.

## **ACADEMIC VIOLATIONS POLICY**

---

Minor Violations, with maximum sanction of F in the course:

- a. Cheating by those who give as well as receive aid in course or lab work.
- b. Evasion of University policies or procedures.
- c. Plagiarizing in any way.

Major Violations, with any sanction up to and including expulsion from the University:

- a. A second minor academic violation at any time in a student's career at IUP.
- b. Purposeful evasion of University policies or procedures.
- c. Possessing an examination without the instructor's authority or prior knowledge.
- d. Defacing library books or educational instruments or materials.

### **Minor Violation Procedure:**

An instructor may recommend the failure of any student for any minor violation in his/her course. Within ten (10) days of the violation, the instructor must inform the student and must file a written report of the violation with the Academic Discipline Subcommittee of the Senate Academic Procedures Committee and the Vice President of Academic Affairs, making the violation a matter of record. The report may be submitted on a form available in each departmental office and must include the following:

name of student involved; course; instructor; date and time; circumstances and supportive data and sanction recommended.

If the student disagrees with the sanction recommended, the following appeal procedure must be followed. If the student does not appeal within fifteen (15) days at any appeals level, the sanction will be automatically invoked. At no stage of the appeal may the original sanction be increased.

1. Within fifteen (15) days of the date of the instructor's written report, the student must request a conference with the Chairperson of the Department wherein the student and instructor involved are heard by the chairperson. The heaviest sanction which can be imposed by the chairperson is to uphold the sanction imposed by the instructor. Within ten (10) days of the conference, the Chairperson must forward a written report of his decision concerning the instructor's sanction to the Academic Discipline Subcommittee and the student and instructor involved.
2. Within fifteen (15) days of the date of the Chairperson's report, the student may appeal to the Academic Discipline Subcommittee of the University Senate's Academic Procedures Committee.
3. In the case when the Chairperson decreases the sanction originally recommended by the instructor, the instructor may appeal the Chairperson's ruling to the Academic Discipline Subcommittee within fifteen (15) days of the date of the Chairperson's report.
4. The Academic Discipline Subcommittee is composed of faculty and students elected from Senate Committee B-1. The Subcommittee is chaired by a student

elected by the members of the Committee B-1. After holding a hearing, the Academic Discipline Subcommittee may:

accept the instructor's sanction; accept the Chairperson's ruling; reduce the sanction so far recommended or send the case back to the Chairperson for reconsideration along with recommendations (this is not DOUBLE JEOPARDY, since the first hearing is not complete).

The Subcommittee may NOT increase the sanction originally recommended by the instructor. Within ten (10) days of the hearing, the Academic Discipline Subcommittee must send a written report of its decision to the student and the instructor involved. The decision is deemed final and will be implemented by the direction of the Vice President of Academic Affairs.

### **Major Violation Procedure:**

In the case of defacing library books or educational instruments or educational material, possessing an examination without the instructor's authority or prior knowledge, and purposeful evasion of University policies or procedures, a written report must be sent to the Academic Discipline Subcommittee of Senate Committee B-1, the student involved, and the Vice President of Academic Affairs, within ten (10) days of the violation, making the violation a matter of record. The report may be submitted on a form available in each departmental office and must include the following:

name of student involved; course (if relevant); date and time; instructor/ person in charge; circumstances and supportive data and sanction recommended (if any).

In the case of a second minor violation, the Academic Discipline Subcommittee will send written notification to the student involved within ten (10) days of the receipt of the written report of the second minor violation.

In either situation above which constitutes a major violation, there will be an immediate hearing called by the Academic Discipline Subcommittee. The hearing will be governed by its own rules as to internal proceedings along lines of fundamental fairness and will follow the standards of procedure where the accused should:

- a. receive ten (10) days written notice of the charges against him/her, and the sanctions which may be applied if the charges are proved;
- b. receive written notice of the date, time, and place of the hearing (this should accompany the charges); non-appearance of the student is tantamount to a plea of NOLO CONTENDERE;
- c. be advised of the names of the witnesses who will appear against him/her and the substance of their testimony;
- d. have the right to present a defense and witnesses in his/her own behalf, and the right to cross-examine witnesses against him/her, (the Academic Discipline Subcommittee naturally has the same right to cross-examine defense witnesses);
- e. Have the right to be assisted by an adviser of his/her choice including the right to legal counsel;

- f. receive a transcript of the proceedings and a written report of the findings of the Academic Discipline Subcommittee.

If the student disagrees with the sanction recommended by the Academic Discipline Subcommittee, within fifteen (15) days of the date of the Academic Discipline Subcommittee's written report, he/she may appeal to an Appeal Board consisting of the Academic Vice President (who will serve as chairperson), the Dean of the School in which the violation occurred, the Vice Chairperson of the Senate, and the President of the Student Government Association. If the student does not appeal within fifteen (15) days of the date of the Academic Discipline Subcommittee's written report, the decision of the Academic Discipline Subcommittee is deemed final, and will be implemented by direction of the President of the University.

### **Disciplinary Dismissal or Suspension**

Suspension or dismissals for disciplinary reasons are recommended to the President of the University by the Academic Vice President upon the recommendation of the University Judicial Board. The Board is composed of the Vice President of Student Affairs, five faculty members, and five student members.

## **ACADEMIC HONORS**

---

Students with appropriate academic records may be graduated with one of the following distinctions:

Summa cum laude

3.75-4.00 cumulative quality point average

Magna cum laude

3.50-3.74 cumulative quality point average

Cum laude

3.25-3.49 cumulative quality point average

These honors are calculated using all credits and quality points earned at IUP. Honors are not granted for subsequent degrees.

DEAN'S LIST - To be eligible for the Dean's List, which is compiled after each semester, a student must be carrying a minimum of 12 semester hours and have a minimum quality point average of 3.25 (exclusive of P/F courses).

## **CLASS ATTENDANCE**

---

Class attendance and class participation beyond mere physical presence are essential for maximum educational advantage and are strongly encouraged. Responsibility for all course material rests entirely with the student, whether or not he/she attends each class. Under no circumstances shall class attendance, per se, be used as a basis for awarding or altering a grade in a course; this applies to freshman through senior class levels. Course grade will be based on such factors as class preparation, class participation, skill development, effectiveness of oral presentations and/or written reports, quiz grades, and test and final examination scores. It is the prerogative of the instructor to administer unannounced quizzes as part of the student evaluation process, and to pass judgment on the merits of all cases involving late class submissions and class requirements missed by the students.



All students are required to attend class at the opening of semester in order to stabilize enrollments and class rosters.

## **NORMAL SEMESTER HOUR LOADS**

---

A normal semester hour load is 15-17 academic hours. A student who wishes to schedule more than 17 semester hours must obtain approval from the Dean of the School in which he/she is registered; approval will be predicated upon the students demonstrated competencies.

## **AUDIT POLICY**

---

To audit an undergraduate course, a person must be admitted to the University, and have met course prerequisites. Students wishing to audit a course, which they registered for at arena registration, should obtain a Course Audit Form from the Department Chairperson of the course. To audit a course, not previously registered for at arena registration, student must first process an add for the course before filing a Course Audit Form. All audit processing must be completed during the regular drop/add period. Copies of the completed form are returned to the Scheduling Center, Department Chairperson, and the student. Audit students have the same privileges as other students in all course work.

All audited courses will be identified as such on the student's grade report and transcript. Work taken on an audit basis will not be graded and will not count toward the fulfillment of requirements for a degree to be awarded by IUP. Since credit hours attempted and quality point will not be awarded for audited courses, they will not affect the student's Quality Point Average in any way whatsoever.

Auditors will pay normal tuition and such other fees as may be required for the course.

## **PASS-FAIL POLICY**

---

A student may take courses on a pass-fail basis to a total of 15 semester hours through out his/her University career. The student is limited to one pass-fail course in any given semester during his sophomore, junior, and senior years. All courses in THE STUDENT'S General Education program and in HIS/HER major and minor fields are excluded from this prerogative.

The student may declare his/her intent to choose pass-fail in a specific course no later than six weeks after the beginning of the semester or the equivalent timespan in a summer session. Instructors will NOT be notified of the identity of pass-fail students in their courses; identification will be handled by the Computer Center through an appropriate coded control.

A student shall be given academic credit WITHOUT QUALITY POINTS for a course taken pass-fail upon receiving a passing mark in the course. The semester hours successfully completed under pass-fail (passed), within the overall 15 semester hour limitation, shall be recorded as counting towards the total semester hours earned for graduation, but not towards the semester hours attempted data used in calculation of the cumulative quality point average. However, if a student fails a pass/fail course he/she will receive the F grade, and the corresponding quality point average.

The summer sessions, collectively or in any combination, shall be considered a unit similar to a spring or fall semester for pass-fail purposes. Hence, a student is permitted to take only one course during the summer on a pass-fail basis.

The purpose of pass-fail is to permit a student to take an elective course in a field of personal interest where he/she may be competing with major students in the department in which the course is offered. When scheduled, such a course shall be included in the student's normal course load for the semester.

## **CHANGES OF CURRICULUM**

---

A student must indicate his/her desire to change to a new curriculum in the office of the Dean of the School in which the student is registered if the curriculum change desired is from one department to another within the same School (for example, change from a mathematics major to a biology major) or in the office of the Dean of the School to which the student wishes to transfer, if the curriculum change is from one School to another (for example, secondary education major to biology major). In either case, the student will complete an application form that is available in the Dean's office. Before seeking a curriculum change, it is advisable that the student consult with the chairpersons of both the old and new departments.

When a student changes Schools, the Dean of the School (or Dean's agent) into which the transfer is sought will evaluate the student's credits before approving the transfer. A copy of the evaluation will be made available to the student and his/her new adviser if a change in curriculum is effected.

In cases involving veteran students, the Dean of the School into which transfer is sought (or Dean's agent) shall give the veteran a statement of prospective approval and the effective date of the proposed changes. This statement shall also indicate the amount of extended training time the change of curriculum will entail and the amount of credit loss, if any. The veteran shall take this statement to the veteran's counselor at least one month prior to the effective date of the change. No transfer of curriculum shall be made by veterans until VA approval has been assured.

## **DISCRETE COURSE WITHDRAWAL POLICY**

---

During the fall and spring semesters, students are permitted to withdraw from a course with a grade of W within two-thirds of the length of the course. Faculty are required to inform students of their standing in class prior to the midpoint of the course.

After the close of the prescribed withdrawal period, a student may withdraw from a course only with the approval of his/her adviser, department chairperson, and School dean (in that order), for such reasons as illness, accident, or extreme personal problems. Such withdrawal may occur no later than one week before the beginning of final examinations.

For all discrete course withdrawals, the student must complete a course withdrawal form, available in department offices. This form must be signed by both the student and the instructor.

If a student fails to complete the requirements for a course but has not formally processed a withdrawal as described above, and if the instructor does not receive

notice of withdrawal from the University, the instructor shall note in his/her course records the student's last attendance date and/or other student activity and assign an F for the course.

## **WITHDRAWALS FROM THE UNIVERSITY**

---

An undergraduate student who does not pre-register for the succeeding semester or, having pre-registered, does not appear for registration at the beginning of the succeeding semester, is considered to have withdrawn from the University. Thereafter he/she must apply for readmission as prescribed under Admission and Registration.

Any undergraduate student withdrawing from the University during a semester or a summer session must secure an official Withdrawal Form from the office of the Dean of Student Services, 202 Pratt Hall. The student will clear with the appropriate offices listed on the form, securing their signatures as evidence of clearance. The Withdrawal Form will be returned to the Office of the Dean of Student Services, which will notify the appropriate School Dean of withdrawals approved, and official notification of withdrawal from specific classes will be sent to each instructor by the School Dean. No person shall be considered withdrawn from the University within a semester or summer session unless such notice is received. Based upon the date of withdrawal, W, WP or WF grades will be assigned to those courses from which the student is withdrawing.

## **ADVISORY PROGRAM**

---

A group of selected faculty members act as freshman advisers for entering freshmen in their departments. In some curricula the advisers continue with the same group of advisees from year to year. In other curricula the freshman advisers remain with their advisee group only for the students first year; under this program, the student is then assigned an academic adviser for the remaining years through to his/her degree in his/her chosen field.

Faculty advisers counsel the students on academic achievement, dropping courses, changing curriculum, student activities, study schedules, and personal problems. The adviser receives a copy of the student's permanent record at the beginning of the academic year, a copy of D's and F's at mid-term, copies of all letters pertaining to academic achievement sent to the student's home, and a copy of the report of the student's application for Junior standing.

## **SOPHOMORE SCREENING FOR JUNIOR STATUS APPROVAL**

---

General Policy at IUP permits each School to determine its own scheme for evaluating the development and progress of its major students. However, each School is expected to employ some effective procedure for such evaluation.

Several of the Schools use a procedure called Sophomore Screening for Junior Status Approval, with the following required: All students (in such a School) enrolled in their fourth semester or who will complete 57 semester hours ATTEMPTED by the end of the current semester must apply for Junior Status approval by filling out an application form by the deadline date designated and announced.

All students should check with their faculty advisers to determine which Schools use Junior Status screening procedure and the criteria for Junior Status Approval.

## **HEALTH AND PHYSICAL EDUCATION SPECIAL REGULATIONS**

---

Credits in health and physical education are required of undergraduate students in the General Education segment of the University curriculum or are part of an option for students in that segment. The University requirement in physical education may be altered after consultation with the department chairperson in health and physical education, who will act upon the recommendation of the University physician and the Dean, School of Health Services.

Physically incapacitated students must obtain a medical waiver from or through the University physician. This procedure should be repeated each semester except in cases of permanent disability. The waiver form should be filed with the chairperson of the health and physical education department involved. Such students may elect to participate in specially arranged adaptive physical education courses or defer the University requirement until such time as the disability dissolves. These regulations do not refer to temporary illness of short duration; such cases are managed by the individual instructor.

## **RESERVE OFFICERS TRAINING CORPS**

---

The United States Army established a unit of the Reserve Officers Training Corps at the University in 1950. In fulfilling the University's four-credit General Education requirement for graduation, students may take four credits of Military Science and receive full credit for the Health and Physical Education requirement. Enrollment in the four-credit ROTC option incurs no military obligation whatsoever and allows the student the option of competing for a Three Year ROTC Scholarship.

Upon graduation from the University and successful completion of the Advanced Course ROTC program, the student will receive a Commission as a Second Lieutenant and serve from three months to three years on active duty, depending on active Army requirements. As an alternative to active duty, the individual may either be chosen or volunteer to complete his/her service obligation with the Army Reserve or National Guard.

Students seeking advanced degrees can be granted an educational delay by the Army following completion of their baccalaureate degrees. Upon completion of the advanced degree, students then enter active duty or Army Reserve/National Guard duty.

## **UNIVERSITY SENATE**

---

### **Purpose**

The purpose of the University Senate is to provide a formal means through which the student body, faculty and administration, working as a unified group, shall share in the governance of the University through the establishment of University policy.

Nothing relating to the organization and administration of the University Senate shall be construed so as to limit the authority of the Board of Trustees or the President of

the University with respect to the administration of the University as prescribed by law.

### **Composition and Elective Procedures**

The University Senate shall consist of a number of faculty double the number of departments of the University, an administrative segment one-third the size of the faculty segment, and a student segment one-half the size of the faculty segment. Faculty and administrative members must hold full-time contracts at the time of election or appointment, and students must be full-time and in good standing. Student refers to both the undergraduate and graduate student bodies. The student segment shall consist of ten times as many undergraduate students as graduate students, each delegation to be elected by its representative student body. Undergraduate students shall be elected under the auspices of the Student Government Association, and graduate students through elections arranged by their comparable body. In both cases, the officiating body shall call for and accept such voluntary nominations for election to the Senate as shall be made to it.

Student members of the University Senate serve on most of the Senate Committees.

## **STUDENTS' ACADEMIC GRIEVANCES**

---

If a student feels that he/she has been treated unfairly by any instructor (this will refer principally to grading policy, but very occasionally may include genuine disagreement in class participation), he/she must try to resolve the problem first with the chairperson of the department in question. If the student is not satisfied with the solution offered by the department chairperson, he/she should confer with the Dean of the School in which he/she is enrolled.



## **COURSE NUMBERS AND ABBREVIATIONS**

---

COURSE NUMBERS - courses for freshmen are numbered in the 100s, for the sophomores in the 200s, for juniors in the 300s, and for seniors in the 400s.

Required courses usually are numbered from 1 to 50 and elective courses are numbered from 51 to 100, within each 100.

DEPARTMENTAL COURSE ABBREVIATIONS. The following departmental abbreviations are used to identify courses referred to in the Undergraduate Catalog:

AH Art History	GM German
AL Allied Health	GR Graduate
AM Applied Music	HP Health & PE
AN Anthropology	HI History
AR Art	HE Home Economics
AT Art Education	HO Home Economics Education
AY Astronomy	IS International Studies
BI Biology	LA Latin
BU Business	LI Linguistics
BA Business Administration	MI Marine Sciences
BE Business Education	MA Mathematics
CH Chemistry	MS Military Science
CO Computer Science	MU Music
CS Consumer Services	AM Music - Applied
CE Counselor Education	NU Nursing
CM Communications Media	PH Philosophy
CR Criminology	PY Physics
DE Distributive Education	PS Political Science
EC Economics	PC Psychology
ED Education	PN Public School Nursing
EP Educational Psychology	RH Rehabilitation
EL Elementary Education	RU Russian
EM Elementary Math	SA Safety Science
ES Elementary Science	SC Science
EN English	SS Social Science
FL Foreign Language	SO Sociology
FN Food and Nutrition	SP Spanish
FE Foundations of Education	SW Social Work
FR French	EX Special Education
GE Geography	SH Speech and Hearing
GK Greek	ST Student Personnel Service
GL Geology	TH Theater
GS Geoscience	

# Student Life and Services

The Student Affairs Staff of the University provides services to students to support the best learning climate possible and to guide the student toward optimum personal development. Beginning with the Freshman Week Orientation Program, the student is invited to participate in the activities and residence life of the University. An attempt is made to provide each student with a maximum opportunity for self-regulation during his/her years as a citizen of the University community. The Student Affairs Staff, together with student groups and other faculty members, endeavors to create a rich environment which will extend the classroom experience and will involve students in making meaningful decisions.

## **ORIENTATION**

---

At the beginning of each semester separate orientation programs are held for all new students entering the University; freshmen, non-traditional, transfer students and graduate students. The purpose behind these programs is to provide new students with academic advisement, to help them become acquainted with each other and become familiar with the University and to acquaint them with services available. Under the direction of the Director of Residence Programming and Orientation, all orientation programs are planned by the New Student Orientation Committee, a representative body of all major student organizations on campus and interested student volunteers. Orientation leaders are selected on a volunteer basis from the student body and are especially trained to help conduct all programs.

## **HOUSING**

---

Housing available to students includes:

University Owned residence halls  
Fraternity houses  
Private apartments and houses  
Privately owned residence halls  
Accommodations at home or with relatives

IT IS THE POLICY OF INDIANA UNIVERSITY OF PENNSYLVANIA TO OFFER FULL, EQUAL AND NON-DISCRIMINATORY ASSISTANCE TO ALL STUDENTS WITHOUT REGARD TO THEIR RACE, COLOR, RELIGION, NATIONALITY OR SEX, in both the placement in University housing and in the furnishing of facilities and services in connection with that housing.

Rooms will be available to full-time, undergraduate students enrolled at IUP. Each year the University reviews its housing policies and revises them according to its needs for the coming year. The University Housing Office is responsible for all residence hall and room assignments, food service assignments, information on private housing facilities and collecting local address and telephone data for the Student Directory. The Housing Office is located in Clark Hall, ext. 2696.

### **University Residence Halls**

IUP is a residential campus. Its 13 residence halls are divided, on a geographical basis into four quads. Each quad is supervised by a full-time student affairs professional with a background in student development or counseling. In addition, each residence hall has a full-time Residence Director to handle the management functions of the building with responsibilities for programming and staff development. The Residence Directors are also full-time professional members of the Student Affairs division. In addition, each building has an undergraduate Head Hall Counselor who supervises a team of Hall Counselors. Hall Counselors are responsible for counseling students, planning programs, carrying out administrative tasks, and maintaining a community atmosphere among the approximately thirty students living in their individual section of the residence hall.

Since college students spend about 85% of their time outside of the classroom and residence students spend a great deal of this time in residence halls, IUP residence halls are seen as much more than a place to sleep. They are rapidly becoming out of classroom learning environments wherein educational, social, recreational, and community service programs are being planned and conducted with the express purpose of facilitating personal growth on the part of the individual residents.

Because residence hall living is seen as a positive educational experience, freshmen are encouraged to live in residence halls unless they are commuting from home. In an effort to make residence hall living more responsive to individual needs, the University offers two separate life styles; single sex and co-ed. Students are encouraged to consider these options carefully and to select the one in which they would feel most comfortable.

Generally, the policy of the University is to encourage the development of positive social behavior and good study habits rather than to exercise close supervision of the individual. Residents should have a well-defined personal recognition of their individual responsibility to protect the dignity, rights, and feelings of fellow students. In residence hall living, students are considered to be adults who are responsible for their own behavior. Within the confines of Federal, State and local laws, the faculty and administration delegate much of the governing authority of residence halls to the



Residence Hall Association which in turn establishes most of the governing policies for the entire residence hall system. All students are encouraged to become actively involved in RHA.

Student accommodations are based on double occupancy. Furnishings include a single bed, desk, study chair, mirror, dresser, pillow, mattress, mattress cover and telephone. Students should bring their own blankets, bedspreads, towels, study lamps, etc.

All IUP residence halls are recently constructed, modern buildings. Each is equipped with study lounges, recreational equipment, laundry facilities and locked mailboxes. In addition, sewing machines, duplication machines, desk calculators and other specialized equipment are located in each Quad for student use. In order to provide security, all residence halls are locked at midnight Sunday through Thursday and at 2:00 a.m. Friday and Saturday nights. Each student has a card key for his/her building which provides entry after the closing hour.

New students will be admitted to their residence halls twenty-four hours prior to their official registration.

Other students may enter the residence halls not earlier than twenty-four hours prior to their specific, announced registration time provided that the day is not a national holiday. Closing notices will be posted before each vacation period indicating dates residence halls will reopen.

Food service will be available to all students who have been issued a valid meal card during registration.

Housing and food charges must be paid to the Accounts Receivable Office, according to the established standards, before residents will be issued a room key and/or valid meal card.

### **Application for Housing**

The University will not discriminate in room or hall assignment on the basis of race, color, religion, national origin, ancestry, sex, or physical handicap. Incoming freshmen who have been accepted by the Admissions Office as residence students will be billed for a \$100 advance deposit in March, one-half of which serves as a housing prepayment. A legally binding Residence Hall Contract for Housing and Food Service will accompany same and must be returned to IUP with the deposit payment. Continuing students may apply for University housing for each semester in accordance with procedure published and posted by the University Housing Office.

Readmitted students and those transferring from other Universities should contact the Housing Office directly for housing applications and/or information.

### **Food Services**

All students residing in University residence halls must take meals in University dining halls (Foster or Folger). Other students may contract for food service each semester with the Housing Office. There are two meal plans offered by the University:

Plan A - 21 meals per week

Plan B - 15 meals, Monday through Friday

The above plans are for one breakfast, one lunch and one dinner each day.

Guests may eat in either of the dining halls at the current transient rate.

Students and guests may purchase meals at Hardees in the Student Union, at the Home Economics cafeteria in Ackerman Hall, at the Coffee Shop in Foster Hall, or at other restaurants near the campus.

### **Insurance for Personal Belongings**

Students are encouraged to carry insurance covering the loss or theft of money or property while residing in a residence hall. Check with your parents to determine whether their Homeowners Policy will cover you while you're at college. If not, riders can be attached.

### **Student Room Refrigerators**

Student room refrigerators are rented on a one or two semester basis from the Dean of Student Life office. These refrigerators are UL approved, 2.1 cubic foot refrigerators requiring a maximum of .5 amps. Privately owned refrigerators which meet these specifications may be used in University residence halls and are assessed a fee of \$1.00 per semester for electricity.

### **Student Room Telephones**

Each student room on campus has a telephone which is part of the University Centrex system. With Centrex telephones, it is possible to dial all telephones on campus, dial direct station to station local and long distance calls, receive directly dialed incoming calls, and transfer incoming calls from one telephone on campus to another. In addition, the Centrex telephone system serves as an important educational tool. Students may dial a specific code given to them by their professor which connects them with the Dial Access Retrieval System in Media Resources thus enabling them to hear required listening assignments in the comfort of their own residence hall room.

Telephone bills are mailed directly to residence hall rooms each month. Long distance calls and telegram charges only appear on the bill. Both occupants of a room are responsible for all charges made to their telephone. Payment is made directly to the Bell Telephone Company.

## **AUTOMOBILES**

---

Each student, faculty or staff member who parks an automobile in campus parking areas must register their auto each year with the Campus Police. A charge of \$1 per decal per year is levied. Resident students are not permitted to park on campus without a decal. Decals are issued only for the following reasons: 1. student teaching; 2. medical reasons; 3. work requirements. A decal for these students must be obtained through writing to the Parking Authority Review board. A LIST OF PARKING RULES AND REGULATIONS MAY BE OBTAINED AT THE CAMPUS POLICE OFFICE, JOHN SUTTON HALL.

## **FACILITIES FOR COMMUTING STUDENTS**

---

A variety of accommodations are provided for commuting students in their lounge in

the basement of Stewart Hall. Among the facilities found in this area are a refrigerator (for brown-bagging purposes), typewriter, lockers, a telephone, a television, and a calculator. Library facilities provide pleasant study conditions for commuter students and several lounges in the Student Union are always available for their use. Com-muter students may purchase lunches in Foster Dining Hall, Folger Dining Hall, Foster Dining Hall Coffee Shop, or the Student Union Coffee Shop. In addition, several private eating establishments are close to the University campus. Dr. Terrell O. Martin, Adviser for the Off Campus Student League, is available to the Commuting Students for assistance in 212 Pratt Hall.

## **STUDENT PERSONNEL SERVICES**

---

### **Student Assistance and Information Center**

The Student Services Office serves as an information center and communication link for areas of student concern. Located in Pratt 202, the center has an open door policy, **AN ATTEMPT IS MADE TO HELP STUDENTS WITH ANY PROBLEMS THEY MAY ENCOUNTER ON AND OFF CAMPUS.** The goals are to assist students in areas of concern - sometimes by referral to appropriate offices, to combat problems of bureaucracy and to create an awareness of the individual on the part of the University. The four basic concepts that the office functions under entail investigation, recommendation, general information, and encouragement. Though not always able to give direct answers or correct situations, the Center does have capabilities of finding an answer and attracting the attention of appropriate segments on campus.

## **HEALTH SERVICES**

---

Pechan Health Center is a completely equipped infirmary located on the corner of Pratt Drive and Maple Street. This two-story structure is thoroughly equipped for all routine work. Registered nurses are on duty 24 hours a day, seven days a week. Medical service is provided by four full-time University physicians. Twenty-seven beds are available where resident students may have hospitalization. Serious illnesses and accidents are transferred to the local hospital or to hospitals in the students home town.

## **SPECIAL CLINICS**

---

Three clinics at the University offer diagnostic testing and remedial or improvement service or instruction in the following areas:

**COUNSELING CENTER** (Pratt Hall) - diagnosis of academic and behavior problems and personal, vocational, and educational counseling.

**READING CLINIC** (Stouffer Hall) - diagnosis and remedial instruction for reading and spelling disabilities and instruction for the improvement of present skills.

**SPEECH AND HEARING CLINIC** (Davis Hall) - diagnosis of speech problems, hearing tests and evaluations, and a regular program of therapy.

These services are made available without charge to students regularly enrolled at the University to give the necessary assistance to alleviate deficiencies which would interfere with successful performance and progress in the University and in future work. Students who need help in any of the areas suggested above are encouraged to use the facilities provided for them and may of their own initiative come to any clinic

for help; or they may be referred by any faculty member or University official.

## **INSURANCE**

---

The IUP Board of Trustees instituted mandatory student accident and health insurance at the University effective September, 1963. It is realized, however, that some of the freshmen class students are covered by hospitalization policies of their parents. Where this is the case and additional coverage under the IUP student insurance plan is not desired, a waiver card can be submitted at the time of registration. However, the reasonable premium required for this service makes it highly desirable for every student to participate. Full information concerning this insurance coverage is mailed to enrolled students with their registration material.

## **CAREER SERVICES**

---

Career services are available to students who are graduating, students who are enrolled to obtain teacher certification, students who have been accepted as candidates for degrees in The Graduate School and alumni. Occupational counseling is provided to students of all class levels as well as alumni.

In addition to career counseling the primary functions of the office are to make credentials available to prospective employers, arrange for campus interviews, prepare a current file of job opportunities, maintain an extensive library of occupational information, make follow-up studies of the graduates, conduct group counseling and orientation meetings and provide general assistance in the career planning and job seeking process. Sets of credentials are prepared at the request of interested students or alumni.

A credit course is available to juniors and seniors in career planning and development.

The Office of Career Services also receives and makes available to graduates and undergraduates information concerning summer employment.

Positions are not guaranteed by the University but IUP's record of placement is one of the very best in Pennsylvania.

## **SELECTIVE SERVICE AND MILITARY AFFAIRS COUNSELOR**

---

The Selective Service Counselor submits all required reports to Selective Service boards for undergraduates when appropriate. He also serves as a liaison person for military affairs and officer programs.

**VETERANS** - An individual who served with the Armed Forces for more than 180 days after January 31, 1955, is eligible for the G.I. Bill (PL 89-358), providing he/she meets certain other requirements. A prospective student should contact the Veterans Counselor and submit to him the Veteran's application for Program of Education.

Individuals eligible for the G.I. bill should report to the office of the Veteran's Counselor prior to registration for a semester or for summer sessions, to be entered or continued in training for Veterans Administration benefits purposes.

No veteran receiving G.I. benefits shall be permitted to change curriculum without clearance from the Veterans Counselor. All veterans must maintain normal class progression and report any change in course load to the Veterans Counselor.

Any undergraduate receiving benefits from the Veterans Administration must carry at least 12 credit hours during a regular semester in order to be considered a full-time student by the Veterans Administration. The minimum full-time requirement for a graduate student is nine credit hours.

**VETERAN'S CHILDREN** - Children of a deceased or disabled veteran whose death or injury was due to service-related causes may be eligible for educational assistance from the Federal Government under Public Law 634 (Dependents Educational Assistance Act). Immediately upon acceptance to IUP, men and women who qualify for such assistance should contact the Veterans Counselor to determine their eligibility. They should report to the Veterans Counselor before registering at the University if the Veterans Administration has approved their training under Public Law 634.

## **GUIDELINES FOR STUDENT CONDUCT**

---

The University has committed itself through a formal vote of the IUP Faculty Senate to the joint statement on Student rights and Freedoms as the approved guideline for all student rules, regulations, and procedures at IUP. The purpose of these general regulations is to spell out some of the actions that place the community in jeopardy and may therefore result in a student's suspension or expulsion from the University. In general, these regulations are concerned with conduct on campus but students must recognize that the University exists within a larger community which has its own laws and standards of behavior, and that membership in the University community confers no exemption from those laws and standards. Whether on or off campus, the student is under the jurisdiction of the city, state, and national governments. Off-campus misconduct will not normally be the basis for disciplinary action by the University; however, when such conduct imperils the integrity and values of the academic community, these actions may also result in disciplinary action on campus.

## **MAIL**

---

The University Post Office is located in the basement of Folger Dining Hall, at the corner of Pratt Drive and Maple Street. The mail is delivered to offices and residence halls from this location. As it is a branch of the Indiana Post Office, the University Post Office provides most postal facilities, including boxes for commuter students.

## **SERVICE FACILITIES**

---

### **Student Union**

The Student Union, built by the students through their Activity Fee, offers many facilities for the University family.

Students may relax or watch television in the lounge, buy a snack or a complete meal at the coffee shop, listen to their choice of records in the music center, or play cards, billiards, or table tennis.

### **Bookstore**

The Co-op Store is located near the Student Union Building. The store stocks a

complete line of all needed textbooks, supplies, paper-back books and other requirements for class use. In addition, the shopper will find an extensive selection of records, college wear, stationary, jewelry, sundries and souvenir items.

The store is operated on a competitive retail basis, with all profits from operations reverting to the Student Cooperative Association for use in supporting student activities.

### **University Lodge**

The University Lodge plays an important part in the recreational and instructional life of the University. Owned by students and faculty, this 100 acres of wooded hillside, with its rustic lodge, three picnic shelters, rope ski tow, toboggan run and nature and hiking trails offers opportunities for classes to study nature and conservation and also is in demand for picnics, meetings, and winter sports. The lodge itself will accommodate groups of 300 to 400 students.

During the winter sports season, ski equipment can be checked out for use by ID card holders.

### **University Farm**

University Farm is located on a tract of 172 acres adjacent to the University Lodge. While the Farm is still under development, several activities are already going on, such as gardening on individual plots by students and faculty, field work by a variety of academic classes, and occasional special events.

The purpose of the Farm will be to provide a setting where people may explore their own relationship to the land and its products which support our life.

## **CO-CURRICULAR ACTIVITIES**

---

As participating members of the IUP community, students have a responsible role in the governance of the campus. Since a valuable part of education lies in participation in groups where experience in leadership, social and community responsibility, intellectual curiosity and religious interests can be met, voluntary participation in a number of varied organizations is available and encouraged. In addition, students are encouraged to initiate and support any new groups which may reflect their interests. Faculty, selected by the students, act as advisers.

## **GOVERNANCE**

---

### **Student Government Association**

The Student Government Association, composed of student representatives from all areas of the University, is the only organization representing all students and elected by students. The president and vice-president of the Student Government Association are chosen in a campus-wide election; other members are elected at large at a ratio of one representative for each 200 students.

Student Government Association works with the Administration for the improvement of student welfare and promotes good University/community relationships.

SGA provides an opportunity for action regarding rights and responsibilities, brings the student body, faculty and administration closer together through a frank under-

standing of mutual problems, and promotes the observance of policies that will lead to improvement of University campus life.

### **Commonwealth Association of Students**

IUP is a member of the Commonwealth Association of Students (CAS), the state-wide student voice of the fourteen state-owned institutions. Headed by an executive director in Harrisburg, the Association is set up to serve the special interests of the state colleges and university through the collection of student opinions and their dissemination to the proper state or federal agencies, as well as to actively promote the passage or defeat of legislation deemed relevant to the students and public higher education in Pennsylvania. CAS also acts as a liaison between students and the state government, the faculty union or any organization or individual that affects the state colleges and university.

At IUP, the CAS local chapter operates independently of the Student Government Association. The local chapter president, student government president, and minority representative are each accorded voting privileges at the statewide meeting held bi-monthly. Any full-time or part-time undergraduate or graduate student at IUP is welcome and encouraged to join and to actively participate in the Association's activities, either on the state or local level.

### **University Senate**

Students also are elected to the University Senate and have full voting rights, together with Faculty and Administrative members. Most of the Senate Committees include students as voting members. Any full-time student may be elected to the Senate. This is the body which shares in the governance of the University through the establishment of University policy.

### **Student Cooperative Association**

The Student Cooperative Association plays an extremely broad role in the extracurricular life of the University. All students and faculty members belong to the Association. Almost all campus-wide activities outside of the instructional program are sponsored wholly or in part by the Association.

The activity fee is the chief source of income for the Association's activities. The student's ID card will admit him/her free of charge to all University social, cultural, and athletic activities. Other income for the Association comes from the Co-op Store profits, athletics income and income from all other events sponsored by the Association.

Facilities under the governance of the Student Cooperative Association are the Student Union, the Co-op Store and the University Lodge.

### **Residence Hall Association**

Residence Hall Association (RHA) is made up of all students living in University residence halls. The executive body of RHA is composed of elected representatives from each residence hall. The purpose of RHA is to provide educational, social, and community service programs for residents; to collect information on various aspects of residence hall life; and to assist in formulating housing policies and procedures.

## **ACTIVITIES**

---

### **Activities Board**

The Activities Board is the student organization that sponsors a majority of the major co-curricular activities on campus. It is financed by the Student Cooperative Association. The Board is advised by the Director of Student Activities and works in close cooperation with the staff of the Student Union. An active program of lectures, dances, concerts, coffee houses, and films are presented throughout the year.

### **Artist Series**

The Student Cooperative Association, in cooperation with the office of the Director of Student Activities, sponsors a series of cultural programs in the areas of dance, music, and theater each year. The programs are selected by a Student-Faculty Committee. Attendance at these programs is free to all students.

### **University Concert Committee**

The University Concert Committee programs major popular concerts throughout the year. The UCC is funded by the Student Cooperative Association and is chaired by the Director of Student Activities. The Committee consists of students who submit applications and are selected by a Student-Faculty screening committee.

## **STUDENT PUBLICATIONS**

---

THE INDIANA PENN, the campus newspaper, is published three times a week, Monday, Wednesday and Friday, by students who wish to gain writing experience. Interested students are advised to attend the organizational meeting, which is held early each semester.

The positions of editors and news editors are filled by Student Government action upon recommendation of a student-faculty committee. The co-editors select their own staff. There are 10 paid staff positions.

Applications for editor and news editor may be obtained from the PENN adviser. Only those students with at least one semester experience on the PENN staff are eligible to apply for the two top positions.

THE OAK is the University yearbook, a pictorial and written review of the years activities. Subscriptions may be purchased during the Fall Semester. The Daily Bulletin will carry notices of the subscription drive.

Applications for staff positions may be obtained from the Oak adviser. From these applications, a committee, composed of students and faculty, selects the staff members. The ten paid positions on the staff are subject to the approval of the Student Government.

SMOKE SIGNALS is an entering freshman newsletter which is sent to all incoming freshman approximately four times prior to their arrival on campus. Contents are geared to areas of concern to new entrants. The staff is open to anyone who is interested. Contact the Student Affairs Office in Room 202 Pratt Hall.

The UNIVERSITY DIRECTORY is distributed early in the fall term to students and faculty. It contains a listing of all properly registered students, staff, faculty and University offices.



THE EYE, a student handbook, is distributed annually to all students, free of charge. It includes rules and regulations, the extra-curricular program, and general information of interest to students.

## **ATHLETICS**

---

### **Herman Sledzik, Director; Ruth Podbielski, Associate Director**

Men's athletic teams of the University compete under the rules of the National Collegiate Athletic Association and the National Association of Intercollegiate Athletics and hold membership in these organizations as well as Eastern College Athletic Conference and Pennsylvania Conference.

In each season of the academic year, the University sponsors at least three sports simultaneously. A total of eleven varsity sports are offered during the school year.

Sports offered in the fall include cross country, football and soccer. Basketball, wrestling, swimming and rifle take the stage in the winter, and track and field, golf, baseball, and tennis hold the spotlight in the spring.

Along with varsity squads in the respective sports, football, basketball, wrestling and baseball teams compete on the freshman or junior varsity level.

Women's athletic teams of the University compete under the rules of the National Division of Girls and Womens Sports and the Association of Intercollegiate Athletics for Women. Varsity teams compete in tennis, volleyball, field hockey, basketball, swimming, gymnastics and fencing.

### **Intramurals - Royden P. Grove, Director**

A well organized and varied program of intramural sports and athletic activities is conducted for men, for women and on a coeducational basis.

In addition to participation in seasonal team and individual sports in organized intramural tournaments, men and women may participate in the Contemporary Dance Performance Group and the IUPiscis, a synchronized swimming group.

Intramural handbooks are available. Contact the Intramural Director, Memorial Field House, for this information.

## **RELIGIOUS LIFE**

---

The religious life of students is cared for through the activities of some twelve independent organizations. Three of these, the Newman Club, the United Campus Ministry, and the Lutheran Center, maintain private meeting facilities near the campus. Others affiliate with and meet in local churches. For those groups too small to arrange their own needs, the University undertakes to provide limited facilities and faculty advisement.

All students are urged to attend their choice of the many community places of worship and to participate in the area, district, and national conferences which provide opportunity for the study of religious problems.

## **STUDENT ORGANIZATIONS**

---

There are more than 180 active student organizations at IUP. Through participation in organizations, students can extend classroom experiences into relevant programs which will improve leadership ability, enhance academic achievement and develop social skills.

## **COMMUNICATIONS AND PUBLICATIONS**

---

*Oak* - Yearbook

Organization for the Publication of a Student Literary Magazine

*Penn* - Student Newspaper

WIUP-FM and CIUP-TV

## **DEPARTMENTAL CLUBS**

---

Anthropology Club of IUP

Art Club

Associates for Student Development

Association for Management Information Systems

Biology Club of IUP

Computer Science Club of IUP

Consumer Services Advisory Council

Counselor Education Graduate Association

Criminology Club of IUP

Economics Club

El Circulo Espanol

Elementary Education Club

English Club

French Club

Geoscience Club

German Club

Hospitality Management Club

Indiana Press Club

Indiana University Collegiate Chapter of the Pennsylvania Association

of Distributive Education Clubs of America

Indiana University Chapter—Student PSEA-NEA

IUP American Society of Safety Engineers

IUP Chapter of Student Affiliates of the American Chemical Society

IUP Council for Exceptional Children

IUP History Club

IUP Home Economics Association

IUP Student Chapter of National Art Education Association

IUP Student Dietetic Association

IUP Student Nurses Association

Marketing Club of IUP

Mathematics Club

McKeldin Philosophy Society

Music Educators Club

National Student Speech and Hearing Association

Pennsylvania School Food Service Association—IUP College Chapter

Phi Beta Lambda

Physical Education Majors Club

Physics Club  
 Political Science Advisory Board  
 Pre-Medical Club  
 Psychology Club  
 School of Business Deans Advisory Board  
 Society for the Advancement of Management  
 Sociology Club of IUP  
 Student Accounting Association of IUP  
 Student Chapter of Society of Mining Engineers  
 Student Music Organization of IUP

## **HONORARY SOCIETIES**

---

Alpha Kappa Delta - Honorary Sociology  
 Alpha Psi Omega - Honorary Dramatic  
 Delta Omicron - Honorary Music  
 Delta Phi Alpha - Honorary German  
 Gamma Rho Tau - Honorary Business  
 Gamma Theta Upsilon - Honorary Geography  
 Kappa Mu Epsilon - Honorary Mathematics  
 Kappa Omicron Phi - Honorary Home Economics  
 Lambda Alpha Epsilon - Honorary Criminology  
 Omicron Delta Epsilon - Honorary Economics  
 Phi Epsilon Kappa - Honorary Health, Physical Education, Recreation, and Safety  
 Phi Mu Alpha Sinfonia - Honorary Music  
 Pi Delta Phi - Honorary French  
 Pi Gamma Mu - Honorary Social Science  
 Psi Chi - Honorary Psychology  
 Sigma Gamma Epsilon - Honorary Earth Sciences  
 Sigma Tau Delta - Honorary English

## **RELIGIOUS ORGANIZATIONS**

---

Campus Christian Fellowship  
 Chi Alpha  
 Christian Athletic Association  
 Coalition Christian Fellowship  
 IUP Maranatha Club  
 Jewish Student League  
 Koinonias Club  
 Lutheran Student Movement  
 The Navigators of IUP  
 Newman Student Association  
 Orthodox Christian Fellowship  
 United Ministry

## **SOCIAL FRATERNITIES AND SORORITIES**

---

There are 28 social sororities and fraternities affiliated with IUP. Their membership totals approximately 1300 men and women. These Greek organizations have broadened their usual base of activities to include charitable projects, and each year, they raise many thousands of dollars for worthy causes. They continue to pursue social, cultural and intellectual activities as well.

## **SORORITIES**

---

Alpha Delta Pi	Delta Zeta
Alpha Gamma Delta	Kappa Delta
Alpha Omicron Pi	Phi Mu
Alpha Phi	Sigma Kappa
Alpha Sigma Alpha	Sigma Sigma Sigma
Alpha Sigma Tau	Zeta Tau Alpha
Alpha Xi Delta	

## **FRATERNITIES**

---

Delta Sigma Phi	Rho Gamma Sigma
Delta Tau Delta	Sigma Alpha Epsilon
Kappa Delta Rho	Sigma Chi
Kappa Sigma	Sigma Nu
Lambda Chi Alpha	Sigma Tau Gamma
Phi Kappa Psi	Theta Chi
Phi Kappa Theta	Theta Xi
Phi Sigma Kappa	

## **SPECIAL INTEREST CLUBS**

---

Activities Board  
 Alpha Phi Omega - Service Fraternity  
 Association of United States Army  
 Alpha Society  
 Black Student League  
 Campus Council on Consumer Affairs  
 Campus 4-H Club  
 Circle K Club of IUP  
 Coalition of University Parents  
 College Republican Club of IUP  
 Commonwealth Association of Students at IUP  
 Delta Sigma Theta, Inc.  
 Foreign Student Club  
 Gamma Sigma Sigma - Service Sorority  
 Graduate Student Assembly  
 Indiana Color Slide Society  
 IUP Environmental Action  
 IUP Gospel Choir  
 IUP Student Alliance of Operation Up-Lift  
 IUP Students for Gay Rights  
 IUP Veterans Club  
 Interfraternity Council  
 International Relations Club  
 I-Uppers  
 L'Esprit de Bleu  
 Little Sisters of Minerva  
 Miss IUP Scholarship Pageant Committee  
 Off-Campus Student League  
 Panhellenic Council  
 Pershing Rifles

Residence Hall Association  
 Semper Fi Club  
 Senior Class  
 Sigma Tau Alpha  
 Small Planet Food Co-op  
 Student Government Association  
 Student Tenants Organization  
 Students of the Creative Arts  
 The Tribe  
 Young Democrats

## **SPORTS AND RECREATION CLUBS**

---

Concert Dance Club	IUP Racquetball Club
Equestrian Club	IUP Rugby Club
Equestrian Team	IUP Sailing Club
42nd Street Hustlers Sport Club	IUP Ski Club
Hoopsters	IUP Ultimate Frisbee Club
Indiana Boxing Club	IUP Volleyball Club
IUP Bowling Club	IUP Water Polo Club
IUP Fellowship of Christian Athletes	Indiana Womens Soccer Team
IUP Handball Club	Jockettes Athletic Club
IUP Ice Hockey Club	The Stable
IUP Intramurals Program	Stardusters Athletic Club
IUPisces Synchronized Team	Thumbs Up Athletic Club
IUP Judo Club	Toesucker Athletic and Social Club
IUP Karate Club	Womens Cross Country Club
IUP LaCrosse Club	Womens Golf Club
IUP Orienteering Club	X House Athletic Club
IUP Outing Club	



# Requirements For Graduation

Undergraduate students at IUP may pursue programs of study in any one of the seven undergraduate schools: the School of Business; the School of Education; the School of Fine Arts; the School of Health Services; the School of Home Economics; the School of Natural Sciences and Mathematics; or the School of Social Sciences and Humanities. A student may earn the degree of Bachelor of Arts; Bachelor of Science, Bachelor of Fine Arts, or the Bachelor of Science in Education. To do so, the student must satisfy all of the degree requirements, which fall into three categories: 1) University requirements; 2) School requirements; 3) Department requirements. Requirements of the latter two categories may be found under the School and the Department in which the student is pursuing a program of study.

University requirements for graduation in all curriculum consist of General Education requirements, residency requirements, and the semester hour and cumulative quality point average requirements.

## **GENERAL EDUCATION**

---

All students are obligated to fulfill a basic program in General Education consisting of 52 semester hours. Different Schools and sometimes Departments within Schools may have specific variations as to how these General Education requirements are to be met.

The primary objective of General Education is to develop those understandings,

attitudes, values and social skills that will enable the student to enjoy a life that is satisfying to himself/herself as an individual and that will enable him/her to play a constructive role in his/her community and in society, without respect to his/her professional vocational interest or activity.

The courses in the program will be distributed throughout the four years of University study, but the basic or introductory courses should be concentrated in the first two years of the student's program.

## GENERAL EDUCATION REQUIREMENTS

### **ENGLISH** **Three Courses** **10 sh**

---

EN 101 - English I	4
EN 102 - English II	3
EN 201 - English III	3
(OR: EN 202 required substitute for En 201 for majors in English and Communication)	

### **FINE ARTS** **One Course** **3 sh**

---

AH 101 - Introduction to Art	3
MU 101 - Introduction to Music	3
TH 101 - Introduction to Theater	3

### **HUMANITIES** **Two or Three Courses\*** **6-9 sh**

---

\*If only two courses are selected from humanities, one additional course must be selected from course listed as natural science or science/math electives.

### **Foreign Language\* (two courses in a language sequence)** **6**

---

AR 115 - Art of Western Man to 1200 AD	3
AR 116 - Western Art: Renaissance to Baroque	3
EN 371 - The English Bible as Literature	3
EN 358 - Modern American Fiction	3
EN 359 - Black American Literature	3
EN 346 - Contemporary American and British Poetry	3
HI 101 - History of Civilization I	3
MU 301 - Music History I	3
PH 100 - Introduction to Religion	3
PH 101 - General Logic: Methods of Critical Thinking	3
PH 110 - World Religions	3
PH 120 - Introduction to Philosophy	3
PH 221 - Symbolic Logic I	3
PH 222 - Ethics	3
PH 223 - Philosophy of Art	3



\*The intermediate level of foreign language (levels II and IV) is required by the School of Natural Sciences and Mathematics, by certain departments in the School of Social Sciences and Humanities and by the School of Education for English Education majors. Students in other schools may elect one year of a foreign language, any appropriate level, or two courses from the above list.

---

**MATHEMATICS** **One Course** **3-4 sh**

---

Course designated by department to meet requirement:

MA 101 - Foundations of Mathematics	3
MA 110 - Elementary Functions	3
MA 121 - Calculus I for the Natural and Social Sciences and Business	4
MA 123 - Calculus I for Physics and Chemistry	4
MA 127 - Calculus I	4
MA 151 - Mathematics for Elementary Teachers I	3
MA 217 - Probability and Statistics	3

**NATURAL SCIENCES**

**A Two-Semester Sequence in Laboratory Science** **8 sh**

---

Sequence may be designated by department.

BI 103-104 - General Biology I and II	8 sh total
CH 101-102 - College Chemistry I and II (Specific departments only)	8 sh total
CH 111-112 - General Chemistry I and II	8 sh total
CH 113-114 - Concepts in Chemistry	8 sh total
GS 101/102-103/104 - Earth Science I and II with labs	8 sh total
GS 121/131-122/132 - General Geology I and II with labs	8 sh total
PY 111-0/111-1 and PY 112-0/112-1 - Physics I and II with labs	8 sh total
PY 131-0/131-1 and PY 132-0/132-1 - Physics I and II with labs	8 sh total
SC 105-106 - Physical Science I and II (either order)	8 sh total

**SOCIAL SCIENCES**

**Five Courses from Twelve Alternatives** **15 sh**

---

1. AN 110 - Introduction to Anthropology	3
2. CR 101 - General Administration of Justice	3
3. EC 101 - Basic Economics	3
OR	
EC 121 - Principles of Economics I	3
4. GE 101 - World Geography	3
5. GE 102 - Geography of United States and Canada	3
6. HI 102 - History of Civilization II	3
7. HI 103 - History of US and PA I	3
OR	
HI 104 - History of US and PA II*	3
8. PS 101 - World Politics	3
9. PS 111 - American Politics	3
10. PC 101 - General Psychology*	3

11. SO 151 - Principles of Sociology	3
12. SS 101 - Contemporary Social Science	3

\*Required for all students in School of Education and teacher certification programs.

## **HEALTH AND PHYSICAL EDUCATION**

### **One Option**

**4 sh**

OPTION 1: Health and Physical Education	
HP 101 — Personal and Community Health	2
AND	
HP — Physical Activity courses - 2 courses, 1 credit each (HP 110-138, 144-172, 260-262, 266)	2
OPTION 2: Military Science	
MS 101 - World Military History and Lab	2
MS 102 - American Military History and Lab	2
OPTION 3: Military Science	4
Veterans are given four credits toward these requirements. Verification of service must be established by form DD 214.	

## **SCIENCE/MATH ELECTIVES**

### **Zero to One Course**

**0-3 sh**

If only six credits are earned in the humanities group, an additional course must be selected from the natural science electives or the following:

BI 261 - Ornithology	3
BI 262 - Etomology	3
BI 271 - Evolution	3
BI 272 - Conservation of Plant and Animal Resources	3
BI 110 - Plant Biology	5
BI 120 - Animal Biology	5
CO 200 - Intro to Computers	3
CO 110 - Intro to Computer Science	3
GS 110 - General Astronomy	3
GS 120 - Geology of Pennsylvania	3
GS 330 - Paleontology	3
GS 321 - Mineralogy	3
GS 371 - Meteorology I	3
GS 361 - Oceanography	3
MA 110 - Elementary Functions	3
MA 121 - Calculus I for the Natural and Social Sciences and Business	4
MA 122 - Calculus II for the Natural and Social Sciences and Business	4
MA 217 - Probability and Statistics	3
PY 222 - Mechanics I	2
PY 231 - Electronics	4
PY 242 - Optics	3
PY 342 - Thermal and Statistical Physics	3
PY 472 - Nuclear Physics	3

SC 111 - Science in Modern Civilization	3
SC 401 - Growth of Science and Its Concepts I	3
SC 402 - Growth of Science and Its Concepts II	3

Students continuing in Military Science (ROTC) beyond their freshman year should use the elective hours available to them by their department towards Military Science classes. Upon entering the Sophomore year of Military Science students are encouraged to discuss this with their Military Science class adviser who will assist them in this matter.

## **RESIDENCY**

---

The last 30 semester hours in a student's curriculum **MUST** be earned by enrollment in courses at Indiana University of Pennsylvania.

## **SEMESTER HOUR AND CUMULATIVE QUALITY POINT AVERAGE**

---

Each student must complete a minimum of 124 semester hours to graduate, including 52 hours in General Education (all on a passing basis), and must have a 2.0 (C grade) cumulative quality point average and a 2.0 (C) average in his/her major field.\*

\*Effective for members of the 1971 freshman class onward and for students admitted from spring 1971 onward.

## **ADVANCED PLACEMENT AND EXEMPTION EXAMINATIONS**

---

Courses taken by students prior to admission to college under the Advanced Placement Program of the College Entrance Examination Board may be recognized by the award of college credit or by exemption from required subjects. Those who earn a grade of 3, 4 or 5 in the Advanced Placement Examination will be granted exemption from the course and /or credit toward the number of credit hours required for graduation.

For students who have had other unusual opportunities of instruction or have advanced in a given field, an opportunity to gain exemption from a course is afforded through exemption examinations, given at the discretion of each department. Departments offering such options will publicize their availability campus-wide every year. A student who passes an exemption examination will be exempt from taking that course in his/her academic program.

When a student receives CREDIT for a course by examination, the credit will be applied to graduation requirements just as though the course had been taken. If a student is granted EXEMPTION ONLY from a course, he/she will be permitted to take a free elective in place of that course.

This enables the student to further specialize, to correct weaknesses outside his/her major field, to build his/her knowledge in an ancillary area, or to introduce himself/herself to an entirely different area.

Courses for which credit and/or exemption are awarded by examination will not be used in the determination of quality point averages.

## **APPLICATION FOR GRADUATION**

---

It is the student's responsibility to complete an application for graduation form in the office of the Dean of his/her School, early in the term prior to graduation. Students are responsible for knowing and fulfilling the requirements for graduation in their degree program.

Certification for graduation is not final until approved by the Dean of the School in which the Student is enrolled.

Students who expect to graduate at the end of the summer session must complete all requirements for graduation by the conclusion of the Main Summer Session, UNLESS PRIOR EXCEPTION be made by the student's School Dean. Diplomas will not be issued until all bills and obligations have been satisfied, including the degree fee.

## **SECOND BACCALAUREATE DEGREE**

---

A graduate either of IUP or of another accredited college or university may receive a second or subsequent baccalaureate degree by earning at least 30 additional credits in courses at IUP which are approved by the Department and the School in which the subsequent degree is earned. In addition, the student must meet any other degree requirements of the department and the School in which the degree is earned. A student may not receive two baccalaureate degrees simultaneously.

Honors are not granted for subsequent degrees.

## **THREE-YEAR DEGREE PROGRAM**

---

There is no special significance to the four-year baccalaureate program; more or less time could be used effectively in pursuit of the Bachelor's degree. For those who wish to graduate in three years, the accelerative features outlined below indicate how this could be accomplished:

Six semesters at 17 semester hours each	102 s.h.
Exemption and credit for English 101	4 s.h.
Advanced Placement Examination Program College Level Examination Program	
Departmental Examinations for exemption and credit	18 s.h.
Summer Session Enrollment(s)	
Minimum requirement for degree	124 s.h.

Any student who desires an accelerated program should consult BOTH his/her adviser AND the Dean of his/her school concerning the opportunities for credit by examination and the total semester hours and courses required for graduation.

# The School of Business

Cyrus A. Altimus, Dean

The establishment of a School of Business was authorized by the IUP Board of Trustees in May, 1966.

Departments within the School of Business include: Accounting, Administrative Services and Business Education, Finance and Management Information Systems, Labor Relations (graduate degree only), and Management and Marketing.

The Bachelor of Science in Business Administration degree is offered by the Accounting, Finance and Management Information Systems, and Marketing and Management Departments. The Administrative Services and Business Education Department offers the following degrees: Bachelor of Science in Education with a Business Education major, Bachelor of Science in Education with a Distributive Education major, Bachelor of Science in Office Administration, and a two-year Associate of Arts in Business degree with majors in Accounting, Retailing or Secretarial Administration. The Labor Relations Department offers the Master of Arts in Labor Relations and selected undergraduate courses.

## **Bachelor of Science in Education**

IUPs School of Business seeks to serve the needs of its students and the needs of business, industry and education through its diverse programs. Known for 50 years as a specialist in business education, IUPs program in Distributive Education prepares teacher-coordinators for schools offering programs in marketing, distribution,

and cooperative work experience. These two degree areas (Bachelor of Science in Education with a Business Education major and the Bachelor of Science in Education with a Distributive Education major) are designed to prepare teachers for comprehensive high schools, area vocational-technical schools and community colleges.

### **Bachelor of Science in Office Administration**

The Bachelor of Science in Office Administration degree program within the Administrative Services and Business Education Department prepares the student to pursue careers as administrative assistants in business; administrative secretaries with opportunities to specialize in medical, legal, and bilingual positions; office managers and supervisors; and records managers and administrators.

### **Bachelor of Science in Business Administration**

For those pursuing the Bachelor of Science in Business Administration degree, IUP's training will provide a broad liberal background in the behavioral sciences; a keen perception of the socioeconomic world in which we live and work; a foundation of general professional education for personally fruitful and socially useful careers in the varied fields of business, the opportunity to obtain the specialized knowledge and skills essential to future occupational growth and advancement. There are five areas of specialization for those pursuing the Bachelor of Science in Business Administration - Accounting, Finance, Marketing, Personnel Management, or Management Information Systems.

The curriculum is generally similar for all areas of specialization during the first two years, and the choice of a major area is necessary prior to the beginning of the student's junior year.

Each area provides for a variety of business, economics or business-related courses which are designed to enrich the student's understanding of the modern business system.

Students may, in consultation with their advisers, plan their program of study to obtain a minor in an area of business specialization other than their major.

### **Associate of Arts Degree**

Students who desire a two-year program that prepares them to enter the business world may elect to pursue the Associate of Arts degree program. Students may elect one or more of the following areas of specialization: Accounting, Retailing and Secretarial Administration. This program is only offered at the branch campus center in Punxsutawney.

## **DEGREE REQUIREMENTS**

All four-year degree candidates in the School of Business must fulfill the University's 52 semester-hour General Education requirement and candidates for degrees in Education must fulfill the 29 semester-hour requirement in professional Education courses needed for certification (see sections on Requirements for Graduation and the School of Education). Specific courses to fulfill the General Education requirement and to meet special degree requirements within the School of Business are identified in the sections on the specific departments.

## **ACCOUNTING DEPARTMENT**

---

**DONALD J. ROBBINS, CHAIRPERSON: BURNER, CHURCH, COOPER, GHESSIE, GHOBASHY, LINDH, McCLURE, PLIVELIC, TIGER.**

The Accounting Department provides the training necessary for one to enter the fields of public accounting, accounting in business or industry, or governmental accounting.

In addition to the 52 semester-hour General Education requirement, candidates for the Bachelor of Science in Business Administration degree with a specialization in Accounting must complete 1) Core Program consisting of 36 semester hours, and 2) 36 semester hours in the Accounting sequence.

### **General Education Requirements**

All students pursuing the Bachelor of Science in Business Administration degree must meet the General Education Requirements of the University. The following represent the specific departmental variations from the General Education Requirements (see section on Requirements for Graduation for full listing of courses included in the General Education Requirements):

**REQUIRED COURSES (20 s.h.)** to include MA 121 Calculus I for Business, Natural and Social Sciences

**HUMANITIES (6 s.h.)**

**NATURAL SCIENCES (8 s.h.)** to include a laboratory science sequence of four s.h. per semester

**GENERAL ELECTIVES (3 s.h.)**

**SOCIAL SCIENCES (15 s.h.)** to include EC 121 Principles of Economics I

### **Core Program**

In addition to the General Education requirements, each candidate for the Bachelor of Science in Business Administration degree must satisfy the following 36 s.h. of Core Program requirements:

#### **Business Courses**

BU 221 Accounting Principles I	3 s.h.
BU 233 Marketing	3 s.h.
BU 235 Introduction to Business Law	3 s.h.
BU 251 Accounting Principles II	3 s.h.
BU 321 Business Communications	3 s.h.
BU 439 Management Information Systems	3 s.h.
BA 200 Principles of Management	3 s.h.
BA 201 Personnel Management	3 s.h.
BA 215 Business Statistics	3 s.h.
*BA 240 Computers in Business	3 s.h.

## OR

*CO 110 Introduction to Computer Science	3 s.h.
BA 241 Finance I	3 s.h.

**Other**

EC 122 Principles of Economics II	3 s.h.
-----------------------------------	--------

\*MIS majors are to select CO 110 Introduction to Computer Science

**Accounting Sequence**

In addition to the General Education and Core Program requirements, specialization in Accounting requires:

**Business**

BU 336 Law of Business Organizations	3 s.h.
BU 352 Intermediate Accounting I	3 s.h.
BU 353 Cost Accounting	3 s.h.
BU 454 Federal Taxes	3 s.h.
BA 354 Intermediate Accounting II	3 s.h.

**Economics**

EC 325 Monetary Economics I	3 s.h.
-----------------------------	--------

**Free Electives****9 s.h.****Accounting Electives** (three courses to be selected from the following)

EC 333 Regulation of Industry	3 s.h.
EC 334 Economics of Corporate Decisions	3 s.h.
BA 451 Advanced Principles of Accounting	3 s.h.
BA 456 Advanced Cost Accounting	3 s.h.
BU 455 Auditing	3 s.h.
BA 457 Federal Taxations of Corporations, Partnerships, Estates & Trusts	3 s.h.
BA 458 Accounting for Government and Non-Profit Organizations	3 s.h.
BA 459 Seminar in Accounting Standards	3 s.h.

Any other advanced Economics course 300/400 level	3 s.h.
--	--------

**ACCOUNTING DEPARTMENT COURSES**

BA 300 Managerial Accounting	3 s.h.
BA 354 Intermediate Accounting II	3 s.h.
BA 451 Advanced Principles of Accounting	3 s.h.
BA 456 Advanced Cost Accounting	3 s.h.
BA 457 Federal Taxation of Corporations, Partnerships, Estates & Trusts	3 s.h.
BA 458 Accounting for Government and Non-Profit Organizations	3 s.h.
BA 459 Seminar in Accounting Standards	3 s.h.
BA 497 Internship in Accounting (Public)	3-6 s.h.



BA 498 Internship in Accounting (Industrial & Govt)	3-6 s.h.
BU 221 Accounting Principles I	3 s.h.
BU 251 Accounting II	3 s.h.
BU 352 Intermediate Accounting I	3 s.h.
BU 353 Cost Accounting	3 s.h.
BU 454 Federal Taxes	3 s.h.
BU 455 Auditing	3 s.h.

## **COURSE DESCRIPTIONS**

---

<b>BA 300 MANAGERIAL ACCOUNTING</b>	3 s.h.
Prerequisites: BU 221, BU 251	
Emphasis is placed upon development and use of accounting information in performing managerial functions, including planning, controls, decision-making, cost analysis and performance evaluation.	
<b>BA 354 INTERMEDIATE ACCOUNTING II</b>	3 s.h.
Prerequisite: BU 352	
Continued study of financial principles and practices of accounting with emphasis on the characteristics, records, and financial reports of business organizations.	
<b>BA 451 ADVANCED PRINCIPLES OF ACCOUNTING</b>	3 s.h.
Prerequisite: BA 354	
Study of accounting problems of a specialized nature, including the application of funds statement, consignments, installment sales, receivership accounts, agency and branch accounting and corporate combinations.	
<b>BA 456 ADVANCED COST ACCOUNTING</b>	3 s.h.
Prerequisite: BU 353	
Study of the theory, preparation and use of budgets, the analysis of cost variance, direct costing and extensive analysis of various cost-control and profit-planning programs.	
<b>BA 457 FEDERAL TAXATION OF CORPORATIONS, PARTNERSHIPS, ESTATES AND TRUSTS</b>	3 s.h.
Prerequisites: BU 454 and BA 354	
An advanced course in Federal income taxation as it applies to taxpayers other than individuals; covers the tax treatment of those property transfer subject to Federal and state gift and death taxes; tax planning and research methodology are also discussed.	
<b>BA 458 ACCOUNTING FOR GOVERNMENT AND NON-PROFIT ORGANIZATIONS</b>	3 s.h.
Prerequisite: BA 354	
Presents the views of authoritative professional organizations as to desirable standards of accounting and reporting for governmental and non-profit entities. Topics include: Budgeting and budgetary accounts, accounting for various funds, the general fixed assets group of accounts, the financial reporting process and application of the principles of fund accounting in specific areas.	
<b>BA 459 SEMINAR IN ACCOUNTING STANDARDS</b>	3 s.h.
Prerequisite: BA 354	
Deals with the study of professional standards having authoritative support in the field of Accounting. APB opinions, FASB interpretations, and SEC Accounting Series Releases are discussed.	
<b>BA 497 ACCOUNTING INTERNSHIP</b>	2-12 s.h.
Practical experience with a public accounting firm.	

- BA 498 INDUSTRIAL & GOVERNMENT ACCOUNTING INTERNSHIP 3-6 s.h.  
Practical experiences in an industrial or governmental accounting setting.
- BU 221 ACCOUNTING PRINCIPLES I 3 s.h.  
Introduces student to the keeping of records for service and professional establishments, as well as mercantile enterprises involving the single proprietor.
- BU 251 ACCOUNTING PRINCIPLES II 3 s.h.  
Prerequisite: at least a 2.0 QPA in BU 221  
Special consideration given to accrued and deferred items: the significance and handling of valuation accounts and interpretation of the effect of all types of transactions on the operation of a business.
- BU 352 INTERMEDIATE ACCOUNTING I 3 s.h.  
Prerequisite: BU 251  
Continued study of financial principles and practices of accounting with emphasis on characteristics, records, and financial reports of corporations.
- BU 353 COST ACCOUNTING 3 s.h.  
Prerequisite: 2.0 QPA in BU 221 and BU 251  
Basic theory and procedures for determining unit cost of production and cost control involving material, labor, and manufacturing expenses in job-order and process cost systems. The costing of joint and by-products.
- BU 454 FEDERAL TAXES 3 s.h.  
Prerequisite: BU 352  
Acquaints students with Federal Income Tax Laws as they affect individuals, single proprietorship, and partnership.
- BU 455 AUDITING 3 s.h.  
Prerequisite: BU 353  
Study of auditing theory and practical application of auditing standards and procedures to the verification of accounts and financial statements: working papers: and audit reports.

NOTE: Internships BA 497 and BA 498 can be taken, if the student qualifies, as a general elective. They do not fulfill the major-area elective requirements. Admission only by permission of the Department Chairperson.

## **ADMINISTRATIVE SERVICES AND BUSINESS EDUCATION DEPARTMENT**

---

**ROBERT STROCK, CHAIRPERSON: BIANCO, MAHAN, McCLELLAND, MOREAU, MORRIS, POLESKY, ROBERTS, ROWELL, TROXELL, VARNER, WOOPER**

This department offers two four-year programs and a two-year associate degree program.

Degrees offered by the Administrative Services and Business Education Department are the Bachelor of Science in Education with a Business Education major, Bachelor of Science in Education with a Distributive Education major, Bachelor of Science in Office Administration with a major in Office Administration, and a two-year Associate of Arts in Business degree with majors in Accounting, Retailing, or Secretarial Administration.

Those students interested in teaching business and distributive education in high

schools and vocational-technical schools have a choice of the following areas of concentration: Accounting, Data Processing, Secretarial (all include certification in Typewriting), and Distributive Education. Students are encouraged to select more than one area of concentration, as additional certification beyond the minimum requirements enrich the students preparation for teaching.

Students interested in a non-teaching degree that prepares them for careers in business, industry, and government as administrative assistants, administrative secretaries, office managers and supervisors, and records administrators may select the office administration major. Students selecting this major have a choice of one or more of the following related areas: Accounting, Finance, Human Relations, Marketing, and Secretarial Administration.

Students who want a two-year program that prepares them for entering careers in business and government may select one or more of the following areas of specialization: Accounting, Retailing, and Secretarial Administration. This program is offered only at the off-campus centers.

## **FOUR-YEAR DEGREE PROGRAMS**

---

In addition to the 52 semester hours in General Education courses required for all baccalaureate candidates (see section on Requirements for Graduation), a core program of 28 semester hours is required of all majors pursuing one of the four-year degree programs in the Administrative Services and Business Education Program.

### **CORE PROGRAM**

#### **Business**

BU 101 Business Organization & Management	3 s.h.
BU 131 Principles of Typewriting	2 s.h.
BU 132 Intermediate Typewriting	2 s.h.
BU 221 Accounting Principles I	3 s.h.
BU 235 Introduction to Business Law	3 s.h.
BU 251 Accounting Principles II	3 s.h.
*BU 335 Machine Mathematics	3 s.h.
BU 321 Business Communications	3 s.h.
BU 336 Law of Business Organizations	3 s.h.
BU 339 Business Data Processing	3 s.h.

#### **Business Education**

*BE 111 Foundations of Business Mathematics	3 s.h.
---	--------

\*May be part of University's General requirement.

All students pursuing the Bachelor of Science in Education degree must meet the professional education requirements for that degree. Please see the section on the School of Education.

## **B.S. IN EDUCATION (BUSINESS EDUCATION MAJOR)**

---

The curriculum in Business Education prepares students for a professional career in teaching office occupations. The Business Education curriculum is designed with three areas of concentration or fields of specialization. The three fields of concentration are Accounting, Data Processing, and Secretarial. Students may pursue the

work of the entire curriculum or they may elect to pursue work according to their aptitudes as follows:

1. The Complete Program leads to certification in all of the high school business subjects. Those who possess aptitudes that indicate success in Accounting, Data Processing, and Secretarial work may pursue this complete program if they wish. School administrators believe that the complete program is desirable for breadth of certification when teaching in the public schools of the Commonwealth of Pennsylvania.
2. The Accounting Field includes all courses in the curriculum listed under that heading and meets the requirements for certification in Accounting and Typewriting.
3. The Secretarial Fields includes all courses in the curriculum listed under that heading and meets the requirements for certification in Secretarial subjects and Typewriting.
4. The Data Processing Field includes all courses in the curriculum listed under that heading and meets the requirements for certification in Accounting, Data Processing, and Typewriting.

All Business Education majors are required to complete the requirements for certification in at least two of the following areas of certification: 1. Accounting, 2. Data Processing, 3. Marketing, 4. Secretarial, and 5. Typewriting.

Students pursuing the Accounting Field or Secretarial Field may elect courses which will afford certification in a third area of certification since the courses listed under these headings in the curriculum only provide certification in two areas.

### **Practical Business Experience**

Before graduation, each student is encouraged to complete the equivalent of 12 months of secretarial practice, accounting practice, data processing, clerical practice, or a combination of these. This experience should be in the field or fields in which the student is contemplating certification and can be acquired during summer vacations and in offices on the campus during the regular school term.

### **Business Education**

In addition to the General Education, Core Program and Professional Education requirements, all majors in Business Education must complete the following:

BU 271 Advanced Typewriting	2 s.h.
BE 311 Methods and Evaluation in Business Education I	3 s.h.
BE 312 Methods and Evaluation in Business Education II	1-3 s.h.
BU 333 Principles of Selling	3 s.h.
*EC 121 Principles of Economics I	3 s.h.

\*May be part of the University's General Education requirements

### **Areas of Specialization**

Specialization in the several areas available to the Business Education student is accomplished by taking courses listed as follows:

#### **Secretarial Sequence**

BU 261 Shorthand Theory	3 s.h.
BU 262 Shorthand Dictation	3 s.h.
BU 363 Transcription	3 s.h.
BU 364 Office Procedures	3 s.h.

**Accounting Sequence**

BU 352 Intermediate Accounting	3 s.h.
BU 353 Cost Accounting	
or	
BU 454 Federal Taxes	3 s.h.

**Data Processing Sequence**

BU 340 Business Systems Technology	3 s.h.
BU 439 Management Information Systems	3 s.h.
BU 443 Business Systems Analysis I	3 s.h.
BU 352 Intermediate Accounting	3 s.h.
BU 454 Federal Taxes	3 s.h.

**Electives**

BU 353 Cost Accounting	3 s.h.
BU 455 Auditing	3 s.h.

## **B.S. IN EDUCATION (DISTRIBUTIVE EDUCATION MAJOR)**

---

The curriculum in Distributive Education is designed to prepare students for a professional career teaching the distributive occupations. Students following this program will be graduated as Teachers-Coordiators of Distributive Education and will be also certified to teach certain courses in Business Education.

Teaching in the field of Distributive Education combines the personal satisfaction of teaching with the enjoyment of public relations work in the distributive area of business-retailing, wholesaling, and service enterprises. The student who likes the prestige of teaching, along with the plus values of working with business leaders and young people, will find this a challenging and rewarding career. Distributive Education presents a promising future for persons in the teaching profession. With the recognition of the importance of distribution to our national economy, this vocational field of teaching is expanding rapidly.

**Distributive Education**

In addition to the General Education, Core Program and Professional Education requirements outlined for the Administrative Services and Business Education Department, all Distributive Education majors must complete the following:

BU 233 Marketing	3 s.h.
BU 332 Retail Management	3 s.h.
BU 333 Principles of Selling	3 s.h.
DE 310 Principles of Distributive Education	3 s.h.
DE 313 Methods of Evaluation and Distributive	
DE 331 Modern Merchandising	3 s.h.
DE 434 Supervised Work Experience and Seminar in Distributive Education	6 s.h.
*EC 121 Principles of Economics I	3 s.h.

\*May be part of the University's General Education requirements.

## **B.S. IN OFFICE ADMINISTRATION (OFFICE ADMINISTRATION MAJOR)**

---

Office Administration is one of the most challenging careers in business, industry,

and government. The Office Administration program is built on a broad general education which provides students with a fundamental understanding of the society in which they live and work. The Program strives to develop the student's knowledge of the functional areas of business (accounting, finance, and marketing), the behavioral sciences, the management sciences, and the systems approach to problem solving. An integral part of each student's program is an intensive study of office administration emphasizing the decision-making aspect of office activities and giving in-depth experiences required for an understanding of the total office system and its relationship to the total business and economic system.

Upon completion of the Office Administration program, the graduate will be able to pursue careers as administrative assistants in business, industry, and government; administrative secretaries with opportunities to specialize in medical, legal, and bilingual positions; office managers and supervisors; and records managers and administrators.

Students pursuing the Bachelor of Science in Office Administration complete a 37 semester hour major and are required to pursue their interest in any of five cognitive areas: Accounting, Marketing, Finance, Human Relations, or Secretarial Administration.

### **Office Administration Sequence**

In addition to the University General Education and Administrative Services and Business Education Department Core Program requirements previously outlined, the Office Administration major requires:

#### **Business**

BU 233 Marketing	3 s.h.
BU 412 Administrative Office Services	3 s.h.
BU 415 Records Administration	3 s.h.
BU 439 Management Information Systems	3 s.h.
BA 201 Personnel Management	3 s.h.
Social Science Elective	3 s.h.
This elective does not apply to the Human Relations Cognitive Area.	
PC 356 Personality	3 s.h.
PC 358 Social Psychology	3 s.h.
PC 399 Industrial/Organizational Psychology	3 s.h.
SO 340 Sociology of Industry	3 s.h.

### **COGNITIVE AREA OPTIONS—Students must select one of the following areas of specialization.**

#### **Finance**

EC 112 Principles of Economics II	3 s.h.
EC 325 Monetary Economics I	3 s.h.
BA 241 Finance I	3 s.h.
BA 380 Principles of Investments	3 s.h.
BA 381 Life Insurance	3 s.h.

#### **Human Relations**

PC 354 Developmental Psychology	3 s.h.
---------------------------------	--------

PC 356 Personality	3 s.h.
PC 358 Social Psychology	3 s.h.
PC 399 Industrial/Organizational Psychology	3 s.h.
SO 340 Sociology of Industry	3 s.h.
One of the following courses:	3 s.h.
BA 384 Case Studies in Personnel Management	
PC 361 Motivation	
PC 375 Applied Social Psychology	
SO 345 Interpersonal Dynamics	

**Marketing**

EC 122 Principles of Economics II	3 s.h.
BU 332 Retail Management	3 s.h.
BA 331 Consumer Behavior	3 s.h.
BA 332 Marketing Management	3 s.h.
BU 337 Consumer Law	3 s.h.

**Secretarial Administration**

*BU 261 Shorthand Theory	3 s.h.
*BU 262 Shorthand Dictation	3 s.h.
*BU 271 Advanced Typewriting	2 s.h.
*BU 363 Shorthand Transcription	3 s.h.
BU 364 Office Procedures	3 s.h.

**Electives 17-18 s.h.**

(BE 498, Internship in Office Administration, 6 s.h., is recommended.)

\*Exemption examination is available for these courses.

## **ASSOCIATE OF ARTS DEGREE (Major in Business)** **(Offered only at the branch campuses)**

---

The Associate of Arts Degree in Business is designed to be a two-year curriculum with these objectives:

1. To provide business occupational education with the opportunity for specialization in the accounting, retailing, and secretarial areas.
2. To enable the student to enter accounting, retailing, secretarial, and word processing positions in business and government.
3. To enable the student to upgrade his/her skills and knowledge to qualify for higher positions in business and government.

All students enrolled in this program must complete the requirements listed below under general education, business core, and areas of specialization.

**General Education**

EN 100 Basic English	
OR	
EN 101 English I	3-4 s.h.
EN 102 English II	3 s.h.
PC 101 General Psychology	3 s.h.
EC 101 Basic Economics I	
OR	
EC 121 Principles of Economics I	3 s.h.
Social Science	
OR	
Humanities Elective	3 s.h.

**Business Core**

BE 111 Foundations of Business Mathematics	3 s.h.
BU 101 Business Organization & Management	3 s.h.
*BU 131 Principles of Typewriting	2 s.h.
BU 221 Accounting Principles I	3 s.h.
BU 235 Introduction to Business Law	3 s.h.
BU 321 Business Communications	3 s.h.
BU 335 Machine Mathematics	3 s.h.

**Area of Specialization**

In addition to the general education and business core requirements listed above, students must select one of the following areas of specialization.

**ACCOUNTING**

BU 251 Accounting Principles II	3 s.h.
BU 336 Law of Business Organization	3 s.h.
BU 339 Business Data Processing	3 s.h.
BU 352 Intermediate Accounting I	3 s.h.
BU 353 Cost Accounting	3 s.h.
BA 354 Intermediate Accounting II	3 s.h.
BU 364 Office Procedures	3 s.h.
BU 439 Management Information Systems	3 s.h.
BE 433 Supervised Work Experience	
OR	
Business Elective	3 s.h.

**RETAILING**

BU 233 Marketing	3 s.h.
BU 251 Accounting Principles II	3 s.h.
BU 332 Retail Management	3 s.h.
BU 333 Principles of Selling	3 s.h.
BU 339 Business Data Processing	3 s.h.
DE 330 Merchandise Information	3 s.h.
DE 331 Modern Merchandising	3 s.h.
BE 433 Supervised Work Experience	
OR	
Business Electives	6 s.h.

**SECRETARIAL ADMINISTRATION**

*BU 132 Intermediate Typewriting	2 s.h.
*BU 261 Shorthand Theory	3 s.h.
*BU 262 Shorthand Dictation	3 s.h.
BU 271 Advanced Typewriting	2 s.h.
BU 272 Introduction to Word Processing	3 s.h.
BE 275 Filing and Records Management	3 s.h.
*BU 363 Shorthand Transcription	3 s.h.
BU 364 Office Procedures	3 s.h.
**BU 365 Advanced Transcription	3 s.h.
BE 433 Work Experience	
OR	
BU 339 Business Data Processing	3 s.h.

\*Student with prior preparation may be exempt from these courses upon the satisfactory completion of a competency examination.

\*\*Specialization in the following areas will be available through individualized instruction modules: (1) medical-dental; (2) legal; and (3) court reporting.



**CORRESPONDENCE SECRETARY**

The Correspondence Secretary (Word Processing) option is available to students who decide not to continue with shorthand after completing Shorthand Theory. Students selecting this option will substitute BE 280, Machine Transcription and Word Processing, BU 339 Business Data Processing, and BU 251 Accounting Principles II, for Shorthand Dictation, Shorthand Transcription, and Advanced Shorthand Transcription.

All other courses listed in the Administrative Secretary option are required in the Corresponding Secretary option.

**ADMINISTRATIVE SERVICES AND BUSINESS EDUCATION COURSES**

BA 382 Principles of Real Estate	3 s.h.
BE 111 Foundations of Business Math	3 s.h.
BE 275 Filing and Records Management	3 s.h.
BE 280 Machine Transcription and Word Processing	3 s.h.
BE 311 Methods & Evaluation in Business Education I	3 s.h.
BE 312 Methods & Evaluation in Business Education II	1-3 s.h.
BE 371 Personal Typewriting and Duplicating	1 s.h.
BE 433 Supervised Work Experience and Seminar in Office Occupations	6 s.h.
BE 498 Internship in Office Administration	6 s.h.
BU 101 Business Organization & Management	3 s.h.
BU 131 Principles of Typewriting	2 s.h.
BU 132 Intermediate Typewriting	2 s.h.
BU 235 Introduction to Business Law	3 s.h.
BU 261 Shorthand Theory	3 s.h.
BU 262 Shorthand Dictation	3 s.h.
BU 271 Introduction to Word Processing	3 s.h.
BU 272 Advanced Typewriting	2 s.h.
BU 321 Business Communications	3 s.h.
BU 332 Retail Management	3 s.h.
BU 333 Principles of Selling	3 s.h.
BU 335 Machine Mathematics	3 s.h.
BU 336 Law of Business Organization	3 s.h.
BU 337 Consumer Law	3 s.h.
BU 363 Transcription	3 s.h.
BU 364 Office Procedures	3 s.h.
BU 365 Advanced Transcription	3 s.h.
BU 412 Administrative Office Services	3 s.h.
BU 415 Records Administration	3 s.h.
DE 310 Principles of Distributive Education	3 s.h.
DE 313 Methods of Evaluation in Distributive Education	1-3 s.h.
DE 330 Merchandise Information	3 s.h.
DE 331 Modern Merchandising	3 s.h.
DE 434 Supervised Work Experience and Seminar in Distributive Education	6 s.h.

## COURSE DESCRIPTIONS

---

- BA 382 PRINCIPLES OF REAL ESTATE** 3 s.h.  
Study of the regulations, legal aspects and professional ethics of the real estate business, including the area of financing, advertising, property valuation and appraisal and selling.
- BE 111 FOUNDATIONS OF BUSINESS MATHEMATICS** 3 s.h.  
Develops an understanding of numbers and a knowledge of fundamental concepts in arithmetic and algebra in the solution of common and advanced problems encountered in business by the businessman and consumer. Topics illustrating and emphasizing the application of business mathematics include methods used to compute interest, discount, partial payments, discounting of notes and drafts, depreciation, amortization, sinking fund redemptions, effective rate of interest, and preparation of statistical data.
- BE 275 FILING AND RECORDS MANAGEMENT** 3 s.h.  
Prerequisite: Sophomore Status  
A study of the basic principles and procedures of records storage and control. Included is an in-depth study of various methods and systems of records storage and management of the records system.
- BE 280 MACHINE TRANSCRIPTION AND WORD PROCESSING** 3 s.h.  
Prerequisites: BU 271 and BU 272  
Develop a high degree of proficiency in the use of dictating and transcribing machines, magnetic and memory typewriters, duplicating machines, and basic business English skills required for successful employment as correspondence and administrative secretaries; further the students understanding of the word processing concept.
- BE 311 METHODS AND EVALUATION IN BUSINESS EDUCATION I** 3 s.h.  
(Prerequisites: General Psychology, Educational Psychology, and completion of the freshman and sophomore courses in the student's major areas.)  
Includes general methods of teaching and evaluation plus special methods and evaluation in basic business courses. Courses of study, unit plans, lesson plans, and unit tests are emphasized. Aims, techniques, and procedures of teaching, grade placement of courses, and classroom management are studied.
- BE 312 METHODS AND EVALUATION IN BUSINESS EDUCATION II** 1-3 s.h.  
(Prerequisites: BE 311 or DE 310)  
Covers three sections of special methods and evaluation in typewriting, stenography, and accounting/data processing. Objectives, planning, evaluating, and skill building are studied. Media and facilities for instruction are examined. Students elect sections needed for certification.
- BE 371 PERSONAL TYPEWRITING AND DUPLICATING** 1 s.h.  
In this beginning course in typewriting, students learn how to touch type and use the spirit duplicator and mimeograph machines. (Open to all students EXCEPT BE and DE majors).
- BE 433 SUPERVISED WORK EXPERIENCE AND SEMINAR IN OFFICE OCCUPATIONS** 6 s.h.  
Students gain experience in selected office occupations. This cooperative business experience is conducted by competent business and University personnel. There is a weekly evening seminar.
- BE 498 INTERNSHIP IN OFFICE ADMINISTRATION** 6 s.h.  
Prerequisites: Senior status, approval of Internship Coordinator, and 2.75 overall GPA and 3.0 GPA in business.  
A supervised office experience program with an approved agency (business, industry, and government) includes three, two-hour, on campus seminars.

- **BU 101 BUSINESS ORGANIZATION AND MANAGEMENT** 3 s.h.  
 This introductory course is an overview of the principles, practices, and methods common to most business firms in a private enterprise system.
- BU 131 PRINCIPLES OF TYPEWRITING** 2 s.h.  
 Emphasis on development of correct techniques in typewriting, introduction to basic styles of business letters, simple tabulations and simple manuscripts; specific standards of speed and accuracy are required. Credit may be given by examination.
- BU 132 INTERMEDIATE TYPEWRITING** 2 s.h.  
 Prerequisite: 2.0 QPA in BU 131 or credit by examination.  
 Emphasis on further development of speed, accuracy, and production ability; includes business letters with special features, business reports, business forms, rough drafts, manuscripts, liquid and stencil duplication.
- BU 235 INTRODUCTION TO BUSINESS LAW** 3 s.h.  
 An introduction to business law dealing mainly with introduction to legal systems, torts, contracts, and sales law.
- BU 261 SHORTHAND THEORY** 3 s.h.  
 An introductory course in the basic principles of Gregg Shorthand, Diamond Jubilee.
- BU 262 SHORTHAND DICTATION** 3 s.h.  
 Prerequisite: BU 261  
 Major objectives are to review and strengthen student's knowledge of principles of Gregg Shorthand, Diamond Jubilee, to build shorthand-writing speed, and to build transcription skill.
- BU 271 ADVANCED TYPEWRITING** 2 s.h.  
 Prerequisites: At least a 2.0 QPA in BU 131 and 132.  
 Continuation of speed and accuracy development and production ability, advanced work in letter forms, legal documents, statistical reports, tables, and manuscripts. Instruction on VariTyper included.
- BU 272 INTRODUCTION TO WORD PROCESSING** 3 s.h.  
 Prerequisite: Sophomore Status  
 A comprehensive overview of all aspects of word processing design to acquaint the student with the concept of a modern word processing center including equipment, procedures, and personnel.
- BU 321 BUSINESS COMMUNICATIONS** 3 s.h.  
 Prerequisite: Junior Status  
 Study of communication theory and principles as applied to business situations and practices; development of communication skills in areas of communication such as oral, writing, listening, and non-verbal. Emphasis in building effective interpersonal relations in a business environment.
- BU 332 RETAIL MANAGEMENT** 3 s.h.  
 Prerequisite: DE 331 or BU 333  
 Study of structure and changing environment of retailing; special emphasis on merchandise management, organization, sales promotions, services and control.
- BU 333 PRINCIPLES OF SELLING** 3 s.h.  
 Covers field of selling, preparing to sell, the selling process and an introduction to sales management. Sales demonstrations incorporating audio-visual aids are a part of course.
- BU 335 MACHINE MATHEMATICS** 3 s.h.  
 Prerequisites: BE 111, Foundations of Business Mathematics or permission of instructor.  
 Fundamental mathematical processes utilized in business are applied in realistic business

situations through use of office machines including a ten-key and full-keyboard adding-listing machines and electronic calculators.

**BU 336 LAW OF BUSINESS ORGANIZATION** 3 s.h.

Prerequisite: BU 235

A study of the law dealing with commercial paper, agency, partnerships, corporations, and bankruptcy.

**BU 337 CONSUMER LAW** 3 s.h.

Deals with the nature of law as it pertains to the consumer. Attention is given to Consumer Protection Relationships; Real and Personal Property; Credit; Environmental Law; Law pertaining to Employment; Landlord-Tenant Relationships; Product Liability; Insurance and Family Law.

**BU 363 TRANSCRIPTION** 3 s.h.

Prerequisite: BU 262

Develop additional speed in taking dictation, with emphasis on development of transcription skill.

**BU 364 OFFICE PROCEDURES** 3 s.h.

Prerequisite: BU 271

Advanced study of theory and practice in activities common to the office-records management; handling of mail; bank, telephone, and telegraph services; receiving callers; writing reports; dictating and transcription equipment bank, financial, and legal transactions; shipping and receiving services; reference books; etc.

**BU 365 ADVANCED TRANSCRIPTION** 3 s.h.

Prerequisites: BU 271 and BU 363 Stresses advanced shorthand dictation and transcription techniques with emphasis on legal and medical modules.

**BU 412 ADMINISTRATIVE OFFICE SERVICES** 3 s.h.

Prerequisite: Junior Status

Presentation of fundamental principles and practices used in the development of an office. Specialized areas such as systems analysis work simplification, forms design, word processing, office machines and equipment, records management, office design and layout, office location and physical environment, office supervision, office manuals, and development of office personnel will be discussed.

**BU 415 RECORDS ADMINISTRATION** 3 s.h.

Prerequisite: Junior Status

Development of the principles of records administration including creation, use, maintenance, and destruction. Storage facilities, records classification, forms analysis, control of records, as well as micro-image systems will be discussed.

**DE 310 PRINCIPLES OF DISTRIBUTIVE EDUCATION** 3 s.h.

(Prerequisites: BU 233 and completion of freshman and sophomore courses in the student's major areas).

To acquaint prospective teachers with the objectives of vocational distributive education, include state plan and curriculum is the purpose of this course. Understanding problems in organizing, teaching, administering, and supervising a complete cooperative program is also covered.

**DE 313 METHODS OF TEACHING AND EVALUATION IN MARKETING AND DISTRIBUTIVE EDUCATION** 1-3 s.h.

(Prerequisites: DE 310 or BE 111, BU 233, BU 333, and EP 302)

Includes two sections of special methods and evaluation in this field. Objectives are to acquaint students with basic principles of group and individual instruction in various subject matter areas, as well as methods of presentation. Unit plans, lesson plans, demonstrations, and evaluations will be prepared. Students select sections needed for certification.

**DE 330 MERCHANDISE INFORMATION**

3 s.h.

Prerequisite: Sophomore status

Study of the physical characteristics and construction of various types of merchandise. Students will be able to translate this information into selling facts and statements.

**DE 331 MODERN MERCHANDISING**

3 s.h.

Techniques for planning and controlling inventory, analyzing sales, working with modern systems for handling cash, uses of color, line and design. Practice in preparing merchandise display units.

**DE 434 SUPERVISED WORK EXPERIENCE AND SEMINAR IN DISTRIBUTIVE EDUCATION**

6 s.h.

Prerequisite: BU 333

Students gain experience in selected distributive occupations. This cooperative business experience is conducted by competent business and University personnel. There is a weekly evening seminar.

## **FINANCE AND MANAGEMENT INFORMATION SYSTEMS DEPARTMENT**

---

**ROBERT BOLDIN, CHAIRPERSON: FLETCHER, MAWHINNEY, McCAFFREY, SHEPHERD, SHILDT, SOLAK, WELKER**

The Finance major, leading to the degree of Bachelor of Science in Business Administration, is designed to educate those students who are interested in the financial management of the firm and in investment analysis of securities.

In addition to the 52 semester hour General Education requirement, candidates for the Bachelor of Science in Business Administration degree with a specialization in Finance must complete 1) Core Program consisting of 36 semester hours, and 2) 36 semester hours in the Finance sequence.

**General Education Requirements**

All students pursuing the Bachelor of Science in Business Administration degree must meet the General Education requirements of the University. See section on Accounting Department for specific variations to these requirements for candidates for the Bachelor of Science in Business Administration degree. See section on Requirements for Graduation for a full listing of courses included in the General Education Requirements.

**Core Program**

In addition to the General Education Requirements, each candidate for the Bachelor of Science in Business Administration degree must satisfy the 36 semester hours of Core Program requirements. See section on Accounting Department for listing of these courses.

## **DEGREE REQUIREMENTS**

---

**Business**

BA 300 Managerial Accounting	3 s.h.
OR	
BU 352 Intermediate Accounting I	3 s.h.
BA 341 Finance II	3 s.h.

BA 380 Principles of Investments	3 s.h.
BA 381 Life Insurance	3 s.h.
BA 482 Seminar in Finance	3 s.h.

**Economics**

EC 325 Monetary Economics I	3 s.h.
-----------------------------	--------

**Free Electives****9 s.h.****Finance Electives (three courses to be selected from the following):**

BA 382 Principles of Real Estate	3 s.h.
BA 383 Property & Liability Insurance	3 s.h.
BA 385 Securities & Commodities Markets	3 s.h.
BA 386 Financial Institutions & Markets	3 s.h.
BA 481 Investment Analysis	3 s.h.
BU 336 Law of Business Organization	3 s.h.
BU 454 Federal Taxes	3 s.h.
EC 326 Monetary Economics II	3 s.h.
EC 334 Economics of Corporation Decisions	3 s.h.
EC 345 International Economics I	3 s.h.

**Management Information Systems Sequence**

The Management Information Systems area provides training in business computer technology and in the design and implementation of management information systems.

In addition to the General Education and Core Program requirements previously outlined, specialization in MIS requires:

**Business**

BA 300 Managerial Accounting	3 s.h.
OR	
BU 352 Intermediate Accounting I	3 s.h.
BA 340 Business Systems Technology	3 s.h.
BA 440 Advanced COBOL Application Programming	
BA 441 Data Base Theory & Application	3 s.h.
BA 443 Business Systems Analysis I	3 s.h.
BA 444 Business Systems Analysis II	3 s.h.

**Other**

CO 220 Applied Computer Programming	3 s.h.
-------------------------------------	--------

**Free Electives****MIS Electives (two courses to be selected from the following):**

BA 445 Quantitative Techniques for Systems	3 s.h.
BA 446 Forms Design and Control	3 s.h.
BA 447 Distributed Business Information Systems	3 s.h.
BA 448 Auditing EDP	3 s.h.

Additional Computer Science courses (with permission of Chairperson)

## FINANCE AND MANAGEMENT INFORMATION SYSTEMS DEPARTMENT COURSES

BA 215 Business Statistics	3 s.h.
BA 240 Computers in Business	3 s.h.
BA 241 Finance I	3 s.h.
BA 340 Business Systems Technology	3 s.h.
BA 341 Finance II	3 s.h.
BA 380 Principles of Investments	3 s.h.
BA 381 Life Insurance	3 s.h.
BA 383 Property & Liability Insurance	3 s.h.
BA 385 Securities and Commodities Markets	3 s.h.
BA 386 Financial Institutions and Markets	3 s.h.
BA 440 Advanced COBOL Application Programming	3 s.h.
BA 441 Data Base Theory and Application	3 s.h.
BA 443 Business Systems Analysis I	3 s.h.
BA 444 Business Systems Analysis II	3 s.h.
BA 445 Quantitative Techniques for Systems	3 s.h.
BA 446 Forms Design and Control	3 s.h.
BA 447 Distributed Business Information Systems	3 s.h.
BA 448 Auditing for EDP	3 s.h.
BA 481 Investment Analysis	3 s.h.
BA 482 Seminar in Finance	3 s.h.
BA 494 Finance Internship	2-12 s.h.
BA 499 Internship in MIS	2-12 s.h.
BU 339 Business Data Processing	3 s.h.
BU 439 Management Information Systems	3 s.h.

## COURSE DESCRIPTIONS

- BA 215 BUSINESS STATISTICS** 3 s.h.  
 Prerequisite: MA 214 Probability & Statistics  
 Expands upon the probabistic concepts developed in MA 214 to orient the stuent toward managerial decision making using statistical methodologies. Topics covered include classical hypothesis testing, frequency analysis, analysis of variance, regression analysis, and Bayesian decision theory.
- BA 240 COMPUTERS IN BUSINESS** 3 s.h.  
 Study of the use of computers in information processing and decision- making functions in business. Computer programming is covered through an introduction to COBOL.
- BA 241 FINANCE I** 3 s.h.  
 Study of methods of securing and managing funds on short, intermediate, and long-term bases: the financial analysis, planning, and control of a corporation.
- BA 340 BUSINESS SYSTEMS TECHNOLOGY** 3 s.h.  
 Prerequisite: BA 240 Computers in Business OR CO 110 Intro to Computer Science.  
 Analysis of computer hardware and its influence on systems design.
- BA 341 FINANCE II** 3 s.h.  
 Prerequisite: BA 241  
 Continuation of BA 241 and covers topics on long-term external financing of the firm, working capital management, mergers, international business finance, and business failures.

- BA 380 PRINCIPLES OF INVESTMENTS** 3 s.h.  
 Prerequisite: BA 241  
 Analysis of various types of securities and other forms of investment possibilities and a study of sound investment policies from a corporate viewpoint. Factors influencing the general movement of security prices and the return from investments are considered.
- BA 381 LIFE INSURANCE** 3 s.h.  
 Comprehensive study of that insurance which provides protection against the economic loss caused by termination of earning capacity. Analysis benefits, underwriting, ratemaking, and legal doctrines.
- BA 383 PROPERTY & LIABILITY INSURANCE** 3 s.h.  
 Study of the hazards of underlying, the principles involved in, and the protection provided by property and liability insurance, including multiple line and all risks insurance, and corporate suretyship.
- BA 385 SECURITIES AND COMMODITIES MARKETS** 3 s.h.  
 Prerequisites: BA 241 and BA 380  
 Study of the structure of security and commodity markets; the nature of speculative transaction and methods of trading; analysis of pricing; and the objectives of security and commodity market regulation.
- BA 386 FINANCIAL INSTITUTIONS AND MARKETS** 3 s.h.  
 Prerequisites: EC 325, BA 380  
 Review of entire structure of financial institutions, money and capital markets, of which the business enterprise is both a supply and demand factor, and structure and dynamics of interest-rate movements.
- BA 440 ADVANCED COBOL APPLICATION PROGRAMMING** 3 s.h.  
 Prerequisite: CO 220 OR BA 340  
 The use of COBOL in application programming utilizing tables and direct access.
- BA 441 DATA BASE THEORY AND APPLICATION** 3 s.h.  
 Prerequisite: CO 220 or BA 340  
 The analysis of data structures and data base management systems.
- BA 443 BUSINESS SYSTEMS ANALYSIS I** 3 s.h.  
 Prerequisites: CO 220, BA 340, BA 241  
 Study of the techniques used in Systems Analysis, involving systems definition feasibility, quantitative, and evaluative techniques of business.
- BA 444 BUSINESS SYSTEMS ANALYSIS II** 3 s.h.  
 Prerequisites: BA 440, BA 443  
 The study of the design of business subsystems such as production, inventory, and marketing, with the requirement of a documented systems study of a subsystem in an outside business.
- BA 445 QUANTITATIVE TECHNIQUES FOR SYSTEMS** 3 s.h.  
 Prerequisites: BA 440, BA 441, BA 443  
 Develops the computer programs necessary for business decision-making techniques; intensive analysis of the decision-making process: diagnosing problems; evaluation of alternative solutions, projection of results and the choice of alternatives.
- BA 446 FORMS DESIGN AND CONTROL** 3 s.h.  
 Prerequisite: BA 443 or by instructor's permission.  
 Study of all data collection, transmission of data, processing of data and retrieval of data forms. Microfiche and COM forms design are included.
- BA 447 DISTRIBUTED BUSINESS INFORMATION SYSTEMS** 3 s.h.  
 Prerequisite: BA 443 or by instructor's permission.



Study of the techniques involved in planning, design and implementation of distributed processing systems. Distributed marketing, financial and corporate accounting systems are included.

**BA 448 AUDITING FOR EDP SYSTEMS** 3 s.h.

Prerequisites: BU 445 and BA 443

Emphasizes the responsibility of the systems analyst to include in systems design the proper management and financial controls and audit trails in business information systems. The design of control for application programs and systems must meet the Internal Audit Department standards. The newly designed system must produce accurate results upon which management can make decisions.

**BA 481 INVESTMENT ANALYSIS** 3 s.h.

Prerequisites: BU 352, BA 241, BA 380

Integrates the work of the various courses in the finance areas and familiarizes the student with the tools and techniques of research in the different areas of investments.

**BA 482 SEMINAR IN FINANCE** 3 s.h.

Prerequisites: BA 241, BA 341, BA 380

A course primarily for the senior Finance major, covering topics in all areas of finance by using recent articles, cases, discussions, speakers and a financial simulation game.

**BA 494 FINANCE INTERNSHIP** 2-12 s.h.

Practical experience in the finance field.

**BA 499 INTERNSHIP IN MIS** 2-12 s.h.

Practical experience in the management information systems field.

**BU 339 BUSINESS DATA PROCESSING** 3 s.h.

Students are familiarized with development and use of Business Data Processing Systems. Data processing methods and equipment, computer programming and interpretation of business information are covered.

**BU 439 MANAGEMENT INFORMATION SYSTEMS** 3 s.h.

Prerequisites: BU 221 and BA 240 (or CO 110)

Orients student to philosophy and concepts of business information systems. Areas of problem definition, information, economics, information management, flow charting, truth table testing, and documentation included.

**NOTE:** Internships BA 494 and 499, can be taken, if the student qualifies, as general electives.

They do not fulfill the major-area elective requirements. Admission only by permission of the department Chairperson.

## **LABOR RELATIONS DEPARTMENT**

---

**DONALD S. MCPHERSON, CHAIRPERSON: HOFFNER, MORAND, NESBITT**

The Labor Relations Department offers a graduate program within the School of Business leading to the degree of Master of Arts in Labor Relations. The 42 semester hour program consists of a required core of 24 semester hours, including a required thesis, and elective course offerings totaling 18 semester hours. Internships are available and strongly encouraged.

The Labor Relations program is multi-disciplinary, combining analytical and human relations skills with knowledge drawn from social sciences and business disciplines. The degree is designed to prepare professional labor relations practitioners in public and private management, unions, neutral agencies, government agencies, and

arbitration panels. It has as its special focus labor relations in the public sector.

While the department does not offer course work leading to an undergraduate major or degree, it does offer several undergraduate courses which are open to students of any major or School.

## **COURSE DESCRIPTION**

---

LR 480 PRINCIPLES AND PRACTICES OF COLLECTIVE BARGAINING 3 s.h.  
The role, function, and authority of negotiation committees, techniques of negotiation, the negotiations agreement, the mediation process and the arbitration process will be analyzed through mainly a case study approach.

LR 481 SPECIAL TOPICS IN LABOR RELATIONS 3 s.h.  
Advanced, innovative, or exploratory topics in Labor Relations

LR 499 INDEPENDENT STUDY 1-3 s.h.  
Independent reading and research under the direction of a faculty member.

## **MANAGEMENT AND MARKETING DEPARTMENT**

---

**WAYNE NELSON, CHAIRPERSON: ANDERSON, BREYER, FALCONE, McAFOOSE, McGOVERN, PILLION, STEVENSON, WEIERS**

### **Personnel Management Sequence**

The Management program, leading to the degree of Bachelor of Science in Business Administration, is designed to prepare students for eventual positions in personnel and related management areas.

In addition to the 52 semester hour General Education requirement, candidates for the Bachelor of Science in Business Administration degree with a specialization in Personnel Management must complete 1) Core Program consisting of 36 semester hours, and 2) 36 semester hours in the Personnel Management sequence.

### **General Education Requirements**

All students pursuing the Bachelor of Science in Business Administration degree must meet the General Education Requirements of the University. See section on Accounting Department for specific variations to these requirements for candidates for the Bachelor of Science in Business Administration degree. See section on Requirements for Graduation for a full listing of courses included in the General Education Requirements.

### **Core Program**

In addition to the General Education requirements, each candidate for the Bachelor of Science degree must satisfy the 36 semester hours of Core Program requirements. See section on Accounting Department for a listing of these courses.

### **Business**

BA 384 Case Studies in Personnel Management	3 s.h.
BA 402 Training Management	3 s.h.
BA 486 Wage & Salary Administration	3 s.h.

**Other**

EC 330 Labor Economics	3 s.h.
PC 339 Industrial/Organizational Psychology	3 s.h.
LR 480 Principles & Practices of Collective Bargaining	3 s.h.

**Free Electives****Personnel Management Electives (three courses to be selected from the following)**

BA 381 Life Insurance	3 s.h.
BA 383 Property & Liability Insurance	3 s.h.
BU 336 Law of Business Organizations	3 s.h.
EC 371 Economics of Labor Legislation	3 s.h.
EC 372 Economics of Wages & Employment	3 s.h.
EN 323 Management in Mass Communications	3 s.h.
SA 101 Introduction to Occupational Safety and Health Services Management	3 s.h.

**Marketing Sequence**

The Marketing area provides training for those interested in (1) sales and product (or services) management, (2) wholesaling or retail management, or (3) marketing support services such as advertising and marketing research.

In addition to the General Education and Core Program requirements previously outlined, specialization in Marketing requires:

**Business**

BA 300 Management Accounting	3 s.h.
OR	
BU 352 Intermediate Accounting I	3 s.h.
BA 331 Consumer Behavior	3 s.h.
BA 332 Marketing Management	3 s.h.
BA 438 Marketing Research	3 s.h.
BA 435 Seminar in Current Marketing Problems	3 s.h.

**Economics**

Advanced Economics Elective (300/400 Level)	3 s.h.
---	--------

**Free Electives (three courses to be selected from the following):**

BA 433 International Marketing	3 s.h.
BA 434 Advertising	3 s.h.
BA 436 Social Issues in Marketing	3 s.h.
BA 437 Industrial Management	3 s.h.
BU 332 Retail Management	3 s.h.
BU 333 Principles of Selling	3 s.h.
EC 331 Economic Organization of Industry	3 s.h.
EC 345 International Economics I	3 s.h.

**MANAGEMENT AND MARKETING DEPARTMENT COURSES**

BA 200 Principles of Management	3 s.h.
BA 201 Personnel Management	3 s.h.
BA 331 Consumer Behavior	3 s.h.
BA 332 Marketing Management	3 s.h.
BA 384 Case Studies in Personnel Management	3 s.h.

BA 402 Training Management	3 s.h.
BA 433 International Marketing	3 s.h.
BA 434 Advertising	3 s.h.
BA 435 Seminar in Current Marketing Problems	3 s.h.
BA 436 Social Issues in Marketing	3 s.h.
BA 437 Industrial Marketing	3 s.h.
BA 438 Marketing Research	3 s.h.
BA 486 Wage & Salary Administration	3 s.h.
BA 490 Decision Making in Business	3 s.h.
BA 491 Special Topics in Business	1-3 s.h.
BA 495 Internship in Personnel Management	2-12 s.h.
BA 496 Internship in Marketing	2-12 s.h.
BU 233 Marketing	3 s.h.

## **COURSE DESCRIPTIONS**

---

**BA 200 PRINCIPLES OF MANAGEMENT** 3 s.h.  
 An investigation of the evolutionary principles of management applicable to all forms of business. Exploration of the role of the manager and the management process. Topics include: Planning goals and objectives, organizing resources, staffing directing and motivating employees, and effective managerial control.

**BA 201 PERSONNEL MANAGEMENT** 3 s.h.  
 A contemporary course in the management of human resources, designed to recognize and evaluate the change to the behavioral science approach in the study of personnel administration. Topics include: Recruiting and selection, training, management development, performance evaluation, communications, wage and benefit programs, and management-labor relations.

**BA 331 CONSUMER BEHAVIOR** 3 s.h.  
 Prerequisites: BU 233, PC 101  
 Survey of noteworthy contributions of behavioral science and research of consumer purchasing and decision-making process, with particular attention to formal and informal influence patterns.

**BA 332 MARKETING MANAGEMENT** 3 s.h.  
 Prerequisites: BU 233, BA 331.  
 Analysis of marketing and operational problems and policies involved in planning, organizing, coordinating and controlling a business from a total marketing program.

**BA 384 CASE STUDIES IN PERSONNEL MANAGEMENT** 3 s.h.  
 Prerequisite: BA 201  
 Actual and realistic case studies illustrating the principles, practices and procedures involved in planning, organizing and controlling the personal aspect of supervising employees.

**BA 402 TRAINING MANAGEMENT** 3 s.h.  
 Prerequisite: BA 201  
 Principles, problems and procedures in planning, organizing, directing, and controlling at all echelons of a business enterprise.

**BA 433 INTERNATIONAL MARKETING** 3 s.h.  
 Prerequisite: BA 233  
 International marketing is analyzed with consideration given to the significance of government regulations; organization structures of export and import enterprises; and credit policies.

**BA 434 ADVERTISING** 3 s.h.  
 Prerequisite: BU 233

An introduction to the principles, practices, and creations of advertising. The use of various media, legal, economic, social and ethical aspects of advertising are also considered.

**BA 435 SEMINAR IN CURRENT MARKETING PROBLEMS** 3 s.h.

Prerequisites: BA 332, BA 438

A terminal course designed for majors in Marketing; considers current literature in the field, case problems pertaining to the total marketing effort and actual problems of local companies.

**BA 436 SOCIAL ISSUES MARKETING** 3 s.h.

An overview of the interactions between marketing and the larger social system in which it operates. Considers the problems, solutions and future directions of societal issues and their relationships to the marketing environment. Topics discussed include consumerism, the morality of advertising, self-regulation, pollution and ecology, over-population, and the social and ethical responsibilities of business and industry.

**BA 437 INDUSTRIAL MARKETING** 3 s.h.

Prerequisites: BU 233, BA 332

Concerned with the major activities involved in the marketing of industrial goods and services, including: the industrial marketing system, marketing information needs of the industrial firm, industrial marketing implementation and control, and channel, pricing, product and promotional strategies for industrial goods.

**BA 438 MARKETING RESEARCH** 3 s.h.

Prerequisites: BU 233, BA 215

The nature, methods, analysis, and application of present-day marketing research techniques utilized in the solution of practical marketing problems.

**BA 486 WAGE AND SALARY ADMINISTRATION** 3 s.h.

Prerequisite: BA 201

Studies the policies and programs that help managers design and administer compensation systems for private and public sector enterprise. Includes motivation theories and practice designing of compensation systems.

**BA 490 DECISION MAKING IN BUSINESS** 3 s.h.

Prerequisites: Senior status and all Business core subjects completed

A capstone course designed to give the student practice in developing solutions to Business problems through the integration and application of the numerous theories covered in the functional areas. The case method will be emphasized.

**BA 491 SPECIAL TOPICS IN BUSINESS** 1-3 s.h.

Covers advanced, innovative, or exploratory topics in the disciplines within Business Administration. Specific content items developed by instructor. Credits may be applied to either required (by permission of department chairperson) or free electives in a student's program.

**BA 495 PERSONNEL MANAGEMENT INTERNSHIP** 2-12 s.h.

Practical experience with a personnel office.

**BA 496 MARKETING INTERNSHIP** 2-12 s.h.

Practical experience in the marketing field.

**BU 233 MARKETING** 3 s.h.

The study of those activities necessary to the design, pricing, promotion, and distribution of goods & services for use by organizations and ultimate consumers.

**NOTE:** Internships, BA 495 and 496, can be taken, if the student qualifies, as a general elective.

They do not fulfill the major-area elective requirements. Admission only by permission of the Department Chairperson.



# **The School of Continuing Education**

**Jerry T. Ice, Dean**

For a variety of reasons, increasing numbers of American adults will enroll in continuing education programs to pursue their educational objectives during the rapidly changing final quarter of the Twentieth Century. As a response to this need for recurrent education, IUP established the School of Continuing and Non-resident Education. The programs within the School of Continuing Education are typically characterized by innovation and experimentation in educational philosophy, teaching methods and techniques. The learning activities are designed to meet the educational needs and goals of adults whose primary occupation during the enrollment period is not that of full-time student. The School of Continuing Education strives to carry out the mission of lifelong learning.

This School provides opportunities for adults to participate in short courses and community service programs offered through the Community-University Study Series each spring, summer and fall. It also offers tutoring, testing, and other academic and advisement services to meet the needs of adult learners. Assistance in career planning is also available.

Currently, criminology courses for credit are offered at a number of locations in Western Pennsylvania through the Criminology Extension Program, in cooperation with other institutions of higher education. Additional extension programs in other subject areas (business, safety science, social sciences, fine arts, etc.) are being

developed as the School expands its offerings.

The School encompasses a variety of centers to meet specific needs. The Crime Study Center develops community-oriented activities with a major emphasis on pre-professional and in-service criminal justice training. Special conferences and seminars are also designed by the Center on a state, regional, and national scale. The Adult Education Center provides in-service educational opportunities and instructional resources for adult and continuing educators and staff development programs for personnel who work with senior citizens in Western Pennsylvania. In addition, all the programs within the School are vehicles for grant development, grant administration, management consultation, research, and information exchange.

The School of Continuing Education conducts conferences, institutes, and workshops for the University to respond to public needs. On the basis of needs assessment and community interest the School designs continuing education and community service programs for the general public and for special publics, such as women, senior citizens, professional people, labor union members and leaders, businessmen, local governmental and state officials, volunteers, paraprofessionals, and other distinct audiences. An example of this is a developing program, the Continuing Education Program for Business, Industry, and Labor. The School has a deep interest in providing access to IUP credit courses (through the Credit Classes Program and Extension Programs) to mature adults beyond the normal college age of 18-22 years who wish to continue their education enrolling in regular credit courses offered at the Main Campus, the Branch Campuses, and off-campus locations. The School generates proposal-writing activities for the support of adult or continuing education, community service, and community development.

The School of Continuing and Non-resident Education offers programs at the Main Campus in Indiana, at the Branch Campuses in Punxsutawney and Kittanning, and in other communities in the IUP service area and, thereby, contributes to extension of the resources of the University to the people of the State. Both credit and non-credit programs are available. The Continuing Education Unit (CEU) is awarded for credit-free programs that meet established criteria. The School of Continuing and Non-resident Education does not have a permanent faculty of its own. The School attracts resource people as needed from the community, the University, and other educational institutions.





**Programs in the School of Continuing Education:**

Community-University Studies Program  
Academic Advisement Center for Adults  
Emergency Medical Training (EMT) Programs  
Individual Non-resident Study Program  
Credit for Life Experience Program  
C.E.T.A. Training Program  
Foreign Student Advisory  
Criminology Extension Program  
Continuing Education Conferences and Institutes  
Credit Classes Program  
General Extension Program  
Crime Study Center  
Adult Education Center  
Older Americans Program/Aging Projects  
Programs for Business, Industry and Labor  
Continuing Education for Nurses  
Women's Resource Center  
Center for the Study of Labor Relations  
Adult Correctional Education Program  
Highway Traffic Safety Center



# The School of Education

Charles M. Kofoid, Dean  
Charles Foust, Associate Dean

The departments of the School of Education offer programs leading to the degree of Bachelor of Science, the degree of Bachelor of Science in Education, the degree of Master of Arts, the degree of Master of Education, and the doctoral programs leading to the degrees of Doctor of Education in Elementary Education and Doctor of Education in Counselor Education. Appropriately, most all programs completed in the School of Education lead to certification for public school teaching or supervision in the Commonwealth of Pennsylvania.

The programs in teacher preparation at IUP enable the teacher to become responsible for the planning, organization, and evaluation of an instructional program within the framework of a school setting. The teacher brings to this setting a broad background of general studies, an acceptable degree of mastery in a specialized field, and an understanding of the processes of human growth and learning. In this role the teacher creates, manages, and maintains an educational environment appropriate to the needs of the students to be served. The teacher uses social, physical, cognitive, and psychological data available on the individual student to plan, execute, and evaluate the instructional program. The teacher assumes a high degree of personal and professional responsibility in developing a philosophy of education in the development and management of a plan for professional growth.

The program of teacher preparation will provide an opportunity to gain expertise in the following generic competencies:

1. An understanding of the theoretical and practical aspects of human growth and development.
2. Knowledge of and experience with effective learning techniques.
3. Utilization of learning resources and evaluation of teaching and learning effectively.
4. Effective classroom management techniques and recognition and response to differing behavioral patterns.
5. An understanding of the historical and philosophical bases of American education and a belief that professional development is a life long process.

## **SUMMARY OF PROGRAMS OFFERED**

---

Elementary Education	Bachelor of Science in Education Master of Education Doctor of Education
Secondary Education	
*English	Bachelor of Science in Education
Communication	*Master of Education
*Biology	
*Chemistry	
*Earth and Space Science	
General Science	
*Mathematics	
*Physics	
*Physics-Mathematics	
*Comprehensive Social Studies	
French	
German	
Russian	
*Spanish	
*Art Education	For details see School of Fine Arts
*Business Education	For details see School of Business
*Home Economics Education	For details see School of Home Economics
*Music Education	For details see School of Fine Arts
Physical Education	For details see School of Health Services
Special Education	
Education of Exceptional Child	Bachelor of Science in Education Master of Education Master of Science
Hearing Impaired	Bachelor of Science in Education
Rehabilitation Education	Bachelor of Science
Speech Correction	Bachelor of Science in Education Master of Education Master of Science
Public School Nursing	Bachelor of Science in Education

Communications Media Graduate Programs (see Graduate Bulletin)	Bachelor of Science
Adult/Community Education	Master of Arts
Counselor Education	Master of Education, Doctor of Education
Educational Psychology	Master of Education
Instructional Media Specialist	Master of Education
Reading Specialist	Master of Education
Certification (see Graduate Bulletin)	
Guidance Supervisor	
Reading Specialist	
Reading Supervisor	
School Psychologist	
School Social Worker	

## **DEGREE REQUIREMENTS**

---

All degree candidates in the School of Education (except for two special programs) must complete satisfactorily a minimum of 124 semester hours in three categories: General Education, a specialized major field, and professional education:

General Education - 52-55 semester hours, described under requirements for Graduation.

Specialized major field - requirements listed under Department offerings.

Professional Education - 29 semester hours, as follows:

EP 302 Educational Psychology	3 s.h.
EP 377 Educ. Tests and Measurements	3 s.h.
FE 302 History and Philosophy of American Education	3 s.h.
CM 301 Instructional Media	3 s.h.
Methods Course - (Teaching of , see under major department offerings)	3 s.h.
One semester student teaching, including professional Practicum and School Law	14 s.h.

The two special programs are those leading to the Bachelor of Science in Education in Public School Nursing and in Rehabilitation Education. For each program, the degree requirements are listed in the pages following.

## **SOPHOMORE SCREENING FOR JUNIOR STANDING**

---

School of Education majors are screened at the close of the sophomore year for Junior Standing approval. The student must have earned a minimum of 57 semester hours, achieved a 2.0 cumulative quality point average, successfully completed English I and English II and received speech clearance and department approval.

## **STUDENT TEACHING**

---

Student teaching is designed to be a learning experience. The student teacher is a student learning to teach under the supervision of a full time cooperating teacher in an off campus center. A University Supervisor is also assigned to work with individual student teachers and cooperating teachers.

## **PROFESSIONAL PRACTICUM**

---

Professional Practicum, including School Law, is a seminar type course, (except Elementary Education majors schedule this in their department prior to student teaching) scheduled concurrently with student teaching and designed to help student teachers: (a) set an overview and understanding of the total school program, (b) gain knowledge of Pennsylvania School laws governing education, and (c) obtain breadth and depth in understanding the role of classroom teachers in their particular areas of specialization.

## **PROFESSIONAL EDUCATION COURSE DESCRIPTIONS**

---

ED 321 STUDENT TEACHING 6 s.h.  
Experience in teaching at the elementary level; coordination and visitation by a University faculty member with daily supervision by a cooperating classroom teacher.

ED 421 STUDENT TEACHING 6 s.h.  
Experience in teaching at the elementary level; coordination and visitation by a University faculty member with daily supervision by a cooperating classroom teacher.

ED 423 PROFESSIONAL PRACTICUM, INCLUDING SCHOOL LAW 3 s.h.  
Series of conferences and related activities to prepare students for actual teaching experiences. Parallels student teaching experience in junior and senior years.

ED 431 TEACHING IN HOME ECONOMICS 8 s.h.  
Experience in teaching home economics at the secondary level.

ED 433 SCHOOL LAW 1 s.h.  
Provides interpretation of school law as it affects teachers.

ED 441 STUDENT TEACHING 6-12 s.h.  
Experience in teaching at the secondary level; coordination and visitation by a University faculty member with daily supervision by a cooperating classroom teacher.

ED 442 PROFESSIONAL PRACTICUM 2 s.h.  
An experience which parallels student teaching and includes such activities as professional readings, discussions, observations and accumulation and organization of teaching materials.

ED 481 SPECIAL TOPICS 3 s.h.  
Prerequisite: By permission only  
Provides opportunity for students to investigate in depth an area of education under professional supervision.

## **THE UNIVERSITY SCHOOL**

---

The University School provides for a program of instruction from kindergarten through sixth grade, thus affording opportunities for professional laboratory experiences and research activities. Professional laboratory experiences are planned and scheduled with the Director of Professional Laboratory Experiences. Research activities are scheduled with the Director of the University School.

## **THE UNIVERSITY CLINICS**

---

Two clinics under the supervision of the School of Education offer diagnostic testing and remedial service and instruction in the following areas:

**READING CLINIC** - diagnosis and remedial instruction for reading and spelling disabilities and instruction for the improvement of present skills.

**SPEECH AND HEARING CLINIC** - diagnosis of speech problems, hearing tests and evaluations, and a regular program of therapy.

Regularly enrolled students at the University may avail themselves of these services without charge.

In addition, a **CHILD STUDY CENTER** provides psychological testing for any pre-school and school-aged child within the area served by the University.

## **COMMONWEALTH REQUIREMENTS FOR TEACHER CERTIFICATION**

---

Certification standards for Commonwealth public school teachers are established by the Department of Education and the State Board of Education. The chairperson of the department in which the student is majoring must verify to the office of the Dean of School of Education that all qualifications are met. The dean of the School is authorized to determine final approval for certification.

Applicants for certification are required by State Law to be of good mental and physical health, not in the habit of using either narcotic drugs in any form or intoxicating beverages to excess.

The Instructional I certificate is issued to the beginning teacher upon graduation from the School of Education. With the addition of 24 semester hours of collegiate and/or in-service work and successful teaching experience, students may acquire the Instructional II certificate, leading to permanent certification to teach in the Commonwealth of Pennsylvania. Graduates of approved programs in non-teaching areas, such as Public School Nursing, are issued an Educational Specialist I certificate.

## **GRADUATE PROGRAMS**

---

Information descriptive of M.Ed., Ed.D. and Teaching Internship programs may be found in the current issue of the Graduate School Bulletin.

## **PUBLIC SCHOOL NURSING**

---

The curriculum for public school nurses leads to the degree of Bachelor of Science in Education. The degree candidate must meet the following requirements:

1. The satisfactory completion of a course of study and training in an approved school of nursing (diploma or associate degree), registration by the State Board of Examiners, and possession of a current R.N. license. (Students already holding a bachelor's degree in nursing may only need to complete those specific courses

required by the School of Education for certification recommendation.)

2. The satisfactory completion of a minimum of sixty (60) semester hours of additional academic preparation beyond the diploma preparation or 64 semester hours beyond the associate degree preparation, distributed as follows:

<b>Major Courses</b>	<b>Sem. Hrs.</b>
PN 301 Public School Nursing.....	3
PN 302 Public School Organization (or FE 454) .....	3
PN 401 Public Health Nursing (class).....	3
PN 401 Public Health Nursing (practicum) .....	3
PN 402 Nutrition and Community Health (or FN 402).....	3
PN 403 Family Case Work.....	3
EX 215 Child Development (or EI 215).....	3
EX 216 Mental Health in the Schools (or EX 300 or EX 220) .....	3
SH 354 Audiometry for Public School Nurses .....	3
Total .....	27
 <b>Professional Education Courses</b>	
CM 301 Instructional Media .....	3
EP 302 Educational Psychology .....	3
FE 302 History and Philosophy of American Education .....	3
Total .....	9
 <b>General Education Courses</b>	
EN 101 English I .....	4
EN 102 English II.....	3
EN 201 English III .....	3
AR 101 or MU 101 or TH 101 History of Art, Music or Theater .....	3
HI 104 History of United States and Pennsylvania II.....	3
MA 000 or SC 000 Math or Natural Science Course approved by adviser* .....	3
HU 000 Humanities Course approved by adviser** .....	3
SS 000 Social Science Course approved by adviser*** ...	3
Total .....	28

\*Waived if more than 3 sem. hrs. of math and 8 sem. hrs. of natural science have been transferred into the IUP program.

\*\*Waived if more than 6 sem. hrs. of humanities have been transferred into the IUP program.

\*\*\*Waived if more than 9 sem. hrs. of social sciences have been transferred into the IUP program.

### **Elective Courses**

Students who have taken or had waived any of the above courses can use unrestricted electives (with the adviser's approval) to complete the requirements of a minimum of 60 semester hours beyond nursing school diploma preparation or 64 semester hours beyond associate degree nursing preparation.



## COURSE DESCRIPTIONS

---

**PN 301 PUBLIC SCHOOL NURSING** 3 s.h.  
 Study of the role of the Public School Nurse. Offers information on organization, development, implementation, and evaluation of school health services. Students given opportunity for practical experience in performing school nursing procedures and functions in a public school nursing setting. Programs, policies, and procedures presented are in conformity with Pennsylvania School Health Law, regulations of State Departments of Health and Education, and standards adopted by national health and education authorities.

**PN 302 PUBLIC SCHOOL ORGANIZATION** 3 s.h.  
 Designed to acquaint student with administration and organization of American public school. Consideration given to cultural role of school, to decision-making in operation of schools. Functions and methods of all professional personnel in operation and improvement of schools considered, particularly as related to Public School Nurse.

**PN 401 PUBLIC HEALTH NURSING** 3 s.h.  
 Designed to provide understanding of principles of public health nursing and basic public health services which come under official jurisdiction. Traditional emerging health programs at national, state, and local level are explored. Emphasis placed on utilization of public health services in school setting. The 3 s.h. classroom component is usually taken the same session as the 3 s.h. practicum component.

**PN 402 NUTRITION AND COMMUNITY** HEALTH 3 s.h.  
 Study of nutritional problems of family members, from infant to aged of community. Emphasis placed on reorganizing good nutritional status and on ways of guiding families toward better nutrition. School health lunch also emphasized.

**PN 403 FAMILY CASE WORK** 3 s.h.  
 In order to understand a child and guide his/her experiences in school more intelligently, educators must have an acquaintance with the family and home situation. Involves recognizing parent's attitudes toward the child, child's feelings toward parents, child's role in family, and special factors within family life that affect behavior and mental health. Guides experiences in working with families and preparing case studies are provided, particularly as related to Public School Nurse functioning.

## COMMUNICATIONS MEDIA DEPARTMENT

---

**RONALD A. JULIETTE, CHAIRPERSON: HAUCK, KLINGINSMITH, LES-  
 NESKIE, MacISAAC, MATTOX, MURRAY, SARGENT, YOUNG**

The Department offers a Bachelor of Science in Communications Media, a Minor in Media, and serves pre-service teachers and other students who are required to complete the basic course in Audio Visual Education, CM 301.

## CURRICULA

---

### **B.S. in Communications Media**

Students completing this degree should qualify for positions in business, industry, government, medical communications and education in the areas of photography, filmmaking, radio or television broadcasting, audio production and graphics production. This degree program offers the student a broad-based experience in non-print media. In addition to the 36 semester hours required in the Department, the student is given ample opportunity through outside electives and an internship program to

design a curriculum that best suits his/her career interests and which may include courses in journalism, business, art, theater or other appropriate departments.

### Core Program

Requirements for all Communications Media majors, beyond the University's General Education requirements are as follows:

CM 101 Survey	3 s.h.
CM 240 Basic Drawing and Design	3 s.h.
CM 271 Photographic Fundamentals	3 s.h.
CM 303 Design and Writing for Media Production	s.h.
CM 390 Field Experience	1-3 s.h.
or	
CM 490 Internship	3-12 s.h.
CM 440 Communications Graphics	3 s.h.
CO 200 Introduction to Computers	3 s.h.

### Minor in Media

A Minor in Media consists of a minimum of 18 semester hours including at least one course from each of these four blocks:

- A. General Communications  
CM 101, 240, 301, 303, 440
- B. Photography  
CM 271, 409, 443, 470, 472, 473
- C. Filmmaking  
CM 444, 445, 447
- D. Radio and Television  
CM 404, 448, 449, 450, 451, 452

## COURSE DESCRIPTIONS

---

CM 101 SURVEY OF COMMUNICATIONS MEDIA 3 s.h.

Required of Communications Media Majors.

Introduction to the field of Communications Media and basic audiovisual techniques. Includes theory and history of Communications Media; trends in media selection, development and utilization; roles of media personnel; processes for selecting, using, and evaluating media; and basic audiovisual equipment operation and maintenance.

CM 240 BASIC DRAWING AND DESIGN FOR MEDIA PRODUCTION 3 s.h.

Required of Communications Media Majors.

Introduces simple drawing techniques and procedures to enable students to prepare storyboard cards, slide cels and other graphic materials that must communicate ideas and thought in recognizable form to others. Lab and lecture. Students with appropriate experience may by-pass this course by departmental exam. Three semester hours of additional Communications electives then may be taken.

CM 271 PHOTOGRAPHY 3 s.h.

Introduction to photography emphasizing the potential value of teacher-made photographic materials in teaching. Both technical and artistic aspects of photography considered. Student must provide 35mm camera and exposure meter. See instructor. Required of Communications Media Majors.

- CM 301 INSTRUCTIONAL MEDIA** 3 s.h.  
Prerequisites: PC 101, EP 201, and Junior Standing.  
Professional course required of all students in Education. Preservice teachers gain competencies in selecting, using and evaluating audio-visual machines and materials. Performance-based activities in instructional design, materials production, machines operation and related learning resource activities relevant to prospective teaching experiences stressed.
- CM 303 DESIGN AND WRITING FOR MEDIA PRODUCTION** 3 s.h.  
Required of Communications Media Majors.  
Introduction to the design of media materials and script writing. Style and techniques of writing will be analyzed. Classroom emphasis is on writing, critiques and revision of designs and scripts. Scripts for audio still projection, motion picture and television productions will be written.
- CM 390 FIELD EXPERIENCE IN MEDIA** 1-3 s.h.  
Designed to provide the media student with practical experience in media production and/or management. Students may elect practicum in several campus media facilities including the Library Media Resources Services, television studio, radio station and photography or motion picture facilities. Students may take 1 semester hour per semester for a maximum of three semester hours.
- CM 404 INTRODUCTION TO RADIO BROADCASTING** 3 s.h.  
Introduction to organization and operation of a radio station. Technical aspects of radio and programming techniques. Examination of station's relationship with educational, industrial, and other social institutions.
- CM 440 COMMUNICATIONS GRAPHICS** 3 s.h.  
Required of Communications Media Majors.  
Provides experiences in planning and preparing commonly used materials for classroom and TV use; graphic materials, including layouts and lettering; mounting techniques; copying techniques, such as Thermofax, Polaroid, photography, and Xerography; laminating and color lifting.
- CM 443 SLIDE AND FILMSTRIP PRODUCTION** 3 s.h.  
Prerequisite: CM 371  
Emphasizes techniques of color and b/w slide preparation, duplication, tilting and binding. Students will participate in making of filmstrip through all stages from script to screen. Student must furnish own 35mm camera and an acceptable exposure meter.
- CM 444 MOTION PICTURE PRODUCTION** 3 s.h.  
Emphasizes effective use of 8mm and 16mm motion picture cameras and editing tools to make useful, locally produced films. No previous experience is necessary.
- CM 445 ADVANCED MOTION PICTURE PRODUCTION** 3 s.h.  
Prerequisite: CM 444  
Emphasizes motion picture production planning. Such techniques as directing, advanced picture and sound editing, and use of cinematography, tilting, animation and special effects photography investigated.
- CM 447 ANIMATION** 3 s.h.  
Prerequisite: CM 444  
Introduces animation techniques and offers practical experience in planning and producing animated sequences. Work with filmograph, cut-out, puppet and full cel animation. Practice in designing, drawing, tracing, inking and painting cels, preparation of blackboards, use of cel boards, animation camera and stand; preparation of story boards and cue sheets; integration of visual and sound.

- CM 448 WRITING FOR RADIO AND TELEVISION** 3 s.h.  
Presents theory and practice in planning, writing and producing various types and formats of broadcast material for radio and/or television.
- CM 449 BASIC AUDIO RECORDING** 3 s.h.  
Explores use of cassette and reel-to-reel magnetic recorders both monaural and stereo, in a variety of situations and modes. Emphasis on original recording techniques in classrooms, laboratories, studios, and in the field, but related subjects such as the transfer and mixing of signals from one tape to another, the tailoring of sound for specific needs, and the physical and electronic editing of tape will be explored. Considerable emphasis on microphone choice and technique. Appropriate for media people, education majors and others who can see an application of magnetic recording to their endeavors. 3 hours lecture/lab per week. Limit 24 students.
- CM 450 ADVANCED AUDIO RECORDING TECHNIQUES** 3 s.h.  
Theory and practice of recording sound for motion pictures, video tapes, audio tapes, sound filmstrips, etc., the use of sound on sound and other special recording techniques will be studied.
- CM 451 TELEVISION PRODUCTION** 3 s.h.  
Develops basic skills in television production and direction. Consideration of operating problems of a television studio, as well as functions; limitations, and capabilities of television equipment and facilities. Stress placed on educational application of television production.
- CM 452 ADVANCED TELEVISION PRODUCTION** 3 s.h.  
Prerequisite: CM 451  
Provides an in-depth experience in the technical aspects of television production. Students will produce and direct programs of broadcast quality.
- CM 470 LIGHTING TECHNIQUES FOR THE VISUAL MEDIA** 3 s.h.  
Investigates and compares the special techniques involved in lighting sets and portraits in motion pictures, television and still photography. Emphasizes practical "hands-on" experience in the studio. Student must provide an acceptable, hand light meter and other minor associated equipment. Three hours lecture/studio work per week. Limit 20 students.
- CM 472 PHOTOGRAPHY II: THE PRINT** 3 s.h.  
Prerequisite: CM 271  
Students will develop camera and print-making skills to the degree that they can produce solon-quality photographic prints. Students will produce high quality negatives and prints. Emphasis is on camera and print control as well as composition and negative and print manipulation.
- CM 473 CREATIVE DARKROOM TECHNIQUES** 3 s.h.  
Prerequisite: CM 271  
Students pursue on an individual basis photographic competencies which they want to develop to a high level of proficiency. Topics include high-contrast photography, silk screen photography, tone line base relief, posterization, etch bleach, photo sketching, print screening, color print and slide making, lighting techniques and flash photography as well as topics pertinent to meeting a student's objectives.
- CM 480 INDEPENDENT STUDY** 1-3 s.h.  
Students may elect with the prior approval of the instructor concerned and the department to do independent study which is of an advanced nature for 1 to 3 semester hours each in any of the four major areas of the departmental curriculum photography, filmmaking, broadcast and production. Prerequisite is the basic course for each of the four areas concerned.
- CM 490 INTERNSHIP** 3-12 s.h.  
Supervised professional off-campus work experience in media in business, industry, govern-

ment, education, health-care or social agencies. Elective for advanced level junior and senior Communications Media majors with approval of the department.

---

## COUNSELOR EDUCATION DEPARTMENT

---

**GEORGE L. SPINELLI, CHAIRPERSON: CULP, SAYLOR, PESCI, WASHBURN, WILSON, WORZBYT.**

The courses listed below are available, as electives and as offered, to undergraduate students in Education, in-service teachers, and other school personnel seeking a broad understanding of helping roles in a school program of guidance services. These courses are not designed for those who would aspire to become school counselors. For more information on counselor education programs see the current Graduate School Bulletin.

---

### COURSE DESCRIPTIONS

---

**CE 251 FUNDAMENTALS OF GUIDANCE** 3 s.h.  
An elective for upper level undergraduate students in Education and aims to provide a broad understanding of the role of the classroom teacher in a school guidance program.

**CE 252 GUIDANCE IN SCHOOL SETTINGS** 3 s.h.  
A survey course in guidance designed as an elective for in-service teachers and school personnel other than counselors.

**CE 253 COUNSELING IN SCHOOL SETTINGS** 3 s.h.  
An elective course designed to provide in-service teachers and school personnel, other than counselors, a basic understanding of the knowledge, information, and skills appropriate to counseling with individuals and groups.

---

## EDUCATIONAL PSYCHOLOGY DEPARTMENT

---

**BRUCE A. MEADOWCROFT, CHAIRPERSON: ANGELONI, CUTLER, DeFABO, HELMRICH, HOELLEIN, LEVENTRY, MAHLER, QUIRK, YANUZZI.**

The department services undergraduate and graduate students. Undergraduate students may declare a Minor in Educational Psychology by making application to the department chairperson. Eighteen semester hours from the courses described below are required for the minor.

The department also offers the M.Ed. with emphasis in Educational Psychology, School Psychology, Home School Visitor, and Research. There is also an M.A. in Adult/Community Education and a post-master's certification in School Psychology. Refer to the current Graduate School catalog for details.

---

### COURSE DESCRIPTIONS

---

#### Professional Education Courses

**EP 302 EDUCATIONAL PSYCHOLOGY** 3 s.h.  
Prerequisite: PC 101  
(Required of all Education majors — it is recommended that this course be taken immediately prior to the student teaching experience.)  
Designed to promote better understanding of principles of psychology governing human

behavior, with particular emphasis on their relation to learner, learning process, and learning situation in an educational environment.

**EP 320 INTRODUCTION TO COMMUNITY EDUCATION** 3 s.h.  
An historic, current, and prognostic overview of public education, other than the traditional K-12. Course content will include organization, and administration, program and staff development.

**EP 377 EDUCATIONAL TESTS AND MEASUREMENTS** 3 s.h.  
Prerequisite: PC 101  
(Recommended that this course be taken immediately prior to student teaching experience.)  
Designed to acquaint students with major methods and techniques of evaluation used to assess and report growth, development, and academic achievement of individuals in an educational environment. Includes interpretation of standardized test information and basic research techniques.

### **General Electives for Instructional II Certification**

**EP 372 PSYCHOLOGY OF CHILDHOOD EDUCATION** 3 s.h.  
Prerequisite: EP 302  
Emphasizes relationship which physical, social, emotional, and intellectual development have on theory and practice of childhood education.

**EP 373 PSYCHOLOGY OF ADOLESCENT EDUCATION** 3 s.h.  
Prerequisite: EP 302  
Study of significant characteristics, behavior, and educational and social problems of adolescents.

**EP 376 BEHAVIOR PROBLEMS** 3 s.h.  
Prerequisite: EP 302  
Examination of emotional and social aspects of behavior problems encountered in classroom situations and potential remedial techniques.

**EP 378 LEARNING** 3 s.h.  
Prerequisite: EP 302  
Explores learning theories and educational application in the classroom.

**EP 380 PUPIL ADJUSTMENT** 3 s.h.  
Prerequisite: EP 302  
Considers human adjustment and mental health in relation to causative factors and explores dynamics of personal and interpersonal relationships.

**EP 383 EDUCATION OF THE DISADVANTAGED STUDENT** 3 s.h.  
Prerequisite: EP 302  
Acquisition of necessary understandings of physiological, psychological, and social implications relevant to working with and teaching disadvantaged student.

**EP 384 FIELD EXPERIENCE** 3 s.h.  
Prerequisite: EP 302  
Provides student with tutorial experience in the public schools with professional supervision.

**EP 385 HUMANIZING THE CLASSROOM** 3 s.h.  
An experimental course concerned with human-relations-skills training with particular emphasis on group process, non-verbal communication, listening, and responding skills. The focus of this course is primarily on the translation of these skills into effecting productive classroom environments in educational settings.

**EP 387 CHILDREN AND THE LAW** 3 s.h.  
A course designed to promote a better understanding of our legal system as it affects children

within the family and in specific settings including schools, juvenile courts, state institutions, and community agencies.

EP 388 INTERPERSONAL EFFECTIVENESS AND COMMUNICATION SKILLS 3 s.h.

This is a course devoted to increasing professional effectiveness and improving communication skills within educational, business, and industrial settings. Course content includes analysis of nonverbal behaviors, active listening, rational self-analysis and assertion skills.

EP 481 SPECIAL TOPICS IN EDUCATIONAL PSYCHOLOGY 3 s.h.

Prerequisite: Department Chairperson permission.

Provides opportunity for students to investigate in depth an area of Educational Psychology under professional supervision.

EP 499 INDEPENDENT STUDY 1-3 s.h.

## **ELEMENTARY EDUCATION DEPARTMENT**

---

**DONALD C. McFEELY, CHAIRPERSON: BARTHA, A. DAVIS, B. DAVIS, De-CICCO, DORSEY, ELLIOTT, JALONGO, KING, KUHNS, MILLWARD, MOTT, REILLY, RIZZO, STUART, WILLIAMS.**

Requirements for a degree in Elementary Education, in addition to the University's General Education requirements and 24 semester hours in Professional Education, are 33 semester hours in Elementary Education. Students may select a concentration in one of the following academic areas: early childhood education, English, French, geography, German, history, mathematics, science, social studies, or Spanish.

## **COURSE DESCRIPTIONS**

---

### **Required Courses in Elementary Education**

EL 211 MUSIC FOR THE ELEMENTARY GRADES 2 s.h.

Geared for elementary education students. Includes basic ideas for understanding, development, and confidence for future classroom teachers and their pupils in areas of music education.

EL 213 ART FOR THE ELEMENTARY GRADES 2 s.h.

The creative use of art materials and an understanding of development of capacities of children through art.

EL 215 CHILD DEVELOPMENT 3 s.h.

Survey of human development, from conception to adolescence, in terms of basic scientific data. Development, growth, and behavior studied and their implications for home, school, and community considered.

EL 221 CHILDREN'S LITERATURE 3 s.h.

Acquisition of a wide acquaintance with children's literature, old and new. Poetry selections, annotated stories, and bibliographies will be assembled. Ways and means to develop, stimulate, and guide children's reading of literature presented. Principles and techniques of successful storytelling studied and practiced.

EL 222 TEACHING OF READING I 3 s.h.

Systematic coverage of teaching of reading, including methods, techniques and materials. First of a two course sequence.

EL 312 TEACHING OF ELEMENTARY SCIENCE 3 s.h.  
 Emphasis placed upon science as it relates to child and curriculum, planning for teaching science, and recent innovations in science teaching. Course offered on the block only.

EL 313 TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL 3 s.h.  
 Prerequisites: MA 160 and MA 250.

Recent developments in curriculum and methods of instruction of contemporary elementary school mathematics programs. Students will become acquainted with books, materials and other resources helpful to prospective teachers. Includes observations of master teachers.

EL 314 TEACHING OF HEALTH AND PHYSICAL EDUCATION 2 s.h.

Games, stunts, rhythms, relays, tumbling, dances, and skills suitable for elementary school child. Teaching of health in elementary school is emphasized, including methods, materials and lesson planning.

EL 322 TEACHING OF READING II 3 s.h.

Second course of a two-sequence course. Systematic coverage of teaching of reading, including method.

EL 411 TEACHING OF SOCIAL STUDIES 3 s.h.

Overview of social studies in elementary school. Includes study of objectives, trends, areas of content, patterns and principles of organization and techniques of teaching. Variety of learning experiences and materials used and evaluated.

EL 413 TEACHING LANGUAGE ARTS 3 s.h.

Techniques for teaching, oral and written communication, spelling, handwriting, vocabulary development, listening, and linguistics for Elementary Education students. Evaluates recent trends and research.

ED 423 PROFESSIONAL PRACTICUM, INCLUDING SCHOOL LAW 3 s.h.

Series of conferences and related activities to prepare students for actual teaching experiences. Parallels student teaching experience in junior and senior year.

### **Elective Courses in Elementary Education**

EL 212 TEACHING OF MUSIC IN THE ELEMENTARY GRADES 3 s.h.

Prerequisite: EL 211.

Continuation of skills and understandings as developed in EL 211, with emphasis on methods and materials for upper grades. Additional opportunities for growth in music reading and part singing are provided. Correlation of music with other areas.

EL 214 TEACHING ART IN THE ELEMENTARY GRADES 3 s.h.

Prerequisite: EL 213.

In-depth experiences and two- or three-dimensional materials relative to art and credit for elementary school child.

EL 330 PROBLEMS IN ELEMENTARY EDUCATION 3 s.h.

Prerequisite: ED 302.

For in-service teachers and those working toward permanent certification. Formulation of solutions to problems of organization and instruction in elementary school; in-depth study of teacher-pupil-parent interrelationships.

EL 351 CREATIVE ACTIVITIES IN THE ELEMENTARY SCHOOL 3 s.h.

Provides student with a wide range of creative experiences in fields of art, crafts, music,



rhythmics, dramatics and games in elementary school. Stress is placed upon need to help children in developing their capacities for creative expression.

**EL 353 PRE-SCHOOL EDUCATION** 3 s.h.  
Principles and practices of guiding learning experiences of kindergarten student. Special attention given to observations, kindergarten program and its curriculum, materials, and methods of instruction.

**EL 355 GUIDANCE IN THE ELEMENTARY SCHOOL** 3 s.h.  
Study and discussion center about child himself — his characteristics, needs, problems, materials, and relationship with others — and around techniques and procedures for identifying, studying, and giving help to children.

**EL 422 DIAGNOSTIC AND REMEDIAL READING** 3 s.h.  
Causes of reading disability; methods of diagnosis; procedures and materials for remedial work, group and individual.

**EL 452 SOCIAL STUDIES IN THE PRIMARY GRADES** 3 s.h.  
Prerequisite: EL 411.  
Examination of content, objectives and resource materials for social studies in kindergarten through third grade. Research problems examined and representative units developed.

**EL 461 ORGANIZATION OF THE ELEMENTARY SCHOOL AND ITS CURRICULUM** 3 s.h.  
Study of organization of elementary school from standpoint of curriculum design and development. Role of teacher as it relates to evaluation, improvement, and development of elementary school curriculum. Designed for those who have completed student teaching or are postgraduates.

**EL 462 INNOVATIONS IN ELEMENTARY EDUCATION** 3 s.h.  
Study of innovations which influence and direct educational objectives of modern elementary school and its organization. Educational innovations dealing with curriculum, school organization, and materials of instruction. Designed for those who have completed student teaching or are postgraduates.

**EL 463 WORKSHOP IN ELEMENTARY TEACHING** 3 s.h.  
Prerequisite: At least one student teaching experience.  
Designed for in-service teachers and those who are preparing to work with elementary school children, including elementary education majors who have had at least one student teaching experience. Course provides for investigation of subject matter, materials, methods and procedures used in modern elementary classroom. Emphasis placed upon observation and participation in programs currently being demonstrated in the University School.

**ED 408 READING IN THE CONTENT AREAS** 3 s.h.  
Problems related to teaching students reading and study skills specifically needed in each of the subject areas at the elementary level. Content teachers learn how to develop student's competence in these skills as part of their regular classroom instruction.

**ED 410 THE TEACHING OF READING IN THE SECONDARY SCHOOL** 3 s.h.  
Specific guidelines and techniques for developing reading skills in each of the content areas as well as guidelines for the organization of secondary reading programs.

### **Graduate Programs**

Programs leading to the M.Ed. and Ed.D degrees are described in the current issue of the Graduate School Bulletin. Internships and assistantships are available.

## **FOUNDATIONS OF EDUCATION DEPARTMENT**

---

**ROBERT H. SAYLOR, CHAIRPERSON: CHU, MERRYMAN, PENTA, ROTIGEL, THIBADEAU, YOUCIS.**

### **COURSE DESCRIPTIONS**

---

#### **Professional Education Courses**

**FE 302 HISTORY AND PHILOSOPHY OF EDUCATION** 3 s.h.

Provides an introduction to some of the major traditional and contemporary philosophic concepts which have played a role in the formation of educational policies and practices. Emphasis on relationship between educational theory and practice in such areas as: the role of the school in society, curricular content, teaching and learning methodology, educational goals, and professionalism.

**FE 433 SCHOOL LAW** 1 s.h.

Introduction to legal framework within which the school operates. Includes study of both federal and Pennsylvania law which influences the conduct of the school.

#### **Electives (Open to Juniors and Seniors)**

**FE 414 COMPARATIVE EDUCATION (DUAL LEVEL)** 3 s.h.

Analysis, evaluation, and especially comparison of educational purposes, curriculum, and methods in some western European nations, some developing nations in Africa, Asia and Latin America, and some communist nations including U.S.S.R. and P.R.C. The educational theories and practices in the United States will be compared with those in other lands. Designed to develop insight into new ideas and practices in American schools.

**FE 415 CURRICULUM DEVELOPMENT (Dual Level)** 3 s.h.

Analysis of philosophical, sociological, and psychological basis for creation of curricular patterns, K-14. Includes utilization of technological devices, critical examination of basic concepts underlying determination of objectives, selection and organization of subject matter and of learning experiences in general. Current curriculum research will be analyzed, as will existing instructional materials and programs.

**FE 454 PUBLIC SCHOOL ADMINISTRATION** 3 s.h.

Study of development of public school administration; current organizational patterns for public education at the local, county, state, and national levels; and the impact of administration upon the total educational program.

**FE 456 ISSUES AND TRENDS IN EDUCATION** 3 s.h.

Critical analysis of issues and trends in education with emphasis on philosophical and social dimensions of topics covered. Attention to work of some major contemporary critics of education.

**FE 495 INTERNATIONAL EDUCATION STUDIES PROGRAM (Dual Level)** 3 s.h.

Affords educators and students opportunity to investigate school systems in cultural settings other than their own. Particular attention to such issues as curriculum, teaching and learning process, teacher education, and the changing cultural patterns and value system impacting upon education. Travel-seminar with educators, teachers, students, and parents in a foreign country. On-site visitation to selected schools and social and cultural institutions.

#### **Urban Education Sequence**

**FE 440 ORIENTATION TO TEACHING IN URBAN CENTERS** 3 s.h.

Provides students an understanding of learners and their unique learning needs and conditions. Emphasis on understanding the origin of attitudes and values and how these affect the relationships which exist between students and teachers. Special attention to practical application of theoretical information to problems of urban education. Field trips and guest speakers will be emphasized.

**FE 441 FIELD EXPERIENCES IN URBAN CENTERS**

6 s.h.

Prerequisite: FE 440.

Provides specialized experience for students desiring to teach in inner-city schools. Aspects to be emphasized include physical characteristics of community, background and aspirations of children and youth, and specialized teacher competencies; classroom management, planning, instructional materials, teaching strategies, and evaluations. Records of comprehensive experiences in urban areas will be considered in making field experience assignments. Schools selected for student experience will be located in Pittsburgh.

**FE 442 INTERPRETING URBAN FIELD EXPERIENCES**

3 s.h.

Prerequisites: FE 440 and FE 441.

Evaluation of learning and behavior problems encountered during field experience in urban schools. Flexible approach stressed to encourage wide range of investigation and exploration of psychological and sociological problems as they effect education. Supervision and guidance for investigating specific problems provided by specialists from psychology, sociology, and education who will function as resource personnel, providing direction enabling students to combine experiences gained by teaching in urban schools with recent and pertinent theoretical information.

Graduate courses offered by this Department include Comparative, Historical, Philosophical, and Social Foundations of Education; Curriculum Development; Professional Negotiations in Education; and International Education Studies Program. For specific information concerning these courses, see the current edition of the Graduate School Catalog.

---

## **SPECIAL EDUCATION AND CLINICAL SERVICES**

---

**EUGENE F. SCANLON, CHAIRPERSON: M. BAHN, W. BAHN, BENCH, BORMANN, CHAPMAN, FELIX, FIDDLER, FLAMM, MEASE, MORRIS, NEWELL, REBER, SHANE, TURTON, VICKERS, YAGEL**

This department offers the degree of Bachelor of Science in Education in any one of four options for students whose major interest is work with exceptional children and/or adults. Each of the four options follows a prescribed sequence of courses. Students may elect to major in any one of the following fields of exceptionality:

- A. Education of Exceptional
- B. Speech Pathology and Audiology
- C. Rehabilitation Education
- D. Education of Hearing Impaired

The following grade policy was adopted by the Department of Special Education on December 14, 1977 and was made effective as of that date. The policy effects students in the programs: Education of Exceptional, Speech and Hearing, Rehabilitation, and Education of Hearing Impaired.

1. No more than one "D" grade, and no "F" grades in major courses will be accepted toward graduation and certification, except for the following courses where a student must earn a C grade or higher.
  1. SH 122 - Phonetics
  2. Clinics I and II
  3. Student Teaching
  4. Field Training
  5. Curriculum & Methods for Mentally and/or Physically Handicapped
  6. Total Communication

2. A student may appeal this policy to a program appeal committee.

## **A. EDUCATION OF EXCEPTIONAL**

---

Completion of the sequence of study in the Education of Exceptional leads to Pennsylvania Dept. of Education comprehensive certification as a teacher of the mentally and/or physically handicapped. Students will be prepared to teach mentally retarded, physically handicapped, emotionally and/or learning disabled, neurologically impaired. This program also provides an opportunity for students to seek career opportunities in the areas of welfare, mental health, and with private agencies. Student teaching experiences are provided with the mentally retarded and one of the other handicaps. The program also provides a foundation for pursuing additional work at the graduate level. Further specialized training in mental retardation offers opportunities for qualified persons in administration, supervision, vocational rehabilitation and related fields.

In addition to fulfilling the General Education requirements established by the University and the Professional Education requirements set by the School of Education, students are obligated to complete 40 additional semester hours in the specialized field and its related areas, as follows:

### **Required Basic Courses**

EX 215 Child Development	3 s.h.
EX 220 Introduction to Exceptional Children	3 s.h.
EX 301 Reading and Language Arts for Mentally and/or Physically Handicapped	3 s.h.
EX 320 Psychology of Mentally and/or Physically Handicapped	3 s.h.
EX 411 Health, Physical Education & Recreation for the Exceptional	3 s.h.
EX 422 Orientation to the Physically Handicapped	3 s.h.
EX 423 Curriculum & Methods for the Mentally and/or Physically Handicapped	3 s.h.
EX 453 Directed Activities I	1 s.h.
EX 446 Teaching Trainable	3 s.h.
EX 465 Education of Children with Social/Emotional Maladjustment	3 s.h.
EX 466 Education of Children with Learning Disabled	3 s.h.

### **Required Related Courses**

SH 254 Classroom Management of Language Disorders	3 s.h.
AT 330 Arts & Crafts for the Mentally and/or Physically Handicapped	3 s.h.
OR	
MU 211 Music for Mentally and/or Physically Handicapped	3 s.h.
EX 313 Teaching Math	3 s.h.
EL 222 Teaching of Reading	3 s.h.

**Electives**

Recommended electives to be determined by need and interest.

**COURSE DESCRIPTIONS****Required Basic Courses in Education of Exceptional**

- EX 215 CHILD DEVELOPMENT** 3 s.h.  
Childhood foundations of human growth and development. Research from various disciplines is studied in terms of understanding physical, mental, social and emotional factors and how these interrelate throughout childhood development.
- EX 220 INTRODUCTION TO EXCEPTIONAL CHILDREN** 3 s.h.  
Surveys characteristics, needs, problems, and behavior patterns of children who deviate sufficiently from "normal" to be considered exceptional. Consideration given to those who fall intellectually both above and below average; those who are handicapped visually, acoustically, behaviorally, orthopedically, neurologically or in respect to speech patterns.
- EX 301 READING AND OTHER LANGUAGE ARTS FOR THE MENTALLY AND/OR PHYSICALLY HANDICAPPED** 3 s.h.  
Prerequisites: EL 222; EX 220; EX 320 and SH 254  
Deals with preparation and execution of units of instruction in language arts for mentally and physically handicapped. Emphasis on consideration of special characteristics of those so handicapped when language arts units of instruction are planned. Diagnostic and clinic teaching are emphasized.
- EX 320 PSYCHOLOGY OF THE MENTALLY AND/OR PHYSICALLY HANDICAPPED** 3 s.h.  
Prerequisite: EX 220  
Considers ways in which mentally and/or physically handicapped develop, learn, and adapt to various home, school, community, and sheltered settings. The handicapped as living and adjusting individuals who respond to many kinds of personal and social situations and cope successfully are shown. Psychological aspects of handicapping condition are investigated.
- EX 411 HEALTH, PHYSICAL EDUCATION AND RECREATION FOR THE EXCEPTIONAL** 3 s.h.  
Prerequisite: EX 220  
Provides a thorough understanding of a program of health, physical education and recreation as it applies to individuals with mental and physical handicaps from preschool through adulthood. Special attention given to needs of individuals with development problems.
- EX 422 ORIENTATION TO THE PHYSICALLY HANDICAPPED** 3 s.h.  
This course will be concerned with the medical aspects of orthopedically handicapped, and the relationship to the education, social, and emotional development of the child. Adaptation of materials, equipment and facilities will also be discussed. The rationalization for placement in special schools, special classes, and enrollment in regular classes will be included in course content.
- EX 423 CURRICULUM AND METHODS FOR THE MENTALLY AND/OR PHYSICALLY HANDICAPPED** 3 s.h.  
Prerequisites: Senior status and permission of Department  
Considers the basic content and methods for teaching mentally and/or physically handicapped. Emphasizes organization of curriculum in fundamentals and in social and pre-vocational skills for daily living and offers opportunities for exploring resource materials used for instruction at elementary and secondary levels. Special emphasis is placed on the diagnostic process and individualization of instruction.
- EX 446 TEACHING THE TRAINABLE, MENTALLY RETARDED** 3 s.h.  
Prerequisite: Junior and Senior majors

Provides for analysis of curriculum and program content for TMR children and adults. Directed toward training students to teach the trainable retarded and/or profoundly retarded in public schools, institutional facilities, or sheltered workshops.

EX 453 DIRECTED ACTIVITIES I 1-3 s.h.

Prerequisite: EX 220 and by arrangement

Provides for opportunities to observe mentally and/or physically handicapped in one or more of a variety of settings. Provides opportunity for the student to confirm his/her interest in the field of special education. Offered only to freshmen, first semester sophomores, and to qualified transfer students.

EX 465 EDUCATION OF THE SOCIALLY AND EMOTIONALLY MALADJUSTED 3 s.h.

Prerequisites: EX 215, EX 220, and EX 320

Provides for an understanding of the psychological and educational characteristics of those who are socially and/or emotionally disturbed. Special consideration is given to relationship between social and emotional disturbance and other areas of exceptionality.

EX 466 EDUCATION OF CHILDREN WITH LEARNING DISABILITIES 3 s.h.

Prerequisites: EX 220, EX 215, and EX 320

Discuss theories and practices concerning rudiments of diagnosis and remediation of learning disabilities; study of disorders of reading, writing, listening, expressive language, and psychomotor activities.

### Required Courses in Related Areas

SH 254 CLASSROOM MANAGEMENT OF LANGUAGE DISORDERS 3 s.h.  
(See course description under Speech Pathology and Audiology)

AT 330 ARTS AND CRAFTS FOR THE MENTALLY AND/OR PHYSICALLY HANDICAPPED 3 s.h.  
(See course description in Art Dept.)

OR

MU 211 MUSIC FOR MENTALLY AND/OR PHYSICALLY HANDICAPPED 3 s.h.  
(See course description in Music Dept.)

EX 313 TEACHING OF MATH 3 s.h.  
(See course description in Math Education)

EL 222 TEACHING OF READING 3 s.h.  
(See description in EL ED section of catalogue)

## **B. SPEECH PATHOLOGY AND AUDIOLOGY**

Completion of the sequence of courses in Speech Pathology and Audiology leads to a Pennsylvania Department of Education Teaching Certificate to act as a Speech Correctionist. The program also emphasizes preparation for graduate training since many work environments conform to the nationally accepted standards mandating a Master's Degree for employment. Students learn the basic skills to work with individuals exhibiting speech, hearing or language disorders of communication, and completion of training leads to pursuit of careers as Speech Clinicians in early childhood education programs, welfare programs, public health facilities, and rehabilitation settings.

The University Speech and Hearing Clinic serves as a laboratory for required clinical

practice, and a semester of student participation in an established speech and hearing program meets the student teaching requirement.

In addition to fulfilling the General Education requirements established by the University and the Professional Education requirements set by the School of Education, students are obligated to complete 40 additional semester hours in the specialized field and its related areas. An option allows substitution of MA 217, Probability and Statistics (see listing under Math Dept.) for EP 302, Educational Tests and Measurements, in the Professional Education sequence.

### Required Basic Courses

SH 111 Fundamentals of Speech and Hearing	3 s.h.
SH 122 Phonetics	3 s.h.
SH 222 Introduction to Audiology	3 s.h.
SH 232 Speech Pathology	3 s.h.
SH 242 Bases of Oral Communication	3 s.h.
SH 251 Anatomy and Physiology of the Speech and Hearing Mechanism	3 s.h.
SH 302 Language Development	3 s.h.
SH 310 Speech Clinic I	1-3 s.h.
	(1 recommended)
SH 311 Aural Rehabilitation	3 s.h.
SH 312 Organization and Administration of Speech and Hearing Programs (also counts as Methods Course in Professional Education Requirements)	3 s.h.
SH 320 Speech Clinic II	1-3 s.h.
	(3 recommended)
SH 321 Development of Language	3 s.h.

### Required Courses in Related Areas

EX 220 Introduction to Exceptional Children	3 s.h.
EX 362 Psych of Reading in Language Processing	3 s.h.
	OR
EX 222 Teaching of Reading	3 s.h.

### Recommended Electives (one required)

EX 215 Child Development	3 s.h.
EL 215 Child Development	3 s.h.
PC 300 Psychology of Adjustment	3 s.h.
EX 320 Psychology of Mentally and/or Physically Handicapped	3 s.h.
EN 333 Trends in Linguistics	3 s.h.
SH 330 Speech Clinic III	1-3 s.h.

## COURSE DESCRIPTIONS

---

### Required Basic Courses in Speech Pathology and Audiology

- SH 111 FUNDAMENTALS OF SPEECH AND HEARING 3 s.h.  
 (Prerequisite for all other required courses in the division except Phonetics.)  
 Introduction to study of physiological, acoustical, and scientific processes involved in production and reception of speech. The genetic development of speech sounds, and factors that hinder or facilitate speech and language acquisition.
- SH 122 PHONETICS 3 s.h.  
 Detailed study of phonemes of American-English speech from a physical and acoustical point of view. Development of proficiency in use of international Phonetic Alphabet for transcription and translation of speech sounds.
- SH 222 INTRODUCTION TO AUDIOLOGY 3 s.h.  
 The auditory function, anatomy of auditory mechanism, psychophysics of sound, types and causes of hearing loss, measurement of hearing, and educational considerations for hearing handicapped child.
- SH 232 SPEECH PATHOLOGY 3 s.h.  
 Basic orientation to speech disorders, their prevalence, symptoms, causes and treatment. Disorders of articulation and rhythm emphasized, with some consideration given to voice problems, cleft palate, cerebral palsy and defects of symbolization.
- SH 242 BASES OF ORAL COMMUNICATION 3 s.h.  
 Study of communication process with emphasis on physical characteristics of sound production, transmission and perception of the sound, and the involvement and use of symbols for meaningful communication. The scientific principles of normal oral communication stressed, and language learning recognized as basis for oral communication.
- SH 251 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISM 3 s.h.  
 Consideration of genetic development, structure, and function of organs of speech and hearing. Anatomical systems involved in respiration, phonation, articulation, and hearing, and relationships between systems in production and reception of speech.
- SH 302 LANGUAGE DEVELOPMENT 3 s.h.  
 Study of development of an interpersonal communication system; language as a system of symbols for communication; the structure of the English language, including phonology, syntax, and semantics with emphasis on the generative evolution of sentences. Highlighting of neurological, social and psychological bases of language development.
- SH 310 SPEECH CLINIC I 1-3 s.h.  
 Prerequisite: Approval by adviser 1 s.h. recommended  
 Orientation to theory and techniques of speech and hearing therapy as applied to specific clients. Introduction to lesson planning and writing of case histories and reports. Observation of clients and limited participation with clients.
- SH 311 AURAL REHABILITATION 3 s.h.  
 Consideration of effects of varied degrees of hearing loss sustained by individuals at different stages of development and study of total education and rehabilitative procedures for hard-of-hearing child or adult. Application of technique of teaching the hard-of-hearing to persons presenting language problems of other etiologies.
- SH 312 ORGANIZATION AND ADMINISTRATION OF SPEECH AND HEARING PROGRAMS 3 s.h.  
 (Meets requirement for Professional Education Course)



Establishment and maintenance of speech and hearing programs within various administrative organizations, particularly in the public schools. Techniques of client identification, scheduling, record keeping, appropriate referral, material and equipment selection, teacher and parental counseling, and the development of coordinated professional and inter-disciplinary procedures.

SH 320 SPEECH CLINIC II 1-3 s.h.

Prerequisite: SH 310 3 s.h. recommended

Experience in working with individuals or groups of persons who exhibit speech or hearing problems. Lesson planning, writing of reports, and case histories of a detailed nature.

### Required Courses in Related Areas

EX 220 INTRODUCTION TO EXCEPTIONAL CHILDREN 3 s.h.

(See course description under Education of Exceptional Children)

OR

EX 362 PSYCHOLOGY OF READING IN LANGUAGE PROCESSING 3 s.h.

Objectives, background knowledge, and understandings of developmental reading process, an over-view of elementary program, pre-adolescent and adolescent and their needs in reading, finding and providing for instructional needs, and special problems.

### Recommended Electives

EX 215 CHILD DEVELOPMENT 3 s.h.

(See course description under Education of Exceptional Children)

OR

EL 215 CHILD DEVELOPMENT 3 s.h.

(See course description under Elementary Education)

PC 300 THE PSYCHOLOGY OF ADJUSTMENT 3 s.h.

(See course description under Psychology Department)

EX 320 PSYCHOLOGY OF MENTALLY/PHYSICAL HANDICAPPED 3 s.h.

(See course description under Education of Exceptional Children)

EN 331 TRENDS IN LINGUISTICS 3 s.h.

(See course description under English Department)

SH 330 SPEECH CLINIC III 1-2-3 s.h.

Experience, of an independent nature, in working with individuals or groups of persons who exhibit speech or hearing problems. Offered for those who specifically desire or need practicum experience in addition to Speech Clinic II.

### Dual Level Courses (open to upper level majors with permission of instructor)

SH 410 ARTICULATION 3 s.h.

Comparative evaluation of traditional, sensory-motor and linguistic, theories of speech production with major emphasis on functioning of articulatory mechanism; etiology, symptomatology, and diagnosis of articulatory disorders of functional, organic, or neurological origin with appropriate methods of remediation adapted to either group or individual use. Critical review of selected topics of research.

SH 412 CLEFT PALATE 3 s.h.

Study of over-all problems associated with phenomenon of cleft lip and palate with special emphasis in areas of speech, hearing, and language. Included in scope will be human embryology, with specific emphasis on oral facial development; physical remediation, including both surgical and prosthetic repair; effects of clefts on structure and function of speech and hearing mechanism; role of speech correctionist on cleft palate team; evaluation and current remedial procedures for speech, hearing, and language problems.

**SH 416 STUTTERING**

3 s.h.

Intensive study of nature and causes of stuttering. Considerable emphasis on diagnoses and management. Counseling and learning theory applications as two main approaches to treatment. Consideration of the person as a stutterer. Review of pertinent and recent research topics.

**SH 418 VOICE**

3 s.h.

Advanced study of scientific principles of voice production emphasizing malfunctioning, structural abnormalities, deviant innervation, and pathologies which relate to voice defects; identification, diagnosis, and therapeutic considerations of remediation for various voice problems and relationship between voice disorders and disorders of personality. Special treatment given to treatment of laryngectomized.

**SH 430 LANGUAGE DISORDERS OF CHILDREN**

3 s.h.

A highlighting of current research regarding normal acquisition and development of language with special consideration of factors related to language delay. Emphasis on various approaches in identification and differential diagnosis of language disorders and principles and techniques of remediation, including Association Method as developed with children labeled aphasic.

**Courses for Non-Majors****SH 254 CLASSROOM MANAGEMENT OF LANGUAGE DISORDERS**

3 s.h.

Study of aspects of speech, language, and hearing problems pertaining to classroom situation. Types of speech and hearing disorders, conducting speech and language improvement lessons, classroom aids for the speech- and hearing-defective child, and school and community resources for these children. (Required for majors in Special Education: Mentally Retarded, and suggested for Elementary Education majors.)

**SH 354 AUDIOMETRY FOR PUBLIC SCHOOL NURSES**

3 s.h.

Intensive review of physiology of hearing; etiologies and classifications of hearing loss; use of audiometric testing equipment in schools; interpretation of audiogram; and role of nurse in public health hearing programs.

**C. REHABILITATION EDUCATION**

Completion of this program leads to the Bachelor of Science in Education with a specialization in rehabilitation. The program is designed for students seeking career opportunities with health and welfare agencies and institutions, and also provides a foundation for pursuing additional work at the graduate level.

In addition to filling the General Education requirements established by the University and the Professional Education requirements set by the School of Education, students are obligated to complete approximately 40 additional semester hours in the specialized field and its related area, excluding Field Training and Practicum, as follows:

**Required Basic Courses**

RH 220 Neurological Basis of Disability	3 s.h.
RH 311 Rehabilitation of the Blind and of the Deaf	3 s.h.
RH 312 Psychological Basis of Disability	3 s.h.
RH 321 Principles and Methods of Rehabilitation	3 s.h.
RH 322 Rehabilitation Case Study and Interpretation	3 s.h.
RH 360 Rehabilitation Counseling: Strategies	3 s.h.
RH 411 Rehabilitation of the Post-Surgical Patient	3 s.h.

RH 412 Occupational Aspects of Rehabilitation	3 s.h.
RH 421/441 Field Training in Rehabilitation	12 s.h.
RH 422 Rehabilitation Practicum	2 s.h.
RH 484 Directed Rehabilitation Activities	1 s.h.

### Required Related Courses

EX 220 Introduction to Exceptional Children	3 s.h.
EX 320 Psychology for the Mentally/Physically Hndcp.	3 s.h.
PC 357 Abnormal Psychology	3 s.h.
BI 151 Human Physiology	3 s.h.
SW 338 Introduction to Social Work	3 s.h.
MA 217 Probability and Statistics	s.h.

## COURSE DESCRIPTIONS

---

### Required Basic Courses in Rehabilitation

RH 220 NEUROLOGICAL BASIS OF DISABILITY 3 s.h.

Prerequisites: Human Physiology; Introduction to Exceptional Children

Study of brain and spinal cord with emphasis on cortical and sub-cortical mechanisms instrumental in normal motion, coordination and bodily sensation, exclusive of vision and hearing. Discussion and demonstration of conditions of cerebral palsy, poliomyelitis, traumatic paraplegias, cerebro-vascular accident, Parkinsons disease, multiple sclerosis; and rehabilitative procedures.

RH 311 REHABILITATION OF THE BLIND AND THE DEAF 3 s.h.

Prerequisites: Neurological Basis of Disability; General Psychology

Structure and function of visual and auditory systems with emphasis on the importance of seeing to mobility in environment, and on hearing to the development of human communication. Discussion of causes of visual and auditory pathologies; braille, mobility training; speech reading and amplification; and other procedures of rehabilitation.

RH 312 PSYCHOLOGICAL BASIS OF DISABILITY 3 s.h.

Prerequisites: RH 220; RH 311, or permission of instructor

Study of emotional and social responses which govern behavior and relationships of handicapped individuals and rehabilitation workers alike, with emphasis on role of disability in formation of concept of human worth.

RH 321 PRINCIPLES AND METHODS OF REHABILITATION 3 s.h.

Prerequisites: RH 220, RH 311, RH 312

Delineates the roles of members of professional disciplines of medicine, psychology, prosthetics, orthodontics, audiology, speech pathology, physical and occupational therapy in restoration of the handicapped; use of diagnostic information; significance and interpretation of medical examination; role of rehabilitation counselor in the agency.

RH 322 REHABILITATION CASE STUDY AND INTERPRETATION 3 s.h.

Prerequisites: RH 311, RH 312

Purpose and techniques of case history taking; meaning and evaluation of diagnostic information; psychological evaluation in terms of mental ability, personality, attitudes and dexterity skills; role of disabled individual's family in planning of services, referrals, and report writing.

RH 360 REHABILITATION COUNSELING: STRATEGIES 3 s.h.

Prerequisites: Permission, Rehabilitation majors only

Designed to help students develop competencies in using various counseling techniques with

handicapped persons. Various theories of counseling will be explored relative to the rehabilitation setting. It will provide basic counseling skills to upperclass Rehabilitation majors prior to field training.

**RH 411 REHABILITATION OF THE POST-SURGICAL PATIENT** 3 s.h.

Prerequisites: RH 321, RH 322

Influence of prospective surgery on human emotion and outlook; the effect of alteration or removal of body parts on personality and physical skills. Study of mastectomy; colostomy, laryngectomy; limb amputation; reconstruction of facial disfigurement; cardiovascular disease; residual capabilities.

**RH 412 OCCUPATIONAL ASPECTS OF REHABILITATION** 3 s.h.

Prerequisites: RH 322, RH 411, or permission of instructor

The realism of world of work and relationship of gainful employment to human autonomy and decision-making. Types of jobs, levels of required skills, potential capabilities of the handicapped relative to specific job responsibilities, methods of assessing potential job success; sheltered workshops.

**RH 421/441 FIELD TRAINING IN REHABILITATION** 12 s.h.

Prerequisites: RH 322, RH 411, RH 412

Emphasizes development of the student rehabilitation coordinator by working with disabled clients in a public or private agency. Writing and analysis of case reports, counseling of clients, understanding of agency responsibilities and limitations, referral, follow-up, and final evaluation of client's ability to function with various degrees of autonomy.

**RH 422 REHABILITATION PRACTICUM** 2 s.h.

Taken concurrently with RH 421 and RH 441

Discussion of current topics of interest in the field, such as state and federal legislation; new prosthetic advances, proposals of the National Rehabilitation Association; or recent techniques in working with specific disabilities.

**RH 484 DIRECTED REHABILITATION ACTIVITIES** 1 s.h.

Prerequisites: Permission, Rehabilitation majors only

Pre-field training experience working with handicapped clients in local facilities. Concrete experience will help the students integrate classroom instruction with field experiences.

**Required Courses in Related Areas**

EX 220 INTRODUCTION TO EXCEPTIONAL CHILDREN

(See course description under Education of Exceptional Children)

EX 320 PSYCHOLOGY OF THE MENTALLY AND/OR PHYSICALLY HANDICAPPED

(See course description under Education of Exceptional Children)

PC 357 ABNORMAL PSYCHOLOGY

(See course description under Psychology Dept.)

BI 151 HUMAN PHYSIOLOGY

(See course description in Biology Dept.)

SW 338 INTRODUCTION TO SOCIAL WORK

(See course description in Sociology Dept.)

MA 217 PROBABILITY AND STATISTICS

(See course description in Math Dept.)

**Recommended Electives**

Certain related courses will be recommended for individual students dependent upon interest and needs.

**Courses for Non-majors**

Students in other departments not intending to major in Special Education but who wish to improve their understanding of exceptionality may elect certain courses in Mental Retardation, Speech Pathology and Audiology, and Rehabilitation. By departmental permission.

**D. EDUCATION OF HEARING IMPAIRED**

---

Completion of the sequence of courses in Education of Hearing Impaired leads to a Bachelor of Science Degree in Education and Pennsylvania Department of Education certification as a teacher of the hearing impaired. Students are provided with the basic skills to teach in special classes for hard-of-hearing or deaf individuals.

Students enrolled in this sequence of study are prepared to assume positions as itinerant hearing therapists and classroom teachers for individuals ranging from preschoolers to adults. Work settings may include public schools, continuing education programs, and home training situations.

Practicum experiences and student teaching with hearing impaired individuals are required in a school facility or any type of formal program for the hearing impaired.

In addition to fulfilling the General Education requirements established by the University and the Professional Education requirements set by the School of Education, students are obligated to complete approximately 40 additional semester hours in the specialized field and its related areas.

**Required Basic Courses**

EH 114 Introduction to Hearing Impaired	3 s.h.
EH 243 Total Communication	2 s.h.
EH 260 General Methodology for Education of the Hearing Impaired	3 s.h.
EH 308 Speech and Language for Hearing Impaired	3 s.h.
EH 330 Hearing Practicum	2 s.h.

**Required Courses in Related Areas**

SH 222 Intro to Audio	3 s.h.
SH 242 Bases of Oral Communication	3 s.h.
SH 308 Language Development	3 s.h.
SH 311 Aural Rehabilitation	3 s.h.
EX 220 Intro to Exceptional Children	3 s.h.
EX 215 Child Development	3 s.h.
EL 222 Teaching of Reading	3 s.h.

**Recommended Electives**

Certain related courses will be recommended for individual students dependent upon interest and needs.

## **COURSE DESCRIPTIONS**

---

### **Required Basic Courses in Education of Hearing Impaired**

EH 114 INTRODUCTION TO HEARING IMPAIRED 3 s.h.

Prerequisites: Adviser permission, EH majors only

Deals with different approaches used in teaching the hearing impaired - manual language, oral language, and total communication. The historical background of each approach would be presented with its strengths and weaknesses. Criteria for the use of each approach established in light of degree of loss exhibited by the client, the age of onset, and the social and psychological implications.

EH 243 TOTAL COMMUNICATION 2 s.h.

Prerequisites: Adviser permission, EH majors only

Teaches the student to finger spell and to develop basic skill in use of a manual language (signing) so that it could be integrated simultaneously with speech to provide a means of total communication for the individual with significant communication problems. Rationale for total communication approach would be emphasized with special consideration to reasons for appropriateness of approach. Methods of teaching the "sign language" to hearing impaired and other exceptional individuals would also be included with emphasis on signing according to acceptable syntactical English structure.

EH 260 GENERAL METHODOLOGY FOR EDUCATION OF HEARING IMPAIRED 3 s.h.

Prerequisites: Adviser permission, EH majors only

Provides a systematic coverage of basic procedures for teaching content matter. Included would be methods of instruction of contemporary elementary school mathematics; science as it relates to the child and the curriculum; content, objectives, and resource materials for social studies; creative experiences, and resource materials for social studies; creative experiences in the fields of art, rhythmic, and physical education and health.

EH 308 SPEECH AND LANGUAGE FOR THE HEARING IMPAIRED 3 s.h.

Prerequisites: Adviser permission, EH majors only

Details effects of varying degrees of hearing impairment upon development of language, production of speech, and reception of speech and other sounds. Concomitant factors such as age of onset of loss, intelligence, psychological factors, and environmental issues would also be considered. Methods of evaluating speech and language performance of hearing impaired would be included, and the performance compared to the expectations according to the audiogram and other hearing test results.

EH 330 HEARING PRACTICUM 2 s.h.

Prerequisites: Adviser permission, Eh majors only

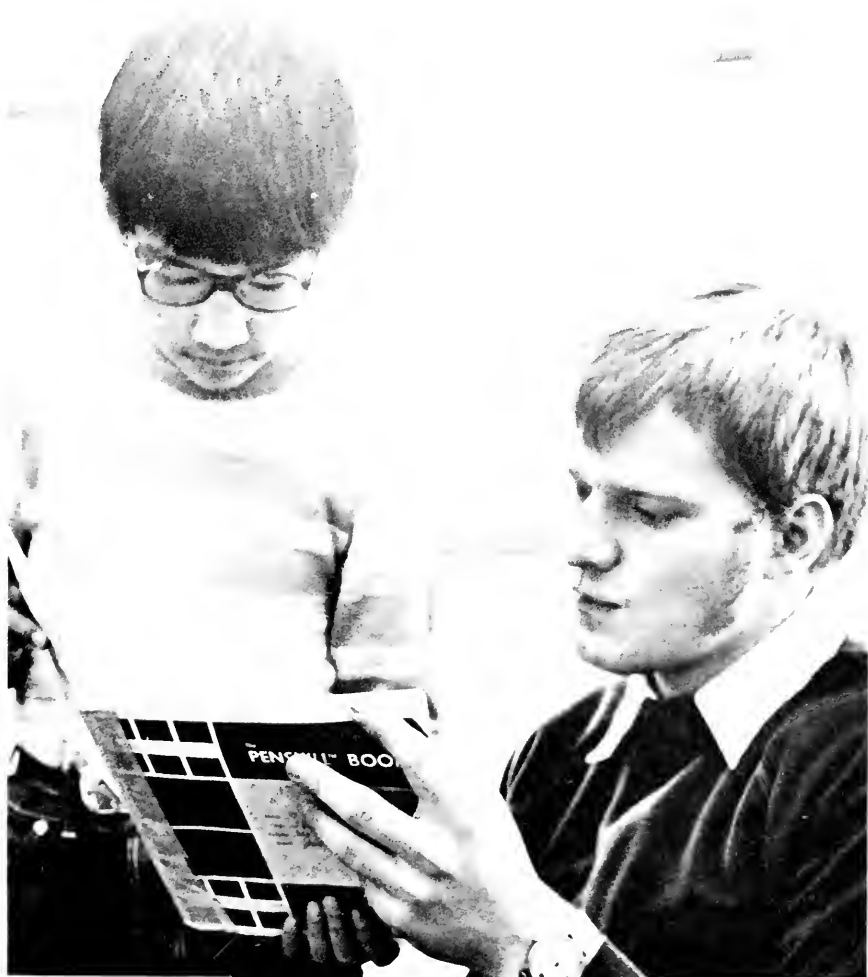
Provides students with actual contact with hearing impaired individuals. Observations will be set up in appropriate school programs for the hearing impaired, on hearing itinerant programs, or in clinical settings where hearing impaired individuals are receiving therapy or are being tested. Techniques of observing and evaluating behavior would be presented initially to prepare the student to profit maximally from the observation experiences. Written reports of the observations would be submitted and discussed, and each student encouraged to gain experience in as many different settings as available.

### **Required Courses in Related Areas**

SH 222 INTRODUCTION TO AUDIOLOGY 3 s.h.

(See course description under Speech and Hearing)

SH 242 BASES OF ORAL COMMUNICATION (See course description under Speech and Hearing)	3 s.h.
SH 308 LANGUAGE DEVELOPMENT (See course description under Speech and Hearing)	3 s.h.
SH 311 AURAL REHABILITATION (See course description under Speech and Hearing)	3 s.h.
EX 220 INTRODUCTION TO EXCEPTIONAL CHILDREN (See course description under Education of Exceptional Children)	3 s.h.
EX 215 CHILD DEVELOPMENT (See course description under Education of Exceptional Children)	3 s.h.
EL 222 TEACHING OF READING (See course description under Elementary Education)	3 s.h.







# School of Fine Arts

**J. Christopher Benz, Dean**

The School of Fine Arts has professional programs in art, music, and theater and awards the Bachelor of Arts degree. Programs leading to certification to teach are offered in cooperation with the School of Education, leading to the Bachelor of Science in Education degree. In addition the Music and Theater departments offer the Bachelor of Fine Arts degree.

A general fine arts major program is available for those students desiring to take course work in art, dance, film, music, photography, and theater. For additional information on this Bachelor of Arts program, contact the Dean of the School of Fine Arts.

There are three objectives for the School of Fine Arts: 1) to provide special academic programs for majors in the arts, 2) to offer all University students general courses in the arts and 3) to make cultural programs in the arts available to the University, the surrounding community and the local region.

There are no additional school requirements for graduation beyond the departmental and University requirements listed in other sections of this catalog.

---

## DEPARTMENT OF ART

---

**JOANNE P. LOVETTE, CHAIRPERSON: BALSIGER, BEN-ZVI, BURWELL, CLAY, DeFURIO, DONGILLA, DROPCHO, HAMILTON, INNES, JOHNSON, ROSS, RUSSELL, SEELHORST, J. SLENKER, R. SLENKER, VISLOSKY, WEILAND, WERT.**

The Department of Art provides both general and special courses in art, directed

toward the development of the student's creative and expressive abilities. Degrees offered are the Bachelor of Arts in either Art History or Art Studio, and the Bachelor of Science in Art Education. The degree in Art Education, offered in cooperation with the School of Education, provides certification for teaching art from grades K-12 in the schools of Pennsylvania.

The Department of Art offers a cooperative program with the Art Institute of Pittsburgh. Students interested in commercial art, with departmental approval, may earn credit toward their major at the Art Institute.

Each adviser within the Department of Art will be able to notify the student of courses that are required within each specialty, and to help the student become aware of options that are available through electives. Through advisement, the Department of Art helps the student to fashion the most desirable program possible to meet the individual students needs.

All art majors are obligated to fulfill the University requirements for General Education. The Department of Art expects that art majors will maintain a 2.5 average in major courses and this will be a prerequisite to the student teaching. A minor in art is available, consisting of at least 15 semester hours in art courses approved by the chairperson of the Department of Art.

## CURRICULUM

B.A. Art History		B.A. Art Studio		B.S. Art Education	
Art Core	24	Art Core	30	Art Core	30
Art History	31	Art Studio	30	Art Studio	9
General Ed.	52	General Ed.	52	Electives	6
Electives	17	Electives	12	Art Education	12
	<hr/>		<hr/>	General Ed.	52
	124		124	Prof. Education*	23
					<hr/>
					132

\*See section on School of Education for a listing of the Professional Education requirements.

### Core Program

All art majors are required by the Department to complete 24-30 semester hours of core courses including:

AR 100 Arts of the Twentieth Century	3 s.h.
AR 111 Drawing I	3 s.h.
AR 112 Fundamentals of Drawing and Design	3 s.h.
AR 113 Design I	3 s.h.
AR 211 Painting I	3 s.h.
AR 215 Sculpture I	3 s.h.
AH 413 Senior Seminar	3 s.h.

Students in the art history program must elect one additional course, while those students in the art education or art studio programs must elect three additional courses from the following:

AR 213 Crafts I	3 s.h.
AR 214 Ceramics I	3 s.h.

AR 216 Metals I	3 s.h.
AR 217 Printmaking I	3 s.h.
AR 218 Graphic Design I	3 s.h.
AR 219 Fabrics I	3 s.h.

## COURSE DESCRIPTIONS

---

### Art Education Courses

- AT 315 SEMINAR IN ART EDUCATION 3 s.h.  
A seminar to introduce the art education major to the principles and practices of teaching visual arts K through 12. Field experiences, pre-student teaching activities, introduction to literature, history, and philosophies of art education emphasized. (Prerequisite to student teaching) 3 hours lecture.
- AR 316 ART EDUCATION MATERIALS AND PRACTICUM 3 s.h.  
An art education studio which will utilize investigation and exploration of typical art materials, including sources and resources of supplies, equipment, resource personnel, and visual-media for a full range of multi-media and visual experiences. The studio endeavors will be followed by a practicum utilizing the above sources in teaching situations with children, youth, and adults. (Prerequisite to student teaching) 2 hours lecture, 1 hour lab.
- AR 317 ART EDUCATION METHODOLOGY AT THE ELEMENTARY LEVEL 3 s.h.  
Examines children's artistic development, art programs, planning, motivation, and evaluation. Weekly teaching experience is an integral part of the course. (Prerequisite to student teaching) 2 hours lecture, 1 hour lab.
- AT 318 ART EDUCATION METHODOLOGY AT THE SECONDARY LEVEL 3 s.h.  
Relationship of art education to total secondary curriculum is studied to determine goals of junior-senior high school art. The adolescent and his creative products are analyzed to help the prospective art teacher to identify himself with problems of students. (Prerequisite to student teaching) 2 hours lecture, 1 hour lab.
- AT 330 ART FOR THE MENTALLY AND PHYSICALLY HANDICAPPED 3 s.h.  
The materials and processes of arts and crafts are studied for opportunities they offer in the training, therapy, and education of students who are mentally retarded or crippled, or need special help for any reason. 2 hours lecture, 1 hour lab.

### Art History Courses

- AH 101 INTRODUCTION TO ART 3 s.h.  
Designed to introduce the student to the significance of art as related to contemporary living and our historical heritage. 3 hours lecture.
- AH 115 ANCIENT AND MEDIEVAL ART 3 s.h.  
Study of art of man from Prehistoric times to the Middle Ages. Man's artistic development is seen in light of political, social, economic, and religious events influencing him. 3 hours lecture.
- AH 116 RENAISSANCE AND BAROQUE ART 3 s.h.  
Study of art from the Renaissance to the Baroque in light of the historical events which affect man's artistic impulses and development. 3 hours lecture.
- AH 219 HISTORICAL PAINTING TECHNIQUES 3 s.h.  
The art major is encouraged to experience a series of historical painting techniques that have been used by artists of the past. Experiences will include exploration in such painting media as fresco, egg tempera, and oil. 2 hours lecture, 1 hour lab.

- AH 406/506 ANCIENT MIGRATORY ART 3 s.h.  
A survey of art from various ancient cultures which reflect contacts known and theoretic. Such cultures as the Celtic, Chinese, Indus Valley, Mesopotamian, African, Oceanic, American Indian, Pre-Columbian, and Egyptian are covered. 3 hours lecture.
- AH 407/507 MEDIEVAL ART 3 s.h.  
Art and architecture of Europe during the Middle Ages, beginning with early Christian and Byzantine art and concluding with art of Romanesque and Gothic periods. 3 hours lecture.
- AH 408/508 ITALIAN RENAISSANCE ART 3 s.h.  
Covers span of Italian art from 1400s through 1650 and Mannerist movement. Special attention paid to great masters of the period. 3 hours lecture.
- AH 409/509 BAROQUE AND ROCOCO ART 3 s.h.  
A general survey of art from 1575-1775, will include architecture, sculpture, painting, and other arts. 3 hours lecture.
- AH 411 MODERN ART 3 s.h.  
A survey of the revolutionary movements which began about 1850 and the trends within the contemporary arts are explored. 3 hours lecture.
- AH 412 CLASSICAL ART 3 s.h.  
Historical survey of the painting, sculpture, architecture, decorative, and utilitarian arts of the classical period, including the art of pre-Greek cultures (Minoan, Mycenaen, Etruscan, and Roman). 3 hours lecture.
- AH 413 SENIOR SEMINAR 3 s.h.  
Intended to help students develop adequate vocabularies and methods to be used in discussion and criticism of works of art. 3 hours lecture.
- AH 416 NORTHERN RENAISSANCE ART 3 s.h.  
Explores phenomena of art north of the Alps from 1400 to 1600, especially as it appears in the Lowlands, as well as side explorations into art of France, Germany, Austria, and the court at Prague. 3 hours lecture.
- AH 418 PRACTICUM IN SLIDE ROOM PROCEDURES 1 s.h.  
A practicum course devoted to study of slide room practices and techniques: includes organization, cataloguing, filing, mounting and labeling of slides. 2 hours lab.
- AH 419 MUSEOLOGY 3-6 s.h.  
The student will work at the cooperating museum under the supervision of the museum director. Museum techniques and practices in an on-the-job training situation will be stressed.
- AH 422/522 ART IN AMERICA 3 s.h.  
Surveys American art and its relation to the development of American ideas and ideals. 3 hours lecture.
- AH 424/524 ART OF THE EAST 3 s.h.  
The development of art in China, India, and Japan from its Neolithic origins to the traditions of later historical times. 3 hours lecture.
- AH 426/526 PRE-COLUMBIAN ART 3 s.h.  
A survey of artistic traditions of the Pacific Ocean, Pre-Columbian of Meso-America and South America and North American cultures. 3 hours lecture.

### **ART STUDIO COURSES**

All studio courses are listed as Level I or Advanced Studio. Those students who take advanced courses may do so for a minimum of three (3) semester hours and up to a maximum of eighteen (18) semester hours.

- AR 100 ARTS OF THE TWENTIETH CENTURY** 3 s.h.  
Designed to expand student response to visual, aural, and kinetic art forms of this century with special emphasis on recent decades. The course includes lecture, studio, and field experiences. 2 hours lecture, 2 hours lab.
- AR 111 DRAWING I** 3 s.h.  
A foundation course in drawing, including a study of the structure of drawing and composition with a variety of media and subject matter. 6 hours lab.
- AR 112 FUNDAMENTALS OF DRAWING AND DESIGN I** 3 s.h.  
A course which seeks to integrate basic principles and fundamentals of drawing and design. 6 hours lab.
- AR 113 DESIGN I** 3 s.h.  
Basic elements and principles of design and color are studied. Basically, a course in design in two dimensions. 6 hours lab.
- AR 211 PAINTING I** 3 s.h.  
An introductory course in painting in which a variety of materials, techniques, and approaches are explored. 6 hours lab.
- AR 213 WOODWORKING I: FUNCTION AND FORM** 3 s.h.  
Involves the study of woodworking and furniture design as it relates to the individual designer—craftsman and sculptor. Students will experience a formal background in both woodworking technique and the application of design.
- AR 214 CERAMICS I** 3 s.h.  
A general introduction to the techniques and aesthetics of clay. The student will work both at the wheel and with hand building methods. 6 hours lab.
- AR 215 SCULPTURE I** 3 s.h.  
Introductory course to sculpture with emphasis on study of form as well as visualizing in the third dimension. 6 hours lab.
- AR 216 BASIC METALS I** 3 s.h.  
Introduction to metal work with emphasis upon creation of functional and non-functional art objects. Approached from viewpoint of beginning craftsman learning basic processes of metal fabrication 6 hours lab.
- AR 217 PRINTMAKING I** 3 s.h.  
Introduction to basic techniques of production of fine prints including, work in relief, intaglio, lithograph, and serigraph processes. 6 hours lab.
- AR 218 GRAPHIC DESIGN I** 3 s.h.  
Students explore various techniques and how they can be translated into commercial art work, package design, trademark, and other design problems. Lettering is stressed, both instant type and hand lettering. 6 hours lab.
- AR 219 FABRICS I** 3 s.h.  
Provides student with introductory working knowledge in design and execution of projects in non 4/harness loom weaving, macrame, stitchery, and related fabric areas. Other fabric techniques available for students to explore as desired. 6 hours lab.
- AR 321 ADVANCED DRAWING** 3 s.h.  
Prerequisites: AR 111 & 112  
An intermediate course in drawing, designed to meet problems of the student who has some background in the field. Problems of composition, two and three dimensional relationships, and surface are on an individual basis. 6 hours lab.

AR 451 ADVANCED WOODWORKING: FUNCTION AND FORM 3 s.h.  
Offers advanced training and skills involving the study of contemporary furniture design and woodworking. Emphasis on a technical and aesthetic point of view.

AR 452 ADVANCED CERAMICS 3 s.h.  
Continued exploration of the field of ceramic production, along with kiln firing and glaze formulation. 6 hours lab.

AR 453 ADVANCED SCULPTURE 3 s.h.  
Gives student opportunity to pursue independent study in sculpture. Materials and processes will be of his choosing and the work related to his own concepts, with the hope that these concepts will be broadened. 6 hours lab.

AR 454 ADVANCED PAINTING 3 s.h.  
Individual experimentation and exploration by the painter, investigation of the various technical approaches. 6 hours lab.

AR 455 ADVANCED GRAPHIC DESIGN 3 s.h.  
Prerequisite: AR 218  
Stresses advanced techniques in layout and illustration. The student explores ideas, such as invention of trademarks and how products are created. Layouts are analyzed as to their quality. Package design is studied. 6 hours lab.

AR 457 ADVANCED PRINTMAKING 3 s.h.  
Student elects to study one of printmaking processes in greater depth and works toward development of own techniques, working processes, and ideas. 6 hours lab.

AR 459 ADVANCED FABRICS 3 s.h.  
Provides student with a working knowledge in design and execution of projects in weaving macrame, and related areas. Other fabric techniques will be available for the students to explore as desired. 6 hours lab.

AR 460 ADVANCED METALS 3 s.h.  
Design and processes associated with art of metal are given greater concentration. The developing craftsman is encouraged to investigate in depth, one or more of the metal arts as an extension of the basic courses. 6 hours lab.

AR 481 SPECIAL TOPICS 1-3 s.h.

AR 482 INDEPENDENT STUDY 1-12 s.h.

AR 485 INTERNSHIP 3-12 s.h.

### **Service Courses**

HE 213 PRINCIPLES OF DESIGN 2 s.h.  
Principles of design and color are studied and applied to a crafted object. Major emphasis on aesthetic quality inherent in designing with materials. 4 hours lab.

EL 213 ART FOR ELEMENTARY GRADES 2 s.h.  
Course basic to creative use of art materials and an understanding of development of capacities of children through art. 1 hour lecture, 2 hours lab.

## DEPARTMENT OF MUSIC

---

**RICHARD S. KNAB, CHAIRPERSON: ADAMS, BACHMANN, BECKER, BIRD, BORST, CASAVANT, CHA, DeCESARE, DiCICCO, DIETZ, FRY, GODT, HULBERT, INTILI, JOHNSON, KAUFFMAN, LLOYD, LUCHSINGER, MALITSKY, OLMSTEAD, PERKINS, D. PERLONGO, S. PERLONGO, SARTORI, STANDLEY, STAPLES, TETI, THORELL, TRIMARCHI, VOUKLIZAS, WEBER, WILDEBOOR.**

The Department of Music has a three-fold mission: (1) Professional preparation of music educators and performers, (2) general education for the University, and (3) programs of music for the community. Degrees offered include the Bachelor of Arts, Bachelor of Fine Arts and Bachelor of Science in Music Education.

Admission to the Music Department requires satisfactory completion of an audition in addition to the University general requirements. Detailed information will be sent to the applicant upon request.

A student wishing to minor in music must elect a minimum of 15 semester hours in music courses as approved by the Department Chairperson.

### CURRICULUM

---

The program leading to the Bachelor of Arts in music has been designed to give the Liberal Arts student a considerable, but not necessarily a professional, experience in music. Students will expect to gain a broad understanding of the culture in which they live, and the function of music in that culture. The student seeking this degree has the choice of four concentrations: Music History/Literature, Music Theory/Composition, Performance, and Jazz Studies.

The program leading to the Bachelor of Fine Arts in Music (equivalent to the Bachelor of Music Degree) is a flexible program with a major in one of 19 areas of performance. The student in this program prepares to pursue a career as a professional performing musician.

The program leading to the Bachelor of Science in Education with a music major leads to certification to teach in the schools of Pennsylvania.

#### Core Program

Requirements for all music majors except students in jazz studies, are: MU 115, 116, 215, 216 Theory I through IV 12 s.h.; MU 111, 112, 211, 212 Theory Skills I through IV 8 s.h.; MU 301, 302, 303 Music History I through III 9 s.h.

Requirements for Jazz Studies majors are: MU 115, 116 Theory I & II 6 s.h.; MU 111, 112 Theory Skills I & II 4 s.h.; MU 222, 223 Jazz Theory I & II 6 s.h.; MU 213, 214 Jazz Theory Skills I & II 4 s.h.; MU 201, 202 Jazz History I & II 6 s.h.; MU 303 Music History III 3 s.h.

#### Special Requirements

1. Each student must declare a primary performing medium. Those who elect voice as their primary instrument normally elect piano as a secondary instrument; those who elect piano as their primary instrument normally elect voice as their secondary instrument. Performance juries are held at the end of each semester. Students

are expected to complete the requirements for their performing area and level. Piano proficiency is required in all degree programs.

2. Ensemble participation of five hours a week is required each semester including the student's primary performing medium.
3. Students must register for MU 475 (Music Lab) and attend (1) all Department and Area recitals, and (2) ten campus recitals and concerts each semester.

## **B.A. IN MUSIC**

---

In addition to the Core Program, requirements for the Bachelor of Arts in Music (other than Jazz Studies) include 22 additional semester hours in music, of which 16 semester hours must be in the concentration selected, as follows:

Music Theory/Composition,	16 s.h.
OR Performance,	16 s.h.
OR	
Music History/Literature	16 s.h.
Music Electives	6 s.h.

In addition to the Core Program, requirements for the Bachelor of Arts in Music (Jazz Studies) include 30 additional semester hours in music as follows:

Applied Music	16 s.h.
MU 224, 225 Jazz Improvisation I & II	6 s.h.
MU 318, 319 Jazz Orchestration I & II	6 s.h.
MU 311 Fundamentals of Conducting	2 s.h.

## **B.F.A. IN MUSIC**

---

In addition to the Core Program, requirements for the Bachelor of Fine Arts in Music, which is a degree in performance, are 44 more semester hours in the following:

Applied Music (major performance medium)	32 s.h.
MU 217, 218 - Keyboard Harmony I and II	2 s.h.
Upper Division Music Electives	10 s.h.
Junior and senior recitals required in the primary instrument	

## **B.S. IN MUSIC EDUCATION**

---

Requirements for the Bachelor of Science in Music Education are as follows:

Music Education	36 s.h.
Class Brass I	1 s.h.
Class Percussion I	1 s.h.
Class Strings I	1 s.h.
Class Woodwinds I	1 s.h.
Class (or private) piano I and II	2 or 4 s.h.
Class Voice I and II	2 s.h.
Fundamentals of Conducting	2 s.h.



Applied Instruction (major instrument)	14 s.h.
Music Electives	10 or 12 s.h.

*Choral Conducting	Class Strings II
*Instrumental Conducting	Class Woodwinds II
French Diction	Music Education Electives
German Diction	Music History Elective
Italian Diction	Music Theory Electives
Class Brass II	Additional Applied Instruction
Class Percussion II	Ensembles

\*Students must elect one of these courses.

Students pursuing the Bachelor of Science in Music Education must also fulfill the 23 semester hour Professional Education requirement. See section in School of Education for a listing of these courses.

## **COURSE DESCRIPTIONS**

---

### **Service Courses**

EL 211 MUSIC FOR THE ELEMENTARY GRADES 2 s.h.  
Geared for elementary education students. Includes basic ideas for understanding, development, and confidence for future classroom teachers and their pupils in areas of music education.

- MU 101 INTRODUCTION TO MUSIC 3 s.h.  
Course presumes no technical background, but does utilize the varied musical experiences of each individual to help extend interest as far as possible. Attendance at various concerts of college organizations, cultural life events, and visiting artist concerts are required; to augment listening experiences of students.

MU 102 MUSIC FOR THE NON-MAJOR 3 s.h.  
Prerequisite: MU 101 or permission of instructor.  
A sequel to MU 101. Course content will vary to cover a wide range of musical interests.

MU 103 PERSPECTIVES IN JAZZ 3 s.h.  
Designed to give an overview of the development and contributions of jazz in the American culture and provide a background for a more intensive and detailed study of jazz for the Jazz Studies major.

### **MUSIC THEORY COMPOSITION**

MU 110 FUNDAMENTALS OF THEORY 3 s.h.  
Rudiments of musical materials; harmonic, melodic, rhythmic and basic formal procedures of the common practice period including pitch reading, interval construction, scales and modes.

MU 111 THEORY SKILLS I 2 s.h.  
Develops aural skills through dictation and interpretation of written music by sight-singing. Taken in conjunction with Theory I.

MU 112 THEORY SKILLS II 2 s.h.  
Continuing development of aural skills, introduction of keyboard skills. Taken in conjunction with Theory II.

MU 211 THEORY SKILLS III 2 s.h.  
Further development of aural and keyboard skills. Taken in conjunction with Theory III.

- MU 212 THEORY SKILLS IV** 2 s.h.  
Culmination of development in aural and keyboard skills. Taken in conjunction with Theory IV.
- MU 213 JAZZ THEORY SKILLS I** 2 s.h.  
Training in aural, vocal and keyboard skills as they relate to the elements of jazz and improvisation. A high degree of emphasis is placed on ear training and its use in the transcription of live and recorded musical examples; and on keyboard skills and its utilization in the development of an harmonic vocabulary.
- MU 214 JAZZ THEORY SKILLS II** 2 s.h.  
A continuation of work begun in Jazz Theory Skills I with emphasis on more advanced aural, vocal and keyboard skills as they relate to jazz and improvisation.
- MU 115 THEORY I** 3 s.h.
- MU 116 THEORY II** 3 s.h.
- MU 215 THEORY III** 3 s.h.  
(Three consecutive semesters.)  
Study of compositional devices of 18th and 19th centuries. Emphasis upon melodic, harmonic, rhythmic, and formal structures, with occasional reference to contrapuntal implications.
- MU 216 THEORY IV** 3 s.h.  
Prerequisites: MU 115, 116, 215.  
Study of compositional devices of latter half of 19th century and first half of 20th century.
- MU 217 KEYBOARD HARMONY I** 1 s.h.  
Prerequisite: Nominal facility at keyboard.  
Designed to develop keyboard skills so student may realize and produce in sound basic harmonic progressions.
- MU 218 KEYBOARD HARMONY II** 1 s.h.  
Prerequisite: MU 217.  
Continuation of Keyboard Harmony I, involving chromatic harmony and more complex progressions.
- MU 222 JAZZ THEORY I** 3 s.h.  
The study of the elements of music, melody, harmony, rhythm and form, as they are found in jazz improvisation. Includes an introduction to the fundamentals of jazz improvisation through aural and written analysis, composition and performance.
- MU 223 JAZZ THEORY II** 3 s.h.  
A continuation of the work begun in Jazz Theory I with emphasis on extending the harmonic, melodic and rhythmic vocabulary. Includes analysis of differing trends in jazz, imitation of a variety of styles, and the cultivation of an individualized approach to jazz analysis, composition and improvisation.
- MU 224 JAZZ IMPROVISATION TECHNIQUES I** 3 s.h.  
A study of the basic materials and practices for improvising or extemporaneous playing.
- MU 225 JAZZ IMPROVISATION TECHNIQUES II** 3 s.h.  
A continuation of the basic materials and practices for improvising or extemporaneous playing. Makes use of more complicated and involved harmonic progressions utilizing extended choral harmonies.
- MU 304 FORM AND ANALYSIS I** 2 s.h.  
Prerequisite: MU 216.  
Thorough study of smaller forms of music.

MU 305 FORM AND ANALYSIS II	2 s.h.
Prerequisite: MU 304.	
Thorough study of larger forms of music.	
MU 306 COUNTERPOINT I	2 s.h.
Prerequisite: MU 216.	
After study and analysis of style of 16th Century contrapuntal writing, student will do original writing using techniques and devices of period. As time permits, same approach will be made to explore style of 17th and 18th Century composers.	
MU 307 COUNTERPOINT II	2 s.h.
Prerequisite: MU 306.	
Continuation of study, analysis, and restricted writing of 17th and 18th Century composers. Consideration given to free contrapuntal techniques used by later composers.	
MU 308 FUGUE AND CANON	2 s.h.
Prerequisite: MU 306.	
Application of contrapuntal techniques within these two specific forms through analysis, assigned exercises, and creative writing.	
MU 309 ORCHESTRATION I	2 s.h.
Prerequisite: MU 216.	
All instruments of orchestra are studied from viewpoint of their contribution to total sound of ensemble. Ranges and timbres are considered, as well as actual arranging of selected music.	
MU 310 ORCHESTRATION II	2 s.h.
Prerequisite: MU 309.	
A continuation of Orchestration I.	
MU 315 THEORY V	3 s.h.
Prerequisite: MU 216.	
Many of harmonic idioms of past half century are considered, such as: comparative analysis of dissonance; polytonality, polyrhythms; atonalism and 12-ton system; and microtonalism. Original writing in these styles required.	
MU 318 JAZZ ORCHESTRATION AND COMPOSITION I	3 s.h.
Work in composition and arranging for instrumental ensembles from trio up to a standard jazz ensemble including reeds, brass and rhythm section. Study proceeds from harmonization of a given melody, to a study of voicing and the realization through composition for various instrumental combinations. Included is a thorough study of instruments and particularly their use in jazz as expressive vehicles for improvisation.	
MU 319 JAZZ ORCHESTRATION AND COMPOSITION II	3 s.h.
Continuation of work in MU 318. Study expands to include strings, full orchestra, band and choirs, and their utilization in jazz. More emphasis on original work in composition and arranging.	
MU 411 COMPOSITION I	2 s.h.
Prerequisite: MU 216.	
Instruction in Composition I is, of necessity, highly individualized. Compositional devices studied through analysis of works by major composers. Students will write several original compositions utilizing smaller forms.	
MU 412 COMPOSITION II	2 s.h.
Prerequisite: MU 411.	
Continuation of Composition I.	
MU 413 COMPOSITION III	2 s.h.
Prerequisite: MU 412.	
Students will write several original compositions utilizing larger forms.	

MU 414 COMPOSITION IV 2 s.h.  
Continuation of Composition III. Outstanding works will be programmed by University performing ensembles.

MU 475 MUSIC LAB 0 s.h.  
All music majors must attend 10 recitals per semester.

### **Music History and Literature**

MU 201 JAZZ HISTORY I 3 s.h.  
An in-depth study of the principal movements, schools, performers and peripheral aspects of American jazz from its origins to the Swing Era of the early 1940s.

MU 202 JAZZ HISTORY II 3 s.h.  
A continuation of the study of the principal movements, schools, performers, and peripheral aspects of American jazz from the Jazz Revolution — BeBop to Free Jazz of the 1970s.

MU 301 MUSIC HISTORY I 3 s.h.  
Intensive study of the history and style of Baroque and Classic music. Considerable analytic listening is required.

MU 302 MUSIC HISTORY II 3 s.h.  
Intensive study of the history and style of Romantic and 20th Century music to 1950. Considerable analytic listening is required.

MU 303 MUSIC HISTORY III 3 s.h.  
Intensive study of the history and style of Medieval and Renaissance music. Considerable analytic listening is required.

MU 320 MUSIC OF THE ANCIENT WORLD 3 s.h.  
Prerequisites: MU 316, 317.  
Concentrated study of music from early Greeks up to Middle Ages.

MU 321 MUSIC OF THE MIDDLE AGES 3 s.h.  
Prerequisites: MU 316, 317  
Starting with the Jongleurs, Troubadors, and Trouveres of Early Middle Ages, course deals with literature of music through English and Burgundian Schools at close of the Middle Ages.

MU 322 RENAISSANCE MUSIC 3 s.h.  
Prerequisites: MU 316, 317.  
Beginning with Ockeghem and ending with Palestrina and his contemporaries, music literature of this age is carefully and thoroughly studied.

MU 323 THE BAROQUE ERA 3 s.h.  
Prerequisites: MU 301, 302.  
Extends from Monteverdi through Bach and Handel, and considers vocal and instrumental forms, styles, and practices of era.

MU 324 EIGHTEENTH CENTURY MUSIC 3 s.h.  
Prerequisites: MU 301, 302.  
Although Mozart and Haydn comprise greater portion of 18th Century music, Rococo Period involves D. Scarlatti and C.P.E. Bach as well.

MU 325 THE EARLY ROMANTIC PERIOD 3 s.h.  
Prerequisites: MU 301, 302.  
Beethoven, Schubert, Rossini, Weber, Mendelssohn, Berlioz, Schumann, and Chopin are major composers to be studied in Early Romantic Period.

MU 326 THE LATE ROMANTIC PERIOD 3 s.h.  
Prerequisites: MU 301, 302.

Wagner, Verdi, Glinka, Bruckner, Meyerbeer, Liszt, Gounod, Brahms, Offenbach, Smetana, J. Strauss, Grieg, Bizet, Moussorgsky, Saint-Saens, Tchaikowsky, Massenet, Franck, Borodin, Rimski-Korsakoff, Wolf, R. Strauss, Mahler, Faure, Puccini, Dvorak, Mac Dowell, and Elgar are major composers of this study.

MU 351 ITALIAN/ENGLISH DICTION 2 s.h.

MU 353 FRENCH DICTION 2 s.h.

MU 354 GERMAN DICTION 2 s.h.

MU 420 CONTEMPORARY MUSIC 3 s.h.

Prerequisites: MU 301, 302.

Beginning with Debussy, Ravel and other impressionists, touching on Schoenberg, Stravinsky, Webern, Honneger, Milhaud, et. al. Contemporary Music ends with today and tomorrow. Various trends, styles, techniques are noted; judgments are attempted on more experimental forms; limited predictions of trends are ventured.

MU 421 AMERICAN MUSIC 3 s.h.

Prerequisites: MU 301, 302.

A study of history and literature of music in America from 1600 to present day.

### **Music Education**

MU 311 FUNDAMENTALS OF CONDUCTING 2 s.h.

Emphasis placed on fundamental physical skills of conducting process; various beat patterns are mastered, and elementary score reading and interpretation considered.

MU 312 CHORAL CONDUCTING 2 s.h.

Prerequisite: MU 311.

Provides opportunity for student to apply his basic conducting techniques to choral music. Each student conducts rest of class in many of standard choral works of the literature. Includes survey of suitable literature, organizational problems, voice testing, rehearsal techniques, program building, interpretation, and diction.

MU 313 INSTRUMENTAL CONDUCTING 2 s.h.

Prerequisite: MU 311.

Provides student opportunity to apply his basic conducting skills to various instrumental ensembles. Includes survey of suitable literature, organizational problems, audition procedures, rehearsal techniques, program building, and interpretation.

MU 331 ELEMENTARY METHODS 3 s.h.

Includes analytical study of texts, recordings, equipment, instruments, and other materials suitable to musical development of elementary pupils; proper treatment of child voice; selection, use, and teaching of rote songs; rhythmic activities and development; music reading; part singing; planning and organization; guided observations; and evaluation techniques.

MU 332 GUITAR AND RECREATIONAL INSTRUMENTS FOR TODAY'S CLASSROOM 2 s.h.

Designed for classroom teachers and music specialists to utilize several social instruments in the school setting. Major emphasis on learning to play the guitar accompany singing. Other fretted instruments, recorder, autoharp and Orff instruments are included.

MU 333 SECONDARY METHODS 3 s.h.

Includes General Music Class, choral organizations, changing voice, techniques of instruction, including team teaching and programmed learning, high school theory courses, high school music literature courses, scheduling, administrative problems, curriculum development, evaluation of materials and equipment, evaluative techniques, and guided observation.

- MU 334 INSTRUMENTAL METHODS** 2 s.h.  
Treats understandings, techniques, equipment, and materials necessary to develop an effective instrumental music program in public schools. Demonstrations and laboratory work designed to give student competencies needed to meet successfully various teaching situations in instrumental music from grades through high school. Guided observations required.
- MU 335 MUSIC FOR THE EXCEPTIONAL STUDENT** 3 s.h.  
Develops music education skills, techniques and materials for the emotionally, mentally, physically or neurologically handicapped student and the gifted. Designed for students in music education, special education, and elementary education.
- MU 401 CHORAL SCORE READING** 2 s.h.  
Prerequisites: MU 216, 313.
- MU 402 INSTRUMENTAL SCORE READING** 2 s.h.  
Prerequisites: MU 216, 313.
- MU 405 PIANO PEDAGOGY** 2 s.h.  
Prerequisites: Junior Standing in Piano, and a piano major or minor.  
Survey of current and significant past developments in teaching of piano, both privately and in small and large classes. The various piano methods are analyzed, compared, criticized, and adapted to each individual's use.
- MU 406 VOICE PEDAGOGY** 2 s.h.  
Prerequisites: A voice major or minor, and permission of the instructor.  
Survey of current and past development in teaching of voice, both privately and in small and large classes. The various vocal methods are analyzed, compared, criticized, and adapted to each individual's use.
- MU 407 MASTER CLASS IN ORGAN** 2 s.h.  
Prerequisites: For organ majors only, with instructor's permission.  
From time to time the organ instructor will accept from four to eight organ majors for this course. Every student observes every other student's instruction, and various techniques of teaching organ are demonstrated.
- MU 408 MARCHING BAND TECHNIQUES** 2 s.h.  
Considers building a band show; alignment of ranks and files; development of a standard pace of 5 to 5 and 8 to 5; selection of music; instrumentation; techniques of developing morale; and fundamentals of uniform design.
- ED 421 STUDENT TEACHING** 6 s.h.  
Experience in teaching music at the elementary level; coordination and visitation by a University faculty member with daily supervision by a cooperating classroom teacher.
- ED 441 STUDENT TEACHING** 6 s.h.  
Experience in teaching music at the secondary level; coordination and visitation by a University faculty member with daily supervision by a cooperating classroom teacher.
- ED 442 PROFESSIONAL PRACTICUM** 2 s.h.  
An experience which parallels the student teaching and which includes such activities as professional readings, discussions, observations and the accumulation and organization of teaching materials, along with the study of Pennsylvania School Law.
- MU 482 INDEPENDENT STUDY** 1-6 s.h.  
Opportunity to pursue special interests beyond the scope of regular class offerings. Permission of instructor and approval of department chairperson are required.
- MU 485 INTERNSHIP IN MUSIC** 1-6 s.h.  
Designed for music majors who wish to receive practical experience working with people in music or in areas related to music.

## Class Instruction

The following courses are designed to acquaint the student with basic skills in each particular area.

MU 151 Class Voice I	1 s.h.
MU 152 Class Voice II	1 s.h.
MU 153 Class Piano I	1 s.h.
MU 154 Class Piano II	1 s.h.
MU 155 Class Strings I	1 s.h.
MU 156 Class Strings II	1 s.h.
MU 157 Class Percussion I	1 s.h.
MU 158 Class Percussion II	1 s.h.
MU 159 Class Brass I	1 s.h.
MU 160 Class Brass II	1 s.h.
MU 161 Class Woodwinds I	1 s.h.
MU 162 Class Woodwinds II	1 s.h.
MU 351 Italian/English Diction	2 s.h.
MU 353 French Diction	2 s.h.
MU 354 German Diction	2 s.h.

## APPLIED MUSIC

### Private Instruction

Private instruction is available in the following performance areas:

Piano	Viola	Flute	Bassoon	Tuba
Organ	Cello	Clarinet	Trumpet	Percussion
Voice	String Bass	Oboe	Guitar	Trombone
Violin	Saxophone	French Horn	Baritone Horn	

### Ensembles

Each ensemble is elected for one semester hour.

MU 120 Brass Ensemble	MU 129 University Symphony Orchestra
MU 121 Chamber Ensembles	MU 130 String Ensemble
MU 122 University Chorale	MU 131 University Wind Ensemble
MU 123 Symphony Band	MU 132 Womens Chorus
MU 124 Glee Club	MU 133 Woodwind Ensemble
MU 125 Marching Band	MU 134 Oratorio Chorus
MU 126 Music Theater	MU 135 Jazz Ensemble
MU 127 Percussion Ensemble	
MU 128 University Chamber Orchestra	

---

## DEPARTMENT OF THEATER

---

### DONALD G. EISEN, CHAIRPERSON: BOWES, LOCKROW, MORELAND

The Department of Theater has four major missions: to train students pursuing a career in theater; to offer theater courses for all students as part of a liberal and humanistic education; to offer students an enriched educational experience by participation in theatrical production; and to enrich the cultural life of the university and the community with theatrical productions.

To fulfill these missions the Theater Department offers courses in the cultural values of theater and in more specialized technical and performance areas of pro-

duction. Students may participate in both faculty directed and student directed productions. In addition, the Theater Department offers a summer season in which students may participate by enrollment in our summer theater workshop.

The Theater Department offers a Bachelor of Arts and a Bachelor of Fine Arts degree as well as a Minor in Theater. Students may take the option of a General Fine Arts Degree (theater, music and art) through the School of Fine Arts. Those wishing to teach theater in the secondary schools may enroll in Communications Education with a concentration in Theater, which leads to a Bachelor of Science in Education and certification.

The Bachelor of Arts in Theater provides a broad, liberal education along with a major in Theater. B.A. students must complete a core program of 30 semester hours of basic theater courses in fundamentals, history, acting, directing, design and technical theater. B.A. students have 42 semester hours of free elective which, with their advisers, they may fashion into a program tailored to their individual needs and interests.

The Bachelor of Fine Arts in Theater provides intensive training in preparation for a career in theater. The B.F.A. student takes a core of 36 semester hours in basic theater courses in fundamentals, acting, directing, history, design, technical theater as well as production work. In addition, the B.F.A. student elects a 30 semester hour concentrate in any one of three areas: (a) directing/criticism, (b) performance or (c) design/technical theater. Each concentrate area is interdisciplinary, consisting of courses in related fields of dramatic literature, art, dance, music, clothing and interior design, as well as of numerous additional offerings in theater.

A minor in Theater consists of 15 semester hours in courses approved by the chairperson of the Department of Theater.

## **COURSE DESCRIPTION**

---

TH 101 INTRODUCTION TO THEATER 3 s.h.

An exploration of various theater arts, examining major periods of theater history, selected works of dramatic literature, and essential theater arts of acting, directing, design and technical theater. The goal is to make more understanding and appreciative audiences of students enrolled.

TH 110 FUNDAMENTALS OF THEATER 3 s.h.

An introductory level course for theater majors and other serious students of theater, examining the principle theater arts, including acting, directing, designing, lighting, costuming, makeup and other aspects of stagecraft and production.

TH 120 STAGECRAFT 3 s.h.

Students not only study but gain practical work experience in all aspects of backstage technical arts and crafts, including lighting, set construction, painting, etc.

TH 122 COSTUME WORKSHOP 3 s.h.

Instruction and practical experience in the process of building costumes for the stage. Activities include fitting, cutting, sewing, dyeing and painting. There is also instruction in the maintenance of wardrobe, costume stock, materials and properties.

TH 130 MOVEMENT AND PANTOMIME 3 s.h.

Extensive instruction in stage movement and pantomime as a means of developing physical acting expertise. Included will be work in improvisational pantomime, stage combat, basic commedia technique and character movement, designed to train the actor in basic bodily expression.



- TH 131 STAGE VOICE** 3 s.h.  
Develops the vocal instrument of the actor in performance. Utilizing the Lessac system, the student should, through work in articulation, intensity and tonal control, expand vocal capacity. Study in specialized or stylized language, such as Elizabethan, will also be emphasized.
- TH 201 THEATER HISTORY I** 3 s.h.  
Prerequisite: TH 101 or TH 110  
A comprehensive survey of theory and history of theater and drama from Greek Classical period through English Renaissance period.
- TH 202 THEATER HISTORY II** 3 s.h.  
(Prerequisite: TH 101 or TH 110)  
A comprehensive survey of theory and history of theater and drama from English Restoration and Continental 17th Century through Modern/Contemporary period.
- TH 220 SCENE DESIGN** 3 s.h.  
Prerequisite: TH 120  
Introduction to action-documentation approach to scene design and to conventional techniques of graphic communication (i.e.,: orthographic, isometric, and perspective projection) used by the professional designer.
- TH 221 STAGE LIGHTING** 3 s.h.  
Prerequisite: TH 120  
Covers lighting instruments, color media, control boards, physical laws of electricity and optics, graphical techniques (i.e.,: light plot, instrument schedule, hook-up chart, Q sheet) and conventional techniques used in lighting dramatic productions in a proscenium theater.
- TH 222 COSTUME DESIGN** 3 s.h.  
Covers design and execution of stage costumes with emphasis to show how mood and illusion can be created through proper selection of style, color, and texture, supplemented by an overview of stage costuming.
- TH 223 MAKE-UP FOR THE STAGE** 3 s.h.  
Deals with practical application of straight and character make-up, and may include instruction in creating beards, wigs, prosthetics, and masks.
- TH 224 STAGE PROPERTIES AND SET DECORATION** 3 s.h.  
Prerequisite: TH 120  
Briefly covers development of interior decoration design and construction of stage furniture, and theory and techniques of set dressing.
- TH 230 ACTING I** 3 s.h.  
Prerequisite: Either TH 101 or TH 110 or permission  
Investigates various major theories of acting and provides practice in short scene work.
- TH 240 DIRECTING I** 3 s.h.  
Prerequisite: Either TH 101 or TH 110 or permission  
Introduces basic skill of the director including script analysis, developing a groundplan, scheduling and conducting rehearsals, blocking, stage business, etc. Students prepare short scenes for presentation.
- TH 250 CREATIVE DRAMATICS** 3 s.h.  
A course employing improvisation, theater games and other workshop techniques to explore theatrical creation beyond working from a prepared script and the application of such theatrical techniques to classroom situations in elementary and secondary education.

Seminars in Theater provide students with opportunities to examine theater history beyond TH 201 and 202. Special topic material chosen by students with the professor's approval will be researched and discussed with their professor and with their

colleagues in a seminar atmosphere. Course structure will be at the discretion of the professor.

TH 301 SEMINAR IN GREEK AND ROMAN THEATER 3 s.h.  
Prerequisite: TH 201

TH 302 SEMINAR IN MEDIEVAL AND RENAISSANCE THEATER 3 s.h.  
Prerequisite: TH 201

TH 303 SEMINAR IN 17TH AND 19TH CENTURY THEATER 3 s.h.  
Prerequisite: TH 202

TH 304 SEMINAR IN CONTEMPORARY MODERN THEATER 3 s.h.  
Prerequisite: TH 202

TH 310 THEATER CRITICISM 3 s.h.  
A study of the theory and criticism and of the discrete functions of critic and reviewer. Students see live performances and practice writing both reviews and criticism.

TH 320 ADVANCED SCENE DESIGN 3 s.h.  
Prerequisite: TH 220  
A study of theatrical problems involved in production of multi- set dramas, operas and musical comedies.

TH 321 ADVANCED STAGE LIGHTING 3 s.h.  
Prerequisite: TH 221  
An introduction to the conventional lighting techniques used in dance, opera, and musical comedy; and study of lighting problems encountered in non-proscenium theaters.

TH 330 ACTING II 3 s.h.  
Prerequisite: TH 230  
Advanced study and practice of acting skills with special emphasis on acting styles and historical periods. Students prepare short scenes and audition pieces for presentation.

TH 340 DIRECTING II 3 s.h.  
Prerequisite: TH 240  
Building on skills acquired in Directing I, students practice scene work for nuances in subtextual interpretation, stage movement, dramatic rhythms, unifying images, stage business and timing. Each student's work culminates with the presentation of a complete one act play.

TH 350 CHILDREN'S THEATER 3 s.h.  
By permission  
Theoretically, course consists of examining scripts for children's theater, compiling a bibliography of materials, implications of productions for or with children and participatory children's theater. Practically, the class becomes a production company, selects or creates a playscript, mounts a production, performs it for children, and evaluates the experience.

TH 360 ADVANCED PRODUCTION WORKSHOP 9 s.h.  
Prerequisites: TH 120, 220, 221  
Extensive experience in design, technical theater or performance with the Summer Theater Workshop. For advanced students only.

TH 380 PLAYWRIGHTING 3 s.h.  
Prerequisite: Permission  
Provides students with an informal workshop environment for writing short scenes and for analyzing each other's work. Course culminates in the writing of a one-act play suitable for production.

TH 482 INDEPENDENT STUDY 1-6 s.h.  
Prerequisite: by permission

Independent study in theater may be either purely academic or may be a practical production project, supported by a written document giving evidence of significant scholarly investigation or original, creative effort. May be repeated for a maximum of 6 credits.

**TH 485 STUDIO THEATER**

3 s.h.

Prerequisite: Permission

Performance-oriented course with class members working intensively on the creation of a full-length theater production as an ensemble. Includes, in addition to actors, directors, designers and technical staff. Leads to a public performance. May be repeated once.

**TH 486 PRACTICUM IN PRODUCTION**

1-6 s.h.

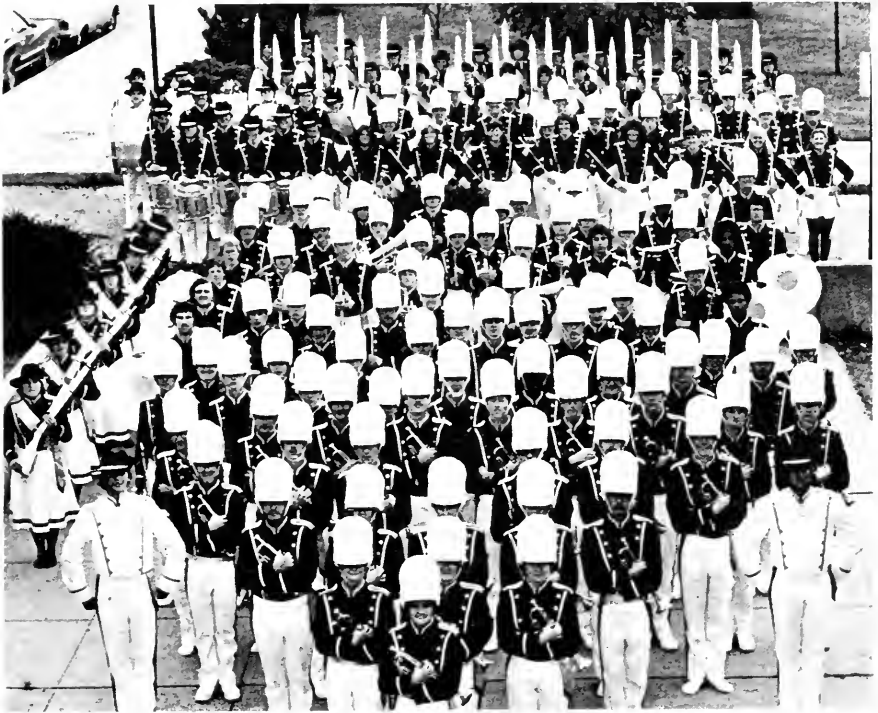
Prerequisite: by permission

An opportunity with academic credit for students to make significant contributions to campus productions augmenting theater course work in the areas of assistant directing or directing, stage management, technical direction, sound design, lighting, costuming, scene design, properties and set decoration, scene building and painting and make-up design. May be repeated.

**TH 488 SUMMER THEATER WORKSHOP**

3-9 s.h.

A theater practicum offering experience in all major aspects of production by combining class work with participation in Theater-by-the-Grove, IUPs repertory theater. Offered in Pre and Main sessions.





# **The Graduate School**

**Jerry T. Ice, Acting Dean**

Indiana University of Pennsylvania offers programs leading to master's and doctoral degrees. The primary purposes of IUP graduate programs are to encourage excellence in scholarship, to provide for depth in the students special field, and to stimulate enthusiasm for continued cultural, intellectual, and professional growth.

Graduate credit is issued to students who have been admitted to The School and who are registered in graduate courses (those numbered 500 or above).

Graduate programs and courses are listed in The Graduate School Bulletin, which may be obtained from the Dean of The Graduate School.

New York 1234567890

April 28

Health Room 9:00  
Spelling 9:45  
Reading 10:25  
V.P.A. 11:15  
English 11:35  
Service - S.L.A. 12:00  
Tutoring 1:10

Annual  
Clean-up

CLIMB  
ING NO



# The School of Health Services

**John Chellman, Dean**  
**Stephen E. Gray, Associate Dean**

The School of Health Services provides an opportunity to educate personnel needed in various health disciplines. The School offers professional curricula leading to appropriate baccalaureate degrees for men and women in health and physical education; respiratory therapy; medical technology; nursing; and safety management. IUP is affiliated with approved schools and hospitals for specialized training in these programs of allied health and nursing.

At present, the School of Health Services includes five departments:

1. Allied Health Professions
2. Athletic
3. Health and Physical Education
4. Nursing
5. Safety Sciences

In addition, the School of Health Services offers advisement for students desiring to pursue graduate work in Health Care Administration.

## **JEFFERSON MEDICAL COLLEGE - IUP PHYSICIAN SHORTAGE AREA PROGRAM**

---

A cooperative Family Medicine Physician Education Program has been established by IUP and Jefferson Medical College of Thomas Jefferson University in Philadelphia for the purpose of improving the distribution of physicians in Pennsylvania. The program is designed to increase the opportunities for young women and men to practice family medicine in the rural communities of Pennsylvania where there is a shortage of physicians.

The program at Jefferson Medical College will admit approximately 12 graduates of IUP and 12 graduates of other colleges each year. Students from IUP will be admitted only if properly qualified according to the admission standards and policies of Jefferson Medical College. Applications are reviewed by the Joint IUP-Jefferson Subcommittee and recommendations made to the Jefferson Committee on Admissions.

### **Requirements for Admission to Jefferson Medical College**

Students may choose from a variety of major fields of study during their four years at IUP. Regardless of the major field of study, the following course work must be included:

		IUP
*General Biology or Zoology	1 year	8 s.h.
*Physics	1 year	8 s.h.
*Inorganic Chemistry	1 year	8 s.h.
*Organic Chemistry	1 year	8 s.h.

\*All courses include laboratory.

In addition to the minimum course requirements, the prospective medical student is advised to complete such courses as: physical chemistry, quantitative analysis, comparative vertebrate anatomy, genetics, animal developmental biology, calculus, psychology, sociology and philosophy. Although these courses are not required for admission to Jefferson Medical College, they are recommended in order that students have an adequate professional, social and ethical background for the study of medicine. After four years of study at IUP, students will qualify for the Bachelor of Science degree with a major in biology, chemistry, or other curricula if preferred.

Students who qualify for the Physician Shortage Area Program (PSAP) must certify their intentions to adhere to the following plan of education and practice: (a) complete the family medicine curriculum during their four years of medical education at Jefferson Medical College, including a six week clerkship in a rural area; (b) complete a three year family medicine residency; and (c) agree to practice family medicine in an underserved area. Preference will be given to Pennsylvania residents who are interested in this program, with highest priority given to those who actually live, at the time of application, in the underserved area in which they hope to practice. Students who are accepted for admission to Jefferson Medical College, in this program, will be considered for financial aid with forgiveness features based upon the years of medical service they provide in areas identified as lacking adequate medical care.



**Admission to IUP**

Applicants to IUP should:

- 1) be a graduate of an accredited four-year high school, with a concentration of high school credits in the areas of science and mathematics.
- 2) apply for admission to IUP and submit all supporting documents as required (applicants may apply beginning July 1 after completing the third year of high school).
- 3) achieve a score on the College Entrance Examination Board (CEEB) tests or the American College Testing (ACT) program that indicates their ability to successfully compete for admission to a medical school.
- 4) agree to complete more than the minimal science requirements and to complete the minimal requirements by the end of the third year.

Prior to making application to Jefferson Medical College, applicants should:

- 1) maintain an overall high academic average especially in the natural science areas.
- 2) achieve at a high level on the Medical College Admission Test (MCAT).
- 3) possess high personal standards of behavior expected of a physician.
- 4) have a mature understanding and be motivated toward the practice of medicine.

## **GRADUATE PROGRAMS — HEALTH CARE ADMINISTRATION**

---

Today, thirty-eight universities in the United States, Canada and Puerto Rico offer graduate degrees in health and hospital administration. A baccalaureate degree from an accredited college or university is the primary prerequisite for admission. Graduate programs leading to the master's degree in health and hospital administration consist of one to two years of full-time academic study and may include a period of up to one year of administrative residency in a hospital or other health-related organization under the preceptorship of an administrator. Courses in hospital administration remain the foundation of the curricula. For further information, contact Dr. Stephen Gray, Zink Hall, Room 202 A.

## ALLIED HEALTH PROFESSIONS DEPARTMENT

---

ALLAN T. ANDREW, CHAIRPERSON

### RESPIRATORY THERAPY

---

Respiratory Therapists assist physicians in the care of patients who have respiratory system problems or illness that relates to breathing. Their assistance includes administering gaseous drugs and executing therapeutic procedures. Included are the operation and maintenance of specialized equipment.

The program leads to the degree, Bachelor of Science in Respiratory Therapy. Presented jointly by Indiana University of Pennsylvania and The Western Pennsylvania Hospital (Pittsburgh), the program offers intensive theoretical and applied knowledge to produce highly-skilled graduates who are prepared to enter the profession as therapists or instructors.

Two academic years of University studies, followed by two academic years of hospital studies and clinical practice constitute the program. Incoming students must maintain a QPA of 2.0 in Natural Sciences and Mathematics to qualify for admission into the clinical years in Respiratory Therapy. While at the University, students are required to complete the following courses or approved substitutes, which give a total of 64 credits:

Biology	BI 105 Cell Biology	4 s.h.
	BI 150 Vertebrate Anatomy	3 s.h.
	BI 151 Human Physiology	3 s.h.
	BI 241 General Microbiology	3 s.h.
Chemistry	CH 101-102 College Chemistry I & II	8 s.h.
Health and Physical Education	*HP Two activity courses	2 s.h.
Humanities	AH 101 Introduction to Art	3 s.h.
	or	
	TH 101 Introduction to Theater	3 s.h.
	or	
	MU 101 Introduction to Music	3 s.h.
	EN 101,102	
	& 201 English I, II, & III	10 s.h.
	Approved Elective	3 s.h.
*Or ROTC Option		
Social Sciences	Approved Electives	12 s.h.
Other	EP 302 Ed. Psychology	3 s.h.

or

CM 301 A-V Education	3 s.h.
MA 101 Foundations of Math	3 s.h.
BA 201 Personnel Management	3 s.h.
PY 151 Medical Physics Lecture	3 s.h.
PY 151 Medical Physics Lab	1 s.h.

In addition to clinical practice each semester during the junior and senior years and research projects during the senior year, students, while at the hospital, study the following subjects:

AL 327 Pharmacology	3 s.h.
AL 328 Intro. to Respiratory Therapy	4 s.h.
AL 329 Respiratory Therapy Instrumentation	4 s.h.
AL 330 Cardiopulmonary Resuscitation	2 s.h.
AL 334 Instrumentation and Application	4 s.h.
AL 335 Nursing Arts	3 s.h.
AL 336 Cardiopulmonary Evaluation & Clinical Correlation	4 s.h.
AL 427 Applied Pulmonary Physiology	4 s.h.
AL 428 Ethics and Administration	2 s.h.
AL 429 Respiratory Therapy Facility Design & Function	4 s.h.
AL 434 Pediatrics and Selected Topics	3 s.h.
AL 436 Respiratory Therapy Teaching	3 s.h.
AL 326,333 426,437 Respiratory Therapy Clinical Practice	22 s.h.

Sixty-two credits are awarded for clinical studies.

## **MEDICAL TECHNOLOGY**

Medical Technologists are highly-skilled members of the medical care team. They perform a wide range of tests and studies, whose results aid physicians in diagnosis and treatment. The program of studies presented jointly by Indiana University and approved hospitals prepares students to enter the profession.

Upon completion of the four-year program, the degree of Bachelor of Science in Medical Technology is granted. The first three years are devoted to University studies. The University-wide General Education obligations may be varied by election of three semester hours in Humanities and 12 semester hours in Social Science.

Required are at least 16 semester hours in Biology, 24 semester hours in Chemistry, a course in Mathematics, and two semesters of Physics, as follows:

### Mathematics

MA 110 Elementary Functions or higher level substitute	3 s.h.
--	--------

### Chemistry

CH 111-112 General Chemistry I and II	8 s.h.
CH 231-232 Organic Chemistry I and II	8 s.h.
CH 323 Analytical Methods	4 s.h.
CH 351 Biochemistry	4 s.h.

## Biology

BI 105 Cell Biology	4 s.h.
BI 120 Animal Biology	5 s.h.
BI 361 Microbiology	3 s.h.
Biology Electives	6-9 s.h.

## Physics

PY 111-112 Physics I and II, including laboratory	8 s.h.
---	--------

NOTE: Biology courses frequently elected:

BI 476 Parasitology	3 s.h.
BI 360 Medical Mycology	3 s.h.
BI 352 Comparative Animal Physiology	3 s.h.
BI 445 Microtechnique	3 s.h.
BI 263 Genetics	3 s.h.
BI 461 General Physiology	3 s.h.

Following the three academic years of University work, each student devotes 12 months to studies at an approved hospital School of Medical Technology to which she/he gains admission on a competitive basis. IUP maintains short-and long-term affiliations with selected hospital schools.

The Department provides student counseling and maintains liaison with hospital schools. However, since not all students are equally successful in academic studies and since the hospital schools select and admit the students to their programs using various criteria, IUP cannot guarantee admission to hospital school studies (also known as the clinical year).

Thirty-two semester hours are earned at the hospital School of Medical Technology. In addition to integrated clinical practice, the following subjects are typically studied:

Urinalysis	Cytology
Hematology and Coagulation	Bacteriology
Radio-Isotopes	Parasitology and Mycology
Clinical Chemistry and Toxicology	Serology
Blood Bank	Virology
Histology	

Upon completion of college and clinical training, the students are eligible to sit for one of the registry examinations. Successful passage of the examination certifies the student as a registered medical technologist, signifying that he/she is a professionally qualified laboratory technologist.

## ATHLETIC DEPARTMENT

---

**HERMAN L. SLEDZIK, DIRECTOR: BECK, BLACKSMITH, CAMPISANO, CELT-  
NIEKS, CHAKOT, DAVIS, DOUGHERTY, FRY, GODLASKY, GROVE, HORNFECK,  
JOHNSON, JUART, LISCINSKY, MOORE, NEEPER, PANAI, SLONIGER, SUT-  
TON, WATSON**

**RUTH PODBIELSKI, ASSOCIATE DIRECTOR: BARTHELEMY, BUCKLEY,  
CLARK, ELTZ, MONTGOMERY, MURTHA, SULLINGER.**

## **DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION**

---

**D. SHELBY BRIGHTWELL, CHAIRPERSON: AIERSTOCK, BARTHELEMY, BECK, BLACKSMITH, CELTNIKS, CLARK, DAKAK, DAVIS, DICKIE, ELTZ, GODLASKY, GROVE, HORNFECK, JOHNSON, KAYLOR, KORAB, LEPLEY, LISCINSKY, LOMMOCK, MILEFF, MILL, MONTGOMERY, MOORE, NEAL, PODBIELSKI, SLEDZIK, SLONIGER, SUTTON, TUCKER, WATSON.**

The Department of Health and Physical Education provides the following services in the University program: (1) instruction in health and various physical activities is provided thus serving part of the University's General Education requirement and leadership in a wide-ranging recreational program is supplied; (2) the degree of Bachelor of Science in Education is offered with a major in Health and Physical Education; and (3) Certification in Education for Safe Living is made available.

## **CURRICULA**

---

### **Required Program**

University students not in the ROTC program are required to complete two semester hours of physical education and two semester hours in HP 101, Personal and Community Health. Any two activity courses offered for General Education physical education credit may be elected to fulfill the physical education requirement. (Veterans are given four semester hours toward the above requirement. Verification of service must be established.) All such courses are coeducational. In addition, a few select courses for men and women are offered.

The requirement may be altered after consultation with the Chairperson of the Health and Physical Education Department, who will act upon the recommendation of the family physician and/or University physician and the Dean, School of Health Services.

### **B.S. in Education (Health and Physical Education)**

Requirements for the degree of Bachelor of Science in Education with a major in Health and Physical Education include the University's General Education requirement, Professional Education requirements, and the Health and Physical Education core requirement (36 semester hours). Upon completion of the degree program, the student is qualified for an Instructional I Certificate in Health and Physical Education, issued by the Pennsylvania Department of Education in Harrisburg, Pennsylvania. This certificate is valid for teaching health and physical education in grades K through 12 for three years in the public schools of Pennsylvania. Major students may utilize free electives to specialize in the areas of adaptives, athletic coaching, aquatics, dance, elementary or health.

Candidates for the degree program in Health and Physical Education must demonstrate acceptable cognitive and psychomotor qualifications, as well as desirable character and personality traits. The professional program seeks to foster those qualities of individual character and competence that are inherent in personal and professional maturity. These competencies are evaluated at the end of the sophomore year. The student is either granted Advanced Standing in the Department or

restricted in scheduling advanced courses for not less than one probationary semester. Continuation in the major program is based upon attainment of department Advanced Standing.

**GENERAL EDUCATION** — See catalog under General Education

**PROFESSIONAL THEORY** — Major students in Health and Physical Education must earn 26 semester hours in the following courses: HP 142; HP 221; HP 246; HP 325; HP 344; HP 345; HP 426; HP 441; HP 442.

**PROFESSIONAL TECHNIQUES** — Students are required 10 semester hours from among the following courses: HP 200-208; HP 263; HP 300-307. (Two laboratory hours and one lecture hour per week) One-half (.5) semester hour courses meet for one-half of the semester only.

**PROFESSIONAL EDUCATION** — The following are required: EP 302; FE 302; HP 242; HP 318; HP 321; HP 341; ED 421; ED 441; ED 442.

## **COURSE DESCRIPTIONS**

---

### **Meeting the General Education Requirement**

- HP 101 PERSONAL AND COMMUNITY HEALTH 2 s.h.  
 Understanding scientific approach to personal health and development of desirable attitudes and practices in all areas of personal health constitute major part of the course. Cause, prevention, and control of various diseases are also considered.  
 (2 lecture hrs.)

### **Co-Educational General Education Activity Courses**

Unless otherwise noted, the following courses provide opportunities for the learning of basic fundamentals and techniques of the activities. Specific courses may be offered in the fall, spring, or both semesters. (Two lab hours per week.)

HP 110 BEGINNING SWIMMING	1 s.h.
HP 111 ARCHERY-DANCE	1 s.h.
HP 112 ARCHERY-FENCING	1 s.h.
HP 113 ARCHERY/INTERMEDIATE SWIMMING	1 s.h.
HP 114 BADMINTON-FENCING	1 s.h.
HP 115 BADMINTON-INTERMEDIATE SWIMMING	1 s.h.
HP 116 BADMINTON-VOLLEYBALL	1 s.h.
HP 117 INTERMEDIATE SWIMMING	2 s.h.
HP 118 FITNESS-VOLLEYBALL	1 s.h.
HP 119 GOLF-BOWLING	1 s.h.
HP 120 TENNIS-INTERMEDIATE SWIMMING	1 s.h.
HP 121 INTERMEDIATE SWIMMING-VOLLEYBALL	1 s.h.
HP 122 CONTEMPORARY (MODERN) DANCE I	1 s.h.
HP 123 FOLK AND SQUARE DANCE	1 s.h.
HP 124 TUMBLING	1 s.h.
HP 126 RESISTIVE EXERCISES	1 s.h.
HP 127 FENCING	1 s.h.
HP 128 GOLF	1 s.h.
HP 129 BADMINTON/TENNIS	1 s.h.
HP 133 FOLK AND SQUARE DANCE II	1 s.h.
HP 134 BOWLING	1 s.h.
HP 137 GYMNASTICS	1 s.h.

HP 144 RHYTHMS AND MOVEMENT (Music major only)	1 s.h.
HP 145 TENNIS	1 s.h.
HP 146 CONTEMPORARY DANCE II	1 s.h.
HP 147 TENNIS/FENCING	1 s.h.
*HP 261 WATER SAFETY INSTRUCTOR (Prerequisites: departmental consent and lifesaving certification.)	1 s.h.
*HP 262 SCUBA (Prerequisites: fee, departmental consent, HP 265)	1 s.h.
*HP 265 LIFEGUARDING (Prerequisites: departmental consent, and advanced swimmer)	1 s.h.
*HP 266 BASIC SMALL CRAFT (Prerequisite: intermediate swimmer)	1 s.h.
HP 349 DANCE REPERTOIRE I	1 s.h.
HP 350 DANCE REPERTOIRE II	1 s.h.

\*These courses are also included in the annual Aquatic School offered each summer. They require the prerequisite courses listed beside them.

### Health and Physical Education Majors

HP 142 FOUNDATIONS OF HEALTH, PHYSICAL EDUCATION, AND RECREATION Scientific principles, philosophical considerations, and career opportunities in professions of health, physical education, and recreation. (3 lecture hrs.)	3 s.h.
HP 200 FUNDAMENTALS OF PHYSICAL ACTIVITY Identification of problem areas in basic neuromuscular activities with subsequent prescriptive programs on an individual basis; presentation of circuit and interval training programs; weight training, and isometrics.	1 s.h.
HP 201 ARCHERY/BADMINTON/BOWLING Skill progressions and analyses, in combination with opportunity to progress individually in skill competency in each activity. Methods and materials emphasized.	1 s.h.
HP 202 BASEBALL Basic skills, position play and team participation in baseball. Baseball theory and strategy.	.5 s.h.
HP 203 BASKETBALL Team tactics, drill patterns, conditioning programs, and teaching/coaching methods.	.5 s.h.
HP 204 FIELD HOCKEY Skill progressions and analyses, in combination with opportunity to progress individually in skill competency. Methods and materials emphasized.	.5 s.h.
HP 205 RHYTHMS AND MOVEMENT Prerequisite: HP 200 Development of basic movement techniques through rhythmic experiences, knowledge of music notation and terminology, and methods in creative presentation.	1 s.h.
HP 206 SOFTBALL Skill progressions and analyses, in combination with opportunity to progress individually in skill competency. Methods and materials emphasized.	.5 s.h.
HP 207 TENNIS Skill progressions and analyses, in combination with opportunity to progress individually in skill competency. Methods and materials emphasized.	.5 s.h.
HP 208 SOCCER Team tactics, drill patterns, teaching and coaching techniques.	.5 s.h.

- HP 221 HUMAN STRUCTURE AND FUNCTION** 3 s.h.  
Anatomical organization of human body, surveyed in sufficient depth to prepare students for physiology, biomechanics, and adaptive physical education. (3 lecture hrs.)
- HP 242 EMERGENCY HEALTH CARE** 1 s.h.  
American Red Cross Standard, Advanced and instructor's certification, and Multi-media Instructor's certification awarded upon successful completion of this course. ( 1 lecture, 2 lab hours).
- HP 246 BIOMECHANICS** 3 s.h.  
Prerequisite: HP 221  
Study of the relationship between mechanical and physical principals and human movement. 3 lecture hours.
- HP 263 AQUATICS** 1 s.h.  
Basic performance techniques in swimming strokes presented with special emphasis on teaching methodology, aquatic sports and games, water safety, skin diving, springboard diving and other aquatic activities.
- HP 264 ADVANCED AQUATICS** 1 s.h.  
Swimming and rescue skills necessary to complete American Red Cross Senior Lifesaving Course. Emphasis placed upon a broad range of other aquatic experiences and teaching strategies.
- HP 265 LIFEGUARDING** 1 s.h.  
Prerequisites: departmental consent and advanced swimmer  
Designed for professional lifeguards. Includes lifeguarding techniques for pools, fresh and salt water beaches. Red Cross certification (Pittsburgh Division) granted upon satisfactory completion of course requirements. (2 laboratory hours).
- HP 300 FOLK AND SQUARE DANCE** .5 s.h.  
Prerequisite: HP 205  
Skill progressions and analyses, in combination with opportunity to progress individually in skill competency in each activity. The role of folk and square dance in the physical education programs of all levels considered. Emphasis on methods and materials.
- HP 301 MODERN DANCE** .5 s.h.  
Prerequisite: HP 205  
Basic course in the dance, introducing student to experiences in development of dance as creative art and an educational medium.
- HP 302 GYMNASTICS** 1 s.h.  
Prerequisite: HP 205  
Conditioning exercises, participation in all phases of gymnastics, including tumbling, and the coaching of the sport.
- HP 303 FOOTBALL** .5 s.h.  
Fundamentals of position play, patterns of offense and defense, individual skills, and team organization in football.
- HP 304 GOLF** .5 s.h.  
Skill progressions and analyses, in combination with opportunity to progress individually in skill competency. Methods and materials emphasized.
- HP 305 TRACK AND FIELD** .5 s.h.  
Basic movement patterns of running, jumping, and throwing; various training programs of track and field; rules and regulations. The student's abilities and skills are developed in order that they may be better able to teach and/or coach track and field.



HP 306 VOLLEYBALL	.5 s.h.
Skill progressions and analyses, in combination with opportunity to progress individually in skill competency. Methods and materials emphasized.	
HP 307 WRESTLING	.5 s.h.
Basic skills, moves and holds used in college and high school wrestling.	
HP 311 ADVANCED FIELD HOCKEY/VOLLEYBALL	2 s.h.
Prerequisites: HP 204, 306	
Advanced techniques and game strategy, with opportunities for individual skill progression. Methods and materials are presented from aspect of coaching responsibilities in these activities. (1 lecture & 2 laboratory hrs.)	
HP 312 ADVANCED BASKETBALL/SOFTBALL	2 s.h.
Prerequisites: HP 203, 206	
Advanced techniques and game strategy, with opportunities for individual skill progression. Methods and materials are presented from aspect of coaching responsibilities in these activities. (1 lecture & 2 laboratory hrs.)	
HP 314 ADVANCED MODERN DANCE	2 s.h.
Prerequisite: Previous dance course or department acceptance of experience.	
Advanced techniques of performance and choreography. Theory and composition form an integral part of course content. (1 lecture & 2 laboratory hrs.)	
HP 316 VOLLEYBALL OFFICIATING	1 s.h.
Prerequisite: HP 306	
Officiating techniques and responsibilities in volleyball. Opportunities for officiating experience and qualification for professional ratings. (1 lecture & 2 laboratory hrs.)	
HP 317 BASKETBALL OFFICIATING	1 s.h.
Prerequisite: HP 203	
Officiating techniques and responsibilities in basketball. Opportunities for officiating experience and qualification for professional ratings. (1 lecture & 2 laboratory hrs.)	
HP 318 PRE-PROFESSIONAL EXPERIENCE I	1 s.h.
Students teach as assistants to a faculty member in two different activities in physical education (general education). Emphasis on unit development, class management, leadership skills, and evaluation. (3 laboratory hrs.)	
HP 319-1 PRE-PROFESSIONAL EXPERIENCE II	1 s.h.
Prerequisites: HP 318, Advanced standing, Departmental approval	
Students may request an assisting/teaching/leadership assignment in certain University related areas that may be either instructional or non-instructional in nature. Examples of such professional areas are adaptives, recreation, dance, coaching, aquatics, intramurals, administration, elementary, service or major classes, club activities, assisting in laboratories, or the training room. (3 laboratory hours).	
HP 319-2 PRE-PROFESSIONAL EXPERIENCE II	2 s.h.
Prerequisites: HP 318, Advanced Standing, Departmental Approval	
Same as above. (6 laboratory hours).	
HP 319-3 PRE-PROFESSIONAL EXPERIENCE III	3 s.h.
Prerequisites: HP 318, Advanced Standing, Departmental Approval	
Same as above. (9 laboratory hours).	
HP 321 METHODS IN ELEMENTARY PHYSICAL EDUCATION	3 s.h.
Study and application of theories of movement, self-testing activities, rhythms, relays, games, gymnastics suitable for elementary school child. Observation, materials and methods of teaching and opportunities for intern teaching provided. (3 lecture hrs.)	

- HP 322 DANCE PRODUCTION 3 s.h.  
Prerequisite: HP 122 or HP 301  
Advanced course in contemporary dance technique and composition; studio productions with staging, lighting, costuming, and make-up as student responsibilities. (3 lecture hrs.)
- HP 325 SCHOOL HEALTH PROGRAMS 3 s.h.  
Organization of school health programs, relationships, and utilization of community resources. (3 lecture hours).
- HP 333 PSYCHOLOGY OF COACHING 2 s.h.  
The goals of athletics in schools and communities; principles and responsibilities of the coach; current problems. (2 lecture hrs.)
- HP 334 SPORTS OFFICIATING 1 s.h.  
Techniques of officiating and rules interpretation. Practice in actual officiating required in several varsity sports. (1 lecture & 2 laboratory hrs.)
- HP 336 ORGANIZATION AND ADMINISTRATION OF RECREATION 2 s.h.  
History, theory, and philosophy of recreation; importance of play in modern world, trends in recreation, problems encountered in organizing community school programs and principles of leadership. (2 lecture hrs.)
- HP 341 EVALUATION IN HEALTH AND PHYSICAL EDUCATION 3 s.h.  
Evaluation theory, instructional objectives, and cognitive test construction; technical and practical consideration in testing, and interpretation of test results. (3 lecture hrs.)
- HP 343 PHYSIOLOGY OF EXERCISE 3 s.h.  
Prerequisite: HP 221  
Physiological effects of exercise on humans. Major factors of diet, conditioning, physical fitness, maximum performance level, and fatigue are considered. (3 lecture hrs.)
- HP 344 ADAPTED PHYSICAL EDUCATION 3 s.h.  
Prerequisite: HP 246  
Recognition of structural deviations, corrective exercises, and physical education programs for a wide range of handicaps. (3 lecture hrs.)
- HP 345 BASIC SPORTS MEDICINE 2 s.h.  
Prerequisite: HP 221  
Prevention and care of accidents in sports activities. Significance of medical examination, conditioning exercise and sound health practices discussed. Laboratory work includes taping, bandaging, use of physiotherapy equipment, massage and supervised training room experience. (2 lecture hrs.)
- HP 349 DANCE REPERTOIRE I 1 s.h.  
Prerequisite: Department consent  
Designed to permit students to be exposed to wide range of dance repertoire, original choreography and technique. (2 laboratory hrs.)
- HP 350 DANCE REPERTOIRE II 1 s.h.  
Prerequisite: HP 349  
Designed to permit students to explore dance repertoire, choreography, and technique beyond HP 349. (1 lecture & 2 laboratory hrs.)
- HP 405 ADMINISTRATION AND TECHNIQUES OF CAMPING 2 s.h.  
The growth and significance of camp movement, and understanding of camping techniques and various types of camp programs considered. Attention given to all camp activity areas. Study of outdoor education also. (2 lecture hrs.)
- HP 408 GUIDED RESEARCH PROBLEM 2 s.h.  
Selection and research of a problem pertinent to student interests and those of the professions

of Health, Physical Education, and Recreation. Classes held on an individual and/or seminar basis. (Independent Study)

HP 426 HEALTH SCIENCE INSTRUCTION 3 s.h.  
Health curriculum- K-12, Methods and Media of instruction in Health Science. (3 lecture hours).

HP 432 ORGANIZATION AND ADMINISTRATION OF INTRAMURALS AND INTERSCHOLASTICS 2 s.h.  
History, theory, philosophy, and principles of intramural and interscholastic athletic programs. (2 lecture hrs.)

HP 433 APPLICATION OF THEORY TO MOTOR LEARNING 2 s.h.  
Identification of aspects of motor learning and its similarity and difference to cognitive and affective learned behavior. Characteristics of children and adolescents. Special emphasis given to the principles of psychomotor learning. (2 lecture hrs.)

HP 434 ADVANCED SOCCER WORKSHOP 1 s.h.  
Prerequisite: HP 208, or department acceptance of experience.  
Principles of attack and defense and their application in group and team play. The study of team play will be carried out, in the main, using small sided games. Those participating will be able to observe, teach, evaluate, and be evaluated. (1 lecture & 2 laboratory hrs.)

HP 441 PSYCHOSOCIAL IMPLICATIONS FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION 3 s.h.  
A study of variables that influence human performance with emphasis on psychological and sociological research. (3 lecture hrs.)

HP 442 SEMINAR IN HEALTH, PHYSICAL EDUCATION, AND RECREATION 3 s.h.  
Theory and philosophy of Health, Physical Education, and Recreation, current issues and problems; innovative and creative programs. (3 lecture hrs.)

HP 447 CARDIO-PULMONARY RESUSCITATION (CPR) INSTRUCTOR 1 s.h.  
Prerequisite: Basic CPR certification  
Study of methods and skills necessary to certify instructors of cardiopulmonary resuscitation and multimedia first aid. Successful completion of requirements leads to certification by the American Health Association and the American Red Cross. (1 lecture hr. and 1 laboratory hr.)

### **Certification in Education for Safe Living**

A student must complete 12 semester hours in Safety Education in order to meet state certification. The only course that is required is HP 252, while the remaining nine semester hours can be selected from the following courses. A student must include Education for Safe Living on the application for teaching certification prior to graduation. For students who have already graduated, contact the office of the Dean, School of Health Services, for correct procedure.

HP 251 INTRODUCTION TO SAFETY EDUCATION 3 s.h.  
Recognition of unsafe conditions, practices, and the methods by which they may be eliminated or curtailed. Overall view of the safety problems in the home, school, highway, public places, and work environment. (3 lecture hrs.)

HP 252 DRIVER EDUCATION 3 s.h.  
Student should have driving ability above the average, evidence of holding a driver's license, plus at least two years of driving experience without having a major accident for which the driver is responsible. Combination of class instruction in traffic safety and driver training in actual behind-the-wheel practice in a dual control car. It prepares the student to teach driver education in high school. (2 lecture hours and 2 laboratory hours.)

- HP 253 METHODS AND MATERIALS IN SAFETY EDUCATION IN THE SECONDARY SCHOOLS 3 s.h.  
Prerequisites: HP 251 and/or HP 252  
Emphasizes the various subjects and school activities in secondary schools as well as treating it as a separate subject. (3 lecture hrs.)
- HP 254 ORGANIZATION AND ADMINISTRATION OF SAFETY EDUCATION 3 s.h.  
Prerequisites: HP 251 and/or HP 252  
Emphasizes the basic principles of organizing, administering and supervising safety education procedure in the public schools at all grade levels; encouraging student activities in the school and community. (3 lecture hrs.)
- HP 255 PSYCHOLOGY OF ACCIDENT PREVENTION 3 s.h.  
Application of the principles of psychology to the development of safe behavior in the school, home, community, highway, and industry. The cause of accidents in relation to attitudes, habits, and behavior. (3 lecture hrs.)

**Required in Elementary Education**

- EL 314 METHODS IN ELEMENTARY SCHOOL HEALTH AND PHYSICAL EDUCATION 2 s.h.  
Includes games, rhythms, movement education, tumbling, folk and square dancing and other skills suitable for elementary school child. The teaching of health in elementary school emphasized. Methods, materials and lesson planning are a part of the course. (1 lecture hour and 2 lab hours).

**Required in Music Education**

- HP 144 RHYTHM & MOVEMENT (Music Major) 1 s.h.

**AQUATICS SCHOOL COURSE OFFERINGS**

Each summer the Department offers the annual Aquatic School for eight consecutive days. Students must be 17 years of age or older and possess the necessary aquatic prerequisites. A fee will be charged which will include room, three meals a day, use of equipment, accident insurance, transportation to and from the lake and special one-night programs. Certification will be granted by the American Red Cross, National YMCA, Professional Association of Diving Instructors, and the American Heart Association upon completion of courses. All courses may be taken for college credit, if the student is eligible and pays the additional tuition fee. For more information, contact the Aquatic Director.

\*These courses are also offered during the school year.

**COURSE DESCRIPTIONS, AQUATICS SCHOOL**

- \*HP 242 EMERGENCY HEALTH CARE 1 s.h.  
American Red Cross Standard, Advanced and Instructor's certification, and Multi-media instructors certification awarded upon successful completion of this course. (1 lecture; 2 labs).
- \*HP 261 WATER SAFETY INSTRUCTOR 1 s.h.  
Prerequisites: Departmental consent and lifesaving certification  
Emphasizes teaching aspect of skills, techniques and attitudes necessary in all areas of swimming. Students successfully completing course are qualified to hold such positions as water front directors, aquatic directors, and other similar positions. (2 laboratory hrs.)

- \*HP 262 SCUBA DIVING** 1 s.h.  
 Prerequisites: Fee, departmental consent and HP 265  
 Designed to teach necessary skills and proper use of equipment for underwater swimming. Tanks, regulators, weights, and special equipment furnished. Student must purchase a mask, fins, and snorkel (approximately \$15.00).work. (2 laboratory hrs.)
- \*HP 265 LIFEGUARDING** 1 s.h.  
 Prerequisites: Departmental consent and advanced swimmer  
 Designed for professional lifeguards which includes lifeguarding techniques for pools, fresh and salt water beaches, Red Cross certification (Pittsburgh Division) granted upon satisfactory completion of course requirements. (2 laboratory hours).
- \*HP 266 BASIC SMALLCRAFT** 1 s.h.  
 Prerequisite: Intermediate Swimming Ability  
 Designed to introduce the use of the canoe, paddle board, and sailboat. Emphasis is placed on development of boating skills, safety rescue, and survival procedures. Red Cross smallcraft certification is granted upon successful completion of the course. (2 laboratory hrs.)
- HP 267 BASIC SYNCHRONIZED SWIMMING** 1 s.h.  
 Prerequisite: Intermediate Swimming Ability  
 Activity course designed to assist students in the development of beginning synchronized swimming skills. YMCA certification is granted upon successful completion of course requirements. (2 laboratory hrs.)
- HP 268 WATER SKIING** 1 s.h.  
 Prerequisite: Intermediate Swimming Ability  
 Water skiing for beginners. Includes use of equipment, ski techniques and safety. Novice I and Novice II levels of certification of the American Water Ski Association program are available upon successful completion of course requirements. (2 lab hours).
- HP 269 POWER BOATING** 1 s.h.  
 Prerequisite: Intermediate Swimming Ability  
 Introduction to the safe use of small power craft and related equipment for recreational boating activities such as water skiing, fishing and scuba diving. Includes maintenance, repair, rescue and survival. (2 lab hours.)
- HP 270 INSTRUCTOR OF HANDICAPPED SWIMMING** 1 s.h.  
 Prerequisite: HP 261  
 Concerned with the learning of skills used to teach swimming to exceptional children. All handicaps are considered. This course is important not only in physical education but also for the mentally retarded, rehabilitation, education, for agency personnel, post graduate swimming education, also for YMCA's Boys Clubs, Community Programs, Private Clubs, and Industrial Programs. The Red Cross certification instructor of Swimming for the Handicapped is granted upon successful completion of the course. (2 laboratory hrs.)
- HP 271 INSTRUCTOR OF SCUBA DIVING** 1 s.h.  
 Prerequisite: HP 262  
 Prepares instructors to teach skin and scuba diving. Emphasis is placed on teaching methods, use and mechanics of equipment, safety, diving physics and physiology and advanced diving skills. Instructor of Scuba Diving certificate granted by the Professional Association of Diving Instructors upon successful completion of the course. (2 laboratory hrs.)
- HP 272 INSTRUCTOR OF CANOEING** 1 s.h.  
 Prerequisite: HP 266  
 Concerned with learning of skills pertinent to teaching canoeing to beginners. All aspects of canoeing including paddling, repair of equipment, white water canoeing, safety, survival and teaching techniques are presented. The Red Cross certification, Canoeing Instructor is granted upon successful completion of the course. (2 laboratory hrs.)

- HP 273 INSTRUCTOR OF SAILING 1 s.h.  
Prerequisite: HP 266  
Concerned with learning of skills pertinent to teaching beginning sailing. All aspects of sailing are considered including the elements of sailing, repair of equipment, racing, safety and techniques of teaching. (2 laboratory hrs.)
- HP 274 INSTRUCTOR OF INFANTS AND PRESCHOOLERS IN SWIMMING 1 s.h.  
Prerequisites: HP 261; Instructor's Consent  
Methods course for preparation of swimming instructor's in the knowledge and skills of teaching young children to swim. YMCA certifications. Instructor of the Very Young granted upon successful completion of course requirements. (2 lab hrs.)
- HP 276 COACHING OF SWIMMING 1 s.h.  
Prerequisite: HP 261  
A lecture-discussion methods course designed to prepare Physical Education majors for coaching of swimming. Emphasis is placed on training methods, officiating, nutrition, scientific principles, and meet strategy. (2 laboratory hrs.)
- HP 277 COACHING OF SYNCHRONIZED SWIMMING 2 s.h.  
Designed to go beyond the activity nature of Basic Synchronized Swimming (HP 267). Students are involved in set design, costumes, selection of music, making props, selecting themes, and organizing a program. (1 lecture & 2 laboratory hrs.)
- HP 279 SWIMMING POOL MAINTENANCE AND CHEMISTRY 2 s.h.  
Prerequisite: HP 264  
A lecture-discussion course designed to teach fundamental water chemistry, filtration, treatment of water problem, winterization of outdoor pools and pool management. Emphasis is placed on water testing and analysis of chemicals and bacteria. (2 lecture hrs.)
- HP 280 AQUATIC FACILITIES MANAGEMENT 2 s.h.  
Prerequisite: HP 264  
An organization and administration course designed to prepare the aquatic professional for management of indoor and outdoor facilities. Includes facility design, safety procedures activity, sport and recreational aspects. (2 lecture hours.)

## **NURSING DEPARTMENT**

---

**MARY C. KATZBECK, CHAIRPERSON; MARIAN MURRAY, ASSISTANT CHAIRPERSON; BELLAK, BERG, BLACK, CUNNINGHAM, HART, HOLT, KRESAK, KUZNESKI, SETTLEMYER, SMATLAK, SPRENKEL, SUHRIE, THISTLETHWAITE, WRIGHT, ZONI.**

The School of Health Services offers a curriculum leading to the degree Bachelor of Science in Nursing. Students are admitted to the nursing major as freshmen. Upon completion of the program, the graduate is prepared to write the examination for Pennsylvania licensure as a registered nurse.

The nursing curriculum has as its primary goal the development of competent professional nurses who are liberally educated, clinically proficient, and aware of their social responsibilities as members of the health professions. The program is designed to provide a broad background in general education, coupled with the specialized knowledge and skills required for clinical competency. Additionally, the curriculum prepares the nurse to practice within the professional code of nursing ethics, to function effectively as a member of the health-care team, and to utilize scientific principles in planning and implementing health care. The objectives of the

nursing program emphasize learning of concepts of health and illness, and the provision of health care in various settings within the community.

The first three semesters are devoted mainly to general education and courses considered essential to the nursing major. The first clinical nursing courses begin in the fourth semester. The courses outlined elsewhere in the Bulletin as mandatory in English, Humanities, Social Sciences, Health and Physical Education (or ROTC), are in addition to the following: (If student selects to pursue senior ROTC curriculum courses, 2 social science electives are excused).

#### Social Science Requirements

SO 151 Principles of Sociology	3 s.h.
PC 101 General Psychology	3 s.h.
PC 354 Developmental Psychology	3 s.h.
SS Electives	6 s.h.

#### Natural Sciences

CH 101-102 College Chemistry I and II	8 s.h.
BI 105 Cell Biology	4 s.h.
PY 151 Medical Physics	4 s.h.
BI 150 Vertebrate Anatomy	3 s.h.
BI 361 Microbiology	3 s.h.
BI 151 Human Physiology	3 s.h.

#### Other Requirements

FN 212 Nutrition	3 s.h.
MA 217 Probability and Statistics	3 s.h.
PC 357 Abnormal Psychology	3 s.h.

Clinical experiences in patient care are provided in acute care centers and other area health agencies throughout the last five semesters. Men and women are eligible to enroll in the nursing program.

Registered Nurse students are enrolled in the basic baccalaureate program in nursing. They will have a genuine upper division major in Nursing, and will fulfill all degree requirements set by the University and the Nursing Department. The Registered Nurse student may be awarded advanced standing, based on prior work completed at an accredited college or university and on exemption tests in nursing at a given point in the curriculum.

## **COURSE DESCRIPTIONS**

---

NU 280 NURSING CORE I 3 s.h.  
 Concepts and principles basic to health and disease, implications for care of patients with problems common to maintenance of health, and the nursing process.

NU 285 NURSING I 3 s.h.  
 Nursing theory and skills necessary for nursing intervention, diagnostic techniques, assessment; includes clinical practice.

NU 302 NURSING II 3 s.h.  
 Nursing theory derived from the content of NU 322 and prior knowledge of biophysical and psychosocial sciences is stressed. Emphasis is on nursing theory relevant to clients with non-acute or acute alterations in homeostasis. Client-centered nursing problems are present-

ed by students in a weekly seminar, with faculty guidance. (2 hr. lecture; 1 hr. seminar)

**NU 303 NURSING IIA (LAB)** 5 s.h.  
Application of nursing theory using the nursing process, under faculty supervision in health agencies, to clients with non-acute or acute alterations in homeostasis. Clinical practice settings include hospitals, community clinics and physicians' offices. (15 clock hours)

**NU 304 NURSING III** 3 s.h.  
Nursing theory derived from concepts and principles NU 323 pertinent to nursing care of clients with acute and more complex deviations from health. Seminar emphasizes client-centered nursing problems, and analysis of identified problems. (2 hr. lecture; 1 hr. seminar)

**NU 305 NURSING IIIA (LAB)** 5 s.h.  
Application of nursing theory using the nursing process under faculty supervision with clients having acute and more complex alterations in homeostasis. Clinical Practice areas include all utilized in NU 303. Student plans, implements and evaluates care for clients of all ages and includes health teaching as part of nursing practice. (15 clock hours)

**NU 322 NURSING CORE II** 3 s.h.  
Principles and concepts pertinent to normal growth and development, family and group dynamics, alterations in homeostasis, pathophysiology, psychopathology, research, professional development and teaching learning principles related to man, health and nursing.

**NU 323 NURSING CORE III** 3 s.h.  
Continuation of concepts and principles in NU 322 increasing in depth and severity of alterations in homeostasis. Emphasis is on pathophysiology, psychopathology, disease control, rehabilitation, management principles, and health teaching.

**NU 402 NURSING IV** 3 s.h.  
Nursing theory derived from NU 422 pertinent to care of clients with crises and life-threatening alterations in homeostasis is emphasized. Methods of leadership and management and change theory are presented. Client-centered nursing seminars are presented weekly. (2 s.h. lecture; 1 s.h. seminar)

**NU 403 NURSING IV-A (LAB)** 5 s.h.  
Application of nursing theory in various health care agencies using the nursing process with life-threatening alteration in homeostasis, critical health failures and psychoses. Practice occurs in acute and chronic psychiatric settings, intensive/coronary care units, and medical-surgical units of the general hospital. Student cares for patients on a one-to-one basis in intensive care units and develops management skills on medical-surgical units, caring for groups of clients. (2 s.h. lecture; 1 s.h. seminar)

**NU 404 NURSING V** 3 s.h.  
Nursing theory relevant to concepts and principles from NU 423 utilizing the nursing process in leadership roles, self-direction and professional accountability terminating in independent functioning within a health care agency and the community. Seminars emphasize client-centered problems; leadership role conflicts or success, trends in nursing roles and responsibility for self and professional growth. (2 cr. lecture; 1 cr. seminar)

**NU 405 NURSING V-A (LAB)** 5 s.h.  
Application of nursing process utilizing concepts and principles pertinent to nursing accumulated throughout the education process. Student has the opportunity to elect areas of practice within any health care setting, also practices in clinics, clients homes, community nursing agencies and health education programs. (15 clock hours)

**NU 422 NURSING CORE IV** 3 s.h.  
Concepts and principles of pathophysiology and psychopathology related to life-threatening alterations in homeostasis, disturbed communications, and crisis theory. Change theory, nursing contribution to change within the health care delivery system, leadership development, and the liaison role of the nurse is stressed. Professional responsibility, accountability and



professional standards are taught.

**NU 423 NURSING CORE V** 3 s.h.  
 Concepts and principles pertinent to leadership responsibility, professional relationships, delivery of health care in community, state, and national systems. Management and leadership principles essential to peer review, nursing audit, client advocacy, professional opportunities and methods to secure employment, labor relations, and changes in the health care system are taught.

**NU 430 NURSING RESEARCH** 3 s.h.  
 Research methodology, development of a research study related to clinical nursing; writing a research paper and becoming a more knowledgeable consumer of research.

**NU 482 INDEPENDENT STUDY (ELECTIVE)** varies -3 s.h.  
 Prerequisites: Senior standing, prior approval of faculty member guiding study.  
 Elective option for students to pursue greater depth of knowledge in a chosen area of nursing.

---

## **SAFETY SCIENCES DEPARTMENT**

---

**ROBERT LAUDA, CHAIRPERSON: CHEKANSKI, McCLAY, PACALO, REED, SOULE.**

The department offers the degree of Bachelor of Science in Safety Management with a specialization in Occupational Safety and Health. In addition, a Mine Safety Management option is offered within this curriculum.

### **CURRICULA**

---

#### **B.S. in Safety Management**

The degree in Safety Management qualifies the student for professional, administrative, managerial and supervisory positions in industry, manufacturing, insurance, transportation, utility, government, contract construction, trade service industry and others. There is an acute need in Pennsylvania and in the nation for the university educated occupational safety and health professional. The curriculum includes a major of 36 semester hours in Safety Management and 18 semester hours in Business Administration. In addition, a number of elective courses are available in the major and minor fields that will enable students to strengthen their primary interest areas.

#### **Mine Safety Management (option)**

The option in Mine Safety Management qualifies the student for professional, administrative, managerial and supervisory positions in the mining industry. With the present emphasis on coal production and coal processing, there is an acute need in Pennsylvania and in the nation for the university educated mine safety and health professional. The curriculum includes a major of 36 semester hours in Mine Safety Management and 18 semester hours in Business Administration. Elective courses are available in the major and minor field enabling students to strengthen their areas of interest.

**REQUIRED UNDER GENERAL EDUCATION** - In meeting the University's General Education requirement, the Safety Sciences major must include:

CH 101&102 College Chemistry I & II	8 s.h.
PY 111&112 Physics I & II	8 s.h.
MA 110&217 Elementary Functions and Probability and Statistics	6 s.h.

HP 221 Human Structure and Functions	3 s.h.
PC 101 General Psychology	3 s.h.
SO 151 Principles of Sociology	3 s.h.
EC 101 Basic Economics	3 s.h.

**BUSINESS ADMINISTRATION** — The following courses are required in the Business Administration speciality:

BA 201 Personnel Management	3 s.h.
BU 321 Business Communications	3 s.h.
BU 339 Business Data Processing	3 s.h.

An additional 9 semester hours of selected Business electives are required.

**SAFETY MANAGEMENT** — Thirty-six semester hours must be achieved from the following courses:

SA 101 Introduction to Occupational Safety and Health	3 s.h.
SA 111&211 Industrial Safety Engineering I & II	6 s.h.
SA 301 Nature & Effects of Occupational Health Hazards	3 s.h.
SA 302 Measurement & Evaluation of Occupational Health Hazards	3 s.h.
SA 303 Control of Occupational Health Hazards	3 s.h.
SA 311 Industrial Fire Protection	3 s.h.
SA 345 Systems Safety Analysis	3 s.h.
OR	
SA 347 Ergonomics	3 s.h.
SA 412 Evaluation of Safety Program Effectiveness	3 s.h.
SA 450 Internship	6 s.h.

In addition to the 33 semester hours identified above, three semester hours of Safety Management Electives are required.

## **MINE SAFETY MANAGEMENT (option)**

**REQUIRED UNDER GENERAL EDUCATION**-In meeting the University's General Education requirement, the Mine Safety Management option must include:

CH 101&102 College Chemistry	8 s.h.
PY 111&112 Physics I & II	8 s.h.
MA 110&217 Elementary Functions and Probability and Statistics	6 s.h.
HP 221 Human Structure and Functions	3 s.h.
PC 101 General Psychology	3 s.h.
SO 151 Principles of Sociology	3 s.h.
EC 101 Basic Economics	3 s.h.

### **BUSINESS ADMINISTRATION**

BA 201 Personnel Management	3 s.h.
BA 402 Training Management	3 s.h.
BU 321 Business Communications	3 s.h.
BU 339 Business Data Processing	3 s.h.

BA 384 Case Studies in Personnel Management	3 s.h.
LR 480 Principles & Practices of Collective Bargaining	3 s.h.

**MINE SAFETY MANAGEMENT (option)** Thirty-six semester hours must be achieved from the following:

SA 102 Introduction to Mine Safety Management	3 s.h.
SA 111&211 Industrial Safety Engineering I & II	6 s.h.
Sa 231&232 Mine Safety Engineering I & II	6 s.h.
SA 301 Nature & Effects of Occupational Health Hazards	3 s.h.
SA 302 Measurement and Evaluation of Occupational Health Hazards	3 s.h.
SA 345 Systems Safety Analysis	
OR	
SA 347 Ergonomics	3 s.h.
SA 401 Mine Ventilation	3 s.h.
SA 412 Evaluation of Safety Program Effectiveness	3 s.h.
SA 450 Internship	6 s.h.

## COURSE DESCRIPTIONS

---

SA 101 INTRODUCTION TO OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT 3 s.h.

Covers theory and history of industrial hazard control, effects of hazards and failures on organizational control and productivity, safety and health legislation, accident causation, organization and administration of safety and health programs, aspects of recognizing, evaluating, and understanding control of safety and health hazards, acquiring hazard data, hazard analytical tools, communication techniques in safety and health management, and the role of interfacing management systems in hazard control.

SA 102 INTRODUCTION TO MINE SAFETY MANAGEMENT 3 s.h.

Designed to provide the student with an in-depth background of the problems involving mine safety. A historical approach to coal and mineral mining are reviewed; legislative influences such as the Federal Coal Mine Health and Safety Act, the Metal and Nonmetal Mine Health and Safety Act, and the Occupational Safety and Health Act discussed in depth; management of mine safety and health programs are presented including industrial relations; and, the necessary training of entry level employees by management along with certification programs.

SA 111&112 INDUSTRIAL SAFETY ENGINEERING I & II 3 s.h.  
Prerequisite: SA 101.

Stresses understanding complexity of industrial hazard control problem by thoroughly examining elements of safety and health enumerated in OSHA Act promulgated standards. Emphasis given to plant layout and design, materials handling, machine guarding, walking and working surfaces, hazardous materials and combustible liquids, industrial sanitation and environmental controls, compressed gases and cryogenics, electrical and static electricity hazards, boilers and unfired pressure vessels, protective equipment, and construction safety.

SA 231 MINE SAFETY ENGINEERING I 3 s.h.  
Prerequisites: SA 102, SA 111

Focuses on the various aspects of mining such as: slope and shaft sinking; roof control; hoisting and man-traps; haulage; mining machinery; personal protective equipment; mining emergency procedures and communication; surface mining operations; and mine related processing operations.

- SA 232 MINE SAFETY ENGINEERING II** 3 s.h.  
 Prerequisites: SA 102, SA 111, SA 211, SA 231  
 Provides an in-depth study of the various controls of electrical hazards and ignition sources such as: permissible equipment, electrical distribution systems, trailing cables, trolley and feeder wiring, grounding, and static electricity. Fire protection systems, blasting and explosives, and the control of combustible materials are also studied in detail.
- SA 301 NATURE AND EFFECTS OF OCCUPATIONAL HEALTH HAZARDS** 3 s.h.  
 Prerequisites: SA 101, CH 101, CH 102  
 Provides understanding of primary health hazards found in industry and their effects on the human body. Students learn to recognize hazards involved with air contaminants, noise, heat radiation, chemicals on the skin, and other stresses. Emphasis placed on study of occupational disease, industrial toxicology, and use of threshold limit values.
- SA 302 MEASUREMENT AND EVALUATION OF OCCUPATIONAL HEALTH HAZARDS** 3 s.h.  
 Prerequisite: SA 301  
 A lecture/laboratory course which provides basic understanding of techniques used in measuring and evaluating the magnitude of health hazards in industry. Laboratory sessions provide experience in air sampling, noise measurement, heat measurement, particle size analysis, chemical analysis and evaluation of industrial ventilation systems.
- SA 303 CONTROL OF OCCUPATIONAL HEALTH HAZARDS** 3 s.h.  
 Prerequisite: SA 301  
 Study of engineering, administrative and personal protective equipment methods of reducing or eliminating hazards to the health of industrial workers. Topics covered include: industrial ventilation, noise control, health control, radiation control, personal protective equipment, and industrial health program.
- SA 311 INDUSTRIAL FIRE PROTECTION** 3 s.h.  
 Prerequisites: CH 101, CH 102, PY 111, PY 112, SA 101, SA 211  
 Introduces fundamental concepts in protection of industrial workers and property from fire and explosion. Fire chemistry, control of ignition sources in industry, and properties of combustible materials discussed. Fire detection and extinguishment covered along with building construction for fire prevention, fire codes, and related topics.
- SA 345 SYSTEMS SAFETY ANALYSIS** 3 s.h.  
 Prerequisites: SA 111, SA 211, MA 217  
 Takes the approach of systems analysis in accident prevention, economics of system safety, information acquisition, analytical approaches, systems safety methodology, human factors engineering, mathematics of systems analysis (including statistical methods, boolean algebra and testing and reliability), comparison of various analytical methods in the engineering design, inductive and deductive analytical techniques: PRELIMINARY HAZARD ANALYSIS, TASK ANALYSIS, FAILURE MODE AND EFFECT ANALYSIS, FAULT TREE ANALYSIS, and excercises in the application of FAULT TREE ANALYSIS to hardware and man/machine systems. Practical analysis work is accomplished in laboratory sessions.
- SA 347 ERGONOMICS** 3 s.h.  
 Prerequisites: SA 111, SA 211, PC 101  
 An exploration of the principles which control human performance and its effect upon the Safety and Reliability of Systems. Engineering anthropometry, biomechanics of motion and work posture, work physiology and performance measurement are covered in the context of their application in workplace design. Students will be instructed in methodologies for analysis tasks and human performance requirements. Two hours lecture and one three hour lab per week.
- SA 370 FLEET SAFETY** 3 s.h.  
 Prerequisites: SA 101, SA 111, SA 211  
 Includes topics involved with the development and operation of motor fleet safety programs: driver selection and training, accident investigation and record keeping, equipment safety

features, preventive maintenance and driver incentive programs.

#### SA 401 MINE VENTILATION

3 s.h.

Prerequisites: SA 102, PY 111, PY 112, SA 301, SA 302

Study of mine ventilation principles and practices which provide a basic knowledge in design and operation of mine ventilation systems. The topics of airflow physics, ventilation standards, fan fundamentals, pressure losses, required air flows and overall design are discussed. Specific problems in mine ventilation will be solved.

#### SA 412 EVALUATION OF SAFETY PROGRAM EFFECTIVENESS

3 s.h.

Prerequisites: MA 217, Senior Standing

Teaches reasons and importance of evaluating safety and health innovations on organization performance, devising measuring systems capable of extracting accurate, meaningful data, methods of collecting, codifying, and processing accident-injury information, and utilization of data retrieval systems.

#### SA 445 PRODUCT SAFETY

3 s.h.

Prerequisites: MA 217, Senior Standing

Traces flow of applicable legislation dealing with consumerism and product safety. Corporate liability for product safety emphasized through case studies. Student familiarized with evolving role of Consumer Product Safety Commission. Corporate management of product development and safety detailed with emphasis on systems safety analysis, standards and product testing.

#### SA 450 INTERNSHIP

6 s.h.

Prerequisite: Senior Standing

All Safety Management majors are expected to take this course. It is conducted away from the University at various industrial enterprises. Students are required to provide their own transportation. Intended to allow the student to apply hazard assessment and safety management practices to actual industrial situations while at same time being exposed to complexities of industrial environment. The student will spend 12 hours per week at an industrial location and 2 hours of classroom instruction weekly where field assignments will be designated, problems will be discussed, and progress will be evaluated.

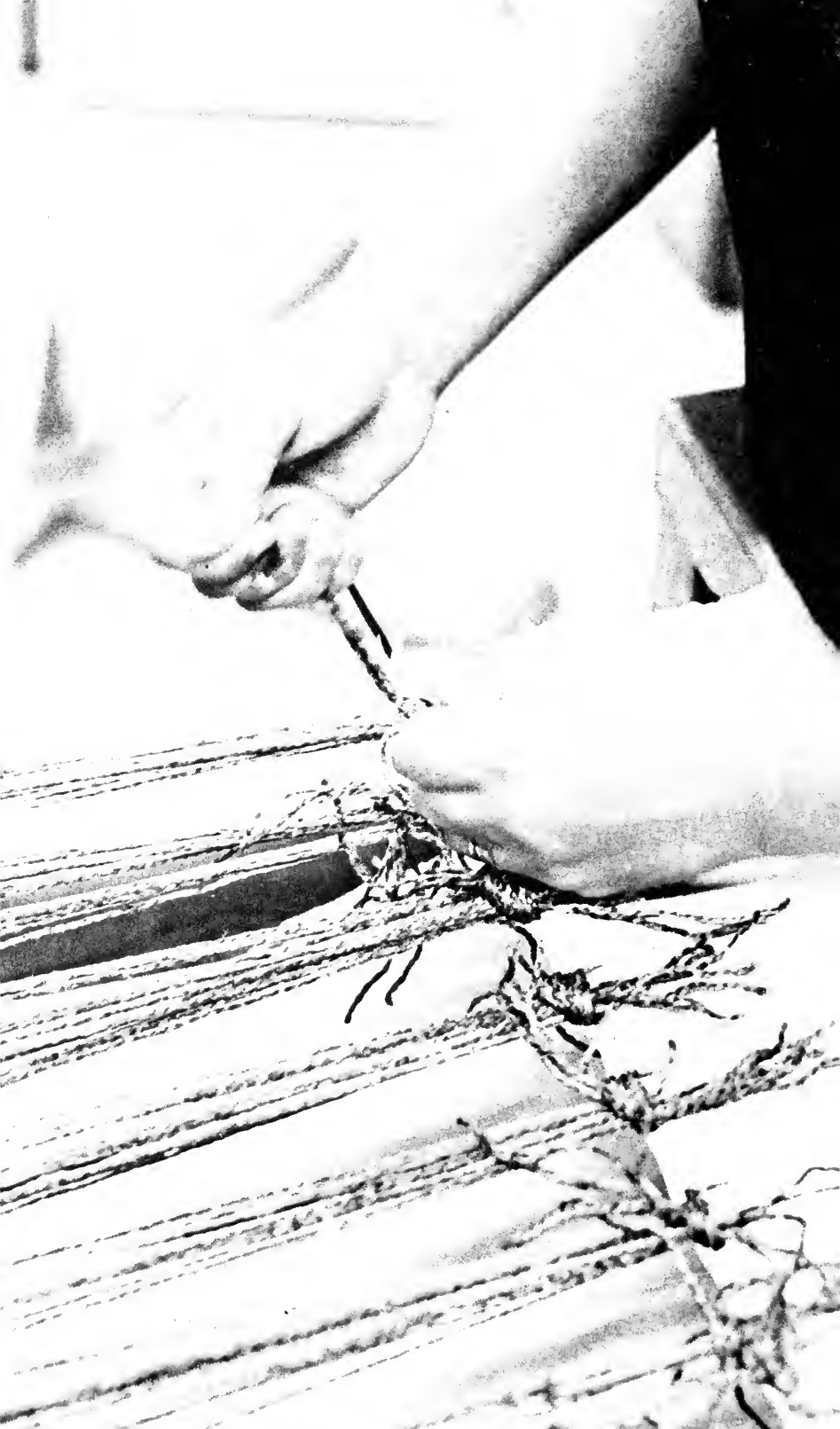
#### SA 462 RADIOLOGICAL HEALTH

3 s.h.

Prerequisites: SA 301, SC 105, PY 111, PY 112

Study of problems associated with ionizing radiation in human environment. Emphasis given to biological effects, radiation measurement, dose computational techniques, exposure control, and local and federal regulations. Study and use of various radiological instruments included.





# **The School of Home Economics**

**Kathleen Jones, Dean**

At IUP Home Economics is the ongoing investigation of human interaction with the near environment as it contributes to one's aesthetic, physical, economic and social-psychological well-being.

The School of Home Economics emphasizes family relations and human development, resource management and consumer economics, food and nutrition, clothing and textiles, housing and interior design in its study of the near environment. Research from all disciplines is utilized.

The objectives of the School of Home Economics at IUP are: to guide students in the development of competencies and skills necessary for various professions; to provide students with a foundation for advanced study in home economics and related fields; to assist in preparing students to lead useful lives as individuals, family members and citizens.

Curricula in the School contribute to the development of professional competencies which enable graduates to enter a diversity of careers in education, business, industry and community services. The School is composed of three departments: Home Economics Education, Food and Nutrition and Consumer Services.

The School of Home Economics has been granted full accreditation status by the American Home Economics Association.

### **Minors**

A minor consisting of 15 to 21 semester hours in a subject-matter area of home economics can be arranged for students enrolled in other schools of the university.

## **UNIVERSITY GENERAL EDUCATION REQUIREMENTS**

Students enrolled in the School of Home Economics must meet the University requirements in General Education.

CH 101-102 College Chemistry I and II (meet the Natural Sciences laboratory requirement)	8 s.h.
---	--------

In meeting the Social Science requirements, all students in the School must take PC 101, General Psychology. Students in the Nutrition Education Option and Home Economics Education Department must elect HI 104, History of the United States and Pennsylvania II. All students in the School are encouraged to elect general education courses in art, sociology, economics and anthropology.

## **SCHOOL OF HOME ECONOMICS REQUIREMENTS**

In addition to the University requirements, each student is required to pass one course offered by the departments in the School he/she is not enrolled in at the time of graduation. Accepted courses are:

### Home Economics Education

HE 218 Child Development	3 s.h.
HE 319 Family Relations	3 s.h.

### Food and Nutrition Department

FN 111 Introduction to Foods	3 s.h.
FN 212 Nutrition	3 s.h.
FN 351 Nutrition Education	3 s.h.
FN 451 Man and Food	3 s.h.

### Consumer Services

CS 213 Home Equipment/Consumer Electronics	3 s.h.
CS 315 Family Finance and Consumer Economics	3 s.h.

## **CONSUMER SERVICES DEPARTMENT**

**DONNA L. STREIFTHAU, CHAIRPERSON: CRAMER, LYNN, SCHMITT, SHARMA, SWINKER, VIGGIANO, WALKER, WILSON, WOOD.**

The Consumer Services Department offers students two options leading to the Bachelor of Science degree: (1) Textiles, Clothing, Interior Design/Business, and (2)



Community Services. These options prepare men and women for positions emphasizing consumer concerns. Graduates are employed by retail establishments, manufacturers, utility companies, extension services, and social and governmental agencies.

The department offers courses in the subject matter areas of clothing, textiles, housing, interior design, home equipment, consumer and family economics, and personal and family management. The faculty are interested in the individual growth of their students and work closely with them to individualize programs to meet the student's career goals.

Students are encouraged to develop their individual potential through the application of knowledge gained in the classroom to job situations and departmental, campus and community activities. Students may elect Field Experience which provides the opportunity to apply academic knowledge to an on-the-job (internship) situation. Students may elect a study tour to gain an understanding of business procedures and/or consumer problems in various areas of the world. Faculty advisers work closely with students in planning and integrating the academic program with enriching experiences outside the classroom.

A Visiting Student Program with the Fashion Institute of Technology (F.I.T.) in New York City is available to qualified Consumer Services students. Students who are approved by IUP and accepted by F.I.T. are able to receive both a bachelor's degree (IUP) and an associate degree (F.I.T.). The student's junior year is spent at F.I.T. pursuing concentrated course work in one of the following areas: advertising and communications, fashion design, management engineering technology, textile design, textile technology, or jewelry design.

### Department Requirements

In addition to meeting the University and School requirements, all students in the Department must take the following:

CS 213 Home Equipment/Consumer Electronics	3 s.h.
CS 315 Family Finance and Consumer Economics	3 s.h.
CS 421 Consumer Services Practicum	3 s.h.
HE 213 Principles of Design	2 s.h.

## TEXTILES, CLOTHING, INTERIOR DESIGN—BUSINESS OPTION

---

Graduates of this option are prepared for employment by business organizations producing or selling clothing, textiles, home furnishings, equipment, or other consumer products.

### Required:

CS 112 Fundamentals of Clothing Construction	
OR	
*CS 212 Advanced Clothing Construction	3 s.h.
CS 216 Clothing and Man	3 s.h.
CS 217 Interior Design	3 s.h.

CS 314 Textiles	3 s.h.
CS 318 Fashion Merchandising	3 s.h.
*(if placed via placement exam)	

**Electives:** (A minimum of six semester hours from the following)

CS 101 Personal and Family Management	3 s.h.
CS 212 Advanced Clothing Construction (if CS 112 was taken as requirement)	3 s.h.
CS 214 Environmental Textiles	3 s.h.
CS 312 Housing and Man	3 s.h.
CS 303 Visual Merchandising	3 s.h.
CS 311 Soft Constructions for Interiors	3 s.h.
CS 354 Independent Study	1-3 s.h.
CS 357 Interior Design Studio	3 s.h.
CS 413 Problems in Consumer Economics	3 s.h.
CS 416 Problems in Family Finance	3 s.h.
CS 433 Study Tour	1-6 s.h.
CS 453 Apparel Structure and Design	3 s.h.
CS 454 Tailoring	3 s.h.
CS 455 Draping	3 s.h.
CS 456 Historic Costume	3 s.h.
CS 462 Historic Interiors	3 s.h.
CS 463 Modern Interiors	3 s.h.

**Outside Concentration**

A minimum of 18 semester hours is required from the following (or business substitutes approved by adviser):

BU 101 Business Organization and Management	3 s.h.
*BE 111 Foundations of Business Math	3 s.h.
BA 201 Personnel Management	3 s.h.
BU 221 Accounting Principles I	3 s.h.
BU 233 Marketing	3 s.h.
BU 251 Accounting Principles II	3 s.h.
BU 321 Business Communications	3 s.h.
BA 331 Consumer Behavior	3 s.h.
DE 331 Modern Merchandising	3 s.h.
BU 332 Retail Management	3 s.h.
BU 333 Principles of Selling	3 s.h.
BU 339 Business Data Processing	3 s.h.
BA 434 Advertising	3 s.h.

**Additional Requirements:**

*EC 121 Principles of Economics I	3 s.h.
EC 122 Principles of Economics II	3 s.h.

\*May be taken as a General Education requirement

**COMMUNITY SERVICES OPTION**

Courses from all subject matter areas of home economics are included in this option.

Electives may be concentrated in particular home economics areas. A concentration of courses is elected in a field of study outside home economics, such as sociology or psychology. Graduates may be employed by the Extension Service or by various governmental and social agencies.

**Required:**

CS 101 Personal and Family Management	3 s.h.
CS 112 Fundamentals of Clothing Construction	
OR	
CS 212 Advanced Clothing Construction	3 s.h.
FN 111 Introduction to Foods	3 s.h.
FN 212 Nutrition	3 s.h.
CS 216 Clothing and Man	3 s.h.
CS 312 Housing and Man	3 s.h.
CS 314 Textiles	3 s.h.
HE 218 Child Development	3 s.h.
HE 319 Family Relations	3 s.h.

A minimum of 18 semester hours beyond General Education courses are to be selected in a field of concentration such as Sociology and/or Psychology. Courses may be selected from the following, or approved substitutes.

SO 231 Contemporary Social Problems	3 s.h.
SO 332 Racial and Ethnic Minorities	3 s.h.
SO 333 Juvenile Delinquency	3 s.h.
SO 435 Social Stratification	3 s.h.
SO 336 Sociology of Family	3 s.h.
SW 338 Introduction to Social Work	3 s.h.
SO 339 The Community	3 s.h.
AN 211 Cultural Anthropology	3 s.h.
AN 319 Kinship and Social Organization	3 s.h.
PC 200 Psychology of Adjustment	3 s.h.
PC 351 Introduction to Psychological Measurements	3 s.h.
PC 354 Developmental Psychology	3 s.h.
PC 356 Personality	3 s.h.
PC 357 Abnormal Psychology	3 s.h.
PC 358 Social Psychology	3 s.h.
PC 361 Motivation	3 s.h.
PC 373 Adolescent Psychology	3 s.h.
PC 374 Adult Development and Aging	3 s.h.

## **COURSE DESCRIPTIONS**

**CS 101 PERSONAL AND FAMILY MANAGEMENT** 3 s.h.  
 Management as a system and its relationship to individuals and families. Formulation of goals, values, standards; use of decision-making process; utilization of resources. Three lecture hours.

**CS 112 FUNDAMENTALS OF CLOTHING CONSTRUCTION** 3 s.h.  
 Principles and techniques involved in fundamental clothing construction and fitting are analyzed. Directed laboratory experiences provide opportunity to solve individual problems in garment structure through application of principles. For students who do not have ability to

exemplify quality workmanship. One hour lecture, 3 hours lab.

**CS 212 ADVANCED CLOTHING CONSTRUCTION** 3 s.h.

Prerequisite: CS 112 or Placement (by exam)

In-depth study of principles of advanced fitting and clothing construction are applied and analyzed. One hour lecture, 3 hours lab.

**CS 213 HOME EQUIPMENT/CONSUMER ELECTRONICS** 3 s.h.

Consumer education in the selection, use, and care of home equipment. The student will study the inter-relationship of energy sources and utilities with such equipment as: major appliances, portable and personal care appliances, and consumer electronics. Two 1-hour lectures, one 2-hour lab.

**CS 214 ENVIRONMENTAL TEXTILES** 3 s.h.

Investigation of components and characteristics of textiles for man's near environment with emphasis on soft goods for public and private interiors; including production, marketing and legislation affecting acquisition, use and care. Two one-hour lectures, one two-hour lab.

NOTE: A student may not count both CS 214 and 314 toward graduation requirements.

**CS 216 CLOTHING AND MAN** 3 s.h.

Prerequisite: PC 101

Survey of aesthetic, cultural, socio-psychological, economic, and physical factors related to the meaning and use of clothing for the individual and society. Three lecture hours.

**CS 217 INTERIOR DESIGN** 3 s.h.

Prerequisite: HE 213 or equivalent

Emphasis upon development of knowledgeable consumers in the selection and design of a home, its furnishings, and its total environment. 1 hour lecture, 3 hour lab.

**CS 303 VISUAL MERCHANDISING** 3 s.h.

Designing and arranging of display and selling areas in relationship to merchandising trends and consumer demands. Emphasis on promotion techniques and merchandise sales through effective use of space, design and color. One hour lecture, three hours lab.

**CS 311 SOFT CONSTRUCTIONS FOR INTERIORS** 3 s.h.

Application of design principles to decor is executed through measurement and construction of soft furnishings for the home and contract phases of the interior design industry. One hour lecture, three hours lab.

**CS 312 HOUSING AND MAN** 3 s.h.

Managerial, sociological, economic, and aesthetic aspects of housing and man are investigated as well as a consideration of the environment of the home as part of the community. Three hours lecture.

**CS 314 TEXTILES** 3 s.h.

Prerequisite: CH 102

Analyses of textile components of fiber, yarn, fabrication, finishes, and color with emphasis upon consumer acquisition, use and satisfaction, including relevant legislation. Two one-hour lectures, one two-hour lab.

**CS 315 FAMILY FINANCE AND CONSUMER ECONOMICS** 3 s.h.

Economic, sociological, and psychological principles are applied to family money management problems. Sources of consumer aid and protection are investigated. Three lecture hours.

**CS 318 FASHION MERCHANDISING** 3 s.h.

Prerequisites: CS 216 and upper level standing

Study of the origins, movement, dissemination and prediction of fashion; an investigation of the methods of operation, merchandising activities and current fashion industry trends; an analysis of the planning and control procedures used in retail merchandising of fashion goods. Three hours lecture.

- CS 354 INDEPENDENT STUDY 1-3 s.h.  
Prerequisite: Permission  
Particular consumer considerations are independently investigated in the area of housing, home equipment, interior design, clothing, textiles, or in the management of resources. Course may be repeated for a total of three semester hours. Students meet with a faculty member at least 5 hours per semester hour.
- CS 357 INTERIOR DESIGN STUDIO 3 s.h.  
Prerequisite: CS 217  
Creative solutions to problems in interior environments emphasized. Field trips to museums, furniture factories, stores, and private residences included. One hour lecture, four hours lab.
- CS 413 PROBLEMS IN CONSUMER ECONOMICS 3 s.h.  
Prerequisite: CS 315 or Economics  
Problems in consumer expenditures studied with emphasis given to effects of current economic and social forces. Governmental and private agencies which aid the consumer are reviewed. Individual investigations required. Three lecture hours. Fall semester only.
- CS 416 PROBLEMS IN FAMILY FINANCE 3 s.h.  
Prerequisite: CS 315  
In-depth theories and principles in personal and family finance and the rights and responsibilities of consumers are emphasized. Opportunities are provided for students to explore specific areas of interest. Three lecture hours. Spring semester only.
- CS 421 CONSUMER SERVICES PRACTICUM 3 s.h.  
Prerequisite: Completion of 75 semester hours  
Knowledge gained in major and outside concentration courses is applied to individual career goals. Students have the opportunity to pursue related areas not directly covered in previous course work, with emphasis upon independent research, analytical thinking, and communications skills.
- CS 433 STUDY TOUR 1-6 s.h.  
Prerequisite: Upper level standing  
Opportunity is provided to visit business establishments and cultural centers concerned with household equipment, furnishings, textiles, clothing, and housing in America as well as abroad. Museums, factories, designers' showrooms, distribution centers, stores, cultural events, and seminars are included. Course may be repeated for a total of six semester hours.
- CS 451 FIELD EXPERIENCE 1-12 s.h.  
Prerequisites: Approval of instructor and department chairperson; upper level standing.  
Practical experience related to the student's major areas of study with objectives, supervised experience, and evaluation. Course may be repeated for a total of 12 semester hours.
- CS 453 APPAREL STRUCTURE AND DESIGN 3 s.h.  
Prerequisite: CS 212 or exemption exam.  
Garment design achieved by use of flat pattern techniques. An understanding is developed of the interrelationship of garment design, figure analysis, fabric, fit, and construction processes. One hour lecture, three hours lab.
- CS 454 TAILORING 3 s.h.  
Prerequisite: CS 212 or exemption exam.  
Various tailoring methods are studied and applied in the selection, fitting, and construction of a tailored garment. Consumer problems in the selection of ready-to-wear apparel are investigated. One hour lecture, three hour lab.
- CS 455 DRAPING 3 s.h.  
Prerequisite: CS 212 or exemption exam  
Apparel design principles are applied by draping fabric to conform to the human figure. Students will pad a form to individual measurements and create garments that are both individual and original. One hour lecture, three hour lab.

**CS 456 HISTORIC COSTUME** 3 s.h.  
Chronological study of historic costume from ancient times to the present day with emphasis on the affect of aesthetic, economic, geographic, political, religious, and social factors upon the design of clothing worn. Three lecture hours.

**CS 461 MICROWAVE COOKING TECHNOLOGY** 3 s.h.  
An in-depth study of the electronic technology, selection, care, and use of the microwave oven. Basic physical and chemical concepts related to microwave cooking are included. Individual investigative research problems are required. Two one-hour lecture, one two-hour lab.

**CS 462 HISTORIC INTERIORS** 3 s.h.  
Chronological study from ancient times to the mid-19th Century of the dominant influences and characteristics of historical interiors, furniture and ornamental design. Emphasis placed upon style detail and its relationship to social, economic, political, religious and aesthetic influence; and to the contemporary scene. Paper required. Three lecture hours.

**CS 463 MODERN INTERIORS** 3 s.h.  
Chronological study from mid-19th Century to the present of the dominant influences and characteristics of the 20th century interior, furniture and ornamental design. Emphasis placed upon style detail and its relationship to social, economic, political, religious and aesthetic influences; and to contemporary usage. Paper required. Three lecture hours.

---

## **FOOD AND NUTRITION DEPARTMENT**

---

**RONALD. E. SIMKINS, CHAIRPERSON: CESSNA, DAHLHEIMER, GRAHAM, GRESSLEY, MINNICK, STEINER, WOODS.**

Interesting work, good salaries and opportunity for advancement in positions that give meaning, satisfaction and a purpose in life await young men and women who prepare for careers in the growing fields of dietetics, food service management, and educational food service.

Courses offered by the Food and Nutrition Department are planned to train the student as a professional to meet the challenge of this growing industry, which includes not only the commercial food service and hospitality facets of the industry, but hospital and educational segments as well.

The prime requisites for success in the field of foods and nutrition are an interest in people, an artistic appreciation of quality food, a realization of the need for good nutrition, and a knowledge of sound business principles.

This department offers the following three options:

### **Nutrition Education Option**

Graduates are prepared to manage the school food service programs; to provide meals with optimum nourishment to school children, to the elderly, to child care centers, or to any of the many nutrition feeding programs and to render professional service to teachers concerning the teaching of nutrition. This program meets Pennsylvania Department of Education certification requirements for a Nutrition Program Specialist (Education Specialist I).

Requirements for the American Dietetic Association internship can also be met by taking additional elective courses.

**Dietetic Option**

This program prepares the student to enter management in the dietary department in hospitals, business and institutional establishments. Requirements for an American Dietetic Association internship are met. The goal of students in this option should be an internship and American Dietetic Association registration.

**Food Service Management Option**

This program is planned to prepare graduates for management positions with establishments providing food service to the general public. Graduates have competencies in the areas of nutrition and food management as well as in business.

In addition to University and School requirements the following courses are required.

**Food and Nutrition — All Options**

FN 111 Introduction to Foods	3 s.h.
FN 211 Advanced Foods	3 s.h.
FN 313 Quantity Food Production and Service	4 s.h.
FN 356 Food Service Personnel and Administration	3 s.h.
FN 358 Food Service Equipment and Layout	3 s.h.
FN 359 Quantity Food Purchasing	3 s.h.
FN 364 Methods of Teaching	3 s.h.
BU 221 Accounting Principles I	3 s.h.

**Nutrition Education and Dietetics**

BI 151 Human Physiology	3 s.h.
EP 302 Educational Psychology	3 s.h.
FN 212 Nutrition	3 s.h.
FN 362 Experimental Foods	3 s.h.
FN 402 Nutrition and Community Health	3 s.h.

**Nutrition Education**

ED 433 School Law	1 s.h.
CM 301 Audio Visual Education	3 s.h.
FE 302 History and Philosophy of Education	3 s.h.
FN 408 School Foodservice Management	3 s.h.
FN 321 Professional Employment Practicum	0 s.h.

**Dietetics**

CO 200 Intro to Computers	3 s.h.
CH 355 Biochemistry and Nutrition	3 s.h.
FN 355 Nutrition in Disease	3 s.h.

**Food Service Management**

CO 200 Intro to Computers	3 s.h.
BU 101 Business Organization and Management	3 s.h.
BU 235 Introduction to Business Law	3 s.h.
BU 233 Marketing	3 s.h.
LR 480 The Principles and Practices of Collective Bargaining	3 s.h.
FN204 Hospitality Management Seminar	3 s.h.
FN 212 Nutrition	3 s.h.
FN 401 Food Management Cost Control	3 s.h.
FN 406 Catering Management	3 s.h.

## COURSE DESCRIPTIONS

---

- FN 111 INTRODUCTION TO FOODS 3 s.h.  
 Basic principles of food preparation, including use of equipment, menu planning, marketing and table service for family meals. Two hours lecture and 2 hours of laboratory work and/or demonstration per week.
- FN 204 HOSPITALITY MANAGEMENT SEMINAR 3 s.h.  
 Psychological and sociological aspects of serving public are considered along with current management techniques to provide student with professional and technological insight of this rapidly growing industry.
- FN 211 ADVANCED FOODS 3 s.h.  
 Prerequisites: FN 111, CH 102 or CH 112 or concurrently.  
 An in-depth study of food preparation, including food preservation, protein, carbohydrate and fat cookery. Two lecture and 3 laboratory hours per week.
- FN 212 NUTRITION 3 s.h.  
 Prerequisites: CH 102 or CH 112, BI 151 or concurrently.  
 Sources and functions of nutrients and interdependence of dietary essentials and nutritive value of an optimum diet are studied. Attention given to varied conditions in human life. Three lecture hours per week.
- FN 313 QUANTITY FOOD PRODUCTION AND SERVICE 4 s.h.  
 Prerequisites: FN 211 and 212.  
 A basic course in quantity food production with experience in planning, purchasing, preparing and serving nutritionally adequate meals. Requirements of National School Lunch program emphasized in satellite and on-premise feeding.
- FN 321 PROFESSIONAL EMPLOYMENT PRACTICUM 0 s.h.  
 Prerequisites: FN 313 plus 60 semester hours  
 Junior or sophomore summer is used for an employment experience in an approved food service facility. Students seek their own position. Assistance and guidance given by department chairperson.
- FN 351 NUTRITION EDUCATION 3 s.h.  
 Study of the functional knowledge of nutritional concepts directed toward improved food habits and nutritional health. Three lecture hours per week.
- FN 355 NUTRITION IN DISEASE 3 s.h.  
 Prerequisites: FN 212; CH 102 or CH 112, BI 151  
 Modification of normal adequate diet to meet nutritional needs in pathological conditions requiring special dietary treatment. Advanced nutrition study. Three lectures hours per week. Fall semester.
- FN 356 FOOD SERVICE PERSONNEL AND ADMINISTRATION 3 s.h.  
 Prerequisites: PC 101, FN 313.  
 Organization and administration of food service business, including personnel policies, work simplification, cost controls, supervision and sanitation.
- FN 357 SPECIAL PROBLEMS IN FOODS 3 s.h.  
 Prerequisite: FN 211.  
 Individual problems in foods investigated with emphasis on identified weaknesses in student's knowledge of food. Four hours per week.
- FN 358 FOOD SERVICE EQUIPMENT AND LAYOUT 3 s.h.  
 Prerequisite: FN 313.  
 Selection and layout of food service equipment in relation to production, work flow and efficient management. Field trips permit investigation of a variety of layouts. Three hours per week. Fall semester.



- FN 359 QUANTITY FOOD PURCHASING 3 s.h.  
 Prerequisite: FN 313 or concurrently.  
 Course includes sources, standards of quality, grades, methods of purchase and storage of various foods. Emphasis is given to the development of purchasing policies and procedures.
- FN 362 EXPERIMENTAL FOODS 3 s.h.  
 Prerequisites: FN 211, 212, and CH 102, or CH 112  
 Study of foods based on scientific methods wherein physical and chemical principles are observed. Professional demonstration techniques are included. Four hours per week.
- FN 364 METHODS OF TEACHING 3 s.h.  
 Current teaching techniques and resource materials in nutrition education emphasized. Both classroom teaching and on-the-job training programs are included. Three lecture hours per week.
- FN 401 FOOD MANAGEMENT COST CONTROLS 3 s.h.  
 Food, beverage and labor cost controls for restaurants, school lunch programs and health care feeding facilities are studied including relationships between budgetary information and managerial decision making in large food service operations.
- FN 402 NUTRITION AND COMMUNITY HEALTH 3 s.h.  
 Prerequisite: FN 212  
 Nutritional implications of both good and poor nutrition for all age groups in home and community situations are studied. Corrective and preventive measures emphasized. Spring semester.
- FN 406 CATERING MANAGEMENT 3 s.h.  
 Profitable organization, preparation, and service of catered food both on and off the premises is main focus of course. Off-campus experience included.
- FN 408 SCHOOL FOODSERVICE MANAGEMENT 3 s.h.  
 Prerequisites: FN 313, 358, 364.  
 Includes the state and federal history of school foodservice, legislation affecting the program, funding, government donated commodities, federal inspection, and application and claim forms. Field trips for observation and participation in school foodservice operations at approved centers will be arranged.
- FN 433 EDUCATIONAL STUDY TOUR IN FOODS 2-6 s.h.  
 Comprehensive program of directed activities permits first hand knowledge of growing, processing, marketing and preparation of foods. The historical and cultural aspects of food are studied. Visits to food markets, catering schools, famous restaurants, etc., are included.
- FN 451 MAN AND FOOD 3 s.h.  
 Prerequisite: PC 101 or SO 151 or AN 110.  
 Exploration of the economic, biological, psychological, social and aesthetic significance of food for individuals, families and society. Taught as a research and seminar class. Recommended as an elective for all students.
- FN 461 MICROWAVE COOKING TECHNOLOGY 3 s.h.  
 Study of the electronic technology, selection, care and use of the microwave oven. Basic physical and chemical concepts related to microwave cooking will be included. Individual investigative research problems will be required. Two lecture, two lab hours per week.
- FN 455 ADVANCED NUTRITION IN DISEASE 3 s.h.  
 Prerequisites: CH 351 or 355, FN 355  
 Advanced study of the effects of dietary modification on pathological conditions utilizing current research. Opportunity to observe the role of the professional dietitian in the clinical setting. Calculation and preparation of modified diets. One hour lecture, two hours lab.

**FN 458 ADVANCED HUMAN NUTRITION**

3 s.h.

Prerequisite: CH 351 or 355 or concurrently, FN 212

Study in depth of the nutrients and their functions within the cell. Incorporation of the principles of physiology and biochemistry in the study of nutrition. Emphasis on current research and evaluation of research methodology. Three hours lecture.

**FN 482 INDEPENDENT STUDY**

1-6 s.h.

Prerequisite: Must have earned 60 semester hours.

Opportunity to pursue special interests beyond the scope of regular class offerings. Permission of instructor and approval of department chairperson required. (Undergraduate maximum is 12 semester hours) Must apply for Independent Study a semester in advance.

**FN 483 INTERNSHIP IN FOOD & NUTRITION**

2-12 s.h.

Prerequisite: Must have earned 90 semester hours.

An opportunity for students to work away from the University in supervised job situations at health care facilities, restaurants, or other institutional foodservice establishments. Objective is to provide students with job-related experiences. Must meet University internship requirements.

NOTE: White uniforms including white shoes are required for all lab courses where food is prepared. Students must meet the professional dress requirements of the department.

---

## **HOME ECONOMICS EDUCATION DEPARTMENT**

---

**ALMA KAZMER, CHAIRPERSON: ANDERSON, BELL, BROWNING, GALLATI, HOVIS, NELSON, RUPERT**

A number of career opportunities await the person who completes either the Home Economics Education program or Child Development and Family Relations program.

---

### **HOME ECONOMICS EDUCATION PROGRAM**

---

A major in Home Economics Education leads to a Bachelor of Science in education and meets certification requirements for teaching home economics at all levels (k-adults) in the schools of Pennsylvania. Upon completion of this program, students have the semester hours necessary for teaching in child care programs and are eligible to receive the Nursery-Kindergarten Certificate issued by the Bureau of Private Academic Schools.

Graduates are also prepared for varied types of employment related to improving family life such as home economists with extension services, utility companies, retail business concerns, social service organizations and government agencies.

The program also provides preparation for students who wish to pursue advanced degrees.

---

### **HOME ECONOMICS EDUCATION REQUIREMENTS**

---

In addition to University and School requirements, the student is required to complete the following home economics content and professional education courses.

**Home Economics Content**

\*CS 112 Fundamentals of Clothing Construction  
AND

3 s.h.

CS 212 Advanced Clothing Construction	3 s.h.
OR	
*CS 212 Advanced Clothing Construction	3 s.h.
AND ONE OF THE TWO FOLLOWING CLOTHING COURSES:	
CS 453 Apparel Structure and Design	3 s.h.
CS 454 Tailoring	3 s.h.

\*Entry into CS 112 and CS 212 will be determined by the student's score on the placement exam.

CS 213 Home Equipment/Consumer Electronics	3 s.h.
CS 217 Interior Design (HE 213 Principles of Design is a prerequisite)	3 s.h.
OR	
CS 312 Housing and Man	3 s.h.
CS 314 Textiles	3 s.h.
CS 315 Family Finance and Consumer Economics	3 s.h.
FN 111 Introduction to Foods	3 s.h.
FN 211 Advanced Foods	3 s.h.
FN 212 Nutrition	3 s.h.
HE 218 Child Development	3 s.h.
HE 319 Family Relations	3 s.h.
HE 320 Teaching in Child Development Centers	3 s.h.

### Professional Education Requirements

HE 250 Introduction to Teaching Vocational Home Economics	3 s.h.
CM 301 Audio Visual Education	3 s.h.
EP 302 Educational Psychology	3 s.h.
FE 302 History and Philosophy of American Education	3 s.h.
HE 350 Evaluation and Methods of Teaching Vocational Home Economics	3 s.h.
HE 430 Student Teaching Practicum	1 s.h.
ED 431 Student Teaching (Home Economics)	12 s.h.
ED 433 School Law	1 s.h.

Depending upon student's interests and needs, concentration will be varied and might include (1) electives in one of the five home economics subject matter areas or (2) electives in other areas approved by adviser.

### Child Development Option

Students receive in-depth preparation for teaching Parenting and Child Development in high school home economics programs, adult programs and community organizations. Those selecting this option take all required courses for the home economics education degree and, in consultation with adviser, select eight semester hours of electives in the Child Development and Family Relations area. Student teaching experience will take place in a center having a Child Development and/or Parenting program.

**Occupational Home Economics Option**

This option is planned to prepare graduates for teaching in home economics occupational programs in comprehensive high schools, vocational-technical schools, adult education programs and community colleges. Students selecting this option take all the courses required for the home economics education degree and, in consultation with adviser, select eight or more semester hours of electives in the area of specialization. The following two courses are required for a minimum of six semester hours:

HE 470 Occupational Home Economics in American Education	3 s.h.
HE 479 Occupational Home Economics Experience	3-6 s.h.

Student teaching experience will take place in a center with an Occupational Home Economics Program.

**CHILD DEVELOPMENT/FAMILY RELATIONS PROGRAM**

The Child Development/Family Relations program leads to a Bachelor of Science degree. Primary objectives of the program are to prepare professionals to administer and teach in programs that entail aspects of child development and/or family relations; to teach at the adult level; or supervise and direct professional, paraprofessional and volunteer staff in federal, state or local family supportive agencies. The program also provides preparation for students who wish to pursue graduate study in the area of child development/family relations.

Students are required to complete the General Education Requirements with the following courses being strongly recommended:

**Natural Sciences**

CH 101-102 College Chemistry I and II	8 s.h.
BI 151 Human Physiology	3 s.h.

**Social Sciences**

PC 101 General Psychology	3 s.h.
AN 110 Introduction to Anthropology	3 s.h.
SO 151 Principles of Sociology	3 s.h.
Two additional social science electives are required.	

**School of Home Economics Requirements**

FN 212 Nutrition	3 s.h.
CS 315 Consumer Economics and Family Finance	3 s.h.

**Home Economics Education Department**

HE 218 Child Development	3 s.h.
HE 317 Infant Development	3 s.h.
HE 318 Advanced Child Development	3 s.h.
HE 319 Family Relations	3 s.h.
HE 320 Teaching in Child Development Centers	3 s.h.
HE 321 Preschoolers With Special Needs	1 s.h.
HE 363 Family and the Community	3 s.h.
HE 315 Observation in the Nursery School	1 s.h.
HE 316 Creativity in the Nursery School	1 s.h.
HE 320 Teaching in Child Development Centers	3 s.h.

HE 421	Preschool Education	3 s.h.
HE 422	Early Childhood Education	3 s.h.
HE 424	The Family	3 s.h.
HE 426	Techniques of Parent Education	3 s.h.
HE 427	Administration of Child Development Centers	3 s.h.

### Other Courses Required

EP 302	Education Psychology	3 s.h.
CM 301	Audio Visual Education	3 s.h.
	Restricted Electives	6 s.h.
	Free Electives	18 s.h.

## COURSE DESCRIPTIONS

(Courses are three hours lecture per week unless noted otherwise)

- ④ HE 218 CHILD DEVELOPMENT 3 s.h.  
Prerequisite: PC 101  
Focuses on normal development and behavior of children. Survey made of physical, emotional, social and intellectual development of children from conception through early adolescence. Pertinent child development research analyzed.
- HE 250 INTRODUCTION TO TEACHING VOCATIONAL HOME ECONOMICS EDUCATION 3 s.h.  
Overview of philosophy and organization of home economics profession and the role of home economics teachers. Opportunities for planned observations and varied teaching experiences using a variety of resource materials are provided for self development and evaluation relative to desirable teacher competencies.
- HE 315 OBSERVATION IN THE NURSERY SCHOOL 1 s.h.  
Prerequisite: HE 218  
Gives the student an opportunity to learn about pre-school children and the nursery school environment through direct observation of pre-school children in a pre-school setting.
- HE 316 CREATIVITY IN THE NURSERY SCHOOL 1 s.h.  
Prerequisite: HE 218  
Students examine creative methods and develop creative activities for pre-school children. Included are art, dance, music, stories and dramatic plays.
- HE 317 INFANT DEVELOPMENT 3 s.h.  
Prerequisite: HE 218  
Study of characteristic developmental changes of human infants from birth to approximately two and one-half years.
- HE 319 FAMILY RELATIONS 3 s.h.  
Prerequisites: PC 101, HE 218 (Major)  
Focuses on preparation for marriage and principles of human relations basic to marital adjustment. Influence of community and family experiences on personal development and adjustment explored.
- HE 320 TEACHING IN CHILD DEVELOPMENT CENTERS 3 s.h.  
Prerequisite: He 218 or equivalent  
Techniques for planning and teaching pre-school children. Participation as teacher-assistant provides experience in applying principles of child guidance and development needed by teachers in pre-school centers or secondary school child development laboratories. (One hour lecture and three hour laboratory per week).

- HE 321 PRE-SCHOOLERS WITH SPECIAL NEEDS 1 s.h.  
Prerequisites: HE 218, HE 320  
Investigates issues involved in integrating "special-needs" children into the normal classroom. Examines classroom techniques and procedures, interaction with community agencies and parent involvement.
- HE 350 EVALUATION AND METHODS OF TEACHING VOCATIONAL HOME ECONOMICS 3 s.h.  
Prerequisites: EP 302, HE 250  
Orientation to classroom teaching through planned activities utilizing a variety of methods, techniques and resources. Major methods and techniques of evaluation used to assess and report growth, development and academic achievement of students are emphasized.
- HE 363 FAMILY AND THE COMMUNITY 3 s.h.  
Study of community contributions and problems that affect family and contributions of family to community. Investigation of ways group dynamics, communication media and other resources aid understanding of human behaviors.
- HE 390-399 INNOVATIVE TEACHING 1-3 s.h.  
Prerequisite: HE 250  
Investigation and evaluation of innovative curriculum materials, resources and techniques.
- \*HE 418 ADVANCED CHILD DEVELOPMENT 3 s.h.  
Prerequisite: HE 218  
Study of trends in the field of child development based on review of current literature. Observations of children in a variety of informal situations will be made within the limits of available resources.
- HE 421 PRE-SCHOOL EDUCATION AGES 2-5 YEARS 3 s.h.  
Prerequisite: HE 218  
Observations and experiences with children are used as basis for understanding guidance procedures appropriate to pre-school children. Program evaluation, curriculum and administration emphasized.
- HE 422 EARLY CHILDHOOD EDUCATION 3 s.h.  
Prerequisite: HE 218  
Current educational theories and research reviewed in terms of implication for pre-school and their effect on material, equipment and activity selection.
- HE 423 MARRIAGE AND FAMILY RELATIONS 3 s.h.  
Emphasis placed on understanding varying family life styles, basics of marriage and changing family roles. Course is based on the disciplines of sociology and psychology as they apply to individuals and families. Effective problem-solving, decision making and identification of potential problems in marriage are emphasized.
- HE 424 THE FAMILY 3 s.h.  
Prerequisite: HE 319  
Concentrated study of selected areas of family life, with emphasis on dynamics of family interaction and interpersonal relationships.
- HE 425 STUDY TOUR IN FAMILY LIFE 2-6 s.h.  
OPTION: FAMILY LIFE  
Opportunity to observe family social structure and values in relation to cultural background and economic conditions. Culture, class, ethnic variations in family/kinship systems examined.
- OPTION: CHILD DEVELOPMENT  
Opportunity to observe developing child in family life/education relative to cultural background and economic conditions.

- \*HE 426 TECHNIQUES OF PARENT EDUCATION** 3 s.h.  
Examination of nature, extent and significance of parent education movement. Interrelationship of home and community agencies are examined in light of various programs, methods and techniques of parenting education.
- HE 430 STUDENT TEACHING PRACTICUM** 1 s.h.  
Taken concurrently with ED 431. Assists student teachers in analyzing problems and experiences encountered during student teaching. Emphasizes the variety and types of home economics programs and focuses on developing effective teaching strategies (4 sessions of 3 1/2 hours during semester).
- ED 431 STUDENT TEACHING (HOME ECONOMICS)** 12 s.h.  
Prerequisite: HE 350  
Supervised opportunities provided to guide the development of the student teacher in developing effective learning experiences with students in home economics classrooms in selected public schools for one semester. Self-evaluation of personal and professional growth are emphasized. (HE 430 is taken concurrently with course)
- ED 433 SCHOOL LAW** 1 s.h.  
Basic principles of school law and vocational legislation relating to home economics education are studied.
- HE 451 WORKSHOP IN HOME ECONOMICS EDUCATION** 3 s.h.  
Prerequisite: HE 250  
Identification and evaluation of current trends and issues in home economics education.
- HE 452 INTERNSHIP IN HOME ECONOMICS EDUCATION** 1-12 s.h.  
Prerequisites: Permission of department, School Dean, and University Internship Coordinator; upper level standing  
Practical experience related to the student's major area of study. Objectives are developed individually in consultation with university faculty member who supervises the internship. Log and major paper required. May be repeated up to a total of 12 semester hours, however these semester hours are not applicable toward the 124 semester hours required for graduation if student receives 12 semester hours in student teaching.
- HE 454 HOME ECONOMICS EDUCATION FOR ADULTS** 3 s.h.  
Prerequisite: HE 250  
Focuses on background and philosophy of adult education; types of home economics programs and methods of implementation; characteristics of adult learners; observation and teaching participation in adult programs.
- HE 470 OCCUPATIONAL HOME ECONOMICS IN AMERICAN EDUCATION** 3 s.h.  
Prerequisite: HE 250 or equivalent  
Identifies implications of federal and state legislation and role of home economics in occupational education. Analyzes federal funding of occupational programs using community needs and resources. Provides experiences in observing and planning home economics occupational programs.
- \*HE 471 CURRICULUM DEVELOPMENT IN HOME ECONOMICS EDUCATION** 3 s.h.  
Prerequisite: HE 250  
Various tasks and processes of curriculum development reviewed and analyzed. Emphasis on realistic decision making and innovative procedures in developing home economics curriculum.
- \*HE 472 EVALUATION IN HOME ECONOMICS** 3 s.h.  
Nature and scope of evaluation in contemporary home economics programs emphasizing use and construction of variety of tests and devices designed to measure comprehensive home economics educational objectives.

HE 479 OCCUPATIONAL HOME ECONOMICS EXPERIENCE

3-6 s.h.

Prerequisites: Approval of instructor and department chairperson; upper level standing  
Personalized experiences designed to broaden pre-service vocational- occupational competencies of teachers and provide them with a broader perspective of current technology within home economics and related areas before beginning teaching careers.

HE 482 INDEPENDENT STUDY

1-3 s.h.

Individual upper-level students with high scholastic achievement pursue their particular interests outside the realm of the organized home economics education curriculum. May be taken more than once to a maximum of three semester hours. Approval of department required.

\*Dual level courses





# MILITARY SCIENCE

**MAJOR RALPH ITALIA, CHAIRPERSON: MAJ DEAN C. FORD, CAP CHARLES M. BONGIOVANNI, CPT WILLIAM H. COLBY, CPT SALVATORE DINA, JR., MAJ EDWARD FLOWERS, CPT CRAIG L. HALBROOK, CPT THOMAS V. MORLEY, CPT ALAN THRASHER, SGM RAYMOND C. BROADBENT, SFC GARY C. BENNETT, SFC ROBERT M. MAMULA, SFC MARK T. OSBORN, SSG MARTHA E. GRANADOS, SP5 JACK ROSS**

Indiana University of Pennsylvania is authorized a Senior Reserve Officers Training Corps (ROTC) unit. The ROTC program offers to both men and women the opportunity to learn and practice leadership and managerial techniques that will prove beneficial to all life's future endeavors; to obtain credits which count toward graduation; and to those who choose to complete the total program, a commission as a second lieutenant in the US Army.

Regular ROTC classes for two semesters satisfy the mandatory University requirement for taking Health and Physical Education classes.

## **ENROLLMENT**

---

The program is broken into two phases: the Basic Course (freshman and sophomore years) and the Advanced Course (junior and senior years). Enrollment in any of the freshman or sophomore level ROTC courses (MS 101, MS 102, MS 203, MS 204, or MS 996 through MS 999) in no way obligates or commits the student to any military

service or any further ROTC courses. These courses are offered on the same basis as other academic courses at IUP with the privilege of withdrawing at any time.

## **REQUIREMENTS FOR ENROLLMENT**

---

The general requirements for enrollment in ROTC are that the student be accepted by the University as a regular enrolled student, be a citizen of the United States, physically qualified, not less than 14 years of age, but 27 or less at anticipated graduation date. Veterans and junior ROTC graduates may receive exemptions from the Basic ROTC Course as approved by the PMS. For continuation in the ROTC during the junior and seniors years, the student must have a 2.0 grade point average in his academic area, successfully completed requirements for the Basic ROTC Course, pass a physical examination, and be accepted by the Professor of Military Science (PMS). Advanced Course students must agree in writing to complete the junior and senior years since they will receive \$100 a month subsistence during these school years.

## **WHAT ROTC OFFERS**

---

Equipment, ROTC textbooks and uniforms are issued without cost to enrolled students.

Credit for successful completion of the four-semester hour Health and Physical Education General Education requirement for graduation.

Students formally enrolled in the Advanced Course (MS 305, MS 306, MS 407 and MS 408) are paid a subsistence allowance (currently \$100 a month) during the school year.

Training in other practical skills such as scuba diving, adventure training, rappelling, marksmanship, orienteering, first aid techniques and water safety.

Opportunities to examine the military profession in detail. This includes the Regular Army, National Guard and Army Reserve.

If students so desire and are accepted into the Advanced Course, they will receive commissions as Second Lieutenants upon graduation from the University and serve either three years continuous active duty or three months active duty for training with the remaining obligation served in the Army Reserve or National Guard.

## **MILITARY SCIENCE CURRICULUM**

---

**REGULAR BASIC COURSE** - The first two years of military science provide a background of the historical role of military forces as well as current national military objectives. In addition, basic leadership is developed and certain skills are taught such as adventure training, survival training, map reading, scuba diving, rappelling and marksmanship.

### **MS 101 WORLD MILITARY HISTORY**

2 s.h.

A study of the relationship and impact of warfare and military forces on the development of the world. This includes the interaction of military forces on the social, economical, and technological development of the world as well as a study of strategy, tactics and personalities involved in the major wars. The time period covered is from 1700 to World War I. Also, see Leadership

## Laboratory.

**MS 102 AMERICAN MILITARY HISTORY** 2 s.h.  
 Study of the evolution of American military institutions and policies and their relationship to society from World War I to present. Included will be studies of the major wars, their strategy and their impact as well as the personalities involved. Also, see Leadership Laboratory.

**MS 203 FUNDAMENTALS FOR TACTICAL OPERATIONS,  
 TECHNIQUES OF LEADERSHIP AND WEAPONS CHARACTERISTICS** 2 s.h.  
 Organization, techniques, resources and capabilities involved in conducting small unit tactical operations. Emphasis is on leadership, organization, and management techniques needed to cause a group of people to accomplish specific objectives. Characteristics of military weapons systems are taught. Students serve as a leader in Leadership Labs.

**MS 204 NATIONAL SECURITY AND FUNDAMENTALS OF  
 MILITARY TOPOGRAPHY** 2 s.h.  
 Study of national security concepts, policies and the national decision-making process with emphasis on national resources, national will, and economic factors. Included will be a study of nuclear and conventional response options. Fundamentals of military topography include the use of military maps to determine topographic features, conduct land navigation and perform terrain analysis will be covered.

**OPTIONAL BASIC COURSE** - Designed for freshman and sophomore students who find that their academic load is too heavy for them to take the regular Basic Course but still desire to participate in the ROTC program. This option enables the student to enroll in only one class per week in the ROTC program. Only the Leadership Laboratory class is taken. (Contents of this class is listed below.) Completion of optional Basic Course in freshman and sophomore years will qualify the student to enroll in the Advanced Course should he/she desire to do so. Academic credit toward graduation is not granted, nor is the University requirement for Health and Physical Education satisfied by taking this option as it is for the regular Basic Course. Course identification for freshmen and sophomores is MS 996, MS 997 and MS 998, MS 99 respectively.

**ADVANCED COURSE** - The last two years constitute the Advanced Course of instruction for both men and women who desire a commission as a Second Lieutenant in the Army of the United States. (Either the Army Reserve, National Guard or, for selected students, the Regular Army). This phase is composed of studies in advanced leadership and management, tactics, military law, psychological, physiological and social factors which affect human behavior and modern instructional and training techniques. Practical application is the rule and students have the opportunity to practice and polish their skills. Participation in the Advanced Course will earn the student approximately \$2,400 between \$100 a month subsistence and pay for summer camp (\$1,800 is not taxable).

**MS 305 FUNDAMENTALS OF LEADERSHIP AND  
 MODERN LEARNING/TEACHING RELATIONSHIP** 3 s.h.  
 Management as applied in classroom and field to include case studies in psychological, physiological, and sociological factors which affect human behavior; individual and group solution of leadership problems common to small units. Also, see Leadership Laboratory.

**MS 306 STUDY OF ADVANCE LEADER PLANNING AND EXECUTION  
 OF MODERN COMBAT OPERATIONS** 3 s.h.  
 Analysis of leaders role in directing and coordinating efforts of individuals and small units in execution of offensive and defensive tactical missions, to include command and control systems, the military team, and communications techniques. Also, see Leadership Laboratory.

**MS 407 MANAGEMENT OF THE MILITARY COMPLEX TO  
INCLUDE FUNDAMENTALS OF MILITARY AND INTERNATIONAL LAW**

3 s.h.

Study of the various managerial elements needed to effectively control a military organization and their techniques used to accomplish these functions. Studies in military law and international law prepare the students for his legal responsibilities.

**MS 408 SEMINAR IN MILITARY ANALYSIS AND MANAGEMENT**

3 s.h.

Contemporary analysis of use of military in world affairs to include importance of strategic mobility and neutralization of insurgent movements. Selected management problems and situations will be presented as they relate to military justice, administration, and obligation and responsibilities of an officer. Also, see Leadership Laboratory.

**LEADERSHIP LABORATORY (one afternoon per week)**

0 s.h.

A practical experience designed for the attainment and application of leadership principles. Concurrently scheduled in conjunction with all Military Science courses, it provides for practical challenges in personal accomplishment, both physical and mental, and for development of team work and leadership.

**SUMMER CAMP**

0 s.h.

Students attend a six-week summer camp upon completion of the first year of the Advanced Course. Time at camp is devoted to practical application of principles and theories taught during the preceding school years. While at camp, each student receives lodging, subsistence, uniforms, medical care, reimbursement for travel and pay in amount of one-half pay of second lieutenant per month.



# School of Natural Sciences and Mathematics

Charles R. Fuget, Dean

One of the characteristics of the twentieth century is the marked change in the relation of citizens to their environment. Space probes, orbiting satellites, and productive researches in the structure and synthesis of living matter have brought to the forefront for re-examination such time honored queries as, "What is the nature of the Universe?", or, "Can man control his natural environment?", or, "How did life begin?". Correct answers to these and other questions, coupled with proper application of this knowledge for man's betterment, must be a significant part of the goal of educated people everywhere.

The objectives of the School of Natural Sciences and Mathematics are to acquaint the student with the kinds of problems which lend themselves to possible solutions through the use of science; to introduce different scientific techniques through significant illustrative experiences; to give a sense of perspective in the development of science; and to develop an understanding of the basic community of all scientific disciplines.

## **DEGREES**

---

The Departments of Biology, Chemistry, and Physics offer work leading to either a Bachelor of Science or a Bachelor of Arts degree, depending upon the specific course program pursued. The Bachelor of Science degree is awarded for successful

work in the Departments of Computer Science, Geoscience, and Mathematics. The Bachelor of Arts degree is awarded by the Department of Psychology.

Several departments in the School of Natural Sciences and Mathematics sponsor Master of Arts or Master of Science degrees in the University's Graduate School. Information on these programs should be obtained from The Graduate School.

### **Degree Requirements**

In addition to the University's General Education requirements, all students seeking a baccalaureate degree in the School of Natural Sciences and Mathematics must complete the requirements for a major as established by the department through which they wish to specialize. Statements of these requirements and for minoring in a specific field, appear in the department sections that follow. A double major or minor may encompass a discipline outside as well as within the School, but should be opted only with adviser approval. As a general principle, there is considerable latitude in course choice for Natural Sciences and Mathematics majors; for specifically required courses, substitutions in any program must have the written approval of the student's department chairperson or the School Dean. The intermediate series foreign language requirement (a description follows) applies without exception to all Natural Sciences and Mathematics degrees.

## **THE FOREIGN LANGUAGE REQUIREMENT**

---

A candidate for a Bachelor of Arts or Bachelor of Science degree must demonstrate a proficiency in a foreign language equivalent to that attained upon completion of two years of college instruction in that language. This requirement may be met by:

- a. successful completion of two semesters at the second year level in a specific foreign language; or
- b. successful completion of an exemption or credit examination in lieu of the above, the examination administered by the appropriate IUP foreign language department.

The foreign language requirement currently may be met through work in French, German, Latin, Russian, or Spanish.

Any foreign student, registered as such at IUP, whose acquired native language is other than English and who demonstrates an acceptable proficiency in English, is exempt from the foreign language requirement for a Natural Sciences and Mathematics degree, if the department he/she is majoring in does not require a specific language not thus covered.

## **SPECIAL CREDIT PROGRAM**

---

School majors may be interested in the programs available through the Marine Science Consortium.

The Marine Science Consortium was established in 1968 for the purpose of promoting teaching and research in the marine sciences. The participating institutions include Indiana University of Pennsylvania and thirteen other colleges and universities. Although no separate major in the Marine Sciences exists, elective courses may be taken and credited toward undergraduate curricula in Biology, Geology, Geography, and Earth Science. The Marine Science Consortium offers five 3-week sessions during the summer at the NASA-Wallops Island Station, Virginia. Normally, several

research cruises are offered each summer.

Students must register for credit and pay credit fees to a participating institution. Room and board fees are paid to the Consortium. Applications for all summer sessions must be submitted to the institutional Director by April 1. Students must be accepted by the Consortium before registering at a participating institution. See section on Marine Science Consortium for a listing of courses. For brochure, summer bulletin, and application forms, contact either: Dr. Gould F. Schrock or Anthony J. Mastase, Director.

## **PRE-PROFESSIONAL PROGRAMS**

---

The School of Natural Sciences and Mathematics offers pre-professional programs for the preparation of students for acceptance by a professional school: pre-dental, pre-medical, and pre-veterinary medicine. In addition, the School offers a major in the Natural Sciences for those students whose goal is pharmacy or pharmacology, optometry, osteopathy, podiatry, or similar professional field. All programs are so designed that, should work at a professional school not ensue, the student may earn an IUP baccalaureate degree, provided he/she has been faithful to faculty advisement.

The pre-professional health programs in Natural Sciences and Mathematics presuppose that the student has an excellent background in the high school sciences and mathematics, or will prove to be an excellent college student. Because admission standards at most professional schools are very high, students desiring pre-professional preparation for any of these fields will find it advantageous to major in the basic department discipline, making known to the department chairperson their eventual goal but delaying explicit affiliation with the pre-professional program until they have established themselves academically at the college level. Commitment to any pre-professional program must be made not later than the end of the student's fourth semester.

Students interested in the related health fields (dentistry, pharmacy, optometry, osteopathy, physical therapy, podiatry, etc.) should consult with the Dean of the School of Natural Sciences and Mathematics during their first semester of IUP attendance, or as soon thereafter as possible.

## **COOPERATIVE PROGRAMS**

---

IUP has been fortunate to enter into cooperative agreements with a number of outstanding institutions to provide significant career opportunities to our students. These formal agreements provide for accelerated graduate or professional degree programs or carefully planned and coordinated undergraduate programming with the cooperating institution. Programs are intended to assure acceptance of properly qualified students by the cooperating professional schools. Additional information concerning the specific programs can be found under the appropriate academic department in this catalog.

### **ENGINEERING (See Department of Physics)**

Drexel University — the program combines the opportunity for two years of study at IUP with the remaining three years of study as part of the Drexel plan of cooperative education.

University of Pittsburgh — the program will allow the student to enroll at IUP for the first two years of college and conclude degree work by enrolling in an engineering program at the University of Pittsburgh for the last two years.

**FAMILY MEDICINE** (See School of Health Services)

Jefferson Medical College of Thomas Jefferson University — the program is designed to increase the opportunities for IUP students to be admitted to Jefferson Medical College in the Family Medicine Program designed to provide physicians to rural communities in Pennsylvania where there is a shortage.

**FORESTRY AND ENVIRONMENTAL STUDIES** (See Department of Biology)

Duke University — the program is designed to coordinate the education of students from IUP with the graduate programs in forestry and environmental management offered at Duke University.

**PODIATRY** (See Natural Science)

Pennsylvania College of Podiatric Medicine — the program is designed to accelerate the professional training of IUP students in the field of podiatry.

## **INTERNSHIP PROGRAMS**

---

Several departments have established programs under which students engage in off-campus supervised work experience for credit.

For more information about specific Internship programs students should consult with the chairperson of the department in which the student is majoring. Low-income students eligible for internships may receive federal-state funding.

## **BIOLOGY DEPARTMENT**

---

**RICHARD F. WAECHTER, CHAIRPERSON: ALICO, ANDREW, ASH, BAKER, BROWE, CHARNAGO, CISKOWSKI, CONWAY, DIETRICH, FERRENCE, FORBES, GALLATI, GOLD, HUE, HULING, HULSE, HUMPHREYS, KESNER, LIEGEY, MERRITT, MILLER, MOORE, NASTASE, PICKERING, SCHROCK, STRAW-CUTTER, VALLOWE, WASKOSKIE, WINSTEAD, ZENISEK.**

Degrees offered by the Biology Department are the Bachelor of Science in Biology, the Bachelor of Arts in Biology, Bachelor of Science in Environmental Health, and the Bachelor of Science in Education with a Biology major. The first three degree programs are under the School of Natural Sciences and Mathematics, and the fourth under the School of Education. The department also offers a Biology minor.

## **CURRICULA**

---

The program leading to a B.S. in Biology is a concentrated curriculum designed to give the student preparation for admission to graduate school or professional colleges, such as Medical, Dental and Veterinary Colleges. With the proper selection of electives, the graduate should be qualified to assume a position in industry or in state and federal agencies requiring well-trained biologists.

The program leading to a B.A. in Biology has a more flexible curriculum permitting



the student to obtain background in a diversity of related areas.

The Environmental Health Program is a preparation for employment in local, state, and federal agencies and industry. Incoming freshmen must be in attendance for four years and two summer sessions. Between the junior and senior year each student should serve an internship with a governmental agency or an industrial concern.

The program leading to the B.S. in Education with a Biology major is designed to prepare for Certification in public school teaching.

NOTE: The Biology Department cooperates in programs with Jefferson Medical College, Duke University School of Forestry and Environmental Studies, and Marine Science Consortium, Inc.

### CORE PROGRAM

Requirements for ALL Biology majors are 18 semester hours in Biology, 16 semester hours in Chemistry, and 4 semester hours in Mathematics as follows:

#### Biology (18 semester hours)

BI 105 - Cell Biology	4 s.h.
BI 110 - Plant Biology	5 s.h.
BI 120 - Animal Biology	5 s.h.
BI 263 - Genetics	3 s.h.
BI 480 - Biology Seminar	1 s.h.

#### Chemistry (16 semester hours)

CH 111 - Gen Chem I	4 s.h.
CH 112 - Gen Chem II	4 s.h.
CH 231 - Organic Chem I	4 s.h.
CH 351 - Biochemistry	4 s.h.

#### Mathematics (4 semester hours)

MA 121 - Calc I	4 s.h.
-----------------	--------

### B.S. In Biology

In addition to the Core Program, requirements for the degree of Bachelor of Science in Biology are 15 semester hours in Biology, 4 semester hours in Chemistry, 3-4 semester hours in Mathematics, and 8 semester hours in Physics, as follows:

#### Biology

BI Electives (electives for majors only)	15 s.h.
--	---------

#### Chemistry

CH 232 - Organic Chem II	4 s.h.
--------------------------	--------

#### Mathematics

MA 122 - Calc II or MA 217 Prob and Stat	4-3 s.h.
--	----------

#### Physics

PY 111-1 - Physics I	3 s.h.
PY 112-1 - Physics II	3 s.h.
PY 111-2 - Physics Lab	1 s.h.
PY 112-2 - Physics II Lab	1 s.h.

**B.A. In Biology**

In addition to the core program, requirements for the degree of Bachelor of Arts in Biology are 9 additional semester hours in Biology electives.

**B.S. In Environmental Health (Biology core does not apply)**

Required are at least 25 semester hours in Biology, 12 semester hours in Chemistry, 4 semester hours in Mathematics, 9 semester hours in Safety Science, and 3 semester hours in Political Science as follows:

**Biology** (25 semester hours)

BI 105 - Cell Biology	4 s.h.
BI 241 - Gen Microbiology	3 s.h.
BI 362 - Ecology	3 s.h.
BI 310 - Applied Entomology & Zoonoses	3 s.h.
BI 321 - Environmental Protection I	3 s.h.
BI 322 - Environmental Protection II	3 s.h.
BI 498 - Internship	6 s.h.

**Chemistry** (12 semester hours)

CH 111 - Gen Chem I	4 s.h.
CH 112 - Gen Chem II	4 s.h.
CH 231 - Organic Chem I	4 s.h.

**Mathematics** (4 semester hours)

MA 121 - Calc I	4 s.h.
-----------------	--------

**Safety Sciences** (9 semester hours)

SA 101 - Intro to Occupational Safety and Health Management	3 s.h.
SA 301 - Nature & Effects of Occupational Health Hazards	3 s.h.
SA 302 - Measurement & Evaluation of Occupational Health Hazards	3 s.h.

**Political Science** (3 semester hours)

PS 370 - Public Administration I	3 s.h.
----------------------------------	--------

**B.S. In Education - Biology Major**

The requirements for the degree of Bachelor of Science in Education with a Biology major are 29 semester hours in Biology, 8 semester hours in Physics I & II with labs, General Chemistry I and II, Organic Chemistry I and Biochemistry.

**Biology** (29 semester hours)

BI 103 - General Biology I	4 s.h.
BI 104 - General Biology II	4 s.h.
BI 110 - Plant Biology	5 s.h.
BI 120 - Animal Biology	5 s.h.
BI 361 - Microbiology	3 s.h.
BI (Electives for majors only):	8 s.h.
BI 105 - Cell Biology	
BI 362 - Ecology	
BI 263 - Genetics	

**Minor in Biology**

To minor in Biology, a student must have the permission of the Biology Department Chairperson. The minor consists of the following courses plus biology electives for a minimum total of 17 semester hours of biology.

BI 103 Gen. Bio. I and Gen. Bio. II	8 s.h.
or	
BI 105 Cell Biology	4 s.h.

## **DUKE COOPERATIVE COLLEGE PROGRAM IN FORESTRY AND ENVIRONMENTAL STUDIES**

The Cooperative College program with the Duke University School of Forestry and Environmental Studies is designed to coordinate the undergraduate education of students at Indiana University of Pennsylvania with graduate programs in the areas of resources and environment offered at Duke. Undergraduate majors in one of the natural sciences, mathematics, economics, business, or political science are suited to the program. Preparation for the Duke program should include at least one year each of biology with work in botany, economics with a significant component of microeconomics, and mathematics which should include calculus, computer science, and statistics. Applicants to the Duke program who have completed courses in ecology, chemistry, geology, physics, and a foreign language; or additional courses in biology, economics, and mathematics will be given preferential consideration. Students are accepted in either of two degree programs at Duke, the Master of Forestry (MF) or Master of Environmental Management (MEM).

Students may be accepted into the Duke graduate program after three years of high quality undergraduate study at IUP or upon completion of the baccalaureate. Students who qualify after three years will have completed most of the undergraduate degree requirements at IUP except for total hours. Courses at Duke will be applied to the bachelor's degree at IUP. Dr. Gould F. Schrock, Department of Biology, is the faculty adviser at IUP and assists students in program planning.

## **COURSE DESCRIPTIONS**

A nominal fee will be charged for students requesting transportation in field courses.

**BI 103 GENERAL BIOLOGY I** 4 s.h.  
Introduces biological components of some of man's major problems, including energy storage and release, molecular transport, chemical control, genetics, and development. Three hours lecture, 2 hours lab per week.

**BI 104 GENERAL BIOLOGY II** 4 s.h.  
Prerequisite: BI 103.  
Completion of background information with study of selected areas of biology, such as genetics, evolution, behavior, and principles of ecology. Intensive consideration of the impact of biological problems on man's existence concludes the semester. Three hours lecture, 2 hours lab per week.

## **BIOLOGICAL SCIENCE COURSES**

**BI 105 CELL BIOLOGY** 4 s.h.  
Introductory course to increase depth of beginning student's understanding of structural, functional development and evolutionary aspects of cell concept. Three hours lecture, 2 hours lab per week.

- BI 110 PLANT BIOLOGY** 5 s.h.  
Prerequisite: BI 105 or special permission.  
Plant structure, function development, recognition and grouping, environmental relationships, and economic importance of plants considered. Three hours lecture, 4 hours lab per week.
- BI 112 PLANT DIVERSITY** 3 s.h.  
Prerequisite: BI 110  
Anatomy and life processes of selected plant forms. Two hours lecture, 3 hours lab per week.
- BI 120 ANIMAL BIOLOGY** 5 s.h.  
Prerequisite: BI 105 or special permission.  
Morphology, physiology, embryology, ecology, taxonomy, social and economic importance of animals; consideration of principles applicable to a correlation of classical with present zoology. Three hours lecture, 3 hours lab per week.
- BI 252 FIELD ZOOLOGY** 3 s.h.  
Prerequisite: BI 120  
Field natural history of vertebrates; identification, collection, and preservation techniques. Field trips required. Two hours lecture, 3 hours lab per week.
- BI 261 ORNITHOLOGY** 3 s.h.  
Prerequisites: BI 105 or BI 103 and 104  
A study of birds of the region. Indoor laboratory as well as field trips required. Two hours lecture, 3 hours lab per week.
- BI 262 GENERAL ENTOMOLOGY** 3 s.h.  
Prerequisite: BI 120  
Morphology, anatomy, ecology, taxonomy, economic and public health importance of insect orders, particularly those of Western Pennsylvania; student collection and field trips required. Two hours lecture, 3 hours lab per week.
- BI 263 GENETICS** 3 s.h.  
Prerequisites: BI 110 or 120 and CH 231.  
Deals with the distribution and function of the hereditary material; special emphasis on microbial, viral, and molecular genetics. Two hours lecture, 3 hours lab per week.
- BI 271 EVOLUTION** 3 s.h.  
Prerequisite: One year biology.  
Historical development of evolutionary thought, evidence and operational mechanisms involved; origin and phylogenetic relationships of biologic groups. Three hours lecture per week.
- BI 272 CONSERVATION OF PLANT AND ANIMAL RESOURCES** 3 s.h.  
Prerequisites: BI 105 or BI 103 and 104.  
A study of accepted practices in soil, water, forest and wildlife conservation. Two hours lecture, 3 hours lab per week.
- BI 273 INTRODUCTION TO ROCKY MOUNTAIN ECOLOGY** 4 s.h.  
An introductory course intended primarily for those not familiar with the Rocky Mountains. Flora and fauna of each of the life zones will be described, collected, and identified. Interactions among the various elements of these ecosystems will be considered. This course will be given in a wilderness area, Bridger-Teton National Forest. Primitive accommodations allow the student the opportunity to enjoy the wilderness area as much as possible. Study takes place in Bridger-Teton National Forest along the Grey's River, Wyoming. Tents, food, horses, etc. are provided by a professional outfitter. Offered only in the summer. No prerequisites.
- BI 310 APPLIED ENTOMOLOGY AND ZONOOSES** 3 s.h.  
Prerequisite: BI 120 or Permission of instructor.  
Study of the measures for abatement or control of arthropods, rodents, birds, and other disease vectors of public importance; selection, chemistry, formulation, and safe application of insecticides, rodenticides, and fumigants; pesticing equipment; application of biological and other

measures of control.

**BI 321 ENVIRONMENTAL PROTECTION I** 3 s.h.

Prerequisites: BI 105, CH 112, and permission of instructor.

Considers impact of important components of physical environment on health and deals with principles and methods for identification, evaluation, and control of such health hazards. Major attention given to principles and methods of epidemiological investigation.

**BI 322 ENVIRONMENTAL PROTECTION II** 3 s.h.

Prerequisite: BI 321

Subjects receiving attention include: water and food supplies, domestic and industrial sewage and wastes, housing, accidents, community air pollution, domestic and industrial poisons, ionizing radiations, occupational health hazards.

**BI 331 ANIMAL DEVELOPMENTAL BIOLOGY** 3 s.h.

Prerequisite: BI 120

Aspects of comparative and molecular development of animals. Two hours lecture, 3 hours lab per week.

**BI 332 COMPARATIVE VERTEBRATE ANATOMY** 3 s.h.

Prerequisite: BI 120

Discussion of anatomy of representative vertebrates from a comparative point of view. Stresses major organizational changes observed in vertebrate history. Two hours lecture, 3 hours lab per week.

**BI 350 CELLULAR PHYSIOLOGY** 3 s.h.

Prerequisite: CH 231

Topics include nutrition, uptake and preparation of food and oxygen, release of energy and elimination of waste products; would complement the animal and plant physiology. Two hours lecture, 3 hours lab per week.

**BI 351 PLANT PHYSIOLOGY** 3 s.h.

Prerequisites: BI 110, CH 231.

Studies physiological processes occurring in plants, considered in relation to growth and development of plant. Two hours lecture, 3 hours lab per week.

**BI 352 COMPARATIVE ANIMAL PHYSIOLOGY** 3 s.h.

Prerequisites: BI 120, CH 231

Comparative study of homeostatic mechanisms and systems in animals and their relation to fundamental chemical and physical events in cells. Two hours lecture, 3 hours lab per week.

**BI 360 MEDICAL MYCOLOGY** 3 s.h.

Prerequisite: BI 105

A study of the mycology of pathogenic fungi. Consideration will include sources of infection, distribution, symptomatology, diagnosis, prognosis, immunology, and treatment. Pathogens are used in the course and emphasis is placed upon actual laboratory technique and procedures. Two hours lecture and three hours lab per week.

**BI 361 MICROBIOLOGY** 3 s.h.

Prerequisites: BI 105, CH 231

Introduction to morphology, physiology, and ecology of procaryotic organisms. Importance of microorganisms in basic and applied research, economics, infection, and immunology are discussed. Two hours lecture, 3 hours lab per week.

**BI 362 ECOLOGY** 3 s.h.

Prerequisites: BI 110 and 120.

Study of interrelations and adaptations of organisms; includes consideration of physical and biotic environmental factors. Field trips. Two hours lecture, 3 hours lab per week.

- BI 372 PLANT ANATOMY** 3 s.h.  
 Prerequisite: BI 110  
 Embryological development and growth and maturation of typical vascular plants; emphasis placed on differentiation and maturation of plant organs of various families. Two hours lecture, 3 hours lab per week.
- BI 445 MICROTECHNIQUE** 3 s.h.  
 Prerequisites: One year Biology, one year Chemistry.  
 Production of whole mount, smear, squash, microtome section and serial section microscope slides of both plant and animal organisms. Three combined lecture/laboratories of 2 hours each per week.
- BI 446 DENDROLOGY** 3 s.h.  
 Prerequisite: BI 110 or 112, or by permission of instructor.  
 Study of woody plants as to their identification, distribution, ecology, culture, anatomy, physiology, mensuration and utilization. Two hours lecture, 3 hours lab per week.
- BI 451 TAXONOMY OF PLANTS** 3 s.h.  
 Prerequisite: BI 110  
 Considers the collection, preservation, and identification and taxonomy of plants of this region. Two hours lecture, 3 hours lab per week.
- BI 461 GENERAL PHYSIOLOGY** 4 s.h.  
 Prerequisites: BI 350, 351 or 352, CH 351, MA 121 (or permission of instructor).  
 Molecular approach to quantitative analysis of mechanisms of functional operation and coordination in living organisms. Emphasis on chemical and physical principles operating at primary functional units of organization. Three hours lecture and 3 hours lab per week.
- BI 463 LIMNOLOGY** 3 s.h.  
 Prerequisites: BI 362  
 An investigation into the physical, chemical, and biological aspects of inland waters and their inter-relationships. In the laboratory the student will gain experience in the techniques involved in aquatic sampling and the analysis of data. Two hours lecture and three hours lab. (Saturday or Sunday labs may be required).
- BI 472 RADIATION BIOLOGY** 3 s.h.  
 Prerequisites: Two years Biology, one year Physics, and General, Organic, and Biochemistry.  
 Aspects of nuclear physics and radioactive isotopes; uses, effects, detection and measurement of radioactive nuclides used in Biology. Two hours lecture, 3 hours lab per week.
- BI 475 MAMMALOLOGY** 3 s.h.  
 Prerequisite: BI 120  
 A general discussion of mammals emphasizing systematics, distribution, and structural and functional modifications related to evolution of this group. Lab work samples numerous techniques that can be applied to mammalian biology. Two hours lecture, three hours lab per week.
- BI 476 PARASITOLOGY** 3 s.h.  
 Prerequisite: BI 120  
 Structure, physiology, ecology, life cycles, pathology and treatment of parasitic protozoa, flatworm and roundworm species of man. Dissection of hosts for parasites. Two hours lecture, 3 hours lab per week.
- BI 478 MYCOLOGY** 3 s.h.  
 Prerequisite: BI 110  
 The systematics, morphology, and physiology of fungi, with emphasis on economically important and experimentally useful Eumycophyta. Lab includes experiments in physiology and genetics of fungi as well as collecting, culturing, and identifying representative taxa. Two hours lecture 3 hours lab per week.

BI 480 BIOLOGY SEMINAR 1 s.h.  
Discussion of recent trends in biological thought and research. Students report on assigned readings and/or personal research.

BI 481 SPECIAL TOPICS 1-3 s.h.  
This course varies from semester to semester covering diverse topics in specific areas of biology.

BI 482 INDEPENDENT STUDY 1-3 s.h.  
Student investigates independently any field of biology in which interested. Work supervised by a faculty member but does not involve regular class or laboratory hours. Enrollment by permission only.

BI 489 LITERATURE OF BIOLOGY 2 s.h.  
Designed to acquaint students with the use of library resources dealing with biology as well as with the mechanics of preparing a scientific paper. Practical hands-on experience in a literature search is an integral part of the course work.

BI 498 BIOLOGY INTERNSHIP Max. 12 semester hrs.,  
only 6 semester hrs. may be applied toward the major.  
Prerequisites: Biology major with at least 62 semester hours and permission of the Director of Internships and the Chairperson. Selected students have opportunity, under Department supervision, to gain off-campus practical experience in area of interest. Total number of credits and number of credits toward the Biology major will be decided in consultation between student, his/her adviser, and Director of Internships.

### Course Required of Secondary Education Majors

ED 451 TEACHING SCIENCE IN THE SECONDARY SCHOOL 3 s.h.  
Background to help science majors meet the problems of teaching science. Various inquiry approaches useful in meeting objectives of a contemporary science class are taught and exemplified. Two hours lecture, 2 hours lab per week.

### Courses Provided for Students in Elementary Education

BI 311 ENVIRONMENTAL BIOLOGY 4 s.h.  
Laboratory and field course providing basic knowledge in biology and its practical implications. Physical and biological aspects of the environment are studied. Three hours lecture, 3 hours lab per week.

EL 312 TEACHING OF ELEMENTARY SCIENCE 3 s.h.  
Emphasis placed upon science as it relates to the child and the curriculum, planning for teaching science, and recent innovations in science teaching. Two hours lecture, 2 hours lab per week.

### Courses For Non-Biology Majors

BI 150 VERTEBRATE ANATOMY 3 s.h.  
Study of systematic anatomy of vertebrate's body. Deals almost entirely with the mammal. The cat is used for dissection in lab. Two hours lecture, 3 hours lab per week.

BI 151 HUMAN PHYSIOLOGY 3 s.h.  
Course deals with acquiring, through lecture presentations and laboratory experiments, an understanding of the basic functions of the major organ systems of the human body. The organ systems examined include the following: Muscular system, cardiovascular system, respiratory system, endocrine system, renal system, digestive system, reproductive system, and nervous system. Two hours lecture and two hours lab per week.

BI 241 GENERAL MICROBIOLOGY 3 s.h.  
Study of microorganisms, and role they play in water, soil, food, and infection. Standard

methods and techniques are emphasized in laboratory. Two hours lecture, 3 hours laboratory per week.

## **CHEMISTRY DEPARTMENT**

---

**STANFORD L. TACKETT, CHAIRPERSON: ASTING, BALLAS, BORDAS, CHRISTODOULEAS, COLEMAN, COSTA, CRUMM, FAZIO, HARTLINE, KOLACZKOWSKI, MARKS, McKELVEY, PATSIGA, SCROXTON, SYTY, VARUGHESE, WOOD, WUNZ, ZAMBOTTI.**

Degrees offered by the Chemistry Department are the Bachelor of Science in Chemistry, the Bachelor of Arts in Chemistry and the Bachelor of Science in Education with a Chemistry major. The first two degree programs are under the School of Natural Sciences and Mathematics, and the third is under the School of Education. The department also offers a Chemistry minor.

## **CURRICULA**

---

The B.S. in Chemistry is a professional degree and is accredited by the American Chemical Society. The student completing this major should be qualified to assume a position in industry or government as a chemist or to apply for admission to graduate school to pursue advanced studies leading to the M.S. or Ph.D. degree. The student considering going to a professional school who also wishes to complete this degree should elect appropriate courses as required by the professional school in addition to the courses required here. Those students who are particularly interested in biochemistry should elect a few selected biology courses.

The curriculum leading to the B.A. in Chemistry is designed to allow for the workable union of nonscience areas with chemistry in such a way as to retain the fundamental science and mathematics requirements needed for a career in chemistry. A cognizant selection of electives will qualify the student for entrance into many fields in which there is an acute need for educated people and, at the same time, satisfy the entrance requirements of various professional and graduate schools.

Some possible and useful combinations between chemistry and other disciplines would include chemistry-biology, chemistry-business administration, chemistry-computer science, chemistry-criminology, chemistry-government, chemistry-pre-dental, chemistry-prelaw, chemistry-premedicine, and chemistry-English (technical writing). The student must arrange a practical sequence of non-chemistry courses in consort with his/her adviser and the department chairperson concerned. A student seeking a career in forensic science should major in chemistry.

The curriculum leading to the B.S. in Education with a Chemistry major is designed to prepare the student to teach chemistry at the secondary school level. Upon completion of the specified course work, the graduate is eligible for certification as a chemistry teacher by the Pennsylvania Department of Education.

### **Core Program**

Requirements for ALL Chemistry majors are 29 semester hours in Chemistry, 8 semester hours in Mathematics, and 8 semester hours in Physics as follows:



**Chemistry**

CH 113-114 Concepts in Chem I and II	8 s.h.
CH 231-232 Org Chem I and II	8 s.h.
CH 321 Quant Analysis	4 s.h.
CH 322 Instrumental Analysis	4 s.h.
CH 341 Phys Chem I	4 s.h.
CH 343 Phys Chem Lab I	1 s.h.

**Mathematics**

MA 123-124 Calc I and II for Physics and Chemistry	8 s.h.
--	--------

**Physics**

PY 131-1,132-1 Physics I and II	3 s.h. each
PY 131-2,132-2 Physics I and II Lab	1 s.h. each

**B.S. in Chemistry**

In addition to the Core Program, requirements for the degree of Bachelor of Science in Chemistry are 14-15 more semester hours in Chemistry and 3 more semester hours in Mathematics. In addition, the Department requires that the foreign language requirement (6 semester hours) of the School of Natural Sciences and Mathematics be fulfilled by German or Russian courses. Course numbers are as follows:

**Chemistry**

CH 301 Chemistry Seminar	1 s.h.
CH 342 Phys Chem II	3 s.h.
CH 344 Phys Chem Lab II	1 s.h.
CH 411 Inorg Chem	3 s.h.

**Electives from the following (6-7 semester hours):**

CH 302 Industrial Chem	3 s.h.
CH 331 Org Qual Analysis	3 s.h.
CH 335 Advan Org Chem	3 s.h.
CH 351 Biochem	4 s.h.
CH 376 Radiochem	3 s.h.
CH 412 Inorg Preparations	3 s.h.
CH 421 Advan Instrum Analysis	3 s.h.
CH 441 Advan Phys Chem	3 s.h.
**CH 498 Problems in Chem	1-2 s.h.

**Mathematics (one of the following)**

MA 171 Intro to Linear Algebra	3 s.h.
MA 227 Calculus III	4 s.h.
MA 241 Differential Equations	3 s.h.
MA 342 Advanced Calculus for Applications	4 s.h.

**Foreign Language**

GM 251-252 Ger III and Ger IV or	
GM 256 Sci Ger (in place of 252)	3 s.h. each
RU 251-252 Russian III and IV	3 s.h. each

\*\*CH 498 is required for ACS certification (2 s.h. course)

**B.A. in Chemistry**

In addition to the Core Program, requirements for the degree of Bachelor of Arts in Chemistry are 15 semester hours minimum in a complementary field, including a minimum of 6 semester hours of advanced work. Any foreign language may be taken to fulfill the Natural Sciences and Mathematics graduation requirement.

**B.S. in Education (Chemistry Major)**

In addition to the Core Program requirements for the degree of Bachelor of Science in Education with a chemistry major are 4-5 more semester hours in Chemistry (a minimum of 33 semester hours total in Chemistry are required), 4 semester hours in biology, and 3 semester hours in education, as follows:

**Chemistry**

CH 498 Problems in Chem (at least one of the following)	1 or 2 s.h.
CH 411 Inorganic Chem	3 s.h.
CH 351 Biochemistry	4 s.h.
CH 342 Physical Chemistry II	3 s.h.

**Biology**

BI 105 Cell Biology	4 s.h.
---------------------	--------

**Education**

ED 451 Teaching Science in the Secondary School (see Biology)	3 s.h.
--	--------

**Strongly Recommended Courses for Chemistry Majors**

Due to the importance of computers in many areas of chemistry, it is strongly recommended that all chemistry majors take one or two Computer Science courses. Computer Science would be an excellent complementary field for the B.A. degree.

CO 110 Introduction to Computer Science	3 s.h.
CO 250 Introduction to Numerical Methods	3 s.h.

**Minor in Chemistry**

The minor in Chemistry consists of a minimum of 20 semester hours, selected as follows:

CH 111-112 Gen Chem I and II	8 s.h.
CH 231-232 Org Chem I and II	8 s.h.
CH 321 Quant Analysis	4 s.h.
	or
CH 323 Analytical Methods	4 s.h.
	or
CH 351 Biochem	4 s.h.

**Special Courses**

The Chemistry Department provides certain special courses as services for other Schools and Departments, such as CH 101 and 102, CH 103 and CH 355.

## COURSE DESCRIPTIONS

---

For those courses which combine lecture and laboratory, attendance and satisfactory performance in the laboratory are required in order to pass the course.

CH 101-102 COLLEGE CHEMISTRY I & II 4 s.h. ea.  
Topics from fields of inorganic, organic and biochemistry. Three hours lecture, 2 hours lab per week.

CH 103 PRINCIPLES OF CHEMISTRY 4 s.h.  
One-semester course to survey areas of inorganic and biochemistry. Open only to Physical Education majors. Three hours lecture, 2 hours lab per week.

CH 111-112 GENERAL CHEMISTRY I AND II 4 s.h. each  
Lecture-discussion of principles of chemistry, including theory and applications. The lab illustrates principles discussed. Three hours lecture, 3 hours lab per week.

CH 113-114 CONCEPTS IN CHEMISTRY 4 s.h. each  
These two semesters of general chemistry give the chemistry major an in-depth and quantitative background in areas of physical, inorganic and analytical chemistry. Three hours lecture, 3 hours lab per week.

CH 230 PHYSICAL CONCEPTS FOR BIOCHEMISTRY 3 s.h.  
Prerequisites: CH 101, CH 102  
Study of important concepts from physical, analytical, and organic chemistry that are necessary background for biochemistry. Designed for dietetics majors in the School of Home Economics. Three hours lecture per week.

CH 231-232 ORGANIC CHEMISTRY I AND II 4 s.h. each  
Prerequisite: CH 112 or 114.  
Study of compounds of carbon, with special emphasis on structure and reactions of more important classes of carbon compounds. Laboratory work involves preparation and purification of representative compounds. Three hours lecture, 4 hours lab per week.

CH 301 CHEMISTRY SEMINAR 1 s.h.  
Discussion of current technical literature and current research problems of staff. Lectures by outside chemists and student presentations. Open to junior or senior chemistry majors and to others by permission of the instructor. One hour per week.

CH 302 INDUSTRIAL CHEMISTRY 3 s.h.  
Prerequisite: CH 232.  
Study of application of chemistry and science to industries of western Pennsylvania for the science teacher. Consists of lectures, laboratory work, and field trips to representative industries. Two hours lecture, 3 hours lab per week.

CH 303 GLASSBLOWING TECHNIQUES 1 s.h.  
Introduces science student to techniques necessary for construction and modification of scientific glass apparatus. Limited to junior and senior science majors and others by permission of instructor. Two hours lecture instruction per week.

CH 305 NEW APPROACHES TO TEACHING HIGH SCHOOL CHEMISTRY 3 s.h.  
Prerequisite: at least junior chemistry education major.  
Survey of current approaches in teaching high school chemistry. Modified versions of Chem Study Approach and Chemical Bond Approach investigated; individualization of chemistry and application of various teaching materials and techniques used in individualizing chemistry surveyed. Environmental chemistry and development of relevant topics in chemistry used to better understand chemical basis of our current environmental problems.

- CH 321 QUANTITATIVE ANALYSIS 4 s.h.  
Prerequisite: CH 112 or CH 114.  
Theory and practice of quantitative analysis, including gravimetric and volumetric analysis; special emphasis on perfecting student's laboratory techniques and application of general chemical knowledge through problem solving. Three hours lecture, 4 hours lab per week.
- CH 322 INSTRUMENTAL ANALYSIS 4 s.h.  
Prerequisite: CH 321.  
Modern instrumental methods of chemical analysis. Student learns theory behind the instrument, principles of operation, interpretation of data obtained, and limitations of methods. Three hours lecture, 4 hours lab per week.
- CH 323 ANALYTICAL METHODS 4 s.h.  
Prerequisites: CH 112 and non-chemistry major.  
Principles of precipitation, acid-base, and oxidation-reduction, equilibria are applied to problem solving and to laboratory determinations; instrumental methods of analysis, such as colorimetry, atomic absorption and flame emission, gas chromatography, etc. Three hours lecture, 4 hours lab per week.
- CH 331 ORGANIC QUALITATIVE ANALYSIS 3 s.h.  
Prerequisites: CH 231-232 (CH 232 may be taken concurrently).  
Gives student experience in systematic identification of various classes of organic compounds by both chemical and physical methods. Four hours lecture-laboratory per week.
- CH 335 ADVANCED ORGANIC CHEMISTRY 3 s.h.  
Prerequisites: CH 232 and CH 341.  
Selected topics of current interest covered. Possible topics include: reaction mechanisms, molecular spectroscopy, stereochemistry, natural products, heterocyclics, polymer chemistry and organic synthesis. Three hours lecture per week.
- CH 341 PHYSICAL CHEMISTRY I 4 s.h.  
Prerequisites: MA 122, 124 or 128 and PY 112 or 132; CH 112 or 114.  
Chemical thermodynamics with applications to solutions, phase and chemical equilibria-kinetic theory. Four hours lecture per week.
- CH 342 PHYSICAL CHEMISTRY II 3 s.h.  
Prerequisite: CH 341  
Study of solids, liquids, surfaces, chemical kinetics, electrochemistry, atomic and molecular structure. Three hours lecture per week.
- CH 343 PHYSICAL CHEMISTRY LABORATORY I 1 s.h.  
Prerequisites: CH 321, 341.  
Experiments illustrating application of fundamental laws to actual systems. Three hours lab per week.
- CH 344 PHYSICAL CHEMISTRY LABORATORY II 1 s.h.  
Prerequisites: CH 342, 343  
Extension of Physical Chemistry Laboratory I; experiments related to chemical kinetics, molecular spectroscopy and other topics of physical chemistry. Three hours lab per week.
- CH 351 BIOCHEMISTRY 4 s.h.  
Prerequisite: CH 231  
Study of chemistry of carbohydrates, lipids, proteins, minerals, vitamins, and hormones and biological functions of each. Four hours lecture per week.
- CH 355 BIOCHEMISTRY AND NUTRITION 3 s.h.  
Prerequisite: CH 102.  
Course for Home Economics major; studies chemistry and biological function of biologically active compounds with respect to nutritional requirements. Three hours lecture per week.

- CH 376 RADIOCHEMISTRY 3 s.h.  
Prerequisite: CH 322.  
Study of basic aspects of nuclear structure, phenomena of radioactive isotopes and chemical effects of such isotopes. Concurrent lab work utilizing instruments for detection and measurement of radioactive nuclides used in chemical experimentation. Four hours lecture-laboratory per week.
- CH 411 INORGANIC CHEMISTRY 3 s.h.  
Prerequisite: CH 341  
Gives understanding of advanced theories of atomic structure, chemical bonding, acids and bases, coordination compounds, and selected topics. Three hours lecture per week.
- CH 412 INORGANIC PREPARATIONS 3 s.h.  
Prerequisites: CH 321 and CH 411.  
Lectures include discussion of descriptive chemistry of elements according to their periodicity; laboratory includes investigation of synthesis; purification, and characterization of inorganic substances. Four hours lecture-laboratory per week.
- CH 421 ADVANCED INSTRUMENTAL ANALYSIS 3 s.h.  
Prerequisite: CH 322  
Study of modern chemical analysis, using advanced instrumental techniques; emphasis on theory, principles of operation, capabilities, and limitations of advanced analytical instruments used. Four hours lecture-laboratory per week.
- CH 441 ADVANCED PHYSICAL CHEMISTRY 3 s.h.  
Prerequisite or Co-requisite: CH 342.  
Study of fundamental ideas of quantum and statistical mechanics, molecular structure, and other topics of current interest. Three hours lecture per week.
- CH 498 PROBLEMS IN CHEMISTRY 1 to 2 s.h.  
Prerequisite: Permission of Chairperson.  
Course of independent study on selected problems, including lab work, library reading, and conferences with staff member. A minimum of 4 hours per week required per credit.
- CH 499 INTERNSHIP IN CHEMISTRY 4-9 s.h.  
Prerequisites: CH 113, 114, 231, 232, 321, 341 and departmental approval.  
Full-time involvement in an actual "on-the-job" situation in an industrial laboratory under the tutelage of a selected preceptor. A department faculty member will work closely with the student and preceptor and will assume responsibility of making the final evaluation and assigning a grade.
- SC 105 PHYSICAL SCIENCE I 4 s.h.  
See course description in Physics Department. This course is not a prerequisite for Physical Science II.
- SC 106 PHYSICAL SCIENCE II 4 s.h.  
Designed to survey chemical principles and concepts and to relate these principles to our current environment problems. Brief exploration made of chemistry of minerals and rocks and sources of energy for the future. Three hours lecture, 2 hours lab per week.
- SC 111 SCIENCE IN MODERN CIVILIZATION 3 s.h.  
Designed to acquaint non-science major with some of the major scientific discoveries and to develop an awareness of how science affects our lives. Three hours lecture per week.

---

## COMPUTER SCIENCE DEPARTMENT

---

**GERALD M. BURIOK, CHAIRPERSON: BUTERBAUGH, MAPLE, SHUBRA, SWEENEY, TOMPKINS.**

The program in Computer Science at IUP leads to the B.S. or B.A. degree and is

designed primarily to prepare graduates for productive work in highly computer-dependent areas of business, government, and industry. In recent years, the distribution of first jobs for majors graduating from the program has been as follows:

Business Applications Programming and Systems Analysis	24%
Government Applications	16%
Computer Software Development	24%
Scientific & Applied Mathematical Programming	12%
Graduate School	12%
Other Computer Related Jobs	12%

In a rapidly developing field such as Computer Science, it is important that the graduate's education be broad and fundamental, so that new trends can more readily be followed. Our goal is to balance fundamentality and breadth with sufficient supervised practice so that our graduates are productive at the time they graduate, but ready and willing to change with the field.

Most applied computer scientists work in cooperation with professionals trained in other areas, and with managers. Hence the ability to work and communicate with others of different education is an important characteristic. To that end, we encourage computer science majors to take a strong minor (or area concentration) in a second area of interest. Some students may wish to double major. Majors in other curricula at IUP are also welcome to take Computer Science courses for which they are qualified, or a Computer Science minor.

Student majoring in Computer Science should set their goals beyond simple programming, and should be preparing:

1. to program well, both in design and implementation phases, and document what they have programmed, and
2. to analyze real-world problems in preparation for program design and implementation, and
3. to manage activities that are strongly computer dependent, or
4. to improve the tools that programmers and systems analysts use, i.e. to develop
  - a. better machine systems,
  - b. better software systems,
  - c. better languages for communicating with machines, or
  - d. better methods for solving intractable problems, or
5. to teach about computers at college or high school level, or
6. to advance the fundamental theory of digital information processors.

## **CURRICULA**

The Computer Science Major Program to the B.A. or B.S. Degree (Note 1) includes:

Computer Science core courses:

CO 110 Introduction to Computer Science (Note 2)	3 s.h.
CO 220 Applied Computer Programming	3 s.h.
CO 250 Introduction to Numerical Methods	3 s.h.
CO 300 Assembler Language Programming	3 s.h.
CO 310 Data Structures	3 s.h.
CO 315 Large File Organization and Access	3 s.h.
CO 480 Seminar on Current Computer Topics,	2 s.h.
1 s.h.each semester of senior year	

At least one CO course numbered in the range 400-479.

Additional Computer Science courses to bring the total CO semester hours to a minimum of 30

Minimum:	7 s.h.
Computer Science course requirement:	30 s.h.

Mathematics prerequisite to CO 250: MA 121-122 or 123-124 or 127-128 (Note 3)	8 s.h.
--	--------

General Education requirement of the School of Natural Sciences and Mathematics, including Foreign Language. Six semester hours of the 8 required in the Calculus may be applied toward the General Education requirement of 52 semester hours. CO courses are not accepted as part of the General Education requirement for CO majors. Hence the additional requirement is: 46 s.h.

Elective courses, preferably including courses in a minor or concentration (Note 4), possibly including additional Mathematics and Computer Science courses.	40 s.h.
--	---------

Minimum total for the B.A. or B.S. degree	124 s.h.
---	----------

Note 1: If a minor (or concentration) is selected from the School of Natural Sciences and Mathematics, or from the School of Business, or if an additional 9 semester hours of Computer Science are taken, including 4 semester hours of CO 485, then the B.S. degree is awarded. Otherwise the B.A. degree is awarded.

Note 2: Credit in or exemption from CO 110 may be obtained by examination. Credit so obtained applies to the major credit requirement of 30 semester hours, but exemption does not. Alternatively, CO 200 (3 s.h.) followed by CO 210 (2 s.h.) may be taken instead of CO 110 (3 s.h.). In the latter case, only the 3 semester hours from CO 200 may be applied to the major credit requirement of 30 semester hours.

Note 3: Any calculus sequence may be elected, MA 127-128 (227) for students interested in pure math, MA 123-124 for students interested in applied math, and MA 121-122 for all others. Any calculus sequence may apply to a minor in mathematics.

Note 4: Minors are possible in a wide variety of fields. See Note 1. For specific restrictions on the minor program, see the announcement of the selected minor department in the Undergraduate Bulletin.

Concentration in Business for Computer Science Majors  
(in lieu of a minor)

(18 semester hours minimum; B.S. degree awarded)

BU 221 Accounting Principles I (3 s.h.)

BU 251 Accounting Principles II (3 s.h.)

BU 439 Management Information Systems (3 s.h.)

Additional general business courses (3 s.h. or more)

Additional systems analysis courses (3 s.h. or more) selected with adviser approval.

### Minor in Computer Science

Any 15 semester hours of Computer Science for which the student is qualified,

necessarily including CO 220, Applied Computer Programming.

An undergraduate course in Computer Science for majors in other disciplines who wish to take only one course is:

CO 200 Introduction to Computers (3 s.h.)

A student who decides to minor in Computer Science after completing CO 200 may elect CO 210 (2 s.h.), and will then have the equivalent of CO 110, for prerequisite purposes.

## COURSE DESCRIPTIONS

---

### Core Courses

CO 110 INTRODUCTION TO COMPUTER SCIENCE 3 s.h.

(For science, mathematics, and computer science majors, and for others who have a sufficiently quantitative orientation.) Basic structure of modern digital computers; batch processing vs. interactive time-shared online computing; problem analysis and computer solution using flowcharting and the FORTRAN language. Exemption or credit by examination possible. Two hours lecture and 1 hour recitation per week.

CO 200 INTRODUCTION TO COMPUTERS 3 s.h.

(For non-science, non-mathematics students, who have a more verbal orientation. See also CO 210 below.)

A computer appreciation course for students with an interest in computers and what they can do; survey of computer organization, flowcharting, and programming; exercises in the interactive BASIC language; economic, political, psychological, and technical effects of computers in our society. Three hours lecture per week.

CO 210 PROGRAMMING THE COMPUTER 2 s.h.

Prerequisite: CO 200 or equivalent.

Development of computer programming skills using the FORTRAN language, including computer representation of data. Problem analysis and computer solution using flowcharting and the language learned. Two recitation hours per week. May be used as a prerequisite to advanced courses in place of CO 110.

CO 220 APPLIED COMPUTER PROGRAMMING 3 s.h.

Prerequisite: CO 110 or equivalent.

Structured programming principles and techniques, as implemented thru the ANS COBOL language; program design using top-down techniques; group programming projects; program and project documentation; introduction to tape and disc files. Two hours lecture and 1 hour recitation per week.

CO 250 INTRODUCTION TO NUMERICAL METHODS 3 s.h.

Prerequisites: CO 110, MA 122, 124 or 128.

Algorithmic methods for function evaluation, roots of equations, solutions to systems of equations operations, matrix operations, curve fitting, interpolation, numerical integration and differentiation; errors in computation.

Three hours lecture per week.

CO 300 ASSEMBLY LANGUAGE PROGRAMMING 3 s.h.

Prerequisite: CO 110 or equivalent.

Examination of structure and languages of machines; representation of data, addressing techniques, symbolic coding, assemblers, macros, etc; problem solution using assembly language. Two hours lecture and 1 hour recitation per week.

CO 310 DATA STRUCTURES 3 s.h.

Prerequisite: CO 220

Basic concepts of data; storage systems and structures; lists, arrays, strings, hashing tech-



niques; searching and sorting techniques; data structures in programming languages; string processing. Three hours lecture per week.

**CO 315 LARGE FILE ORGANIZATION AND ACCESS** 3 s.h.

Prerequisites: CO 220 and CO 310, or their equivalents.

The organization of large computer files for business systems, information systems, and other applications. Use of COBOL and Assembler for efficient file access. Evaluation of file access methods. Study of IBM file access conventions, and JCL. Three hours lecture per week.

### **Intermediate and Advanced Courses in Data Processing**

**CO 320 SOFTWARE ENGINEERING** 3 s.h.

Prerequisite: CO 315 or permission of the instructor.

Planning, design, and implementation of large software systems using structured top-down techniques; maintenance and documentation principles and practices; large group projects. One hour lecture and two hours recitation per week.

**CO 345 DATA COMMUNICATIONS** 3 s.h.

Prerequisites: CO 220 and MA 214, 217, or equivalents.

Communication of digital data between computers, and to and from terminals and other peripherals; computer networks; design project or term paper. Three hours of lecture per week.

**CO 370 COMPUTER RESOURCE MANAGEMENT** 3 s.h.

Prerequisite: CO 220

Concepts and techniques of computing facility management, including selection of computer resources; survey of applications in which computer resource management is needed; faculty supervised management project at a selected local computer facility. Three hours lecture per week.

**CO 399 INTERNSHIP IN COMPUTER SCIENCE** 4-12 s.h.

Prerequisites: CO 250, CO 300, CO 310, CO 315, CO 320,

completion of application, and selection by committee. Positions with participating companies provide students with experience in Computer Science under the supervision of the companies and faculty. Requirements include three on-site consultations, two university consultations, completion of progress reports, and presentation of final cumulative paper. Offered only to students during the second semester and summer of their Junior year, or the summer and the first semester of their Senior year. No more than 6 semester hours of CO 399 may be applied toward the 30 semester hours requirements for a major in Computer Science.

**CO 441 DATA BASE MANAGEMENT** 3 s.h.

Prerequisite: CO 315

Review of data base concepts. Detailed study of data base management approaches. Comparative study of commercially available data base management systems. Project on the locally available data base system. Three hours lecture per week.

**CO 480 SEMINAR, CURRENT TOPICS IN COMPUTER SCIENCE**

Section 1: Trade Literature 1 s.h.

Section 2: Professional Literature 1 s.h.

Reading, review, and discussion of the current literature of computer science and industry, effective oral presentation; employment prospects; one semester focuses on the trade literature, the other on the professional literature, of the field. Must be taken over 2 semesters, in Senior year (or Junior year, if CO 399, Internship, is taken in Senior year), with each section taken once. One hour recitation per week.

### **Advanced Courses in Programming Applications and Theory**

**CO 420 MODERN PROGRAMMING LANGUAGES** 3 s.h.

Prerequisites: CO 220 and CO 310.

Comparative study of the properties and applications of a range of modern higher level programming languages, including APL, SNOBOL, PL/I, ALGOL 60, PASCAL, LISP, and

TRAC. Comparison with older languages such as BASIC, FORTRAN, COBOL AND RPG. Three hours lecture per week.

CO 450 APPLIED NUMERICAL METHODS 3 s.h.

Prerequisites: CO 250, MA 171 and MA 241, or equivalents.

Polynomial approximations using finite differences, with applications in numerical integration and differentiation. Numerical solution of initial value ordinary differential equations. The APL language will be introduced and used, along with FORTRAN, in programming selected algorithms. Three hours lecture per week.

CO 460 THEORY OF COMPUTATION 3 s.h.

Prerequisites: CO 310 and MA 219, or consent of instructor.

Formal methods for describing and analyzing programming languages and algorithms. Backus-Naur forms; productions; regular expressions; introduction to automata theory; Turing machines; recent concepts in algorithm theory. Three hours lecture per week.

### **Advanced Courses in Machines & Systems Programming**

CO 410 PROCESSOR ARCHITECTURE AND MICROPROGRAMMING 3 s.h.

Prerequisites: CO 300 and CO 310.

The logical description of computer processor structure (architecture), with emphasis on the microprogramming approach. Project assignments using the Microdata 1600 minicomputer. Three hours lecture per week.

CO 430 INTRODUCTION TO SYSTEMS PROGRAMMING 3 s.h.

Prerequisites: CO 300 and CO 310.

Concepts and techniques of systems programming with an emphasis on assembly and compilation of user programs. Representation of source language so as to facilitate the needed translation process. Exercises using the Microdata 1600/30 and the Xerox Sigma 6. Three hours lecture per week.

### **Special Courses and Project Study**

CO 481 SPECIAL TOPICS IN COMPUTER SCIENCE 3 s.h.

Prerequisite: 12 semester hours in Computer Science or consent of instructor.

Seminar in advanced topics of Computer Science, content will vary, depending on interests of instructor and students. May be repeated for additional credit. Three hours per week.

CO 485 SPECIAL PROJECTS IN COMPUTER SCIENCE 1-4 s.h.

Prerequisite: Permission of a Computer Science faculty member who agrees to supervise your project.

Arrangements for selection of a specific topic must be made before the end of the prior term. Hours as arranged.

---

## **GEOSCIENCE DEPARTMENT**

---

**EDWARD A. STANLEY, CHAIRPERSON: CLARK, GRANATA, HALL, PARK, PRINCE, C. SUTTON.**

The Geoscience Department provides curricula in areas of natural science dealing with and related to the earth and its environment by offering courses in astronomy, geology, meteorology, and oceanography.

In addition to on-campus instruction, opportunities exist for summer course work and research in geology and oceanography at the Marine Science Consortium located at Wallops Island, Virginia.

Degrees offered by the Geoscience Department are the Bachelor of Science in

Geology, the Bachelor of Science in Geoscience, and the Bachelor of Science in Education with a major in Earth and Space Science or with a major in General Science. The first three degree programs are under the School of Natural Sciences and Mathematics, and the last two are under the School of Education.

The Department also will act in an advisory capacity for students enrolled in the B.S. in Natural Sciences with concentrations in either Astronomy, Meteorology, or Oceanography. These degree programs are designed to prepare students for graduate work in the aforementioned disciplines.

## **CURRICULA**

---

The B.S. degree in Geology is, in a sense, a dual purpose degree program. Not only is it designed to graduate well trained, competent geologists, able to compete for positions as professional geologists in the job market; but it is also designed so as to provide the student with the necessary allied science and math background to enable the good student to qualify for admission to the Graduate School of his/her choice in Geology.

The B.S. degree in Geoscience offers the student a broad-based science background. In addition to the 38 semester hours of Geoscience (Astronomy, Geology, Meteorology, Oceanography) the student will also acquire a strong background in Math and the Allied Sciences of Chemistry, Biology and Physics. The student who earns the B.S. degree in Geoscience may anticipate career openings in government or private industry in those expanding fields directly associated with environmental studies. The B.S. in Geoscience will also prepare students for admission to graduate study, should they choose to pursue academic preparation beyond the undergraduate level.

The department recognizes as one of its functions the role of serving the field of public education by the preparation of qualified and certified teachers of earth and space science. Also, because of the interdisciplinary nature of both the department and the requirements for preparing general science teachers, the department administers the program designed to lead to general science certification and includes majors of that category as department members.

### **Minor in Geology**

The minor in geology consists of 15 semester hours of geology. General Geology I and II are required. The remaining 7 semester hours of geology may be selected by the student. It is recognized that the anthropology student minoring in geology would benefit from courses differing in content from those benefiting students who, for example, are majoring in Urban Planning. The department staff members will be happy to consult with students concerning their special needs.

### **Minor in Geoscience**

The requirement for the minor in Geoscience will be 16 semester hours of geoscience, taken within the following framework. Students must complete one course in each discipline within the department: Astronomy 3 semester hours; Geology 4 semester hours; Meteorology 3 semester hours; Oceanography 3 semester hours, for a total of 13 semester hours. The additional 3 semester hours can be taken in any one of the aforementioned disciplines. It is further stipulated that neither the non-major General Astronomy nor the Geology of Pennsylvania courses will be accepta-

ble toward the minor in Geoscience.

## **DEGREE PROGRAMS**

---

### **B.S. in Geology**

The departmental requirements for the Degree of Bachelor of Science in Geology are as follows:

*Geology	35 s.h.
Geoscience	3 s.h.
Math	7-8 s.h.
Chemistry	8 s.h.
Physics	8 s.h.
Electives	24-25 s.h.

\*Includes a summer field course of 5 s.h. and two 1 s.h. independent study. Detailed program description available in Geoscience Department

### **B.S. in Geoscience**

The departmental requirements for the degree of Bachelor of Science in Geoscience are as follows:

Geoscience (Selected under adviser's supervision)	38 s.h.
Math	7-9 s.h.
Biology	11-14 s.h.
Chemistry	8 s.h.
Physics	8 s.h.
Electives	9-13 s.h.

Detailed program description available in Geoscience Department

### **B.S. in Education (Earth and Space Science Major)**

The departmental requirements for the degree of Bachelor of Science in Education with a major in Earth and Space Science are as follows:

Astronomy	7 s.h.
Geology	14 s.h.
Meteorology	6 s.h.
Oceanography	6 s.h.
Math	4 s.h.
Biology	4 s.h.
Chemistry	8 s.h.
Physics	4 s.h.

Detailed program description available in Geoscience Department

### **B.S. in Education (General Science Major)**

A major in another science department may be certified in General Science if the student's program includes, or is supplemented with, the prescribed credits, as follows:

Astronomy	3 s.h.
Geology	3-4 s.h.
Geoscience Field course	3-4 s.h.

Meteorology	3 s.h.
Math	4 s.h.
Biology	8 s.h.
Chemistry	8 s.h.
Physics	8 s.h.
Science Elective	3 s.h.

Detailed program description available in Geoscience Department

## **COURSE DESCRIPTIONS**

<b>GS 101 EARTH SCIENCE I</b>	3 s.h.
A non-mathematical treatment of introductory oceanography and geology designed specifically for non-science majors. Three hours of lecture per week.	
<b>GS 102 EARTH SCIENCE I LAB</b>	1 s.h.
Should be taken concurrently with GS 101. Lab experiences in various aspects of oceanography and geology. Two hours lab per week, including field trips.	
<b>GS 103 EARTH SCIENCE II</b>	3 s.h.
No prerequisite. The earth's upper environment is studied by focusing on the effects of the atmosphere and the earth's place in the universe on the daily lives of man. Three hours lecture per week.	
<b>GS 104 EARTH SCIENCE LAB II</b>	1 s.h.
Should be taken concurrently with GS 103. Use of the weather station and the planetarium highlight the series of exercises designed to aid students in developing meaningful concepts about their ability to understand and, in the future, control their place in the universe. Two hours lab per week.	
<b>GS 110 GENERAL ASTRONOMY</b>	3 s.h.
Specifically designed to introduce students to discipline of astronomy; emphasis placed on study of planets, space program, constellations, and Milky Way. Two hours lecture, one laboratory session or night observation per week. No science or math majors except those completing general science certification requirements.	
<b>GS 121 GENERAL GEOLOGY I</b>	3 s.h.
Introduction to science of earth; properties and processes of earth's interior and crust and their interaction with surface processes to shape and modify man's physical environment. Three hours lecture per week.	
<b>GS 122 GENERAL GEOLOGY I LABORATORY</b>	1 s.h.
Should be taken concurrently with GS 121. Identification of common minerals and rocks; introduction to topographic and geologic maps, to land forms, and to geologic structures. Three hours lab per week, including field trips.	
<b>GS 131 GENERAL GEOLOGY II</b>	3 s.h.
Prerequisite: GS 121 or permission of instructor. Introduction to history of earth, its physical changes and sequences of configuration, and record of biological evolution. Three hours of lecture per week.	
<b>GS 132 GENERAL GEOLOGY II LABORATORY</b>	1 s.h.
Should be taken concurrently with GS 131. Selected problems in geologic map interpretation, paleontology, and stratigraphic rock sequences. Three hours lab per week, including field trips.	
<b>GS 321 MINERALOGY</b>	3 s.h.
Prerequisite: GS 121 or CH 111.	

Concerned with properties of minerals; introduction to crystallography and chemistry of crystals, followed by a determination of minerals and their probable genesis. Two hours lecture, 3 hours lab per week.

**GS 322 IGNEOUS AND METAMORPHIC PETROLOGY** 3 s.h.

Prerequisite: GS 321.

Concerned with a description of igneous and metamorphic rock character based upon mineral components and physical relationship between mineral components of a rock. Two hours lecture, 3 hours lab per week.

**GS 324 GLACIAL GEOLOGY** 3 s.h.

Prerequisites: GS 121 and GS 131.

Study of origin and development of all features resulting from action of glaciers. Two hours lecture and a laboratory or field trip per week.

**GS 325 STRUCTURAL FIELD GEOLOGY I** 3 s.h.

Prerequisite: GS 131 or permission of instructor.

Analysis of deformation structures such as folds, joints, faults, foliation and lineation. Includes lab and field work with geologic maps, cross sections, Brunton compass, stereographic projections, and field reports on structures observed in the region. Two hours lecture, 3 hours lab per week, and field trips.

**GS 326 STRUCTURAL FIELD GEOLOGY II** 3 s.h.

Prerequisite: GS 325.

Techniques of geologic field work including work with Brunton compass, aerial photographs, plane table and alidade, drafting, and rock color charts. Includes a field project involving compilation of measured and described stratigraphic sections, a geologic map, cross sections, and field report. Two hours lecture, 3 hours lab per week, and field trips.

**GS 327 GEOMORPHOLOGY** 3 s.h.

Prerequisites: GS 121 and GS 131.

A study of the origin of the earth's land forms, including relationship of geologic structure to landform types and role of geomorphic processes in landscape development. Two hours lecture, 3 hours lab per week.

**GS 330 PALEONTOLOGY** 3 s.h.

Prerequisite: GS 131 or permission of instructor.

Study of the morphology, evolution, geologic significance and paleoecology of invertebrate fossils. Two hours lecture, 3 hours lab per week.

**GS 335 ECONOMIC GEOLOGY** 3 s.h.

Prerequisite: GS 321.

Deals with location and probable origin of fossil fuels, ores of the non-metals, and metallic ores, both ferrous and nonferrous. Two hours lecture, 3 hours lab per week.

**GS 336 GEOLOGY OF THE NORTHERN ROCKIES** 3 s.h.

Prerequisite: Permission of Instructor.

A field study of the major geologic features and relationships involved in the development of the northern Rocky Mountains, National Park and Monument areas of South Dakota, Wyoming and Montana are included among the areas investigated. Two weeks, summer only.

**GS 341 SOLAR SYSTEM** 3 s.h.

Prerequisites: MA 121 and PY 111.

Fundamentals of astronomy, with emphasis on observational methods, mechanics and origin of the solar system, and spatial relationship of the solar system to the other members of the universe. Two hours lecture, 3 hours lab or night observation per week.

**GS 342 STELLAR ASTRONOMY** 3 s.h.

Prerequisites: MA 121 and PY 111.

Fundamentals of astronomy, with emphasis on sun, stars, galaxies, the sidereal universe and

use of spectroscopy for gathering astronomical data. Two hours lecture, 3 hours lab or night observation per week.

**GS 350 OPERATION OF THE PLANETARIUM** 1 s.h.

Prerequisites: GS 110 or 341 or 342 or permission of instructor.

Designed to acquaint the student with methods of operation and repair of a Spitz A-3-P planetarium. Content includes topics suitable for lectures to various age groups. Student will write and present a demonstration lesson. Meets once a week with occasional evening observations.

**GS 361 PHYSICAL OCEANOGRAPHY** 3 s.h.

Prerequisites: PY 111 and MA 121 or permission of instructor.

Introduction to physical, chemical, geological and biological nature of ocean; topography, submarine geology and bottom deposits. Two hours lecture, 3 hours lab per week.

**GS 362 MARINE GEOLOGY AND PLATE TECTONICS** 3 s.h.

Prerequisites: Physics I and II, Geology courses.

A study of marine geology, coastal geomorphology, marine sedimentary environments, and plate tectonics examined in the light of sea floor spreading and other oceanographic evidences. Two hours lecture, three hours lab per week.

**GS 371 METEOROLOGY I** 3 s.h.

Prerequisite: One year of Physical Science or Physics.

Introduction to meteorological sciences; composition and structure of the atmosphere; radiation principles; elementary thermodynamics and heat balance. Two hours lecture, 3 hours lab per week.

**GS 372 METEOROLOGY II** 3 s.h.

Prerequisite: GS 371 or permission of instructor.

Introduction to physical, dynamical and theoretical meteorology. Two hours lecture and 3 hours lab per week.

**GS 411 SEDIMENTARY PETROLOGY** 3 s.h.

Prerequisite: GS 321 or permission of instructor.

Study of sediments and sedimentary rocks with emphasis on interpreting ancient environments of deposition utilizing sieve analysis, hand lens, and petrographic microscope. Two hours lecture, 3 hours lab per week, and field trips.

**GS 412 STRATIGRAPHY** 3 s.h.

Prerequisite: GS 411 or permission of instructor.

Principles and processes involved in development and description of stratified rock sequences, principles and problems of correlation, and selected stratigraphic problems. Two hours lecture, 3 hours lab per week, and field trips.

**GS 420 GEOLOGY OF PENNSYLVANIA** 3 s.h.

Prerequisite: Permission of instructor

An advanced course dealing with many varied aspects of Pennsylvania geology, including the structure, stratigraphy and geologic history of its varied geologic provinces. Two hours lecture, three hours lab per week.

**GS 440 SUBSURFACE GEOLOGY** 3 s.h.

Prerequisite: Minimum 20 credit hours of Geology.

An introduction to the geology of petroleum, its origin, migration, entrapment and production. Lab is designed to provide practical experience in subsurface mapping techniques and the use and evaluation of geophysical logging devices. Two hours lecture, 3 hours lab per week.

**GS 441 CARBONATE GEOLOGY-FLORIDA** 3 s.h.

Prerequisite: Permission of Instructor.

Two weeks of field study in Florida, Keys. Course will be conducted from base camp in Florida Keys and will consist of both land and water work as the different carbonate environments in the

Keys, Florida Bay and in the Atlantic reef tract are studied.

**GS 480 GEOSCIENCE SEMINAR** 1 s.h.

For seniors majoring in some aspect of geoscience. The seminar:

(1) provides student opportunity to prepare, formally present, and defend a scientific paper based either on his own research or on a topic chosen by him with the approval of instructor, (2) provides opportunity to discuss topics presented by other students, faculty, or guests.

**GS 481 SPECIAL TOPICS** 1-3 s.h.

Prerequisite: Permission of instructor.

It is the department's intention to use this course to schedule extended field trips and for teaching special courses which will utilize the specialities of the geoscience faculty.

**GS 482 INDEPENDENT STUDY** 1-3 s.h.

Independent study provides the student with an opportunity to use library, laboratory or field research in an area which is of interest to him under the supervision of a designated faculty member.

**GS 485 INTERNSHIP** 1-3 s.h.

Summer work experiences with cooperating firms or agencies. May be scheduled only after consultation with advisor and chairperson. Restricted to Junior and Senior Geoscience Department majors.

## **MARINE SCIENCE CONSORTIUM**

---

**ANTHONY J. NASTASE AND GOULD F. SCHROCK, DIRECTORS**

The following courses are offered through the Marine Science Consortium which operates during the summer at the NASA-Wallops Island Station, Virginia.

All courses include lecture and field work and meet for morning and afternoon sessions on Monday through Friday.

### **COURSE DESCRIPTIONS**

---

**MI 110 INTRODUCTION TO OCEANOGRAPHY** 3 s.h.

Prerequisites: None.

Introduction to physical, chemical, biological and geological aspects of oceans and methods and techniques of oceanography. Lab emphasis placed on at-sea assignments.

**MI 211 FIELD METHODS IN OCEANOGRAPHY** 3 s.h.

Prerequisite: MI 110 or consent of instructor.

Familiarization with dynamic marine environment involving use and application of oceanographic instruments and sampling devices.

**MI 212 NAVIGATION** 3 s.h.

Prerequisite: Four years high school math or equivalent or consent of the instructor.

Covers navigation, i.e., the art and science of safely bringing a vessel from one position to another in a body of water. Course divided into: (1) brief historical background; (2) navigation within sight of land, i.e., piloting; (3) navigation in the open sea, including electronic navigation methods.

**MI 221 MARINE INVERTEBRATE ZOOLOGY** 3 s.h.

Prerequisite: One year biology or consent of instructor.

Study of marine invertebrates with emphasis on development, reproduction, structure, function, and classification of selected marine organisms.



- MI 241 MARINE BIOLOGY** 3 s.h.  
Prerequisites: Botany and zoology or consent of instructor.  
Study of plant and animal life in marine environment with emphasis placed upon physical and chemical factors affecting biota.
- MI 250 MANAGEMENT OF WETLAND WILDLIFE** 3 s.h.  
Prerequisites: None.  
The ecology and management of wetland wildlife, particularly of freshwater marshes and saltwater marshes. Special emphasis on ecosystem approach.
- MI 260 MARINE ECOLOGY** 3 s.h.  
Prerequisite: One year of biology or consent of instructor.  
A course in ecology of marine organisms.
- MI 270 SCUBA DIVING** 3 s.h.  
Prerequisites: Swimming ability and good health. (A standard diving physical form will be mailed to students electing the course.)  
Students who complete course will receive a National Association of Underwater Instructors Diver Certificate.
- MI 280 MARINE FIELD BIOLOGY** 3 s.h.  
Prerequisites: None.  
An introduction to basic principles of ecology and natural history of selected plants and animals in terrestrial, freshwater, and marine environments. Suitable for non-science majors.
- MI 331 CHEMICAL OCEANOGRAPHY** 3 s.h.  
Prerequisites: MI 110 and one year of chemistry.  
Treatment of oceanic chemical phenomena by sampling and laboratory analysis techniques.
- MI 342 MARINE BOTANY** 3 s.h.  
In-the-field studies and laboratory analysis by instrumentation of marine and marine fringe plants in the Middle Atlantic Coast as exemplified by those found in the Cape Henlopen, Delaware, and Wallops Island, Virginia, areas.
- MI 343 MARINE ICHTHYOLOGY** 3 s.h.  
Prerequisites: General Biology and/or consent of the instructor.  
A study of fishes. Specimens collected along Eastern Seaboard by students will be used to illustrate anatomy, physiology and systematics of this major vertebrate group. Field collections will give student opportunity to observe relationships of these animals to biotic and physical environment.
- MI 344 ANATOMY OF MARINE CHORDATES** 3 s.h.  
Prerequisites: Six hours of biology including general Zoology.  
Designed to familiarize students with various aspects of marine chordates.
- MI 345 MARINE ORNITHOLOGY** 3 s.h.  
Prerequisite: One year of Biology, or consent of the instructor.  
Introduces student to avian fauna of seacoast and enables comparison with inland species. In addition to field work providing visual and vocal identification, lecture material will include information on distribution, behavior, physiology, and anatomy of birds.
- MI 362 MARINE GEOLOGY** 3 s.h.  
Prerequisites: MI 110 and physical geology or consent of instructor.  
Studies of structural and sedimentary environments of continental shelf, slopes, and ocean basins and crustal structure of earth and its relation to sedimentary record and geologic history of oceans.
- MI 364 PHYSICAL OCEANOGRAPHY** 3 s.h.  
Prerequisites: MI 110, one year of physics, one semester of calculus and permission of the instructor.

Course includes consideration of physical properties, mass and energy budgets, theory of distribution of variables; cause, nature, measurement, analysis and prediction of tides, currents and waves; and basic instrumentation in the field.

MI 420 MARINE MICROPALAEONTOLOGY 3 s.h.

Prerequisites: One year of geology and biology or consent of instructor.

Deals with modern, living representatives of microorganisms important in fossil record with particular emphasis placed on taxonomy, morphology, evolution and ecologic affinities of representative groups.

MI 431 ECOLOGY OF MARINE PLANKTON 3 s.h.

Prerequisite: One year of Biology.

Study of phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons made between the planktonic populations of various types of habitats in relation to primary and secondary productivity.

MI 459 COASTAL GEOMORPHOLOGY 3 s.h.

Prerequisite: One year of Geology.

A study of coastal geomorphology with emphasis on Late Cenozoic and Pleistocene sea-level changes in response to world-wide continental glaciation. The student will participate in field studies of Pleistocene deposits and the weathering of these deposits.

MI 481 SPECIAL TOPICS 3 s.h.

Prerequisite: Instructor consent.

Topics vary from session to session.

MI 500 PROBLEMS IN MARINE SCIENCE 3 s.h.

Graduate students or undergraduate students with advanced standing registering for this course may elect either of the following options.

Option A: Take a 200, 300, or 400 level MI course and complete, in addition to regular course requirements, a project in the area under direction of instructor.

Option B: Complete an independent research project. A research proposal must be approved by the Academic Committee of M.S.C. in advance of the time research is to be pursued.

## **MATHEMATICS DEPARTMENT**

---

**JAMES C. REBER, CHAIRPERSON: ANGELO, ARMS, BERTNESS, BROUGHTON, BUSOVICKI, CROOKS, A. DAVIS, DEISHER, DUNCAN, R. GIBSON, HARTMAN, HENNEMANN, W. LONG, MADERER, D. McBRIDE, R. McBRIDE, McCOY, MORRELL, MUELLER, OAKES, PETERS, REIGH, RETTIG, D. SHAFER, SHAWER, SHEPLER, E. SMITH, W. SMITH, SPEAKMAN, STILWELL, WESTWOOD, WILLISON, R. WOLFE, M. WOODARD.**

The Mathematics Department prepares students for work in industry, graduate school mathematics, and teaching. Degrees offered by the Department are the Bachelor of Science in Mathematics, the Bachelor of Science in Applied Mathematics, and the Bachelor of Science in Education with a Mathematics major. The first two degree programs are offered within the School of Natural Sciences and Mathematics and the third is with the School of Education. The Department also offers a minor in Mathematics and a minor in Applied Statistics.

The program for a mathematics major in the School of Natural Sciences and Mathematics is two-phased. A student may pursue a degree in Applied Mathematics or Mathematics. Those completing a degree in Mathematics will be prepared to continue their studies in mathematics in graduate school though some may enter

business, industry, or government service. Those students receiving a degree in Applied Mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used or to continue their studies in applied mathematics or computer science in graduate school. This student would not be expected to continue graduate studies in pure mathematics.

The program leading to the B.S. in Education with a Mathematics major prepares the student for teaching mathematics in junior or senior high school. Many graduates, however, continue their formal education in mathematics at the graduate level.

### Core Program

Requirements for ALL Mathematics majors, beyond the University's General Education requirements are CO 110 and 18 semester hours in Mathematics, as follows:

MA 127, 128, 227 - Calculus I, II, III	12 s.h.
MA 171 - Introduction to Linear Algebra	3 s.h.
MA 271 - Introduction to Algebraic Structures	3 s.h.

### B.S. in Mathematics

In addition to the Core Program, requirements are 18 more semester hours in Mathematics, as follows:

I. MA 421 - Advanced Calculus I	3 s.h.
MA 476 - Abstract Algebra I	3 s.h.
II. At least 3 semester hours in one of the following:	
MA 422 - Advanced Calculus II	3 s.h.
MA 427 - Introduction to Topology	3 s.h.
MA 477 - Abstract Algebra II	3 s.h.
III. At least enough semester hours in the following courses to meet the minimum requirements of 36 semester hours total for the major:	
MA 241 - Differential Equations	3 s.h.
MA 353 - Theory of Numbers	3 s.h.
MA 355 - Foundations of Geometry I	3 s.h.
MA 356 - Foundations of Geometry II	3 s.h.
MA 363 - Mathematical Statistics I	3 s.h.
MA 364 - Mathematical Statistics II	3 s.h.
MA 371 - Linear Algebra	3 s.h.
MA 423 - Complex Variables I	3 s.h.
MA 424 - Complex Variables II	3 s.h.
MA 465 - Topics in Statistics	3 s.h.

It is strongly recommended that the Mathematics major take two of the three courses in Section II, one of the two being Introduction to Topology. It is further recommended that students who intend to take graduate work in mathematics check the requirements for entrance to their intended school of graduate study for guidance in choosing courses from Section III.



**Minor in Mathematics**

The Minor in Mathematics consists of a minimum of 17 semester hours in mathematics made up of any two semester sequence in calculus and additional semester hours selected from courses for mathematics majors. This excludes MA 010, MA 101, 110, 214, 217, 417, 482, 483.

**Minor in Applied Statistics**

The Minor in Applied Statistics consists of a minimum of 17 semester hours in Mathematics selected as follows: Required are (a) MA 121, 123, or 127; (b) Choice of at least one of the following: MA 102, MA 122, MA 171; (c) Choice of MA 214 or MA 217; (d) MA 417. The remaining semester hours may be chosen from appropriate courses in Statistics, MA 481, MA 482, MA 483, or mathematics courses approved by designated adviser in the Mathematics Department.

**COURSE DESCRIPTIONS**

MA 010 BASIC ALGEBRA 3 s.h.

A basic course in algebra including factoring, exponents and radicals, systems of linear equations, complex fractions and inequalities. Designed for those students who lack the basic algebraic skills required in MA 110 Elementary Functions. Three hours lecture per week.

MA 101 FOUNDATIONS OF MATHEMATICS 3 s.h.

Introduces logic and mathematical way of analyzing problems; develops an appreciation for nature, breadth, and power of mathematics and its role in a technological society and introduces useful mathematics or mathematics related to student interest. Possible topics include: logic, problem-solving, number theory, linear programming, probability, statistics, intuitive calculus, introduction to computers, mathematics of finance, game theory. Three hours lecture per week.

MA 102 FINITE MATHEMATICS 3 s.h.

Prerequisite: At least 4 years of high school mathematics or a college mathematics course. An informal approach to practical application of mathematics. Fundamental concepts of matrices, linear system, linear programming, probability, and decision theory will be introduced and used to develop mathematical models for business, physical science, and ecology. Computer packages may be used as a tool to solve mathematical problems. This course may be taken in place of MA 101 by well-prepared students or by those who have completed MA 101 and seek an additional experience. Three hours lecture per week.

MA 110 ELEMENTARY FUNCTIONS 3 s.h.

For students not prepared to begin study of calculus; topics include polynomial, exponential, logarithmic and trigonometric functions. Three hours lecture per week.

MA 121/122 CALCULUS I AND II FOR BUSINESS, NATURAL AND SOCIAL SCIENCES 4 s.h. each

Prerequisite: MA 110 or equivalent high school preparation. Introduces non-math major to analytic geometry, elementary functions (including trig functions), central ideas of the calculus (limit, derivative and integral), applications of these central ideas to social and natural sciences and numerical methods that involve series. Four hours lecture per week.

MA 123/124 CALCULUS I AND II FOR PHYSICS AND CHEMISTRY 4 s.h. each

Prerequisites: High school algebra, geometry, and trigonometry. Techniques of differentiation and integration, with application to analytic geometry of two and three dimensions by means of vector analysis (algebra and calculus), kinematics, surface integrals, line integrals, infinite series, matrices and simultaneous linear equations, differential

equations with numerous application to physical problems. Four hours lecture per week.

**MA 127/128/227 CALCULUS I, II, AND III** 4 s.h. each

Prerequisite: Permission of the Mathematics Department.

These courses stress the theory of the calculus as well as the application in problem solving. Topics to be included are: Calculus I — real numbers, an introduction to analytic geometry, functions, limits and continuity, derivatives and applications, the differential, and antidifferentiation; Calculus II — definite integrals and applications, logarithmic and exponential functions, trigonometric and inverse trigonometric functions, polar coordinates, hyperbolic functions, indeterminate forms, improper integrals and Taylor's formula; Calculus III — vectors in the plane, parametric equations, vectors in three dimensional space, solid analytic geometry, differential calculus of functions of several variables, directional derivatives, gradients, applications of partial derivatives, infinite series. Four hours lecture per week.

**MA 171 INTRODUCTION TO LINEAR ALGEBRA** 3 s.h.

Introduction to vector spaces, linear transformations determinants and matrix algebra. Topics are presented in a direct and intuitive approach. Three hours lecture per week.

**MA 214 PROBABILITY AND STATISTICS FOR BUSINESS MAJORS** 3 s.h.

Designed to introduce study of probability theory, discrete random variables and probability distributions, empirical frequency distributions, theoretical frequency distributions, statistical investigations and sampling, and sampling distributions. Three hours lecture per week.

**MA 217 PROBABILITY AND STATISTICS** 3 s.h.

(For non-math majors)

Frequency distributions, measures of central tendency, variation, elementary probability, sampling, estimation, testing hypotheses, correlation and regression; emphasis on applications as opposed to theoretical development of topics. Three hours lecture per week.

**MA 219 DISCRETE MATHEMATICS** 3 s.h.

Prerequisites: CO 110 and a two semester calculus sequence.

Topics include set algebra, mappings, relations, semigroups, groups, directed and undirected graphs, Boolean algebra and propositional logic, with examples and applications of these to various areas of computer science. Emphasis placed on developing an intuitive understanding of basic structures rather than formal theories, and influence of these topics on theory and practice of computing. Three hours lecture per week.

**MA 241 DIFFERENTIAL EQUATIONS** 3 s.h.

Prerequisite: MA 122 or 124 or 227.

Emphasis is placed on techniques of solution and elementary physical applications. A thorough study is made of differential equations classified as order one-degree one, linear, and nonhomogeneous. Solution techniques involving reduction of order techniques, the differential operator and infinite series are introduced. Three hours lecture per week.

**MA 271 INTRODUCTION TO ALGEBRAIC STRUCTURES** 3 s.h.

Gives student basic ideas of contemporary mathematics. Includes mathematical logic, algebra of sets, equivalence relations and partitions of sets, functions, and fundamentals of group theory. Methods of proof in area of abstract mathematics. Three hours lecture per week.

**MA 342 ADVANCED CALCULUS FOR APPLICATIONS** 4 s.h.

Prerequisite: MA 241

This course deals with application of mathematics to problems of science. Emphasis is placed on the three phases of such an application and on the development of skills necessary to carry out each step: (a) translation of the given physical information to a mathematical model; (b) treatment of the model by mathematical methods; (c) interpretation of the mathematical result in physical terms. Topics included are vector calculus, integral theorems, fourier series, partial differential equations and the Laplace transformation. Four hours lecture per week.

**MA 353 THEORY OF NUMBERS** 3 s.h.

Prerequisite: MA 271.

Divisibility, congruences, primitive roots, number theoretic functions, diophantine equations, continued fractions, quadratic residues. Three hours lecture per week.

MA 355 FOUNDATIONS OF GEOMETRY I 3 s.h.

Prerequisites: MA 171, 271.

Studies various groups of transformations and geometries associated with these groups in the Euclidean plane. The Euclidean Similarity, Affine and Projective Groups of Transformations are studied. Three hours lecture per week.

MA 356 FOUNDATIONS OF GEOMETRY II 3 s.h.

Prerequisite: MA 355.

An extension of the topics included in MA 355. The real projective plane is introduced and the analytic geometry of this plane. Three hours lecture per week.

MA 363 MATHEMATICAL STATISTICS I 3 s.h.

Prerequisite: MA 122 or 124 or 227.

Probability theory necessary for understanding of mathematical statistics is developed. Applications of set theory to models, combinations and permutations, binomial, Poisson and normal distributions, expected values and moment generating functions. Three hours lecture per week.

MA 364 MATHEMATICAL STATISTICS II 3 s.h.

Prerequisite: MA 363.

Multivariate distributions, change of variable technique, Chisquare distribution, estimation, confidence intervals, hypothesis testing, contingency tables, goodness of fit. Practical applications are used to aid in the development. Three hours lecture per week.

MA 371 LINEAR ALGEBRA 3 s.h.

Prerequisites: MA 171, 271.

Vector spaces and linear transformations are studied in a theoretical setting. Also canonical forms and multilinear algebra are studied. Three hours lecture per week.

MA 399 INTERNSHIP IN MATHEMATICS 3-12 s.h.

Prerequisites: Completion of core curriculum, completion of application.

Positions with participating companies or agencies provide students with experience in mathematics related work under the supervision of the agencies and faculty. Requirements include one to three on-site consultations, two university consultations, completion of progress reports, and presentation of final cumulative paper.

MA 417 STATISTICAL APPLICATIONS 3 s.h.

(For non-math majors)

Prerequisite: MA 214 or 217.

Using computer programs, a wide array of statistical procedures for educational research workers will be explored. Basic concepts of statistical inference and prediction will be reviewed, including regression analysis and prediction, hypothesis testing, analysis of variance and covariance, and partial and multiple correlation. Emphasis is on use of computer and interpretation of computer print-outs, along with understanding techniques employed. No computer knowledge is necessary. Three hours lecture per week.

MA 421 ADVANCED CALCULUS I 3 s.h.

Prerequisites: MA 124 or MA 227, MA 271.

Study of set theory, real number system, functions topology of cartesian space, sequences, convergence and uniform convergence, continuity, and uniform continuity. Three hours lecture per week.

MA 422 ADVANCED CALCULUS II 3 s.h.

Prerequisite: MA 421.

Includes study of convergence sequences in  $R_n$ , global properties of continuity, uniform continuity, differentiation of  $R_n$ , Riemann integrals, and infinite series. Three hours lecture per week.

MA 423-424 COMPLEX VARIABLE I AND II	3 s.h. each
Prerequisite: MA 124 or 227.	
Introduction to theory of functions of a complex variable: topics included are elementary functions, analytic functions, conformal mapping, integration, series, and application. Three hours lecture per week.	
MA 427 INTRODUCTION TO TOPOLOGY	3 s.h.
Prerequisite: MA 271.	
Study of sets, functions, continuity, compactness, the separation axioms, and metric spaces; application of topology to analysis is demonstrated. Three hours lecture per week.	
MA 445 PROGRAMMING MODELS IN OPERATIONS RESEARCH	3 s.h.
Prerequisites: 2 semester sequence of calculus	
Development of probabilistic mathematical models for managerial and social sciences with relevant computational techniques. Three hours lecture per week.	
MA 446 PROBABILISTIC MODELS IN OPERATIONS RESEARCH	13 s.h.
Prerequisites: 2 semester sequence of calculus, MA 363.	
Development of probabilistic mathematical models for managerial and social sciences with relevant computational techniques. Three hours lecture per week.	
MA 452 SEMINAR IN TEACHING ALGEBRA	1-4 s.h.
MA 453 SEMINAR IN TEACHING GEOMETRY	1-4 s.h.
MA 454 SEMINAR IN TEACHING GENERAL MATHEMATICS	1-4 s.h.
Seminars are designed for pre-student teacher. Students in each class will gain insights into the problems in teaching each topic, and become aware of the materials available and methods of instruction geared to the special type of student. Education majors only.	
MA 465 TOPICS IN STATISTICS	3 s.h.
Prerequisite: MA 364	
Correlation and regression from applied and theoretical points of view, bivariate and multivariate normal distribution, analysis of variance, nonparametric methods. Practical problems involving statistical techniques and use of computer statistical packages. Knowledge of computer programming is not required. Three hours lecture per week.	
MA 476 ABSTRACT ALGEBRA I	3 s.h.
Prerequisites: MA 171, 271.	
Development of theory of integral domains, fields, rings, and groups; designed to develop student's power to think for himself and to improve ability to construct formal proofs. Three hours lecture per week.	
MA 477 ABSTRACT ALGEBRA II	3 s.h.
Prerequisite: MA 476	
Designed to have student continue study of algebra by use of axiomatic method; Euclidean domains; polynomial domains and extension fields included; inter-relationships between these structures and simpler structures, particularly groups and rings, are developed as in study of Galois group of a polynomial and in an introduction to Galois Theory. Three hours lecture per week.	
MA 481 TOPICS IN MATHEMATICS (Credit toward Math major)	1-3 s.h.
MA 482 TOPICS IN MATHEMATICS (Credit toward graduation)	1-3 s.h.
MA 483 TOPICS IN MATHEMATICS (Credit for non-math majors only)	1-3 s.h.



MA 490 INDEPENDENT STUDY

1-3 s.h.

MA 456 TEACHING MATHEMATICS IN THE SECONDARY SCHOOLS

3 s.h.

(To be taken during the semester or summer session prior to student teaching.) Prepares students to teach mathematics in modern secondary schools. Lesson planning and presentation evolve from examination of teaching strategies, use of media in teaching mathematics and handling of individual differences. Three hours lecture per week.

---

## NATURAL SCIENCES

---

**CHARLES R. FUGET, DIRECTOR: BALLAS, SCROXTON**

The program leading to the Bachelor of Science degree in Natural Science is designed to prepare students for various professional schools - optometry, podiatry, pharmacy, dentistry (the natural science major is not recommended for medical school preparation). The degree is offered by the School of Natural Sciences and Mathematics.

In addition to the University's General Education requirements and the requirements of the School of Natural Sciences and Mathematics, a total of 45-46 semester hours are required for the major. The distribution is: Biology, 14 s.h.; Chemistry, 16 s.h.; Physics, 8 s.h.; and Mathematics or Computer Science, 7 to 8 s.h.

NOTE: The credits in Natural Sciences and in Mathematics INCLUDE those required in the General Education portion of the degree requirements.

---

## PHYSICS DEPARTMENT

---

**GARY L. BUCKWALTER, CHAIRPERSON: BERRY, EDDY, FOX, GAGGINI, HERSHMAN, MATOLYAK, MATOUS, McNAMARA, RAMSEY, RIBAN, ROBERTS, WHITSON.**

The Physics Department aims to fully prepare qualified young men and women for careers in physics. Two degrees are offered within the School of Natural Sciences and Mathematics: the Bachelor of Science in Physics and the Bachelor of Arts in Physics. Each of these is adequate preparation for those wishing to enter a graduate program in physics or wishing to pursue research in industrial technology or for those wishing a strong physics background before aiming at their direct goal of medical research, air pollution control, etc. Two degrees are provided within the School of Education, the Bachelor of Science in Education with a Physics major and the Bachelor of Science in Education with a Physics-Mathematics major. The department also provides a minor in Physics, as well as general science courses for those who wish to be truly liberally educated with a working knowledge of the rudiments of physical science.

In addition, a pre-engineering program is offered whereby a student may acquire the first two years' requirements at IUP and complete the remainder at the cooperating institution.

## CURRICULA

---

### Core Program

Requirements for ALL Physics programs are 18 semester hours in Physics and 18 semester hours in Mathematics as follows:

#### Physics

*PY 131-1 - Physics I-C Lecture	3 s.h.
*PY 132-1 - Physics II-C Lecture	3 s.h.
*PY 131-2 - Physics I-C Lab	1 s.h.
*PY 132-2 - Physics II-C Lab	1 s.h.
PY 222 - Mechanics I	2 s.h.
*PY 322 - Electricity and Magnetism I	2 s.h.
PY 331 - Modern Physics	3 s.h.
PY 350 - Intermediate Experimental Physics I	3 s.h.

#### Mathematics

*MA 123 - Calculus I for Physics and Chemistry	4 s.h.
*MA 124 - Calculus II for Physics and Chemistry	4 s.h.
MA 241 - Differential Equations	3 s.h.
MA 342 - Advanced Calculus for Applications	4 s.h.
CO 200 - Introduction to Computers	
or	
CO 110 - Introduction to Computer Science	3 s.h.

\*Or appropriate substitute.

### B.S. in Physics

In addition to the Core Program, requirements for the degree of Bachelor of Science in Physics are 27 more semester hours in Physics and 3 more semester hours in Mathematics, as follows:

#### Physics

PY 223 - Mechanics II	2 s.h.
PY 231 - Electronics	4 s.h.
PY 242 - Optics	3 s.h.
PY 323 - Electricity and Magnetism II	2 s.h.
PY 342 - Thermal and Statistical Physics	3 s.h.
PY 351 - Interm. Exp. Physics II	3 s.h.
PY 473 - Quantum Mechanics I	4 s.h.
PY 472 - Nuclear Physics	3 s.h.
or	
PY 490 - Solid State Physics	3 s.h.
Physics Elective	3 s.h.

#### Mathematics - One of the following:

MA 171 - Intro to Linear Algebra	3 s.h.
MA 217 - Probability and Statistics	3 s.h.
MA 421 - Advanced Calculus I	3 s.h.
MA 423 - Complex Variables I	3 s.h.
CO 250 - Intro to Numerical Methods	3 s.h.

**B.A. in Physics**

In addition to the Core Program, requirements for the degree of Bachelor of Arts in Physics are 18 more semester hours in Physics as follows:

## Physics

PY 223 - Mechanics II	2 s.h.
PY 231 - Electronics	4 s.h.
PY 323 - Electricity and Magnetism II	2 s.h.
PY 351 - Interm. Exp. Physics II	3 s.h.
PY 473 - Quantum Mechanics I	4 s.h.
Physics Elective	3 s.h.

In addition, students are required to complete a two-semester Natural Science sequence other than Physics and a two-semester advanced Social Science or a two-semester advanced Natural Science sequence.

**B.S. in Education (Physics Major)**

In addition to the Core Program, requirements for the degree of Bachelor of Science in Education with a Physics major are 10 more semester hours in Physics and 8 semester hours in Chemistry as follows:

## Physics

PY 231 - Electronics	4 s.h.
PY 242 - Optics	3 s.h.
Physics Elective	3 s.h.

## Chemistry

CH 111-112 - General Chemistry I and II	4 s.h.
---	--------

**B.S. in Education (Physics - Mathematics Major)**

In addition to the Core Program, requirements for the degree of Bachelor of Science in Education with a combined Physics-Mathematics major are 6 more semester hours in Physics and 12 more semester hours in Mathematics, as follows:

## Physics

PY 242 - Optics	3 s.h.
Physics Elective	3 s.h.

## Mathematics

MA 271 - Intro to Algebraic Structures	3 s.h.
MA 171 - Intro to Linear Algebra	3 s.h.
MA 355 - Foundations of Geometry I	3 s.h.
MA 421 - Advanced Calculus I	3 s.h.

**Minor in Physics**

To minor in Physics, a student must successfully complete 15 semester hours in Physics which must consist of at least three courses at the 200 level or higher. PY 150 may be substituted with the permission of the chairperson.

Pre-Engineering (Chemical, Civil, Electrical, Materials, Mechanical) Common to all

engineering programs are the following science and mathematics requirements: \*PY 131-1, \*PY 131-2, \*PY 132-1, \*PY 132-2, PY 322, PY 342, \*MA 123, \*MA 124, MA 171, \*CH 111, \*CH 112.

Further requirements depend on the particular engineering program chosen. Complete information regarding a specific program may be obtained from the Physics Department.

\*Or appropriate substitute.

## **COURSE DESCRIPTIONS**

<b>PY 101 PHYSICS AND OUR ENVIRONMENT</b>	<b>3 s.h.</b>
An overview of the areas of energy, transportation and pollution. These topics are approached via the relevant concepts of physical science and physics. Three hours lecture per week.	
<b>PY 110 SOLAR ENERGY</b>	<b>3 s.h.</b>
Prerequisite: SC 105 or equivalent. Overview of the solar energy field including the feasibility of solar technologies in comparison with other energy technologies. Science of solar collection, storage and applications. Three hours lecture per week.	
<b>PY 111-1 PHYSICS I LECTURE</b>	<b>3 s.h.</b>
Prerequisites: Elementary algebra and trigonometry. General college physics; mechanics, wave motion, and sound. Three hours lecture per week.	
<b>*PY 112-1 PHYSICS II LECTURE</b>	<b>3 s.h.</b>
Prerequisite: PY 111-1 Electricity and magnetism, heat, light, atomic and nuclear physics, and an elementary introduction to relativity and quantum theory. Three hours lecture per week.	
<b>*PY 111-2 PHYSICS I LAB</b>	<b>1 s.h.</b>
Corequisite: PY 111-1 Physics laboratory at level of Physics I; exercises in mechanics, wave motion, and sound. Three hours laboratory per week.	
<b>*PY 112-2 PHYSICS II LAB</b>	<b>1 s.h.</b>
Corequisite: PY 112-1 Physics laboratory at level of Physics II; exercises in optics, electricity and magnetism, and radioactivity. Three hours laboratory per week.	
<b>*PY 131-1 PHYSICS I-C LECTURE</b>	<b>3 s.h.</b>
Prerequisites: MA 121, 123 or 127, at least concurrently. A calculus-based course in general college physics; topics covered are similar to those covered in Physics 111, but are treated in more depth through use of calculus. Three hours lecture per week.	
<b>*PY 132-1 PHYSICS II-C LECTURE</b>	<b>3 s.h.</b>
Prerequisites: MA 122, 124, or 128, at least concurrently. Continuation of Physics I-C; topics covered are similar to those covered in Physics II, but are treated in more depth through the use of the calculus. Three hours lecture per week.	
<b>*PY 131-2 PHYSICS I-C LAB</b>	<b>1 s.h.</b>
Corequisite: PY 131-1 Sequence of physics laboratory at same level as Physics I-C; exercise in mechanics, wave motion, sound and kinetic theory. Three hours laboratory per week.	
<b>*PY 132-2 PHYSICS II-C LAB</b>	<b>1 s.h.</b>
Corequisite: PY 132-1	

- Sequence of physics laboratory at same level as Physics II-C; exercises in optics, electricity and magnetism, and radioactivity. Three hours laboratory per week.
- PY 150 COMPUTER APPLICATION TO PHYSICS LABORATORIES** 3 s.h.  
Covers applications of the RCA 110A and micro-computers to laboratory data acquisition. Interfacing design and construction as well as computer repair and machine level computer programming are included. Two hours lecture and two hours laboratory per week.
- PY 151-1 MEDICAL PHYSICS LECTURE** 3 s.h.  
Development of concepts and principles of physics with a strong emphasis as to their use and application in medical and other biophysical areas. Three hours lecture per week.
- PY 151-2 MEDICAL PHYSICS LAB** 1 s.h.  
Experiments dealing with applications of physical principles to field of medicine. Practical experience with use of electronic equipment, chart recorders, etc., of type found in modern day medicine will be introduced. Three hours laboratory per week.
- PY 222 MECHANICS I** 2 s.h.  
Prerequisites: PY 111 or 131; MA 122, 124 or 128  
Dynamics of a particle in one, two and three dimensions, central forces including planetary and satellite motion, energy in particle dynamics, statics, systems of particles. Two hours lecture per week.
- PY 223 MECHANICS II** 2 s.h.  
Prerequisites: PY 222, MA 342 or MA 241.  
Mechanics of a rigid body, constraints, oscillations, wave motion, introduction to Lagrangian and Hamiltonian formulation and relativistic mechanics. Two hours lecture per week.
- PY 231 ELECTRONICS** 4 s.h.  
Prerequisites: PY 112-1 or 132-1; MA 122, 124 or 128.  
Circuit theory, transients, vacuum-tube and transistor circuits, frequency response, input and output impedance, feedback and electronic noise. Operational amplifiers and digital electronics. Three hours lecture, 3 hours laboratory per week.
- PY 242 OPTICS** 3 s.h.  
Prerequisites: PY 112-1 or 132-1; MA 122, 124, or 128.  
Geometrical optics, physical optics, including interference, diffraction and polarization. Quantum Optics is introduced. Three hours lecture per week.
- PY 322 ELECTRICITY AND MAGNETISM I** 2 s.h.  
Prerequisite: PY 222.  
Electrostatic potential theory, dielectrics, dipole theory, magnetostatics, Maxwells equation for static fields, and Legendres polynomials and other approximation methods. Two hours lecture per week.
- PY 323 ELECTRICITY AND MAGNETISM II** 2 s.h.  
Prerequisite: PY 322.  
Time-dependent form of Maxwell's equations, electromagnetic induction, vector potential, magnetism, radiation fields, and poynting vector. Two hours lecture per week.
- PY 331 MODERN PHYSICS** 3 s.h.  
Prerequisites: PY 112-1 or 132-1; MA 122, 124 or 128.  
Introduction to particle and wave properties of matter, atomic structure, relativity, solid state and nuclear physics. Three hours lecture per week.

\*PY 111-1, 112-1 with accompanying labs PY 111-2, 112-2 and PY 131-1, 132-1 with accompanying labs PY 131-2, 132-2 also satisfy the General Education requirement for a laboratory science sequence.

- PY 342 THERMAL AND STATISTICAL PHYSICS** 3 s.h.  
Prerequisites: PY 112-1 or 132-1; MA 122, 124 or 128.  
Thermometry, laws of thermodynamics, low-temperature physics, entropy, properties of ideal gas, and an introduction to statistical mechanics. Three hours lecture per week.
- PY 350 INTERMEDIATE EXPERIMENTAL PHYSICS I** 3 s.h.  
Prerequisites: PY 242 and 331.  
Required fundamental experiments in areas of mechanics, optics, modern physics and heat. Six hours laboratory per week.
- PY 351 INTERMEDIATE EXPERIMENTAL PHYSICS II** 3 s.h.  
Prerequisite: PY 350.  
Increasingly sophisticated experiments in essential areas of physics. Analog and digital computers and the Van de Graaff are available. Six hours laboratory per week.
- PY 421 SELECTED EXPERIMENTS I** 3 s.h.  
Prerequisites: PY 231 and 331.  
Experiments selected from advanced optics, microwaves, radio and optical astronomy, semiconductor properties, cryogenics, and classic experiments in atomic physics. Six hours laboratory per week.
- PY 432 ADVANCED ELECTRONICS** 3 s.h.  
Prerequisite: PY 231.  
Digital Measurement, Switching Circuit, Logic circuits, Counting, Coding, Input and Output, AD and DA converters, Computer organization. Two hours lecture, 3 hours laboratory per week.
- PY 472 NUCLEAR PHYSICS** 3 s.h.  
Prerequisite: PY 331.  
Survey of nuclear physics; nuclear size; nuclear mass, reaction theory, types of radioactive decay, nuclear models, nuclear forces and elementary particles. Three hours lecture per week.
- PY 473 QUANTUM MECHANICS I** 4 s.h.  
Prerequisites: PY 222 and 331.  
Quantum mechanics following method of Schrodinger; the theory is applied to properties of harmonic oscillator, hydrogen atom, electron in a magnetic field and radioactive decay of alpha particles. Four hours lecture per week.
- PY 474 QUANTUM MECHANICS II** 3 s.h.  
Prerequisite: PY 473  
A sequel to PY 473, general principles of quantum mechanics are further developed. Matrix mechanics, angular momentum theory, time-independent perturbations, variational methods, spin, and introduction to the many-body problem. Three hours lecture per week.
- PY 490 SOLID STATE PHYSICS** 3 s.h.  
Prerequisites: PY 223 and 331.  
Reciprocal lattice, crystal structure, the quantization of fields to produce quasi-particles such as phonons, magnons, excitons. Fermi gas of electrons, energy bands, semiconductor crystals, and photoconductivity. Three hours lecture per week.
- PY 498 PROBLEMS IN PHYSICS** 1-4 s.h.  
Prerequisites: PY 112-1 or 132-1; MA 121, 123 or 127.  
Students select from topics such as: Physics education projects, spectrum analysis, cosmic rays, digital and analog computer applications, astrophysics, Van de Graaff accelerator experiment, cryogenics and electro-paramagnetic resonance.

### **General Education Courses**

- SC 105 PHYSICAL SCIENCE I** 4 s.h.  
The physical world is studied by focusing on concepts of matter and energy; emphasis on physical phenomena that can be explained by Physics and Astronomy. Three hours lecture, 2

hours laboratory per week.

SC 106 PHYSICAL SCIENCE II 4 s.h.  
See course descriptions in Chemistry Department section.

SC 401 THE GROWTH OF SCIENCE AND ITS CONCEPTS I 3 s.h.  
Traces development of science concepts and their interaction with growing society of Western Civilization, from earliest beginnings to time of Newton. Treatment is non-mathematical. Three hours lecture per week.

SC 402 THE GROWTH OF SCIENCE AND ITS CONCEPTS II 3 s.h.  
Influence and development of concepts of Science in Western Civilization are studied from Newton to present time; stress placed on non-mathematical understanding of the basic ideas. Three hours lecture per week.

ED 457 TEACHING PHYSICS IN THE SECONDARY SCHOOL 3 s.h.  
Provides foundation for a prospective secondary school physics teacher in the area of current professional practices, curriculum, and methods.

## **PSYCHOLOGY DEPARTMENT**

---

**DAVID E. GROVER, CHAIRPERSON: CARTWRIGHT, EDGAR, FLEISCHER, D. R. JACOBS, P. JACOBS, MAGEE, MARQUETTE, PATTON, RICH, RITTLE, ROSS, SCHNEIDER, STIRES, SUSSMANN, THORNTON, VANDE CREEK, WALZ, ZANICH.**

The program in psychology leads to a Bachelor of Arts degree and is designed to give the student an understanding of the methods and major findings of the science of behavior, with an introduction to several areas of professional application. The major offers the background required for graduate work in psychology and also preparation for such related fields as social work, personnel work, advertising, medicine, law, and theology. The department also offers a minor in psychology.

## **CURRICULA**

---

### **B.A. in Psychology**

The major in psychology consists of a minimum of eleven courses, including PC 101 - General Psychology and MA 217 - Probability and Statistics, both of which can be used to meet General Education requirements, and Experimental Design and Analysis I and II. At least two courses must be taken from Group A and two courses from Group B below. Psychology majors are required to complete a minor or concentration.

#### Course Group A

PC 361 - Motivation	3 s.h.
PC 362 - Physiological Psychology	3 s.h.
PC 363 - Human Cognition: Perception	3 s.h.
PC 365 - Conditioning and Learning	3 s.h.
PC 366 - Human Cognition: Learning	3 s.h.
PC 367 - Animal Behavior	3 s.h.

#### Course Group B

PC 351 - Intro. to Psych. Measurement	3 s.h.
PC 354 - Developmental Psychology OR	3 s.h.
PC 355 - Child Psychology	3 s.h.

PC 356 - Personality	3 s.h.
PC 357 - Abnormal Psychology	3 s.h.
PC 358 - Social Psychology	3 s.h.

### **Suggested Course Sequence for Psychology Majors**

<b>Freshman Year</b>	
First Semester	PC 101 - General Psychology
Second Semester	MA 217 - Probability & Statistics
<b>Sophomore Year</b>	
First Semester	PC 290 - Exp. Design & Analysis I
Second Semester	PC 291 - Exp. Design & Analysis II
<b>Junior Year</b>	
First Semester	One course from Group A One course from Group B
Second Semester	One course from Group A One course from Group B
<b>Senior Year</b>	
	At least three additional courses in psychology

An honors program has been developed to enrich the education of qualified psychology majors and assist such students in gaining entrance to graduate school by providing classroom and research experiences which will prepare them for work at the graduate level.

Psychology majors possessing at least a 3.00 quality point index at the end of their third semester are eligible to apply for entrance into the honors program. The program itself consists of two research seminar courses and two semesters of independent research taken in addition to the normal requirements for the psychology major. These requirements are normally met on a one course a semester basis throughout the four semesters of the junior and senior years. The two semesters of independent research are taken consecutively and are devoted to the completion of an honors thesis.

### **Minor in Psychology**

A minor in psychology consists of six courses: General Psychology, Probability and Statistics, Experimental Design and Analysis I, one course from Group A, one course from Group B, and one additional course to be selected by the student.

## **COURSE DESCRIPTIONS**

---

PC 101 GENERAL PSYCHOLOGY 3 s.h.  
An introduction to the scientific study of behavior.

PC 200 THE PSYCHOLOGY OF ADJUSTMENT 3 s.h.  
Prerequisite: PC 101.  
Designed to present fundamental concepts of psychological adjustment. Emphasis on preventive approaches to maladjustment and psychological disorders. (Cannot be used to meet requirements for major or minor in psychology.)



PC 290 EXPERIMENTAL DESIGN AND ANALYSIS I	3 s.h.
Prerequisites: PC 101, MA 217.	
A laboratory course devoted to designing, conducting and evaluating results of psychological experiments.	
PC 291 EXPERIMENTAL DESIGN AND ANALYSIS II	3 s.h.
Prerequisites: PC 101, 290.	
A continuation of Experimental Design and Analysis I.	
PC 351 INTRODUCTION TO PSYCHOLOGICAL MEASUREMENT	3 s.h.
Prerequisites: PC 101, MA 217.	
Survey of psychological measurement techniques, with emphasis on theoretical assumptions underlying these techniques and discussion of interpretation and limitations of measuring instruments.	
PC 354 DEVELOPMENTAL PSYCHOLOGY	3 s.h.
Prerequisite: PC 101	
Comprehensive study of all factors that contribute to human development from conception to death, particularly as they relate to psychological development of individual. A survey course directed at students not planning to take PC 355, PC 373, PC 374. Credit toward a major or minor in psychology will not be given for both PC 354 and PC 355.	
PC 355 CHILD PSYCHOLOGY	3 s.h.
Prerequisite: PC 101	
Study of factors that influence total development and behavior of child. Current theories and research are considered, with focus upon optimum development of individual. Credit toward a major or minor in psychology will not be given for both PC 355 and 354.	
PC 356 PERSONALITY	3 s.h.
Prerequisite: PC 101	
Provides comparative analysis of major representative traditional and contemporary theories of personality.	
PC 357 ABNORMAL PSYCHOLOGY	3 s.h.
Prerequisite: PC 101	
The description, causes, and treatment of behaviors labeled abnormal in our society are studied from experimental and clinical points of view.	
PC 358 SOCIAL PSYCHOLOGY	3 s.h.
Prerequisite: PC 101	
The study of the effects of the social environment on human behavior. Topics include perception of person, attitude formation and change, and small group interaction.	
PC 361 MOTIVATION	3 s.h.
Prerequisites: PC 101, 290.	
Systematic study of how behavior is initiated, sustained, directed, and terminated. Lecture and laboratory.	
PC 362 PHYSIOLOGICAL PSYCHOLOGY	3 s.h.
Prerequisites: PC 101, 290.	
Study of relationship between behavior and anatomy and physiology of nervous system. Lecture and laboratory.	
PC 363 HUMAN COGNITION: PERCEPTION	3 s.h.
Prerequisites: PC 101, 290.	
Study of perceptual process. Sensory mechanisms for processing information are examined, as well as responses to complex stimuli. Lecture and laboratory.	
PC 365 CONDITIONING AND LEARNING	3 s.h.
Prerequisites: PC 101, 290.	

Examination of basic principles of learning and related phenomena; discussion of classical conditioning, discrimination learning and aversive control of behavior. Lecture and laboratory.

PC 366 HUMAN COGNITION: LEARNING 3 s.h.

Prerequisites: PC 101, 290.

Study of methods and findings in areas of human memory and human information processing. Lecture and laboratory.

PC 367 ANIMAL BEHAVIOR 3 s.h.

Prerequisites: PC 101, 290.

Comparative survey of behavioral processes, with emphasis on sensory systems and learning in organisms of different phylogenetic levels. Lecture and laboratory.

PC 373 ADOLESCENT PSYCHOLOGY 3 s.h.

Prerequisite: PC 101.

Study of adolescent and his world, especially the physical aspects of adolescence, psychological growth patterns, social pressures and adaptation.

PC 374 ADULT DEVELOPMENT AND AGING 3 s.h.

Prerequisite: PC 101

A survey of physiological, cognitive, emotional and social issues affecting the young adult, the middle-aged and the elderly. Includes an examination of significant adult life crises.

PC 375 APPLIED SOCIAL PSYCHOLOGY 3 s.h.

Prerequisites: PC 101, 358.

The application of social psychological research and theory to selected public issues such as racism, aggression, altruism, social injustice and international conflict.

PC 376 ENVIRONMENTAL PSYCHOLOGY 3 s.h.

Prerequisite: PC 101.

The study of the relationship between human behavior and its environmental context. Emphasis on the physical environment, both natural and built.

PC 377 POLITICAL BEHAVIOR 3 s.h.

Prerequisites: PC 101, PS 111.

An interdisciplinary course which investigates the psychological bases of political behavior.

PC 378 PSYCHOLOGY OF DEATH & DYING 3 s.h.

Prerequisite: PC 101.

Theories and research which delineate the psychological factors affecting the dying person as well as those persons close to one who is dying are discussed.

PC 399 INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY 3 s.h.

Prerequisites: PC 101; MA 217.

The study of psychological principles in an organizational setting; application of psychological principles to individual behavior and experience in organizations.

PC 410 HISTORICAL TRENDS IN PSYCHOLOGY 3 s.h.

Prerequisite: PC 101.

Comprehensive overview of historical antecedents of contemporary psychology with emphasis on their implications for future developments in the field.

PC 445 BEHAVIOR MODIFICATION 3 s.h.

Prerequisites: 12 s.h. of psychology.

Survey of the theoretical and empirical foundations of behavior modification procedures.

PC 450 INTRODUCTION TO CLINICAL PSYCHOLOGY 3 s.h.

Prerequisites: PC 101 and department consent.

Overview of clinical psychology, with emphasis upon clinician's use of methods of evaluation, and treatment and modification of behavior.

PC 480 HONORS SEMINAR PSYCHOLOGY 3 s.h.

Prerequisites: PC 290 and department consent.

PC 481 SPECIAL TOPICS IN PSYCHOLOGY 2-3 s.h.

Prerequisites: PC 101 and department consent.

A seminar providing study of selected topics not emphasized in other courses. May be taken more than once to a maximum of 6 semester hours.

PC 482 INDEPENDENT STUDY IN PSYCHOLOGY 1-3 s.h.

Prerequisites: PC 101 and department consent.

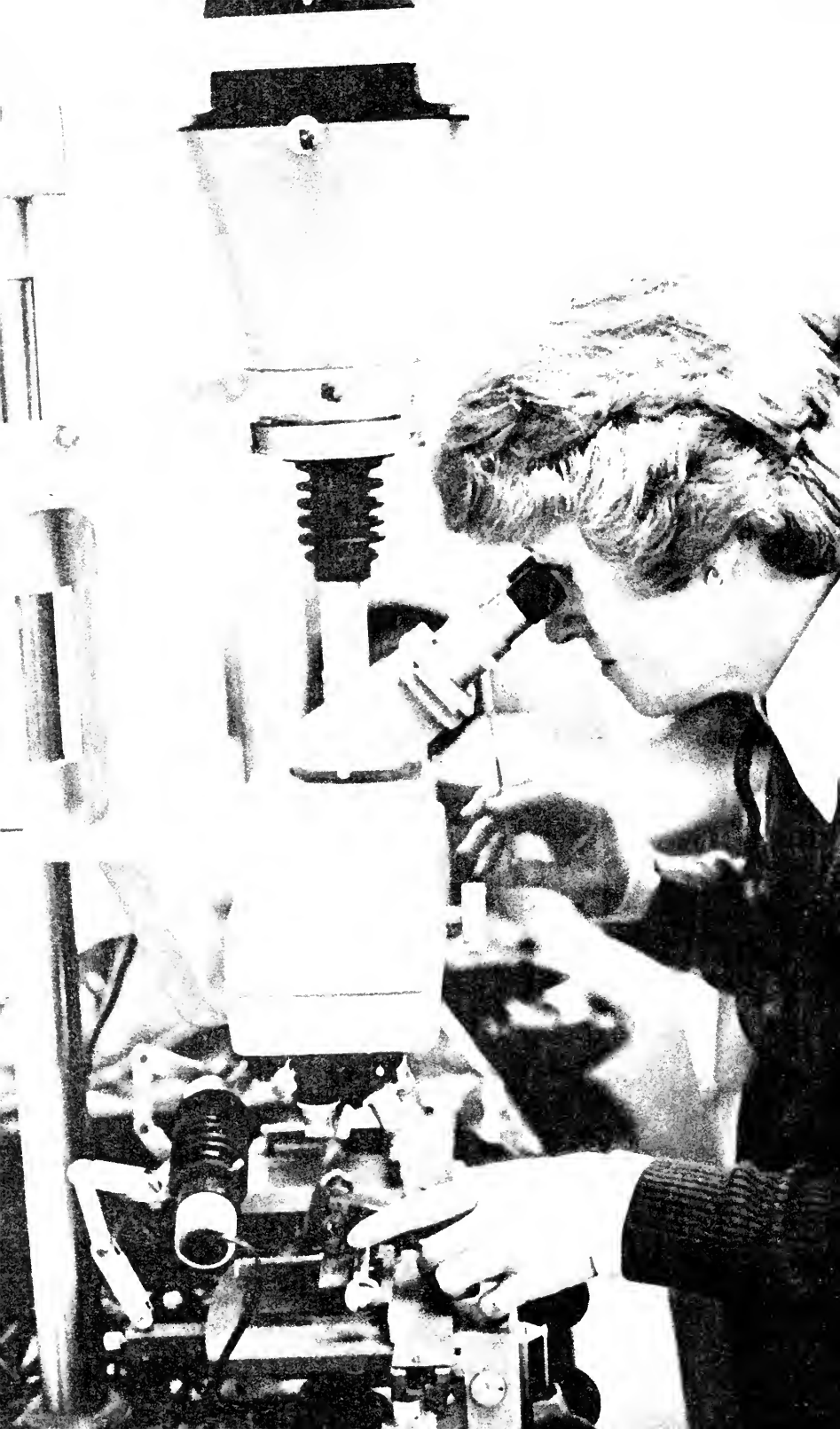
Individual students pursue their particular interests in psychology in consultation with a member of the staff. May be taken more than once to a maximum of 6 credits.

PC 489 PSYCHOLOGICAL PRACTICUM 1-12 s.h.

Prerequisites: PC 101 and department consent.

Under supervision of psychology department, selected students receive experience in application of psychological techniques. May be taken more than once to a maximum of 12 semester hours.





# The School of Social Sciences and Humanities

Dr. Joseph M. Gallanar, Dean

The School of Social Sciences and Humanities has as its objective the providing of a liberal education as the basis of the student's preparation for a satisfying career. In a dynamic society such as America's, a broad liberal education accompanying career preparation is virtually a necessity. The School maintains an emphasis upon fundamental understanding and application of the basic principles of our cultural heritage, combined with development of a thorough background of knowledge in the student's specific area of interest. It seeks to promote in students critical and objective thinking, analytical skill, and a keen awareness of their responsibilities to society as it prepares them for their chosen field.

The school's programs of study are:

English	Government and Public Service
French	Political Science
German	Regional Planning
Journalism	Sociology
Spanish	
Speech	<b>Pre-Professional Programs</b>
Philosophy	Law School Preparation
Anthropology	Theological School Preparation
Criminology	
Economics	
Geography	
History	
International Studies	

## **DEGREES**

---

The departments of Criminology, Economics, English/Journalism, Geography, History, Foreign Languages, Philosophy, Political Science, and Sociology-Anthropology offer work leading to a Bachelor of Arts degree. The Bachelor of Science degree is offered in Regional Planning. In addition, the Associate of Arts degree is offered by the Criminology Department.

Several departments sponsor Master of Arts or Master of Science degrees in the University's Graduate School, and the English department offers a graduate program leading to the Doctor of Philosophy degree. Information on these programs should be obtained from the Graduate School.

### **Degree Requirements**

In addition to the University's General Education requirements, all students seeking a baccalaureate degree in the School of Social Sciences and Humanities must complete the requirements for a major as established by the department through which they wish to specialize. Statements of these requirements, and for minoring in a specific field, appear in the department sections that follow. A double major or minor may encompass a discipline outside as well as within the School, but should be opted only with adviser approval. As a general principle, there is considerable latitude in course choice for Social Sciences and Humanities majors; for specifically required courses, substitutions in any program must have the written approval of the students department chairperson or the School Dean. A foreign language may be required in certain programs. Consult department section for this requirement.

## **SPECIAL CREDIT PROGRAMS**

---

School majors may be interested in the various Foreign Study Tours. Credits obtained through such arrangements normally are applicable toward a Social Sciences and Humanities degree. Also of interest are the School's credit-awarding IUP at Valladolid (Spain), IUP at Duisburg (Germany), and IUP at Nancy (France) programs, as well as the Summer Study in Jalapa (Mexico) Program.

**IUP at Valladolid:** The University's Department of Foreign Languages has sponsored a Spring semester of study at the University of Valladolid, Spain for the past 17 years. The participants will live in private homes. For details and brochures, please contact Dr. Juan Cruz Mendizabal, Department of Foreign Languages.

**IUP at Duisburg:** IUP has a study abroad program at the University of Duisburg, West Germany. The program is open to German majors and other students having specific interest in a foreign study experience. Students must register for FL 100 and pay an administrative fee of \$50.00 per semester. For further information, contact the Chairperson, Department of Foreign Languages.

**IUP at Nancy:** The Foreign Language Department has established a study program with the University of Nancy, France. Two separate study programs are available.

Program A is intended for those participants who have studied advanced French courses and for French majors. Program B is designed primarily for the non-major or for the student who wishes to enroll for just one semester. Participants in the Nancy program must register for FL 100 and pay an administrative fee of \$50.00 per semester.

**IUP — MEXICO SUMMER PROGRAM** — The Spanish Section of the Department of Foreign Languages sponsors a program of study in Spanish Language in Mexico. The program is located at Jalapa in the state of Veracruz and the cost of the program includes transportation, complete room and board, insurance, tuition, etc. The student may earn up to six hours of undergraduate or graduate credit. Internship opportunities are available for students with fluency in Spanish. For a detailed brochure, please contact the Chairperson, Department of Foreign Languages.

**Self-Instruction in Critical Languages, FL 485** - A course intended for students whose professional or personal interest leads them to the study of an uncommonly-taught language, and whose motivation and aptitude are sufficiently high to undertake this as independent study. Drill-masters will assist the student in three weekly tutorial sessions, and specialists from other institutions will test orally the achievement of each student at the conclusion of the course. Among the twenty African, Asiatic and European languages available in this program, Japanese, Chinese, Arabic, Hebrew, and Portuguese are of considerable interest today. For further information, contact the Chairperson, Department of Foreign Languages.

## **PRE-PROFESSIONAL PROGRAMS**

---

The School of Social Sciences and Humanities offers two pre-professional programs that prepare the student for application to a professional school; pre-law and pre-theology. These are grounded in Social Sciences and Humanities and Business department(s) - Pre-law in Business, Criminology, Economics, English, History, Philosophy or Political Science; and pre-theology in Philosophy. All programs are so designed that, should work at a professional school not ensue, the student may earn an IUP baccalaureate degree, provided he/she has been faithful to faculty advisement.

Course work in the pre-law program centers upon a carefully developed interdisciplinary minor. For detailed guidance in pre-law, students should consult with the Dean of Social Sciences and Humanities.

## **INTERNSHIP PROGRAMS**

---

Several departments have established programs under which students engage in off-campus supervised work experience for credit. During the past year IUP students have worked in Harrisburg, Pa. as aides to state legislators, with the Governor's Justice Commission and the Local Government Commission, and with the Investigations Division, Pennsylvania Department of Justice. Others have worked at correctional institutions in Pittsburgh, Greensburg and Warrendale, as peer group counselors on the local campus, as an assistant to the Pennsylvania State Republican Chairperson, as on-site guides at The United Nations, as workers on an Israeli kibbutz, and as student aides for the Department of Education, Puerto Rico. Other students have worked in the Pittsburgh federal probation office. Many students have worked with major political parties and candidates at the local and

state level. At the county level, they have been attached to the County Planner, the Common Pleas Court, Coroner, Treasurer, Commissioners and Boro Manager. Students have also worked in the Washington office of Pennsylvania Congressmen, and in the Governor's Office.

For more information about specific Internship programs students should consult with the chairperson of the department in which the student is majoring.

For Internships abroad, consult the information on the Foreign Language Department.

## **CRIMINOLOGY DEPARTMENT**

---

**JOHN THOMAS, CHAIRPERSON: BOGAN, BROWN, COHEN, GRAY, McGUIRE, McNABB, MELODINI, SHANNON, SULLIVAN, WEGENER.**

The Department of Criminology offers men and women who seek a career in the criminology field a professional education program supported by a broad liberal arts education. The degree offered is the Bachelor of Arts degree with a major in Criminology, under the School of Social Sciences and Humanities; also available are a Two-year Academic Diploma, an Associate of Arts degree, and a minor in Criminology.

The program in Criminology has a five-fold objective:

1. The education of students for employment and leadership in the expanding field of criminal justice.
2. The education of presently employed law enforcement and correctional officers who recognize the need for raising their educational level.
3. The instruction of students who wish to acquire an understanding of the processes of criminal justice as a cultural part of their higher education.
4. The instruction of students who wish to prepare for graduate study and research in the administration of justice.
5. A curriculum that provides an excellent foundation for students preparing for a career in law.

Nearly every level of government offers opportunities for professional careers in criminology. Employment opportunities normally exist in more than 50 Federal agencies, including Federal Bureau of Investigation, U.S. Secret Service, Bureau of Narcotics, Intelligence Division (IRS), Inspection Service (IRS), Alcohol Tobacco Tax Division (IRS), State Department Security, Atomic Energy Commission, and military investigative branches.

Both men and women will find employment opportunities in parole and probation work for Federal, state, and local governments, institutional careers concerned with the custody and treatment of juveniles and adults at all levels of government. In addition, many police departments have specialized units dealing with juveniles, community relations, training and research. Criminalistic laboratories provide an-



other career area, and there are a wide variety of opportunities in traffic administration, investigative and security activities in the commercial and industrial fields.

Career opportunities are available also in research and teaching at the college and university level and in research divisions of agencies in the field of administration of justice.

## CURRICULA

---

### Required Courses:

CR 101 General Administration of Justice	3 s.h.
CR 102 Criminology	3 s.h.
CR 301 Criminal Law I	3 s.h.
CR 302 Criminal Law II	3 s.h.
CR 490 Crime in Modern Society	3 s.h.

### B.A. in Criminology

In addition to the Required Course, the requirements for the degree of Bachelor of Arts in Criminology are 15 more semester hours in Criminology, as follows:

CR Electives	15 s.h.
--------------	---------

### Concentration in Industrial and Private Security and Loss Prevention

In addition to the required courses, a student in Criminology may elect to take a concentration in the area of Private and Industrial Security. The following courses are required in order to have a concentration in this area:

CR 360 Introduction to Security	3 s.h.
CR 362 Security Administration	3 s.h.
CR 364 Retail Security/Loss Prevention	3 s.h.
CR 366 Physical and Plant Security	3 s.h.
CR 368 Personnel and Management Security	3 s.h.

### Associate of Arts Degree (offered only on branch campuses)

For officers and students taking this program in Criminology, requirements in addition to the Required Courses are 18 semester hours in Criminology, six semester hours in English, three in Sociology, three in Psychology, three in Political Science, 15 semester hours of electives in the Social Sciences division. The requirements are as follows:

#### Criminology

The following are suggested, but substitutions may be permitted depending on circumstances:

CR 201 Police Administration I	3 s.h.
CR 202 Police Administration II	3 s.h.
CR 310 Criminal Investigation	3 s.h.
CR 340 Crime Prevention	3 s.h.
CR 350 Techniques of Interviewing	3 s.h.
CR 415 Supervision in the Administration of Justice	3 s.h.

English	EN 101 English I EN 102 English II 3 s.h.	3 s.h.
Psychology	PC 101 General Psychology	3 s.h.
Political Science	PS 111 American Politics	3 s.h.
Sociology	SO 151 Introduction to Sociology	3 s.h.
Electives	Any of the Social Sciences	15 s.h.

### Minor in Criminology

The minor in criminology must be approved by the department and consists of a minimum of 18 semester hours, consisting of the Required Courses plus the following:

Criminology Electives	3 or more s.h.
-----------------------	----------------

## COURSE DESCRIPTIONS

---

CR 101 GENERAL ADMINISTRATION OF JUSTICE	3 s.h.
Administration of criminal justice in United States. Deals with role of police, courts, and correctional process.	
CR 102 CRIMINOLOGY	3 s.h.
Prerequisite: CR 101 General survey of nature and causes of crime and its prevention and treatment.	
CR 201 POLICE ADMINISTRATION I	3 s.h.
Prerequisite: CR 102 Analysis of organizational structure, administrative practices, and operating procedures of law enforcement agencies.	
CR 202 POLICE ADMINISTRATION II	3 s.h.
Prerequisite: CR 201 Continuation of Police Administration I, with special emphasis on staff functions, such as records, communications, training, personnel administration, and finance.	
CR 301 CRIMINAL LAW I	3 s.h.
Prerequisites: CR 101 and 102 A study and substantive law analysis of elements of crimes, with emphasis on understanding the application of those elements. Attention given to defenses, uncompleted conduct, conspiracy and parties to crime.	
CR 302 CRIMINAL LAW II	3 s.h.
Prerequisites: CR 101 and 102 Law of arrest, search and seizure, with discussion of important case law. Analysis of safeguards established for protection of individual liberties, especially as found in application of rules governing the introduction and use of information in formalized legal proceedings.	

- CR 310 CRIMINAL INVESTIGATION** 3 s.h.  
Theory and practice of investigation; discussion of various types of information obtainable from persons and things; application of investigative theory to crime and accidents.
- CR 311 CRIMINALISTICS** 3 s.h.  
Prerequisite: CR 310  
Application of scientific crime detection methods; emphasis on collection, preservation, and interpretation of physical evidence found in connection with a crime.
- CR 320 TRAFFIC ADMINISTRATION I** 3 s.h.  
Origin and growth of traffic problem; emphasis on traffic enforcement and procedures, organization and functions of police traffic division, study of traffic laws and judicial process.
- CR 325 INSTRUMENTAL DETECTION OF DECEPTION** 3 s.h.  
Devices for measuring emotional responses to verbal stimuli; psychological and physiological aspects of deception; analysis of detection of deception techniques and their application to law enforcement.
- CR 330 PLANNING AND RESEARCH** 3 s.h.  
Prerequisites: CR 101 and 102  
Role of planning and research in contemporary law enforcement; analysis of planning process and nature of planning with emphasis on planning for special events and situations.
- CR 340 CRIME PREVENTION** 3 s.h.  
Organization and function of crime prevention agencies; problems and techniques in the prevention of crime; community resources in preventing crime.
- CR 350 TECHNIQUES OF INTERVIEWING** 3 s.h.  
Consideration of the nature, methods, and principles of interviewing; emphasis on role playing in interviewing situations.
- CR 360 INTRODUCTION TO SECURITY** 3 s.h.  
Historical, theoretical, and legal basis of security. Deals with security professional in today's society. Involves basic aspects of security: physical security, theft, electronics, etc.
- CR 362 SECURITY ADMINISTRATION** 3 s.h.  
Covers organization, administration, and management of security and plant protection units; information on policy and decision-making, personnel and budgeting; programs in business, industry, and government to include retail, transportation, as well as public and private institutions.
- CR 364 RETAIL SECURITY/LOSS PREVENTION** 3 s.h.  
Operation of security departments including functions of mercantile establishments, dishonest employees, shoplifters, management and public relations, receiving, shipping and warehousing, special laws and procedures; overview of the functional operation of various specialized areas of security surveys and loss prevention management in proprietary and governmental institutions.
- CR 366 PHYSICAL AND PLANT SECURITY** 3 s.h.  
Study of concepts of physical security integrated with management, physical security requirements and standards, alarm and surveillance devices, animate security, costing, planning and engineering, legal basis for and development and training of guard forces/private police.
- CR 368 PERSONNEL AND MANAGEMENT SECURITY** 3 s.h.  
Procedures for handling and control of classified and sensitive information; survey of control systems using data processing; governmental and proprietary concepts, background investigations and employee security; the role of cognizant security office (Defense Contract Administration Service Programs), physical security control and security procedures.

- CR 370 COMMUNITY RELATIONS 3 s.h.  
Role of law enforcement agencies in modern day society; police-community relations units, human relations resources, civil rights and professionalism in law enforcement.
- CR 410 QUESTIONED DOCUMENT ANALYSIS 3 s.h.  
Evaluation and identification of questioned documents; admissibility as evidence, preparation and presentation in court.
- CR 411 ADVANCED CRIMINALISTICS 3 s.h.  
Prerequisite: CR 311  
Ballistics, serology, narcotics, poisons, firearms, chromatography, alcohol tests, and hair identification.
- CR 415 SUPERVISION IN THE ADMINISTRATION OF JUSTICE 3 s.h.  
Consideration of supervisory problems in field of administration of justice; emphasis on such topics as leadership, motivation, morale, discipline, public relations, communications, decision-making, and the training functions.
- CR 420 TRAFFIC REGULATION AND CONTROL 3 s.h.  
Organization for traffic control, accident investigation, traffic flow pattern, high accident frequency locations, signs, signals, and simple engineering remedial actions. Traffic safety research.
- CR 425 ADVANCED INSTRUMENTAL DETECTION OF DECEPTION 3 s.h.  
Prerequisite: CR 325  
Special techniques in detection of deception, including: Backster techniques, Keeler technique, Modified Backster technique, and the Integrated Control Question technique. Statistical chart interpretation. Polygraph research.
- CR 430 COMPARATIVE STUDY OF JUSTICE 3 s.h.  
Comparison of American system of administration of justice with those of other nations, including developed and underdeveloped countries.
- CR 431 ETIOLOGY OF DELINQUENT BEHAVIOR 3 s.h.  
Analysis of the aberrant behavior of children and youth in terms of modern behavioral sciences, personality and social factors examined with a view toward developing prevention and control procedures.
- CR 432 TREATMENT AND CONTROL OF DELINQUENCY 3 s.h.  
Analysis of juvenile court procedures, juvenile probation, juvenile institutions, and juvenile parole in treatment and control of delinquency.
- CR 440 INSTITUTIONAL TREATMENT OF THE OFFENDER 3 s.h.  
Modern philosophy and methods in treatment of adult criminals and juvenile delinquents in correctional institutions.
- CR 445 NON-INSTITUTIONAL TREATMENT OF THE OFFENDER 3 s.h.  
Analysis of principles and practices in probation and parole; case method; techniques of supervision.
- CR 460 INDUSTRIAL SECURITY AND SAFETY 3 s.h.  
Administration of fire and accident prevention programs; government security programs; document control, security clearances, and visitor control; special problems and hazards.
- CR 480 SEMINAR IN ADMINISTRATION OF JUSTICE 3 s.h.  
Study of problems in administration of justice, reports based upon original investigation; reviews of recent books and periodical literature; topics of current interest. Enrollment limited.

- CR 481 SPECIAL TOPICS IN CRIMINOLOGY 1-3 s.h.  
Prerequisite: Department consent  
A Seminar providing study of selected topics not emphasized in other courses. May be taken more than once to a maximum 6 semester hours.
- CR 482 INDEPENDENT STUDY IN CRIMINOLOGY 1-3 s.h.  
Individual students pursue their particular interests in Criminology in consultation with a member of the staff. May be taken more than once to a maximum of 6 semester hours.
- CR 490 CRIME IN MODERN SOCIETY 3 s.h.  
Analysis of nature and extent of crime at state, national, and international levels of government; consideration of special problems in metropolitan areas, organized crime, the professional criminal and white-collar crime; crime control in a democratic society.
- CR 492 CORRECTIONAL ADMINISTRATION 3 s.h.  
Administration of juvenile and adult probation and parole programs, and correctional institutions; emphasis on special problems encountered in field.
- CR 497 INTERNSHIP 12 s.h.  
Prerequisite: 18 credits in Criminology  
Practicum designed to broaden educational experience of students through appropriate observational and work assignments with governmental agencies and private firms. Offered during summer and spring only. By appointment only.
- CR 498 SUPERVISED PROFESSIONAL EXPERIENCE 6 s.h.  
Prerequisite: 18 credits in Criminology  
Practicum designed for full-time police officers who attended the FBI Academy and/or Pennsylvania State Police Academy. By Department approval only.

## **ECONOMICS DEPARTMENT**

---

**DONALD A. WALKER, CHAIRPERSON: CROSS, DAVIS, DYAL, GARVIN, HOLT, HUFF, KARATJAS, KRITES, MARTEL, NOWAK, STONEBRAKER, WARE.**

The Economics Department offers courses to meet the needs of IUP students in four general areas: a program that prepares students majoring in Economics for graduate school or immediate employment; a program that prepares students to teach Economics on the high school level; a program that offers courses in Economics to students majoring in other departments; and a pre-law program for Economics majors who wish to go to law school.

The program for Economics majors is designed for those who intend to pursue careers as economists in education, government, industry, finance, or commerce. The economist in today's world occupies an increasingly important position and great opportunity exists for qualified people.

Degrees offered are the Bachelor of Arts in Economics and the Bachelor of Science in Education with a major in Social Sciences, concentrating on Economics.

## **CURRICULA**

---

Economics 101, BASIC ECONOMICS, may be taken in partial fulfillment of the Social Sciences segment of the University's General Education requirement. Economics 101 cannot be programmed by Economics majors or minors, by students

enrolled in the Business School, or by students in the School of Education who are contemplating teaching social science on the high school level. Instead, Economics 121, PRINCIPLES OF ECONOMICS I, should be taken by these students, since it serves as a foundation for many advanced Economics courses. Students can receive credit toward graduation for either EC 101 or EC 121 but not both. The Department will accept either EC 121 or EC 122 for General Education credit as a substitute for EC 101.

Students majoring in other fields are welcome to choose Economics courses among the upper-division electives. These courses are designed to aid the student in developing sophisticated insights into economic issues and are valuable in many ways, regardless of the student's ultimate vocation.

It is recommended that Economics majors take a minor in one of the other Social Sciences, or in Business, or in Mathematics. A minor in Mathematics is strongly recommended for those whose future may include graduate work in Economics.

### **Core Program**

Requirements for Economics majors and minor are 6 semester hours in Economics, as follows:

EC 121 Principles of Economics I	3 s.h.
EC 122 Principles of Economics II	3 s.h.

### **B.A. in Economics**

In addition to the Core Program, requirements for the degree of Bachelor of Arts in Economics are as follows:

EC 355 Statistics for Economists	3 s.h.
EC 421 Macroeconomic Analysis	3 s.h.
EC 422 Microeconomic Analysis	3 s.h.
Economics Electives	12 s.h.
MA 121 Calculus I for the Natural and Social Sciences or its equivalent	4 s.h.
or	
EC 305 Mathematics for Economists I	3 s.h.

### **B.S. in Education (Economics Concentrate)**

In addition to the Core Program requirements for the degree of Bachelor of Science in Education with a major in Social Sciences, concentrating in Economics, are 9 more semester hours of Economics electives, excluding Economics 101.

### **Minor in Economics**

To minor in Economics, the student must take 9 semester hours of Economics electives in addition to the Core Program, excluding Economics 101 as a possible elective.

## Concentrations in Economics

The Department of Economics offers several concentrations in particular aspects of Economics. The concentrations are designed to equip students with the education and skills that will enable them to obtain a position in government or private business upon completion of the undergraduate degree. The Department provides verification that students have completed a concentration, and they may also have the information recorded on their transcripts. These concentrations are not restricted to Economics majors. The concentrations available at present are:

Competition and Public Policy  
 Economics of Government Affairs  
 International Economics  
 Labor Economics  
 Managerial Economics  
 Monetary Economics  
 Quantitative Economics

Detailed information regarding these concentrations may be obtained from the Department Chairperson.

## Pre Law Program

The Department of Economics is a participant in the Pre Law Program offered by the School of Social Sciences and Humanities. For further information concerning this program see section on Pre-Professional Programs.

## Grades and Quality Points

The quality point average necessary for graduation or the approval of a specific program is 2.0. This requirement is applicable to economic majors, minors, concentrations of the School of Education, and the concentrations offered by the Department of Economics.

## COURSE DESCRIPTIONS

---

- EC 101 BASIC ECONOMICS 3 s.h.  
 Study of how man makes a living, individually and collectively, with particular reference to our own economic system. For those who do not plan to take more than 3 semester hours of Economics.
- EC 121 PRINCIPLES OF ECONOMICS I 3 s.h.  
 Nature and methodology of economics; mixed capitalism and market economy; national income; employment theory, including economics of fiscal policy; money, banking, and Federal Reserve System; economic growth
- EC 122 PRINCIPLES OF ECONOMICS II 3 s.h.  
 Economics of the firm; theory of consumer demand; determination of price and output in different market structures; distribution of income; foreign trade and the balance of payments.
- EC 241 CONTEMPORARY ECONOMIC ISSUES 3 s.h.  
 Examination of relevant and important problematic aspects of U.S. and of world economy, including a rigorous but non-technical analysis of problem, and a formulation and evaluation of possible corrective policies.

- EC 283 ENVIRONMENTAL ECONOMICS 3 s.h.  
Examination of economic costs and benefits of environmental control and modification. Techniques of economic analysis used to understand economic aspects of environmental problems and contribute toward their solution.
- EC 305 MATHEMATICS FOR ECONOMISTS I 3 s.h.  
Elements of algebra and calculus necessary to enable students to grasp mathematical foundations of economic theory and statistical research, with examples taken from economic theory and data.
- EC 306 MATHEMATICS FOR ECONOMISTS II 3 s.h.  
Prerequisite: EC 305 or its mathematical equivalent or permission of the instructor  
Application of mathematical methods to microeconomics and macroeconomics, and an introduction to linear programming.
- EC 320 HISTORY OF ECONOMIC THOUGHT 3 s.h.  
Prerequisite: EC 121 or 122 or permission of the instructor  
Examination of social, political, intellectual, and economic origins of work of the more prominent past economists, and of content and impact of their work.
- EC 325 MONETARY ECONOMICS I 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
Organization, operation, and economic significance of U.S. monetary institutions; commercial banks and Federal Reserve System; survey of monetary theory and policy; mechanism of international payments.
- EC 326 MONETARY ECONOMICS II 3 s.h.  
Prerequisite: EC 325 or permission of the instructor  
Detailed study of monetary theory; tasks of central banking; principal objectives of monetary policy; intensive study of recent monetary experience; complementary and competing aims of monetary and fiscal policy.
- EC 330 LABOR ECONOMICS 3 s.h.  
Prerequisite: EC 122 or permission of the instructor  
History, structure, and operations of trade unions and employer organizations; major Federal labor legislation; collective bargaining theory; wage determination; current labor problems.
- EC 331 ECONOMIC ORGANIZATION OF INDUSTRY 3 s.h.  
Prerequisite: EC 122 or permission of the instructor  
Social effectiveness of industries analyzed through measures of market structure, market conduct, and market performance.
- EC 332 GOVERNMENT AND BUSINESS 3 s.h.  
Prerequisite: EC 122 or permission of the instructor  
Formal and informal methods used to maintain, supplement, and moderate competition as well as regulation as a substitute for competition.
- EC 333 REGULATION OF INDUSTRY 3 s.h.  
Prerequisites: EC 121 and 122 or permission of the instructor  
Examines theory and practice of regulation, emphasizing effects of regulation on economic performance and efficiency in U.S.
- EC 334 ECONOMICS OF CORPORATE DECISIONS 3 s.h.  
Prerequisites: EC 121 and 122 or permission of the instructor  
Applies economic theory to corporate decision making. Topics include corporate objectives, profit maximization, economic measurement and forecasting.
- EC 335 PUBLIC FINANCE 3 s.h.  
Prerequisites: EC 121 and 122 or permission of the instructor  
Taxation and expenditure theory at Federal level; Federal budget and debt considerations;



public sector impact upon economy, intergovernmental fiscal relations.

EC 336 STATE AND LOCAL FINANCE 3 s.h.  
Analysis of character and impact of state and local government revenue sources, expenditures, and fiscal systems.

EC 339 ECONOMIC DEVELOPMENT I 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
theory of growth; theory of economic development of underdeveloped countries.

EC 340 ECONOMIC DEVELOPMENT II 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
Application of theory of growth and analysis of economic development of selected economies; empirical and econometric studies of underdeveloped countries and their economic institutions.

EC 341 HISTORY OF THE ECONOMIC DEVELOPMENT OF THE UNITED STATES 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
Examination of main patterns of the United States' economic growth since end of eighteenth century; emphasizes economic development as a laboratory for economic analysis.

EC 342 HISTORY OF THE ECONOMIC DEVELOPMENT OF MODERN EUROPE 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
Study of dynamic forces which contributed to development of modern Europe; industrial revolution in England; industrialization on the continent; impact of Europe on world economy.

EC 345 INTERNATIONAL ECONOMICS I 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
Theory of international trade; analysis of balance of payments; international economic equilibrium; mechanism of international economic and monetary adjustments.

EC 346 INTERNATIONAL ECONOMICS II 3 s.h.  
Prerequisite: EC 345 or permission of the instructor  
Application of theory of international trade to empirical data and problems; historical survey and examination of current problems of international trade; the institutional setting of international trade.

EC 350 COMPARATIVE ECONOMICS SYSTEM 3 s.h.  
Prerequisite: EC 121 or permission of the instructor  
Capitalism, socialism, and communism subjected to economic analysis; their principles, practices, institutions and philosophies.

EC 351 SOVIET ECONOMY 3 s.h.  
Prerequisite: EC 121 or 122 or permission of the instructor  
Thorough study of operations of Soviet economy. Course will compare and contrast workings of Soviet economy with other Communist countries.

EC 355 STATISTICS FOR ECONOMISTS 3 s.h.  
Introduction to economic statistics. Material covered regarding empirical frequency distributions, probability, distributions of random variables, functions of random variables, and tests of economics hypotheses.

EC 356 INTRODUCTION TO ECONOMETRICS 3 s.h.  
Prerequisites: MA 013 and EC 355 or permission of the instructor  
Introduction to econometrics. Interest centers upon linear normal regression models of two or more random variables, special econometric problems, and solutions of simultaneous equations.

- EC 360 ECONOMICS OF HEALTH SERVICES** 3 s.h.  
 Analysis of the allocation of resources in the health sector using demand and supply techniques. Pricing and output decision by physicians, hospitals, and other health agencies will be considered along with other current policy issues.
- EC 371 ECONOMICS OF LABOR LEGISLATION** 3 s.h.  
 Prerequisite: EC 330 or permission of the instructor  
 Economic background and effects of governmental regulation of labor relations, with emphasis on a detailed examination of National Labor Relations Act as amended.
- EC 372 ECONOMICS OF WAGES AND EMPLOYMENT** 3 s.h.  
 Prerequisite: EC 330 or permission of the instructor  
 Analysis of wages and employment under various market structures. Also, analysis of impact of labor market forces on wages, prices, and distributive shares.
- EC 373 ECONOMICS OF HUMAN RESOURCES** 3 s.h.  
 Prerequisite: EC 121 or permission of the instructor  
 Inquiry into economic demographics, and related factors affecting growth, structure, and distribution of an economy's labor force into different occupations.
- EC 374 ECONOMICS OF EDUCATION** 3 s.h.  
 Analysis of the costs and benefits of education in relation to economic growth, and the private and public process of determining investment in education.
- EC 381 REGIONAL ECONOMICS** 3 s.h.  
 Prerequisite: Three semester hours in Economics or permission of the instructor  
 Process of regional economic growth, location theory, basic techniques of regional analysis, public and private area development programs.
- EC 382 URBAN ECONOMICS** 3 s.h.  
 Prerequisite: Three semester hours in Economics or permission of the instructor  
 Structure of urban economy, goals, processes, problems, and policy in urban economic development.
- EC 421 MACROECONOMIC ANALYSIS** 3 s.h.  
 Prerequisites: EC 121 and 122 or permission of the instructor  
 Income and employment analysis; national income accounts and theory; classical, Keynesian, and post-Keynesian models; investment, growth, and inflation theory; role of government in our economy.
- EC 422 MICROECONOMIC ANALYSIS** 3 s.h.  
 Prerequisites: EC 121 and 122 or permission of the instructor  
 Consumer behavior, theory of the firm, market structures, distribution, general equilibrium analysis, applications to current problems of economic policy.
- EC 450 INTERNSHIP IN ECONOMICS** 2-12 s.h.  
 Prerequisite: A student must be an economics major who has completed at least 12 semester hours in economics, and who has at least a 2.5 grade point average in the major and in all course work  
 The course provides on-the-job experience in economics positions with private and governmental employers. The student is also required to complete related academic work in form of papers and selected readings. Number of credits earned will depend upon the nature of the job and amount of time involved in internship. A maximum of 6 of the credits earned in this course may be counted toward the 27 semester hours in economics requirement for economics majors.
- EC 480 SEMINAR** 3 s.h.  
 Prerequisite: Permission of the instructor  
 Seminar in selected economic issues or problems.

EC 481 SPECIAL TOPICS	3 s.h.
Prerequisite: Permission of the instructor	
EC 482 INDEPENDENT STUDY	1-6 s.h.
Prerequisite: Permission of the Department and the instructor	
EC 483 HONORS IN ECONOMICS	3 s.h.
Prerequisite: Permission of the instructor	
Readings, conferences, and reports arranged for students who have demonstrated proficiency in economics. Research work may be directed toward theoretical or applied economic problems.	

---

## ENGLISH AND JOURNALISM DEPARTMENT

---

**LAURABEL H. MILLER, CHAIRPERSON: BETTS, J. BRIGHT, L. BRIGHT, COLLINS-STOCKTON, COMO, COMPTON, COOK, CRAIG, CUREY, J. DAVIS, DAY, DeGEORGE, FORCE, FREUND, FRITZ, GRAY, GRAYBURN, GRUBB, HALDEMAN, HAYWARD, HAZLEY, HEIMER, JESICK, R.G. JOHNSON, KRASZEWSKI, KRUPNIK, C. MAHAN, D. McCLURE, McMANMON, NANIA, PATTERSON, RAY, R. ROFFMAN, ROUMM, RUFFNER, RUSSELL, SEACRIST, SEINFELT, R. SHAFER, H. SMITH, SWAUGER, SWIGART, TANNALITO, R.L. THOMAS, TRUBY, WADDELL, H. WARREN, WATTA, WILSON, WOODWORTH, YARUP.**

One goal of the English program is to contribute to the general language proficiencies of all its students. These proficiencies include the ability to express oneself comprehensibly and clearly in written language, to speak distinctly, tastefully and meaningfully in oral language, and to appreciate, understand and draw sustenance from both long-recognized and recently produced literary and dramatic achievements in the English language. In its programs, the English Department attempts to prepare its majors for careers in the teaching of English at the secondary school and for careers of all types where skill in communication and conviction in favor of humane values are considered an appropriate background for the performance of assigned duties and responsibilities.

Degrees offered by the English and Journalism Department are the Bachelor of Arts in English, in Pre-Law English, in Speech, or in Journalism and the Bachelor of Science in Education with an English or Communication major. The first four degree programs are under the School of Social Sciences and Humanities, and the fifth is under the School of Education. In addition, an English minor is available in the School of Social Sciences and Humanities.

---

## CURRICULA

### Special Requirements

In meeting the University's General Education requirements, English majors in both the School of Education and the School of Social Sciences and Humanities are **REQUIRED** to replace EN 201, English III, with EN 202, Introduction to Literary Analysis. It is recommended that this course be taken during the sophomore year, as early as possible in the major program. Also, **ALL** English majors, in both the School of Education and the School of Social Sciences and Humanities, **MUST** complete the intermediate sequence of a foreign language. This may be done in one of three ways: by examination, by earning credit in the third and fourth semesters of a foreign

language, or by completing four semesters of a new language. If the last procedure is used, the two beginning foreign language courses may be applied as free electives to the total number of credits needed for graduation.

English majors in the School of Social Sciences and Humanities may not use professional education courses as free electives toward the 124 semester hours for graduation.

EN 331 Trends in Linguistics	EN 365 16th Century Prose and Poetry
EN 340 European Literature From the Renaissance to the Twentieth Century	EN 366 Shakespeare
EN 341 - Modern European Literature	EN 369 17th Century Prose and Poetry
EN 345 Criticism of Contemp- orary Writing	EN 370 - Milton
EN 346 - Contemporary American and British Poetry	EN 371 - The English Bible as Literature
EN 350 - American Literature to 1865	EN 373 - Restoration and 18th Century Drama
EN 351 - American Literature from 1865-1915	EN 375 - 18th Century Prose and Poetry
EN 352 - American Literature from 1915-1945	EN 377 The Rise of the English Novel
EN 358 - Modern American Fiction	EN 379 - The Romantic Movement
EN 359 - Black American Literature	EN 380 - Victorian Literature
EN 360 - Old and Middle English Literature	EN 381 - 19th Century English Novel
EN 361 - Chaucer	EN 383 - Modern British Fiction
EN 362 - English Drama to the Restoration	EN 385 - The English Essayists
	EN 390 - Literary Britain: Tour
	EN 480 - Seminar: Studies in English and American Literature
	EN 481 Special Topics
	EN 482 - Independent Study

### **B.S. in Education (Communication Major)**

This major leads to a teaching certificate in communication in the secondary school. The major takes a basic program covering literature, language, composition, speech, theater, and media and selects one or more specialties from the following: literature, linguistic science, non-print media, writing, speech, theater.

Independent Study, EN 482 and EN 399, Internship are available in all of the specialties. However, such independent activity is usually reserved for students who are at least halfway through their certification requirements. An exception may be made by the department chairperson. The nature of the independent activity depends upon the specialty under which it falls.

Independent activity may be defined as that done independently of a rigidly structured course but not necessarily independently of regular faculty direction and consultation.

A student who wishes to engage in an independent activity under the communication program must obtain permission to do at the time of Pre-Scheduling (October for the Spring Semester, March for the Fall Semester, and May for the Summer Sessions).

The students must present proposals for the approval of both their advisers and the department chairperson. The proposal will outline in detail the student's plan to engage in independent activity. If the proposal is approved by both the adviser and the department chairperson, the student then pre-schedules for EN 482 or 399.

Despite the 124 semester hour minimum for graduation with a baccalaureate degree at Indiana University of Pennsylvania, the Communication program offers students the opportunity to develop skills and knowledge beyond the normal restrictions of the classroom and semester hours. Such opportunity comes in part with the flexibility of the independent activity, described above. Further opportunities lie in the co-curricular areas (campus newspaper, plays, debate, etc.) for which students under many circumstances could be given appropriate specialties credit. Training and experience outside the University and even prior to admission to the University should be considered in the student's development of specialties. In short, since the Communication program is designed to prepare teachers of the wide area of communication for the secondary schools of the Commonwealth, the Department recognizes that preparation and training of such teachers should be restricted as little as possible by enforcement of required courses and course credits.

In the end the teacher of communication should be certificated on the basis of course preparation, independent activities, experiences, performances and whatever else contributes to an evaluation of knowledge and training. A teacher certificated as a communication teacher has fulfilled the Basic Program and has developed one or more of the following Specialties: Literature, Linguistic Science, Writing, Speech, Theater.

The communication teacher then enters the teaching experience with not only a basic knowledge in literature, language, composition, speech, theater, and the media, but with a specialty that instills confidence to meet an advanced writing class or to direct a play or to advise a newspaper.

### **B.A. in English**

The candidates for the degree of Bachelor of Arts in English usually chooses this program because they wish a broad undergraduate education in liberal studies. They may intend to prepare for graduate study in English for eventual college teaching or for other non-academic professions. This program does not lead to certification in secondary English.

In addition to the General Education requirement for English majors (English 101, 102, and 202), requirements for the degree of Bachelor of Arts in English are 30 more semester hours in English selected from the list herein. All courses listed give three semester hours except English 390, which gives three to six semester hours. The English major also may select a minor of at least 15 semester hours in any one of several fields, such as history, philosophy, psychology, or foreign languages.

EN 206 The Nature of Drama	EN 351 American Literature From 1865 to 1915
EN 208 The Art of the Film	EN 352 American Literature From 1915 to 1945
EN 220 Advanced Composition or	EN 358 Modern American Fiction
EN 221 Creative Writing or	EN 359 - Black American Literature
EN 222 Journalistic Writing	EN 360 Old and Middle English Literature
EN 235 Languages of Media	



Because journalism itself covers all areas of life, the journalism major covers many areas of study in preparation. Thus, a number of departments are cooperating to make journalism study at IUP a very broad experience.

The following journalism courses are currently available:

EN 105 Journalism and Mass Media	EN 321 Feature Writing
EN 328 News Reporting	EN 323 - Management in Mass Communications
EN 208 - The Art of the Film	EN 326 - Public Relations
EN 220 - Advanced Composition	EN 327 - Layout Design and Production
EN 221 - Creative Writing	EN 343 - History of Journalism
EN 120 - Journalistic Writing	EN 399 - Internship
EN 223 - Photojournalism	EN 481 - Special Topics
EN 235 - Languages of Media	EN 482 - Independent Study
EN 311 - Oral Communication	

The following courses are available as free electives:

ART	CRIMINOLOGY
Drawing	General Administration of Justice
Graphic Design	Criminology
	Community Relations
BUSINESS	HISTORY
Marketing	U.S. Urban History
Principles of Selling	Contemporary U.S. History
BUSINESS ADMINISTRATION	Diplomatic History of the U.S. I-II
Advertising	History of Women
Consumer Behavior	COMMUNICATIONS MEDIA
Marketing Research	Introduction to Radio Broadcasting
Personnel Management	Photography
Training	Television Production
COMPUTER SCIENCE	Advanced Motion Picture Production
Introduction to Computers	Advanced Photography
CONTINUING EDUCATION	SOCIOLOGY
Career Planning	Contemporary Social Problems
	Population Problems
POLITICAL SCIENCE	Modern Social Institutions
American Politics	Racial and Cultural Minorities
Comparative Government	The Community
News Interpretation	Industrial Sociology
Legislative Process	Introduction to Social Research
Public Opinion	Social Dynamics
Metropolitan Problems	Social and Cultural Change
Constitutional Law and Civil Liberties	SOCIAL SCIENCE
Public Administration	Studies in Urban and Regional Planning
Contemporary Political Problems	
State and Local Political Systems	
Mass Media in American Politics	

**PSYCHOLOGY**

Developmental Psychology  
 Personality  
 Social Psychology  
 Industrial Psychology  
 Motivation

**B.A. in Speech**

Students interested in becoming speech majors should consult with the Chairperson of the English Department.

**B.S. in Education (English Major)**

In addition to the General Education requirements for English majors (English 101, 102, and 202), requirements for the degree of Bachelor of Science in Education with an English major are a minimum of 36 more semester hours in English, in order to satisfy the requirements for certification. Since English majors do not take a minor, many of them augment the minimal 36 semester hour program with courses that will prepare them for graduate study in their profession of secondary English teaching.

Of these 36 semester hours, nine are in required courses, and the remainder may be selected from those listed as follows, of which a maximum of 12 semester hours may be in journalism, speech, or dramatics courses. Also required is Education 452. All the English courses give three semester hours except English 390, which gives three to six semester hours, and English 482, which gives varied credits.

**Required:**

EN 220 - Advanced Composition (EN 221 or EN 222 may be substituted)  
 EN 230 - History of the English Language  
 EN 330 - The Structure of English  
 EN 452 - The Teaching of English and Communication (not counted in the 36 semester hours for the major)

**English Electives:**

EN 102 - News Reporting	EN 246 - Contemporary Short Fiction
EN 105 - Journalism and the Mass Media	EN 247 - Poetry and Its Forms
EN 206 - The Nature of Drama	EN 260 English Literature to the Restoration
EN 208 - The Art of the Film	EN 261 - English Literature from the Restoration to 1900
EN 223 - Photojournalism	EN 305 Modern Drama
EN 245 - Literature for Adolescents	EN 310 - Oral Interpretation
	EN 311 - Oral Communication
	EN 321 - Feature Writing
	EN 342 - Classical Literature in Translation

**COURSE DESCRIPTIONS****EN 050 ENGLISH FOR FOREIGN STUDENTS**

3 s.h.

Provides foreign students an opportunity to improve their ability to speak and write English. The emphasis is on individualized exercises and assignments.



- EN 100 BASIC ENGLISH** 3 s.h.  
Designed to review, strengthen, and further develop the basic English skills necessary for clear and effective communication. Reserved for assignment of selected students.
- EN 101 ENGLISH I** 4 s.h.  
Should be taken the first semester at IUP. Course uses readings in nature and history of language, semantic and linguistic analysis, and problems in rhetoric. Seven theme-length expository papers are written, in addition to shorter exercises and a written final examination. Three hour lecture, 1 hour individual instructor- student conference.
- EN 102 ENGLISH II** 3 s.h.  
Prerequisite: EN 101  
Analytical reading of various types of nonfictional prose, aimed at enunciating both meaning and techniques by which meaning is manifested. Writing in course consists of three substantial documented papers.
- EN 105 JOURNALISM AND THE MASS MEDIA** 3 s.h.  
A critical examination of roles-goals of newspapers, magazines, radio and television as they affect American society socially, politically, and economically. For Journalism majors.
- EN 120 JOURNALISTIC WRITING** 3 s.h.  
Emphasis on intelligent use of writing ability in a journalistic style, and understanding of the why of journalism and mass media. May be substituted for EN 220.
- EN 201 ENGLISH III** 3 s.h.  
Prerequisites: EN 101 and 102  
Focuses on analysis of an imaginative literature. Writing consists of two substantial critical papers on themes generated by the reading.
- EN 202 INTRODUCTION TO LITERARY ANALYSIS** 3 s.h.  
Offers beginning English majors opportunities to study examples of various approaches to works of literary art and requires them to practice such approaches through writing at least three critical papers.
- EN 206 THE NATURE OF DRAMA** 3 s.h.  
Study of selected plays of various styles and periods, to gain greater understanding and appreciation of art of drama.
- EN 208 THE ART OF THE FILM** 3 s.h.  
Concentrates on the film as an artistic medium. Eight to twelve motion pictures are shown during semester and are analyzed in class discussions.
- EN 220 ADVANCED COMPOSITION** 3 s.h.  
Primarily seeks to improve writing style, particularly in the more utilitarian forms, such as magazine article and personal essay.
- EN 221 CREATIVE WRITING** 3 s.h.  
Prerequisite is demonstrated ability and interest in creative writing; may be substituted for EN 220. This is a seminar course in which the kinds of writing done are chosen in line with the special interests and abilities of each student.
- EN 223 PHOTOJOURNALISM** 3 s.h.  
Introduction to still photography for news media. Includes preparation of portfolio and learning of specialized processing techniques for high-speed work. For Journalism majors.
- EN 235 LANGUAGES OF MEDIA** 3 s.h.  
Introductory course in nature of language and communication, heavily grounded in practice of communication in various media which resources of university make available to student.

- EN 245 LITERATURE FOR ADOLESCENTS 3 s.h.  
Surveys poetry, drama and fiction with which the adolescent is familiar through his school work and his personal reading.
- EN 246 CONTEMPORARY SHORT FICTION 3 s.h.  
Attention given to form, structure, and art of the modern short story, British, American, and Continental.
- EN 247 POETRY AND ITS FORMS 3 s.h.  
A study in appreciation of poetry, with special attention to technique of the poet and structure of poetry.
- EN 260 ENGLISH LITERATURE TO THE RESTORATION 3 s.h.  
A survey of major English authors, major works, and major literary genres written from the beginnings of English literature to the Restoration (1660).
- EN 261 ENGLISH LITERATURE FROM THE RESTORATION TO 1900 3 s.h.  
A survey of major English authors, major works, and major literary genres written from the Restoration to 1900.
- EN 305 MODERN DRAMA 3 s.h.  
Reading of plays starts with Ibsen and other Scandinavian dramatists, followed by plays by outstanding Continental, British, and American playwrights.
- EN 310 ORAL INTERPRETATION 3 s.h.  
Emphasizes understanding and appreciation of literature through developing skill in reading aloud.
- EN 311 ORAL COMMUNICATION 3 s.h.  
Fundamental principles of public speaking, audience analysis, interest and attention, selection and organization of speech material.
- EN 313 HISTORY OF RHETORICAL THEORY 3 s.h.  
Survey of rhetorical theory from Greek and Roman through modern times.
- EN 314 PURSUASION 3 s.h.  
Advanced study of problems involved in influencing an audience.
- EN 321 FEATURE WRITING 3 s.h.  
Designed for student who might work in journalism or who might wish to write on a part-time or free-lance basis.
- EN 323 MANAGEMENT IN MASS COMMUNICATIONS 3 s.h.  
Attention given to the process of advancement to management positions in journalism. For Journalism majors.
- EN 324 CREATIVE WRITING II 3 s.h.  
Prerequisite: EN 221  
A workshop for students who wish to write fiction or poetry under guidance of instructor.
- EN 325 ADVANCED COMPOSITION II 3 s.h.  
Prerequisite: EN 220  
Workshop and tutorial atmosphere for students who intend to write or teach writing.
- EN 326 PUBLIC RELATIONS: PRINCIPLES AND PRACTICES 3 s.h.  
Explores functions of Public Relations in detail.
- EN 327 LAYOUT DESIGN AND PRODUCTION 3 s.h.  
Provides basic techniques and theories of layout design and production, including typography, headlines, copyfitting, newspaper design and layout, photo cropping, etc.

- EN 328 NEWS REPORTING 3 s.h.  
Upperclass journalism students. Includes instruction in writing the news story, preparing copy, interviewing, covering special events and similar reporting activities.
- EN 329 THE HISTORY OF THE ENGLISH LANGUAGE 3 s.h.  
Studies historical development of the English language, as a basis for a better understanding of modern American English.
- EN 330 THE STRUCTURE OF ENGLISH 3 s.h.  
Training in analysis of American-English Language, with structural and generative approaches to system of grammar emphasized. Course is a prerequisite for ED 452, Teaching of English and Speech in the Secondary School.
- EN 331 TRENDS IN LINGUISTICS 3 s.h.  
Explores recent developments in linguistic theory and research.
- EN 332 THE DIALECTS OF AMERICAN ENGLISH 3 s.h.  
Examines relationship of dialectal differences in sounds, structure and vocabulary to geographical and sociological factors.
- EN 333 PSYCHO-LINGUISTICS 3 s.h.  
An introduction to those aspects of the study of language that bear on relationship of thought and behavior; the ways people move from their perception of reality to verbal and non-verbal communication.
- EN 340 EUROPEAN LITERATURE FROM THE RENAISSANCE TO THE TWENTIETH CENTURY 3 s.h.  
Selected European works from Renaissance to twentieth century representing all major genres with exception of the epic.
- EN 341 MODERN EUROPEAN LITERATURE .3 s.h.  
Selected Continental fiction concerned with alienated man and quest for identity in the intellectual climate of pluralism and changing values.
- EN 342 CLASSICAL LITERATURE IN TRANSLATION 3 s.h.  
Masterpieces studied range from those of ancient Greece to Middle Ages. English literature and American literature excluded.
- EN 343 HISTORY OF JOURNALISM 3 s.h.  
Traces the development of the American press from its Colonial roots. Emphasis on the role of the press in social and political development.
- EN 345 CRITICISM OF CONTEMPORARY WRITING 3 s.h.  
Covers basic texts of literary criticism and relates development of critical concepts to work of influential literary critics of twentieth century. Not open to freshmen and sophomores.
- EN 346 CONTEMPORARY AMERICAN AND BRITISH POETRY 3 s.h.  
Study of British and American poetry since World War II.
- EN 350 AMERICAN LITERATURE TO 1865 3 s.h.  
Provides a study of major American writers from colonial times to the Civil War.
- EN 351 AMERICAN LITERATURE FROM 1865 TO 1915 3 s.h.  
Emphasis on in-depth study of masterpieces of American literary Realism and Naturalism, in both fiction and poetry.
- EN 352 AMERICAN LITERATURE FROM 1915 TO 1945 3 s.h.  
A study of major writers and major works in American literature between World War I and World War II.

- EN 358 MODERN AMERICAN FICTION 3 s.h.  
Major American writers of fiction since 1945 are considered.
- EN 359 BLACK AMERICAN LITERATURE 3 s.h.  
Analyzes significant Black American literature of a variety of types - autobiography, essay, fiction, poetry.
- EN 360 OLD AND MIDDLE ENGLISH LITERATURE 3 s.h.  
Study of Old English includes a reading of both prose and poetry, whereas the reading in Middle English is limited to major works of poetry, excluding Chaucer's.
- EN 361 CHAUCER 3 s.h.  
Studies Chaucer, his life, his language, the development of his literary style and his art, with and through his major poetical works.
- EN 362 ENGLISH DRAMA TO THE RESTORATION 3 s.h.  
Traces development of English drama from 900 A.D. to closing of theaters in 1642, but does not include plays of Shakespeare.
- EN 365 SIXTEENTH-CENTURY PROSE AND POETRY 3 s.h.  
Covers English literature from late Middle Ages to High Renaissance.
- EN 366 SHAKESPEARE 3 s.h.  
Studies Shakespeare's development as a poetic dramatist against background of Elizabethan stage; examines audience, textual problems, language imagery, and philosophy.
- EN 369 SEVENTEENTH-CENTURY PROSE AND POETRY 3 s.h.  
Covers English Literature from death of Elizabeth to 1660; examines work of such poets as Donne, Jonson, Herbert, and Marvell, and such prose stylists as Bacon, Burton, and Browne.
- EN 370 MILTON 3 s.h.  
Consists of a close reading of English poems of John Milton, with particular attention to *Paradise Lost* and *Samson Agonistes*.
- EN 371 THE ENGLISH BIBLE AS LITERATURE 3 s.h.  
Considers literary aspects of English Bible by relating earlier translations to the Authorized Version of 1611 and by tracing some of the major influences of King James Bible upon writers and speakers of modern English.
- EN 373 RESTORATION AND 18TH CENTURY DRAMA 3 s.h.  
Emphasizing critical theory and social implication of English drama from 1660-1780, concentrates on great comedies of manners of Etherege, Congrave, Wycherly, and Sheridan.
- EN 375 EIGHTEENTH CENTURY PROSE AND POETRY 3 s.h.  
Examines major eighteenth century English prose and poetry.
- EN 377 RISE OF THE ENGLISH NOVEL 3 s.h.  
Surveys development of English novel from its forerunners through fiction of Gothic romantics and Jane Austen.
- EN 379 THE ROMANTIC MOVEMENT 3 s.h.  
Examines basic tenets of Romantic philosophy in major writings of period from 1780-1832 -poetry, the essay, and fiction.
- EN 380 VICTORIAN LITERATURE 3 s.h.  
Examines essays, novels, and poetry of second half of nineteenth century, with special consideration of criticism they offer of political, economic, social, and religious practices and creeds of Victorian England.

- EN 381 NINETEENTH CENTURY ENGLISH NOVEL 3 s.h.  
Traces historical and technical development of novel from Scott to Hardy.
- EN 383 MODERN BRITISH FICTION 3 s.h.  
Covers important twentieth century novels - including works by Conrad, Lawrence and Joyce -from about 1900 to recent times.
- EN 385 THE ENGLISH ESSAYISTS 3 s.h.  
Considers major essayists, both as members of and influences on society of their time.
- EN 390 LITERARY TOUR: BRITAIN 3 s.h. or 6 s.h.  
Offered each summer, either for three weeks during Pre-Session or for six weeks during Main Session. Visits London, Stratford, and Cambridge or Oxford, as well as other places important in English literature.
- EN 399 INTERNSHIP 3-12 s.h.  
On-the-job training opportunities in journalism and related areas.
- EN 480 SEMINAR: STUDIES IN ENGLISH AND AMERICAN LITERATURE 3 s.h.  
A seminar in English or American literature, the special topic to be chosen by the instructor. Open to junior and senior English majors.
- EN 481 SPECIAL TOPICS 2-3 s.h.  
These courses vary from semester to semester, covering such diverse topics as autobiography, science fiction, folklore, the political novel, black theater, journalism specialties, etc.
- EN 482 INDEPENDENT STUDY 1-6 s.h.  
Opportunities for independent study that goes beyond the usual classroom activities. Approval of department chairperson required.
- ED 452 TEACHING OF ENGLISH AND COMMUNICATION IN THE SECONDARY SCHOOL 3 s.h.  
Prerequisite: EN 380  
This course is a prerequisite to student teaching in English. Introduces student to current professional practices in the teaching of English and communication in high school.

## **DEPARTMENT OF FOREIGN LANGUAGES**

---

**JOSE M. CARRANZA, CHAIRPERSON; BRODE, CORD, DRESCHER, FISEL, FAUST, A.M. GUARDIOLA, A.P. GUARDIOLA, HENRY, ISAR, JONES, LISCIN-SKY, LOZADA, MENDIZABAL, MILTZ, OP DE BEECK, PHILLIPS, READY, ROFFMAN, SHIELDS, SOMMER, SORENTO, SPIEKER, VOELKER, WHITMER, ZALAZAR.**

Foreign Language study is offered by the Department of Foreign Languages. Majors in French, German, and Spanish are available as well as classes in Latin, Greek and Russian. Courses in Self-Instruction in Critical Languages which provide for study in twenty African, Asiatic and European languages including Japanese, Chinese, Arabic, Hebrew and Portuguese are also available.

Students who major in a language will acquire an active skill in all phases of that language and enter more deeply into its history, culture and literature. They will also gain some knowledge of its linguistic development throughout the centuries. Language specialists are destined for careers in government work, librarianship, journalism, foreign trade, airlines, tourism, business, and teaching. Students who choose

careers as secondary school teachers will find the close supervision and advanced methodology offered by the department a distinct asset. Students also may elect to do further graduate work in their language, thereby enhancing their high school teaching careers or preparing themselves for a career in college teaching.

Degrees offered are the Bachelor of Arts in the selected language, the Bachelor of Science in Education in the selected language, and the Master of Education and Master of Arts in Spanish and German. In addition to major concentrations, an 18 semester hour sequence may be chosen for the area of concentration required for a degree in Elementary Education, or a 21 semester hour sequence to satisfy the requirements for a minor in the School of Social Sciences and Humanities. Foreign language majors are required to take HI 101-102, History of Civilization I and II.

### **GENERAL EDUCATION LANGUAGE REQUIREMENTS**

Students in the Schools of Natural Sciences and Mathematics and Social Sciences and Humanities, who must pass a second year language course (FL 251 and 252) as a School's requirements for graduation, may choose any one of the six languages offered. The six semester hours for these courses are part of the General Education requirement. Self-instruction in Critical Languages does not fulfill the General Education requirement, but may be counted as a general elective. The student with no previous foreign language study will take FL 151-152 (three semester hours each) as prerequisites; the credits will not be applicable to any School or Departmental requirements, but may be counted as general electives in the total required for graduation. Generally, the student should program in accordance with previous school or practical background according to the schedule:

- 1 year of high school, or equivalent, equals FL 151
- 2 years of high school, or equivalent, equals FL 152
- 3 years of high school, or equivalent, equals FL 251
- 4 years of high school, or equivalent, equals FL 252

Individual placement may be requested by the student, in which case the pertinent factors regarding preparation will be weighed by the department, with the student's individual requirements and the judgement of classroom instructors also being considered.

## **CURRICULA**

---

### **Core Program**

Basic requirements for all majors and minors in any foreign language are credits from Foreign Language I and II (FL 151 and FL 152) and Oral Practice I and II (FL 051 and 052). These credits may be obtained by course work at the University, or by advanced placement owing to previous high school or other work in the language or special examination.

### **B.A. in the Specified Language**

The requirement for the degree of Bachelor of Arts in the specified language is 36 semester hours in the chosen language above the first year level, as follows:

#### Foreign Language

FL 251-252 Language III and IV	6 s.h.
FL 053-054 Oral Practice	4 s.h.
FL 351-352 Advanced Language I and II	6 s.h.

FL 055-056 Advanced Oral Practice I and II	2 s.h.
FL 361-362 Development of Culture and Literature I and II**	6 s.h.
FL Electives	12 s.h.

### Minor in Foreign Language

A minor in a foreign language consists of 21 semester hours, as follows:

FL 251-252	6 s.h.
FL 053-054	4 s.h.
FL 351-352	6 s.h.
FL 055-056	2 s.h.
FL 361	3 s.h.

\*\*Students majoring in Spanish may select the sequence 361-362 or 363-364. Upon completion of either sequence, either course from the other sequence may be selected.

### B.S. in Education (Foreign Language Major)

The requirement for the degree of Bachelor of Science in Education with a foreign language major is a minimum of 33 semester hours in the major language above the first year level and, in addition, three semester hours in the Teaching of Foreign Language in the Secondary School (ED 453), for a total of 36 semester hours. Also, a proficiency examination in the major language chosen and a semester of supervised student teaching is necessary before certification is granted.

#### Foreign Language

FL 251-252 Language III and IV	6 s.h.
FL 053-054 Oral Practice	4 s.h.
FL 351-352 Advanced Language I and II	6 s.h.
FL 055-056 Advanced Oral Practice I and II**	2 s.h.
FL 361-362 Development of Culture and Literature I and II	6 s.h.
FL Electives	9 s.h.

\*\*Students majoring in Spanish may select the sequence 361-362 or 363-364. Upon completion of either sequence, either course from the other sequence may be selected.

#### Education

ED 453 Teaching of Foreign Language in the Secondary School	3 s.h.
---	--------

A foreign language education major may be certified in a second foreign language after completing 24 semester hours in this language as follows:

FL 251-252	6 s.h.
FL 351-352	6 s.h.
FL 361-362 or	
FL 363-364	6 s.h.
FL 053-054	4 s.h.
FL 055-056	2 s.h.

A student in Elementary Education may elect a concentration of 18 semester hours of a foreign language, consisting of the following:

FL 251-252	6 s.h.
FL 053-054	4 s.h.
FL 351-352	6 s.h.
FL 055-056	2 s.h.

### **Study Abroad**

IUP offers study programs in Valladolid, Spain; Duisburg, Germany; Nancy, France; and Jalapa, Mexico. Students interested in participating in either the Duisburg or Nancy program must register for FL 100 and pay a \$50.00 per semester administration fee. For further information, contact the Chairperson, Department of Foreign Languages.

## **COURSE DESCRIPTIONS**

---

FR, GM, GK, LA, RU, SP, 151-152 FRENCH, GERMAN, GREEK, LATIN, RUSSIAN, SPANISH I and II 3 s.h. each

For beginning students; pronunciation, reading, oral and written communication are the objectives. Majors take 051 and 052 concurrently with 151-152.

FR, GM, SP 151-2 INTENSIVE FRENCH, GERMAN, SPANISH I AND II 6 s.h. each

By attending class six hours each week, the student completes the elementary sequence (6 credits) in one semester. The intensive sections present the same basic language skills that are taught in the regular FL 151-152 classes with slightly greater emphasis on the mastery of the spoken language.

FR, GM, RU, SP, 051-052 ORAL PRACTICE I AND II 2 s.h. each

Two hours weekly oral practice in small groups, to improve pronunciation and response through basic drill.

FR, GM, GK, LA, RU, SP 251-252 FRENCH, GERMAN, GREEK, LATIN, RUSSIAN, SPANISH III AND IV 3 s.h. each

Continued training in basic skills, with possible addition of study of specific topics; consult the department for topics of interest. Majors take 053-054 (or 051-052) concurrently.

FR, GM, SP 251-2 INTENSIVE FRENCH, GERMAN, SPANISH III AND IV 3 s.h.

By attending class six hours each week, the student completes the intermediate sequence (6 credits) in one semester. The intensive sections continue to develop basic language skills with a slightly greater emphasis upon the mastery of the spoken language.

FR, GM, RU, SP 053-054 ORAL PRACTICE III AND IV 2 s.h. each

Improves oral skills to a higher level, through conversation and discussion.



FR, GM, GK, LA, RU, SP 351-352 ADVANCED FRENCH, GERMAN, GREEK, LATIN, RUSSIAN, SPANISH LANGUAGE I AND II 3 s.h. each  
Reviews grammar in depth; analyzes the structure of the language; frequent themes required. Majors take 053-054, or 055-056 concurrently.

FR, GM, RU, SP 055-056 ADVANCED ORAL PRACTICE I AND II 1 s.h. each  
Informal advanced conversation; meets twice weekly.

FR 361-362 DEVELOPMENT OF FRENCH CULTURE AND LITERATURE I AND II 3 s.h. each

GM 361-362 DEVELOPMENT OF GERMAN CULTURE AND LITERATURE I AND II 3 s.h. each

SP 361-362 DEVELOPMENT OF SPANISH CULTURE AND LITERATURE I AND II 3 s.h. each

SP 363-364 DEVELOPMENT OF SPANISH-AMERICAN CULTURE AND LITERATURE I AND II 3 s.h. each  
Study of the historical and cultural aspects of countries involved; review of their function in the world over the centuries; analysis of the literary schools and evolution.

### **Elective Courses in French**

FR 253 INTERMEDIATE COMPOSITION AND CONVERSATION 3 s.h.  
Intermediate course in grammar, reading, composition and some oral work. Can substitute for or be in addition to FR 252 for majors or serious students.

FR 254 COMMERCIAL FRENCH 3 s.h.  
Prerequisite: FR 251 or equivalent  
Commercial letter writing, use of technical language, survey of special business practices and methods of French-speaking commercial systems and problems of translation are studied. The course is a regular substitute for FR 251.

FR 363 MEDIEVAL AND RENAISSANCE LITERATURE 3 s.h.

FR 365 SEVENTEENTH CENTURY FRENCH LITERATURE 3 s.h.

FR 366 EIGHTEENTH CENTURY FRENCH LITERATURE 3 s.h.

FR 367 NINETEENTH CENTURY FRENCH LITERATURE 3 s.h.

FR 368 TWENTIETH CENTURY FRENCH LITERATURE 3 s.h.  
Designed to present general surveys of literature of respective periods, with due consideration to social factors and events behind them.

FR 371 THE FRENCH NOVEL 3 s.h.  
Elective survey of the origin and development of French Novel. A selected list of works representative of major forms are read in their entirety.

FR 372 STUDIES IN CONTEMPORARY FRENCH LITERATURE 3 s.h.  
Content of this course will vary in accordance with needs and interests of those who elect it.

FR 461 STRUCTURES OF FRENCH AND ENGLISH 3 s.h.  
Modern methods of linguistic analysis applied to a study of French syntax, transformational, distributional and traditional models serve to explain mechanisms of the language with a pedagogical intent.

FR 481 SPECIAL TOPIC 3 s.h.  
Designed to meet special needs of a student group.

FR 482 INDEPENDENT STUDY 1-3 s.h.

FR 499 INTERNSHIP 3-12 s.h.  
(See course description for GM 499)

### **Elective courses in German**

GM 253 INTERMEDIATE COMPOSITION AND CONVERSATION 3 s.h.  
Can be taken instead or in addition to 252. Designed for majors or serious students. Offered in spring only.

GM 254 BUSINESS GERMAN 3 s.h.  
Prerequisite: GM 251 or equivalent  
A one semester course which can be taken instead of German 252 by students interested in business or as part of the General Education requirement (equivalent to German IV). Business practices and specialized business vocabulary, letter writing, and problems of translation are emphasized.

GM 256 SCIENTIFIC GERMAN 3 s.h.  
Designed to substitute for German 252, will be offered in the second semester. Primarily for science majors, it may be taken as an elective by German majors.

GM 363-364 INTRODUCTION TO GERMAN LITERATURE I AND II 3 s.h. each  
Selected readings in German poetry, drama, and fiction, to acquaint student with some techniques for intelligent understanding and formal criticism of works of literature.

GM 367 NINETEENTH CENTURY GERMAN LITERATURE 3 s.h.

GM 368 TWENTIETH CENTURY GERMAN LITERATURE 3 s.h.

GM 369 CONTEMPORARY GERMAN LITERATURE 3 s.h.

GM 370-371 THE AGE OF GOETHE I AND II 3-6 s.h.

GM 381 GERMAN DRAMA IN ENGLISH TRANSLATION 3 s.h.  
Representative works of major dramatists in English translation. Primarily intended for students of English literature, comparative literature, and not considered as credit toward a German major.

GM 391 SPECIAL PROJECTS IN GERMAN LITERATURE 1-3 s.h.  
Devoted to a special aspect of German language or literature. May be arranged for individual or group study. Permission of Department required.

GM 410 HISTORY OF THE GERMAN LANGUAGE 3 s.h.  
History and development of German Language, with special emphasis on relationships with English. Analysis of annals in Gothic, Old High German, and Middle High German using methods of historical and contemporary linguistics.

GM 480 SPECIAL TOPICS IN GERMAN LANGUAGE OR LITERATURE 1-3 s.h.  
Devoted to a special aspect of German language or literature. May be arranged for individual or group study. Permission of Department required.

GM 482 INDEPENDENT STUDY 1-3 s.h.

**GM 499 INTERNSHIP IN GERMANY** 3-12 s.h.  
 Prerequisite: German 352 or equivalent  
 A supervised field experience in Germany with approved public agencies and institutions or private firms; no longer than one semester and no less than one month. Positions will be matched as closely as possible with the intern's personal interests and his degree of proficiency in the German language. Academic work at the Gesamthochschule in Duisburg may precede or follow the Internship. Open to students in other disciplines, such as Political Science, International Relations, Business, etc., with their advisers approval.

**FL 100 STUDY ABROAD**  
 A student wishing to spend a semester or a year abroad may enroll at the University of Duisburg in Germany or at the University of Nancy in France. This may be done in conjunction with an internship abroad.

### **Elective Courses in Latin**

**LA 361 DEVELOPMENT OF ROMAN CULTURE AND LITERATURE** 3 s.h.

**LA 362 LATIN CONVERSATION AND COMPOSITION** 3 s.h.  
 Aims at the ability to speak Latin on a conversational level and to write grammatically correct Latin prose.

**LA 371-372 SURVEY OF LATIN LITERATURE I AND II** 3 s.h. each  
 This course sequence will give a comprehensive view of Latin literature from Ennius to the Middle Ages.

### **Elective Courses in Russian**

**RU 351-352 ADVANCED RUSSIAN LANGUAGE I AND II** 3 s.h. each  
 Conducted entirely in Russian for students with two years of college Russian, advanced grammar, composition, reading, and oral self-expression on a variety of topics.

**RU 055-056 ADVANCED ORAL PRACTICE I AND II** 1 s.h. each  
 For students with two years of college Russian, advanced oral expression on readings, current events and more abstract themes.

**RU 361-362 DEVELOPMENT OF RUSSIAN CULTURE AND LITERATURE I AND II** 3 s.h. each  
 Readings, discussions and lectures in Russian on the course of Russian civilization; open to students with two years of college Russian or equivalent.

**RU 367-368 NINETEENTH CENTURY RUSSIAN LITERATURE I AND II** 3-6 s.h.  
 Reading selections from masterpieces of 19th century Russian fiction; reports, discussions, compositions, and analysis of language; conducted entirely in Russian.

**RU 369-370 TWENTIETH CENTURY RUSSIAN LITERATURE** 3-6 s.h.  
 Analysis of contemporary Russian language as used by various Soviet writers in fiction and periodical literature; conducted entirely in Russian. Students will do independent reading of Soviet novels in English.

**RU 371 RUSSIAN POETRY** 3 s.h.  
 Reading of selected lyric poets of 19th and 20th centuries, with particular emphasis on development of modern Russian; conducted entirely in Russian.

**RU 372 RUSSIAN DRAMA** 3 s.h.  
 Reading and listening to selected plays of 19th and 20th centuries, in an attempt to understand and master the idiom of conversational Russian; conducted entirely in Russian.

RU 480-489 SPECIAL TOPICS IN RUSSIAN LANGUAGE OR LITERATURE 1-3 s.h.  
 Devoted to a special aspect of Russian language or literature. May be arranged for individual or group study. Permission of department required.

### **Elective Courses in Spanish**

SP 253 INTERMEDIATE COMPOSITION AND CONVERSATION 3 s.h.  
 Given according to demand and staff availability.

SP 254 COMMERCIAL SPANISH 3 s.h.  
 Prerequisite: SP 351 or equivalent  
 Practice with letter writing, technical business terms, and methods of Spanish speaking commercial systems and transactions, and translations. This course is not a substitute for SP 252.

SP 365 SPANISH LITERATURE BEFORE 1650 3 s.h.

SP 367 NINETEENTH CENTURY SPANISH LITERATURE 3 s.h.

SP 368 TWENTIETH CENTURY SPANISH LITERATURE 3 s.h.  
 Present general surveys of literature of respective periods, with due consideration to social factors and events behind them.

SP 370 GOLDEN AGE DRAMA 3 s.h.  
 Traces the development of Spanish theater and examines its artistic and spiritual flowering in Baroque period.

SP 371 THE SPANISH NOVEL 3 s.h.  
 After a brief survey of origins and trends of the Spanish novel, major stress is given to the Nineteenth Century Novel and the Generation of 98.

SP 376 SPANISH-AMERICAN LITERATURE 3 s.h.  
 Following a consideration of the salient tendencies of Spanish-American Literature, this course may take form of a comprehensive survey, or it may concentrate its attention upon the novel of social thesis.

SP 389 PENNSYLVANIA-VALLADOLID PROGRAM 21 s.h.  
 Contact Chairperson, Department of Foreign Languages.

SP 390 SPANISH IN THE ELEMENTARY SCHOOL 3 s.h.  
 Prerequisite: Spanish 251-252 or equivalent  
 The prospective teacher of Spanish on the elementary level is introduced to materials suitable for Grades 1 through 6. Preparation of games, songs, poems, and story telling included.

SP 480 MEXICO SUMMER PROGRAM 3-6 s.h.  
 Contact Chairperson, Department of Foreign Languages.

SP 481 SPECIAL TOPIC 3 s.h.  
 Designed to meet special needs of a student group, mainly related to Spanish American Literature.

SP 482 INDEPENDENT STUDY 1-3 s.h.

SP 499 INTERNSHIP 3-12 s.h.  
 Opportunities in Spain, Mexico and the U.S.A. (See course description for GM 499). For further information concerning Internships in France, Spain, and Mexico, contact the Chairperson, Department of Foreign Languages.

## **Linguistics**

FL 421 LANGUAGE AND SOCIETY

3 s.h.

The student considers salient facts of language and its role in society and culture. Language families, linguistic change, and reciprocal influences of culture and language are presented.

## **Critical Language Program**

FL 485 SELF-INSTRUCTION IN CRITICAL LANGUAGES

A self-instructional course for the study of rare languages not taught in the classroom. The students are provided with texts, cassettes and the services of a native speaker. A special fee of \$30.00 is charged in addition to tuition for audio services and examinations. Professional teachers of language from other universities will test performance. Students interested must contact the coordinator at least one semester before taking the course.

The following languages are available for study: Arabic, Chinese, Dutch, Modern Greek, Modern Hebrew, Classical Hebrew, Hindi, Hungarian, Japanese, Korean, Persian, Polish, Portuguese, Serbo-Croatian, Swahili, Swedish, Tagalog, Thai, Turkish, Vietnamese, Yoruba.

The following numbers will be used to program:

FL I (1st semester) FL 485

FL II (2nd semester) FL 486

FL III (3rd semester) FL 487

FL IV (4th semester) FL 488

The language will be indicated in parenthesis in abbreviated form: Example FL 486 (HI): FL II (2nd Semester of Hindi).

## **Education**

ED 453 TEACHING OF FOREIGN LANGUAGES IN THE SECONDARY SCHOOL 3 s.h.

Prerequisite: Successful completion of 351-352 and 055-056 in the students major language; passage of a language proficiency examination or permission of the instructor.

Methods and material for secondary school teaching, current theories and techniques, and classroom demonstrations are given.

# **GEORGAPHY AND REGIONAL PLANNING DEPARTMENT**

**RUTH I. SHIREY, CHAIRPERSON: BALLAS, HEIDEN, KULKARNI, MILLER, PAYNE, TEPPER, WEBER, WOOK, ZUCAR.**

GEOGRAPHY has two traditions of study. The first is the study of relationships between man and environment and the ecological tradition. The second is the study of spatial organization, which involves the way man uses space on the earth's surface. In both traditions the focus is on understanding regions of the world and the interactions within and between them. Geographers make important contributions to the understanding of all aspects of man's use of and impact on the earth's surface.

REGIONAL PLANNING involves preparing for the future. The demands and effects of a large and growing population require that land use, resource use, settlement patterns, transportation systems and economic activity be planned. Regional planning is concerned with the social, economic, locational, and environmental aspects of these planning decisions.

GEOGRAPHY and REGIONAL PLANNING are in the same department because planning is the art of which geography is the science.

Employment opportunities for geographers and regional planners are good. Students will find a wide variety of positions in government, business, industry, planning and education available. Environmental and locational knowledge gained in the department's programs provide skills needed in the job market.

Three degree programs are offered by the department: (1) Bachelor of Arts in Geography; (2) Bachelor of Science in Regional Planning; (3) Bachelor of Science in Social Science Education with a concentration in Geography.

## **CURRICULA**

---

### **BACHELOR OF ARTS (B.A.) IN GEOGRAPHY OR BACHELOR OF SCIENCE (B.S.) IN REGIONAL PLANNING**

Students in both degree programs must take 36 semester hours for the major including the core program which consists of 15 semester hours as follows:

GE 230, GE 231, GE 341, GE 342 and GE 411.

Students taking the B.A. in Geography must elect 21 semester hours in other geography courses including GE 102—Geography of United States and Canada, in addition to the 15 semester hours required in the core program. A student may take these additional semester hours from any of the department's offerings or may choose to take courses mainly from one of the following areas: human geography, physical/environmental geography, planning, regional geography or philosophy, methods and techniques. The geography major may elect to do an internship.

The B.S. in Regional Planning prepares students to take positions in planning offices. In addition to the 15 semester hours required in the core program, 21 more semester hours are required as follows: GE 313 or GE 314, GE 332, GE 360, GE 361, GE 462, GE 463 and one elective course. In addition, a 21 semester hour interdisciplinary minor or a 15-21 semester hour minor in an approved discipline is required. An Internship may be elected.

Students may apply up to six semester hours of internship credit toward the majors in geography and regional planning.

### **BACHELOR OF SCIENCE IN SOCIAL SCIENCE EDUCATION (GEOGRAPHY CONCENTRATE)**

Students concentrating in geography in the social science education program must take a minimum of 15 semester hours as follows (department recommends 24 semester hours in the concentration): GE 101 and GE 231 or GE 332 and GE 341 or GE 342 and GE 102 plus two regional courses and one additional 3 semester hour geography course.

### **MINOR IN GEOGRAPHY**

A minor in geography is appropriate for majors in all other fields of the natural and social sciences. Students of business also find this minor relevant. A minor consists of minimum of 15 semester hours in geography. A student may elect any combination

of courses for the minor. The department suggests that students take the core program if they anticipate doing graduate work in geography. Students might also consider concentrating in one of the areas of the field indicated by the section in the course descriptions below.

### **MINOR IN REGIONAL PLANNING**

A minor consists of a minimum of 15 semester hours of course work as follows: GE 360, GE 361, GE 462, GE 463 and 332, or GE 440.

Minors in geography and regional planning may elect an internship.

## **COURSE DESCRIPTIONS**

---

### **General Education Courses**

GE 101 WORLD GEOGRAPHY: MAN AND ENVIRONMENT 3 s.h.  
Study of man's relationship with the earth accomplished through study of physical, cultural, economic and demographic factors.

GE 102 GEOGRAPHY OF UNITED STATES AND CANADA 3 s.h.  
The cultural landscape of North America is studied. The relationship between man and environment is examined and spatial patterns of environment, economy, society and politics are considered.

### **Human Geography**

GE 230 CULTURAL GEOGRAPHY 3 s.h.  
May be taken in place of GE 101. Introduction to cultural geography, including population, settlement, historical, urban and political geography, human relationships with the natural environment and the literature and methods of cultural geography.

GE 231 ECONOMIC GEOGRAPHY 3 s.h.  
Introduction to geographic concepts, methods and skills related to spatial patterns of production, consumption, and exchange over the earth's surface.

GE 331 POPULATION GEOGRAPHY 3 s.h.  
Spatial variations in numbers, characteristics and dynamics of human population, models and theoretical constructs relevant to demographic structures and processes are studied, as well as major world and regional problems.

GE 332 URBAN GEOGRAPHY 3 s.h.  
Basic principles of urban geography including site, situation, function, urban land use, urban structure and urban hierarchy are introduced. Relationships between urban geography and urban planning are explored.

GE 333 TRADE AND TRANSPORTATION 3 s.h.  
Deals with the spatial aspects of transportation systems and their use. Circulation, accessibility, time and distance concepts and trade patterns are discussed.

GE 334 POLITICAL GEOGRAPHY 3 s.h.  
Geographic factors and conditions are analyzed as they relate to the character and function of states. Political institutions are evaluated in light of geographic conditions.

GE 335 GEOGRAPHY OF ENERGY 3 s.h.  
Energy production and consumption in human societies through time are considered to provide the background necessary for understanding contemporary problems. Emphasis is on locational and environmental aspects of energy in the United States.

GE 336 SOCIAL GEOGRAPHY 3 s.h.  
 Spatial dimensions of the American society is the focus of this course. The distribution of various social groups and their impact on the landscape are considered.

GE 337 HISTORICAL GEOGRAPHY 3 s.h.  
 Studies of past geographies, geographical change through time, and historical perspectives on the cultural landscape are included. Historical geography of the United States is emphasized.

### **Physical/Environmental Geography**

GE241 PHYSICAL GEOGRAPHY 3 s.h.  
 Introduction to physical geography including study of weather, climate, soils, vegetation, landforms, energy cycles, and the hydrologic cycle. Maps and air photographs are used.

GE 341 CLIMATOLOGY I 3 s.h.  
 The elements of weather and climate and the climatic regions of the earth are studied in relation to other aspects of the physical and biological environment.

GE 342 PHYSIOGRAPHY 3 s.h.  
 The study of landforms and water features is the focus of this course. Types, distribution and processes of formation are considered in relationship to the human landscape.

GE 440 CONSERVATION: ENVIRONMENTAL ANALYSIS 3 s.h.  
 Problems of exploitation and utilization of regional resources such as soils, minerals, forests and wildlife are considered in relation to population growth and regional planning and development.

### **Planning**

GE 360 INTRODUCTION TO PLANNING 3 s.h.  
 Introduction to field of planning on city, metropolitan, regional and county levels. Included are: intergovernmental context and legislative basis for planning; the comprehensive plan; plan implementation, and the planning agency.

GE 361 PLANNING: BASIC STUDIES AND ANALYSIS 3 s.h.  
 Prerequisite: GE 360  
 Research, analytical design and plan-making techniques in urban and regional planning. Examines basic items necessary to prepare urban and regional comprehensive plans.

GE 462 PLANNING: DEVELOPMENT, PRINCIPLES AND THEORY 3 s.h.  
 Prerequisite: GE 360  
 Examines process of city planning during ancient, medieval, renaissance and modern periods. A review of early planning in America, as well as present city planning is included.

GE 463 PLANNING: DESIGN 3 s.h.  
 Prerequisite: GE 360  
 Presents concepts of city, subdivision and transportation design in relation to topography, natural resources and other physical elements.

GE 464 LAND USE POLICY 3 s.h.  
 Basic concepts of land use policy at the national, regional, county and local levels are treated. Analysis is made of various land use policies.

### **Regional Geography**

GE 251 GEOGRAPHY OF PENNSYLVANIA 3 s.h.  
 Regions of Pennsylvania are examined in detail to identify man-environment relationships. Soils, topography, climate, vegetation, population and economic patterns are studied.



GE 252 GEOGRAPHY OF LATIN AMERICA 3 s.h.  
Impact of rapid population growth and economic development on the environment and spatial organization of Latin America are considered. The resource base and cultural heritage of the region are studied.

GE 253 GEOGRAPHY OF EUROPE 3 s.h.  
Investigates relationships underlying land use, dominant international problems, boundary disputes and regional complexes of European continent.

GE 254 GEOGRAPHY OF USSR 3 s.h.  
Regions of the Soviet Union, natural resources, cultural patterns, population, strategic areas and related geopolitical problems are studied.

GE 255 GEOGRAPHY OF AFRICA 3 s.h.  
Systematic survey of the physical, economic, political- historical, and cultural geography of the continent is followed by regional studies of countries and peoples in Africa, south of the Sahara.

GE 256 GEOGRAPHY OF EAST ASIA 3 s.h.  
Studies China, Japan, Korea, Outer Mongolia, Taiwan geographic background for development and wise use and restoration of natural resources dealt with.

GE 257 GEOGRAPHY OF SOUTH AND SOUTHEAST ASIA 3 s.h.  
India, Pakistan, Bangla Desh, Sri Lanka, Burma, Thailand, Laos Cambodia, Vietnam, Malaysia, and Indonesia are studied with special attention to regional similarities and differences, particularly as they pertain to human adjustment.

### **Philosophy, Methods, and Techniques**

GE 411 GEOGRAPHY: THOUGHT AND PHILOSOPHY 3 s.h.  
Seminar limited to junior and senior majors with at least 12 semester hours in geography. Deals with history of the discipline, great ideas, leading problems, and unresolved issues.

GE 312 RESEARCH IN GEOGRAPHY AND PLANNING 3 s.h.  
Introduction to the basic elements of research in the context of orderly scientific investigation. Emphasizes the application of research methodology to specific geographic and planning problems.

GE 313 CARTOGRAPHY 3 s.h.  
Gives an understanding of the compilation and use of maps and develops an ability to construct various types of maps.

GE 314 MAP AND PHOTOGRAPH INTERPRETATION 3 s.h.  
Maps and air photographs, along with remote sensing materials, permits inventory and analysis of geologic, land use, urban development and other landscape phenomena. The understanding of these materials and associated tools for their use is presented.

GE 415 REMOTE SENSING 3 s.h.  
Deals with air photographs, satellite imagery, thermal sensing, radar imagery, and their application to deriving information about the Earth's physical and cultural landscapes.

### **Other**

GE 371 AEROSPACE WORKSHOP 3 s.h.  
Develops an appreciation and provides information related to aerospace activities and contributions; offers background for teaching aerospace courses, discusses aviation/space careers, and presents the basic principles of flying (usually including some flight instruction).

ED 455 TEACHING OF SOCIAL SCIENCE IN SECONDARY SCHOOL 3 s.h.  
 Study of modern methods and techniques for teaching social science and of current curricula in social science.

GE 481 SPECIAL TOPICS 3 s.h.  
 Topical courses offered on an experimental basis. Check department schedule for these offerings.

GE 498 INTERNSHIP 3-12 s.h.  
 Professional learning experience with emphasis on application of academic background. Open to majors and minors in geography and regional planning with 75 semester hours and 15 semester hours in the department, respectively. See internship supervisor for additional information.

GE 499 INDEPENDENT STUDY 3-6 s.h.  
 Independent research and study under faculty direction. Interested students should approach department chairperson for information.

## HISTORY DEPARTMENT

---

**JOHN F. KADLUBOWSKI, CHAIRPERSON: CASHDOLLAR, CORD, FERGUSON, FRICKE, GELBACH, GOODRICH, HATFIELD, KLEIN, LONDON, LEHMAN, MARCUS, MASTRO, MILLER, MOORE, OLIVER, RIFE, SMITH, VOGEL, WILEY, YACKUBOSKEY.**

Programs in history are designed to give both those who major in history in the School of Social Sciences and Humanities, and those who concentrate in history in the School of Education an opportunity to study in some depth the past story of man and his world. Degrees offered by the History Department are the Bachelor of Arts in History and the Bachelor of Science in Education with a major in Social Studies, concentrating in history. The first program is under the School of Social Sciences and Humanities, and the second is under the School of Education.

The history student will find that the program is excellent preparation for government service, for pre-law training, for broad business opportunities, for work in varied fields of journalism, for archival positions, and for teaching. Not only the story of the people of the United States, but also that of other peoples is covered in the belief that historical understanding is essential for the future of mankind.

## CURRICULA

---

Requirements for the degree of Bachelor of Arts in History are 30 semester hours in history. Requirements for the degree of Bachelor of Science in Education with a major in Social Studies, concentrating on history, are a minimum of 15 semester hours in history within the 42 semester hours required for social science certification. The requirement for a minor in history is 15 semester hours. For all history programs, courses in history in General Education are applicable. Although there are no prerequisites to history courses, all programs should be planned with an adviser. Every major and concentrate in history will be advised by History Department staff members.

Admission to History 482 and 483, initiation in the local chapters of Phi Alpha Theta and Pi Gamma Mu, participation in study tours and study-abroad programs and

other activities should be investigated by every history student. The department is committed to the idea of a broad education.

## **COURSE DESCRIPTIONS**

---

- HI 101 HISTORY OF CIVILIZATION I 3 s.h.  
Survey course, presenting in various forms origin and development of Western man's major political, social, economic, religious, and intellectual institutions to approximately 1600 A.D.
- HI 102 HISTORY OF CIVILIZATION II 3 s.h.  
Survey of man's development from 1600 A.D. to present, in which economic, political, social, and intellectual trends are discussed in a basic presentation, the student then selects a topic of personal preference from a variety of preparations offered by individual professors.
- HI 103 HISTORY OF THE UNITED STATES AND PENNSYLVANIA I 3 s.h.  
Survey of American history from colonization to 1865, with attention to Pennsylvania, colonial foundations, emergence of Federal Union, political and social reform, and controversy over sectionalism and slavery.
- HI 104 HISTORY OF THE UNITED STATES AND PENNSYLVANIA II 3 s.h.  
Survey of history of the United States and Pennsylvania since 1865, with emphasis on major economic, political, and social trends and development of American culture. Also considered is role of America in world affairs.
- HI 200 INTRODUCTION TO HISTORY 3 s.h.  
For history majors and concentrates. Topics include philosophy of history, important schools of history and historians, and methods of historical research. Student is encouraged to become a better historian and to identify with historical profession.
- HI 301 HISTORY OF GREECE 3 s.h.  
Will analyze major political, social, and economic developments in ancient Greek civilization from Bronze Age to death of Alexander.
- HI 302 HISTORY OF ROME 3 s.h.  
Will trace Roman history from early Republic down to fall of Empire. Roman political theory will be particularly emphasized.
- HI 303 MEDIEVAL EUROPE I, 400-1000 3 s.h.  
History of early Medieval Europe, from decline of Rome to beginnings of High Middle Ages; emphasis on political, social, economic, religious, and intellectual developments.
- HI 304 MEDIEVAL EUROPE II, 1000-1300 3 s.h.  
History of late Medieval Europe, from High Middle Ages to Renaissance period; emphasis on political, social, economic, religious, and intellectual developments.
- HI 305 RENAISSANCE AND REFORMATION 3 s.h.  
History of Europe from c. 1250; rise of commercial city, Kings, and pressures on Christian Church to 1600. Some consideration of technology and voyages.
- HI 306 EARLY MODERN EUROPE 3 s.h.  
Greatness of France under Louis XIV; Sweden; Thirty Years War. Emergence of modern society; French Revolution.
- HI 307 HISTORY OF EUROPE: 1815-1914 3 s.h.  
Study of Europe in 19th century, with emphasis on the emergence of major thought patterns, Romanticism, Nationalism, Socialism, and Positivism.

- HI 308 TWENTIETH CENTURY EUROPE 3 s.h.  
Political, economic, and diplomatic trends in Europe since 1900, with major emphasis on causes and results of war, and search for security.
- HI 320 HISTORY OF ENGLAND TO 1688 3 s.h.  
Survey of growth of English nation, with emphasis on political, social, and economic developments leading to 17th century conflict between Crown and Parliament.
- HI 321 HISTORY OF ENGLAND, 1688 TO PRESENT 3 s.h.  
Survey of growth of England as a democratic constitutional monarchy. Attention directed to industrial revolution, and to imperial expansion and England's role in 20th century world. Attention given to social and cultural history.
- HI 322 FRENCH REVOLUTION AND NAPOLEON 3 s.h.  
Brief sketch of Old Regime, concentration on Revolution, and Empire, with emphasis on politics, social structure, diplomacy, and economics.
- HI 323 MODERN FRANCE 3 s.h.  
Investigation of political, cultural, economic, and social developments since 1815. Discussions and readings.
- HI 324 HISTORY OF GERMANY TO 1848 3 s.h.  
Study of German nation from its prehistoric origins, emphasizing medieval and early modern phases, to 1848.
- HI 325 HISTORY OF GERMANY: 1849-1970 3 s.h.  
Study of development of modern Germany from Revolution of 1848, including imperial republican and totalitarian phases, to post-War formation of East and West Germany.
- HI 326 HISTORY OF RUSSIA 3 s.h.  
General survey of Russian history, culture, and institutions. Special consideration given to study of historical forces formative of Revolution of 1917.
- HI 327 HISTORY OF SOVIET RUSSIA 3 s.h.  
General survey of contemporary Soviet history, culture, and institutions. Special consideration given to study of communist theory and its place in current Russian historiography.
- HI 340 COLONIAL AMERICA 3 s.h.  
Survey of original thirteen states from their inception as colonies within British empire to 1763, the eve of independence. Attention given to their political development; economic position within empire; relations with Indians; and evolution of social, educational and religious life.
- HI 341 AMERICAN REVOLUTION 3 s.h.  
An examination of Whig-Tory participants of American Revolution. Examines events from 1763 to 1783. Changing interpretations of the courses and effects of the revolution will be discussed.
- HI 342 MIDDLE PERIOD OF U.S., 1783-1850 3 s.h.  
Survey of United States history from 1783 to 1850, with special attention on constitutional, political, economic, and social trends.
- HI 343 CIVIL WAR AND RECONSTRUCTION 3 s.h.  
Study of failure of American democracy to cope with issues of mid-nineteenth century, followed by political, economic, military, and social developments during War and reconciliation of North and South.
- HI 344 HISTORY OF THE UNITED STATES, 1876-1900 3 s.h.  
Stresses reaction of various segments of heterogeneous population to rapid industrialization, urbanization and corporatization of American life and emergence of U.S. as a world power, special attention to formation of new institutions.

- HI 345 HISTORY OF THE UNITED STATES 1900-1929 3 s.h.  
Emphasis on political, social, economic, and diplomatic developments in American history between 1900 and 1929.
- HI 346 CONTEMPORARY UNITED STATES HISTORY 3 s.h.  
Study of political, economic, and cultural changes in American life since 1929; examines roots of social problems facing us today. Some recent foreign policy trends also studied.
- HI 350 HISTORY OF LATIN AMERICA: COLONIAL PERIOD, 1450-1820 3 s.h.  
Study of life of people, Indian cultures, conquest by Spaniards and Portuguese, government during Colonial Period, and Wars of Independence.
- HI 351 HISTORY OF LATIN AMERICA: NATIONAL PERIOD, 1820-PRESENT 3 s.h.  
Study of history of nations which have emerged since independence; emphasis on economic, political, cultural, and social developments of these nations, as well as relationships of these nations to others in the Hemisphere.
- HI 360 HISTORY OF PENNSYLVANIA 3 s.h.  
Emphasizes the cultural, economic, political, and social development of our state in its various periods from colonial to today. Special attention given to diversity of Pennsylvanias people, their institutions, and problems.
- HI 361 HISTORY OF AMERICAN FOREIGN RELATIONS, 1775-1900 3 s.h.  
Traces Foreign Relations of United States from Independence to emergence as a world power. Topics concentrate on themes of commercial relations, political isolation, expansion, and debate over imperialism.
- HI 362 HISTORY OF AMERICAN FOREIGN RELATIONS, 1900-PRESENT 3 s.h.  
Treats primarily our 20th century involvement in world affairs and domestic debate over that involvement. Special emphasis will be placed on role of interest groups and increasing power of Executive Department over Foreign Affairs.
- HI 363 SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES TO 1875 3 s.h.  
Selected topics in early American intellectual and cultural growth, with emphasis on Puritanism, Enlightenment, cultural nationalism, and Romantic Movement.
- HI 364 SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES SINCE 1875 3 s.h.  
Selected treatment of historical development of modern American movements in social and political thought, religion, philosophy, fine arts, and literature.
- HI 365 HISTORY OF BLACK AMERICA SINCE EMANCIPATION 3 s.h.  
Description and analysis of role of blacks in history of United States since Civil War; emphasis on key leaders, major organizations, leading movements and crucial ideologies of blacks in modern America.
- HI 366 AMERICAN LABOR MOVEMENT 3 s.h.  
Investigation of growth of American labor movement from 19th century to present; emphasis on role of Knights of Labor, American Federation of Labor, Industrial Workers of the world and Congress of Industrial Organizations. Study of working class in its working and living settings.
- HI 367 ECONOMIC HISTORY OF THE UNITED STATES 3 s.h.  
Historical development of economic institutions in American life since Independence; emphasis on farming, labor, transportation, banking and manufacturing.

- HI 368 U.S. URBAN HISTORY 3 s.h.  
A survey of American cities from their beginnings to present emphasizing relationship of urban history to social science theory, and stages and process of city development.
- HI 380 HISTORY OF THE ISLAMIC CIVILIZATION 3 s.h.  
An approach to learning about a non-Western culture: Muhammad, Arabs, Muslims as creators of a great civilization from rise of Islam to 1800; emphasis on cultural institutions of Islam and their interrelationships within Middle East.
- HI 381 HISTORY OF THE MODERN MIDDLE EAST 3 s.h.  
Survey of changes that have taken place in Middle East and in Islam since eighteenth century and of contemporary problems in that region.
- HI 382 HISTORY OF THE FAR EAST 3 s.h.  
History of China and Japan from ancient times. Buddhism, medieval Japan; Chinese Communism, industrialization. Some consideration of peripheral Asia from 1500.
- HI 390 HISTORY OF WOMEN - WORLD CULTURES 3 s.h.  
Explores religious, legal, political, and mythic dimensions of women in society from ancient to modern times, including Eastern, Western and American experiences.
- HI 391 FILM AS HISTORY 3 s.h.  
Particularly concerned with probing relationship between cinema and society. History of film is explored and student is given some background in film interpretation and cinematography, the western, science fiction, police films, and great foreign and American detective films.
- HI 481 SPECIAL STUDIES IN HISTORY 3-9 s.h.  
Each semester six to ten courses are offered in interest areas that are not part of the regular program. For example, Film as History, the American Jew, Fighting the Great Wars, History of Baseball, the Car, and the Christian Perspective have been offered as special studies. Students may schedule as many of these courses as desired, but two per semester is the usual limit.
- HI 482 INDEPENDENT STUDY 3-6 s.h.  
Prerequisites: 12 s.h. in history; a 3.0 history average; permission of a faculty member  
Involves directed reading or research for qualified students. We encourage experimental projects and personalized learning. Honors sections are provided for qualified students.
- HI 483 INDEPENDENT STUDY 3 s.h.  
An honor program within the independent study format. Minimum qualifications are a 3.0 Q.P.A. 15 s.h. of history, and a 3.2 average in history classes. Satisfactory honors work is rewarded by formal recognition at graduation.

---

## INTERNATIONAL STUDIES

---

Degree programs in International Studies are offered in both the School of Social Sciences and Humanities (Bachelor of Arts) and the School of Education (Bachelor of Science in Education). Both degrees are interdisciplinary and, consequently, draw upon the faculty and course offerings of many other departments. The course selection is broad enough to prepare the student for any one of a great variety of career opportunities. The Bachelor of Arts program is designed for the specialist who is interested in a professional career; the Bachelor of Science is designed to certify the graduate to teach world cultures or any of the social sciences in the public schools.

## **CURRICULA**

---

### **B.A. Program**

Beyond the General Education courses required of all students in the University, the requirements for the degree of Bachelor of Arts in International Studies are as follows:

1. The student must build an interdisciplinary sequence of 15 semester hours taking an introductory or comparative international course from each of five social science disciplines. This selection depends upon the goal of the major and should be determined in consultation with adviser and/or the Director of the Center for International Studies.
2. The student should complete a specialization sequence in the economic and political systems of another culture which must include a study of language, literature, history, and geography of that region. This specialization sequence must include at least 15 semester hours. Currently, three specializations are offered: Soviet Studies, The Far East, and Latin America. However, students interested in Africa or the Middle or Near East may elect interdisciplinary courses focusing on the developing nations. It is also possible to build a program centering on the Atlantic Community of Nations.

Specialization must include work in at least three disciplines. The student is expected to have completed the intermediate language sequence of the appropriate language in the General Education requirements, so that no credit towards specialization is given for language courses numbered below the 300 level.

### **B.A. in Pre-Law/History**

The requirements for this major are the same as for the History major with the addition of the pre-law interdisciplinary minor.

For requirements in the pre-law minor, students should contact the departmental pre-law adviser or the department chairperson.

### **Minor in International Studies**

A minor in International Studies consists of meeting the requirements listed under (1) above. The curriculum of the Center for International Studies is flexible enough that the student can plan a program to match his interests.

### **B.S. in Education (International Studies Concentrate)**

A concentration in International Studies will supplement the student's required courses and leads to Certification in the social science fields for teaching positions in the state of Pennsylvania.

---

## **LINGUISTICS MINOR INTERDISCIPLINARY PROGRAM**

---

Interdisciplinary Linguistics Board: SHARON MONTGOMERY (Philosophy);

Chn.), **ANDERSON** (English; At-large), **BORMANN** (Special Education-Speech and Hearing), **HUDSON** (Humanities and Social Science) **ISAR** (Foreign Languages), **JACOBS** (Psychology), **OLIN-FAHLE** (Sociology-Anthropology), **TANNACITO** (English), **TOMPKINS** (Computer Science)

Linguistics is a social science, concerned with an aspect of behavior that has traditionally set humans apart from the other animals—our use of an intricate system of speech sounds to communicate with our peers and our use of written symbols to transmit our accumulated knowledge to our descendants. Language has always been regarded as peculiarly human, but even this belief is being questioned by those conducting contemporary experiments on the language capabilities of monkeys. The problems of modern linguistics are of concern to many diverse fields, including anthropology, sociology, psychology, philosophy, and speech and hearing. Linguistics has always had a close relationship with literature and foreign language learning. Developments in other areas have had their impact on linguistics. Formal models of language and its structures are a part of computer science. This Interdisciplinary Linguistics Minor is intended to offer to students the opportunity to acquaint themselves with modern linguistics from a variety of perspectives.

The Interdisciplinary Linguistics Minor consists of 18 semester hours chosen from the list of options below, selected from at least three participating departments, and including no more than 6 semester hours from the student's major department. Any one of the following courses is strongly recommended as an initial program course: AN 233, EN 330, FL 421, or SH 302.

The program is academically supervised by an Interdisciplinary Linguistics Board consisting of the Associate Dean of Social Sciences and Humanities, an at-large complement, and one representative from each of the following departments: Computer Science, English, Foreign Languages, Philosophy, Psychology, Sociology-Anthropology, and the Speech and Hearing section of the Special Education Department. Board members serve as Interdisciplinary Linguistics advisers.

Some of the courses listed below in the program have prerequisites; these must be satisfied as prescribed by the department offering the course.

### **Program Courses**

AN 233 Cultural Symbolism I: Language in Culture  
 CO 220 Applied Computer Programming Languages  
 CO 340 Data Structures and Non-Numeric Programming  
 CO 460 Theory of Computation  
 EN 230 History of the English Language  
 EN 330 The Structure of English  
 EN 331 Trends in Linguistics  
 EN 332 Dialects in American English  
 EN 333 Psycholinguistics (Also PC 333)  
 FL 421 Language and Society  
 FL 351-352 Advanced Language I-II, where fl is FR, LA, SP, GM, or RU (French, Latin, Spanish, German, or Russian).  
 FR 461 Structures of French and English  
 PH 221 Logic I  
 PH 300 Philosophy of Language  
 PH 321 Logic II  
 PC 333 Psycholinguistics (also EN 333)



SH 302 Language Development

SH 430 Language Disorders

NOTE: Specific offerings of Special Topics or other courses in the 480 series offered by participating departments may be approved by the board for inclusion in the minor. Consult Board members for current information.

## PHILOSOPHY DEPARTMENT

---

**ROBERT M. HERMANN, CHAIRPERSON: BOONE, BOUFFARD, CHAN, FER-RARA, LIN, MLECKO, MONTGOMERY, SCHAUB.**

### Philosophy (Major and Minor)

The program in philosophy is designed to provide the student with a capacity for thinking clearly, a critical attitude and the ability to reason theoretically.

The major offers the background required for graduate work in philosophy. Those whose primary interests are in other disciplines will find philosophy courses which relate directly to their fields on a theoretical level. Both the minor and double major are especially desirable for their reflective benefits and because of the essentially interdisciplinary nature of philosophy.

### Requirements for Major and Minor Philosophy

<b>Major</b>			<b>Minor</b>
	PH 101	General Logic or	
3 s.h.....	PH 221	Symbolic Logic I .....	3 s.h.
	PH 324	History of Philosophy I or	
	PH 325	History of Philosophy II or	
6 s.h.....	PH 410	Contemporary Philosophy.....	6 s.h.
18 s.h. ....		Departmental Electives.....	6 s.h.
27 s.h. total			15 s.h. total

No more than one 100-level course may be counted toward the major or minor. Majors concentrating in Philosophy may take up to 9 semester hours in Religious Studies, minors no more than 3 semester hours. These courses are indicated in the catalog by an asterisk.

### Religious Studies

A program of courses in religious studies including a minor is offered by the department. These courses are indicated with an asterisk. The program in religious studies is designed to provide a balanced, non-sectarian approach leading to a better understanding of the phenomenon of religion in human experience.

Students considering theological schools, and related vocations such as religious journalism, broadcasting or education are encouraged to pursue a Philosophy major and/or a Religious Studies minor.

**Requirements for minor in Religious Studies**

No more than one 100-level course may be counted among the required fifteen semester hours. One philosophy course (3 s.h.) may be included among the department electives.

**REQUIRED**

PH 310 Western Religious Thought in Development	3 s.h.
PH 340 Contemporary Western Religious Thought	3 s.h.
PH 311 Oriental Religio-Philosophic Thought	3 s.h.
Departmental Electives	6 s.h.
	15 s.h. total

**Pre-Law Program**

The Philosophy Department participates in the university Pre-Law Minor Program whereby a student majors in one of several academic disciplines including philosophy and also meets the pre-law minor requirements. Students interested in the philosophy major/pre-law minor should consult with the departmental pre-law adviser. Philosophy courses included in the pre-law minor program are as follows: PH 101, General Logic, PH 222, Ethics and PH 327 American Philosophic Thought.

**COURSE DESCRIPTIONS**

\*PH 100 INTRODUCTION TO RELIGION 3 s.h.

A beginning approach to the study of religion. Questions discussed will include: the nature of religion, types of religion, origins of religion, conceptions of deity, the religious nature and destiny of man, religion and science, religion and society, and contemporary religious issues.

PH 101 GENERAL LOGIC: METHODS OF CRITICAL THINKING 3 s.h.

Designed to develop students' ability to critically analyze deductive and inductive argumentation, rhetoric and persuasion, with examples drawn from media, textbooks, advertising, scholarly works, personal contacts, etc. Emphasis upon the nature of definition, clarification of meaning, detection of fallacies, scientific methodology, and logic as a practical tool.

\*PH 110 WORLD RELIGIONS 3 s.h.

History, comparative theology, ritual and contemporary influences of world's major religions. A nonsectarian study of religions such as Hinduism, Buddhism, Confucianism, Taoism, Shinto, Zoroastrianism, Judaism, Christianity, and Islam.

PH 120 INTRODUCTION TO PHILOSOPHY 3 s.h.

Designed to acquaint the beginning student with philosophical problems and methods in such areas as metaphysics, epistemology, logic, value theory and philosophy of religion.

\*PH 210 WORLD SCRIPTURES 3 s.h.

Major sacred writings of Hindu, Buddhist, Zoroastrian, Moslem, Confucian, Taoist, and Judeo-Christian traditions will be studied from point of view of their religious significance.

PH 221 SYMBOLIC LOGIC I 3 s.h.

An introduction to symbolic logic dealing with the symbolization of deductive arguments in the sentential calculus, syllogistic calculus and quantificational calculus, including the logic of relations. Natural deduction proofs, truth trees and other tests of validity are covered.

PH 222 ETHICS 3 s.h.

Investigation of efforts to rationally justify moral judgment, What is moral? Are moral notions cultural, rational, divine, or innate in origin? Are they relative or absolute? Are they intuitive, cognitively meaningless, or supportable by good reasons?

- PH 223 PHILOSOPHY OF ART** 3 s.h.  
 Meaning of aesthetics as a philosophical discipline; methodological questions; a classification of problem areas; questions of imitation, history and art, the artist, the audience; consideration of some of the major western and non-western writers' positions. Nature of artistic creativity; art and anarchy; chance and art; definition of art in the present culture.
- PH 300 PHILOSOPHY OF LANGUAGE** 3 s.h.  
 An investigation of issues in the philosophy of language and related issues in linguistics (including anthropological linguistics, sociolinguistics and psycholinguistics). Topics include, e.g. the influence of language on perception, rationalist/empiricist perspectives on language acquisition, language and political control, reference, meaning, truth.
- \*PH 310 WESTERN RELIGIOUS THOUGHT IN DEVELOPMENT** 3 s.h.  
 Theological development of the Judaeo-Christian religious tradition, approached through in depth study of selected writings from the early Church Fathers to the Protestant Reformers.
- \*PH 311 ORIENTAL RELIGIO-PHILOSOPHIC THOUGHT** 3 s.h.  
 Advanced study in those religious philosophies which have shaped the oriental worldviews and ways of life. Emphasis on Hinduism, Jainism, Buddhism, Confucianism, Taoism, Mohism, and Shinto.
- \*PH 312 BIBLICAL HISTORY AND PALESTINIAN ARCHAEOLOGY** 3 s.h.  
 An investigation of religio-historical traditions of the Bible in light of archaeological research. Will include study of archaeological method and interpretation, discoveries in Egypt, Mesopotamia, and Syro-Palestine as background for understanding the traditions and religious practices and beliefs of Israel, and special questions surrounding the Patriarchal narratives, the Exodus and Conquest, Israel under David and Solomon, the Dead Sea Scrolls and N.T. times.
- PH 321 SYMBOLIC LOGIC II** 3 s.h.  
 Prerequisite: PH 221 or permission of instructor  
 A continuation of Logic I designed to enable students to evaluate consistency of statements, validity of arguments, soundness and completeness of formal systems. Focus on quantificational calculus and inductive logic.
- \*\*PH 323 POLITICAL PHILOSOPHY** 3 s.h.  
 Political thought of such major classical theorists as Plato, Aristotle, Cicero, Augustine, Aquinas, Hobbes, Rousseau, Locke, Marx, and Mill, examined against the background of metaphysical roots from which their political views derive.
- PH 324 HISTORY OF PHILOSOPHY I: ANCIENT AND MEDIEVAL** 3 s.h.  
 Western philosophy of pre-Socratic, classical Greek, Roman and medieval periods. Special attention given to Plato, Aristotle, Augustine, and Aquinas, as well as the philosophic schools.
- PH 325 HISTORY OF PHILOSOPHY II: RENAISSANCE AND MODERN** 3 s.h.  
 Continuation of PH 324, beginning with 15th century Renaissance thought and ending with the 19th century precursors of contemporary philosophies.
- \*\*PH 327 AMERICAN PHILOSOPHIC THOUGHT** 3 s.h.  
 Study of the more original and influential philosophical positions developed in America from colonial period to present, and of the thinkers who gave them their most complete expressions.
- PH 329 PHILOSOPHY OF RELIGION** 3 s.h.  
 Philosophical problems in religious thought: nature of religious experience, mysticism, defining religion, conceptions of deity, existence of God, meaning of religious language, faith, and knowledge.

**PH 330 PHILOSOPHY OF SCIENCE** 3 s.h.  
 An investigation into nature of formal and empirical sciences; structure of scientific thought and its dependence upon or independence of theory; the logical and metaphysical status of scientific laws and theoretical concepts; reductionism in science; the concept of causality; the logic of explanation; problems in confirmation theory; science and value. No special background required. Recommended for math and science majors.

**\*PH 340 CONTEMPORARY WESTERN RELIGIOUS THOUGHT** 3 s.h.  
 Introduction to thought of such contemporary theologians as Bonhoeffer, Buber, Bultrmann, Kierkegaard, Teilhard, Tillich, Barth, Brunner and Niebuhr.

**PH 410 CONTEMPORARY WESTERN PHILOSOPHY** 3 s.h.  
 Survey in depth of 20th century western positions such as pragmatism, logical positivism, logical and linguistic analysis, existentialism, and phenomenology.

**PH 420 METAPHYSICS** 3 s.h.  
 Divergent views of the nature of reality and the main questions which it raises: substance, unity, mind, existence, necessity, possibility, time, eternity, space, and the self.

**PH 421 THEORY OF KNOWLEDGE** 3 s.h.  
 Investigation into problems involved in justifying knowledge claims and a consideration of methods suggested for their resolution. Particular attention paid to problems of certainty, objectivity, perception and truth.

**PH 481 SPECIAL TOPICS** 3 s.h.  
 Topical courses which will vary from semester to semester. See current schedule of classes.

**PH 482 INDEPENDENT STUDY** 1-6 s.h.  
 Individual students wishing to pursue philosophical or religious studies interests not covered in the department's regular offering may do so by seeking approval for independent study. Make inquiry of the chairperson. Upon approval students are guaranteed at least five hours of faculty time per credit. All programs of study must be accepted by the department as a whole. May be taken more than once to maximum of 6 s.h. (This option is available to both philosophy majors and non-majors.)

**PH 482 INDEPENDENT STUDY: HONORS PROJECT** 3 s.h.  
 Prerequisites: 3.00 QPA, 15 s.h. in Philosophy and 3.20 average in departmental courses. Majors in Philosophy are invited to take 3 s.h. of independent study designated Honors Project. Upon satisfactory completion, graduation with departmental honors is possible.

\*Program in Religious Studies.

\*\*Offered at the discretion of the department.

---

## **POLITICAL SCIENCE DEPARTMENT**

---

**RICHARD F. HEIGES, CHAIRPERSON: CARONE, CHASZAR, GREEN, KEENE, KRITES, MORRIS, PALMER, PLATT, SMITH, THORPE, WILSON.**

Political scientists focus upon political systems, including the effect of environment on the system, inputs, the decision-making agencies which render binding public policies, and system outputs. Approaches to the study of government and politics include: the **NORMATIVE** approach, in which philosophical attention centers on values by asking the question, What ought to be?; and the **BEHAVIORAL** approach, in which an attempt is made to develop verifiable theories through scientific methods by asking the questions, how and why?

Students majoring in political science have employment opportunities in federal, state, and local governments, and with private civic groups, interest groups, and political groups. Students who go on to graduate work find appointments at higher levels and in college teaching. Students graduating in political science, as in any of the social sciences, are in demand by employers in business and industry. Students completing the Political Science Internship Program have experienced considerable success in finding employment upon graduation.

The political science major is also especially suitable for the pre-law student.

Degrees offered by the Political Science Department are the Bachelor of Arts in Political Science; in Government and Public Service; in Pre Law-Political Science; and the Bachelor of Science in Education with a Social Science Major, concentrating in Political Science. The department also offers a minor in political science.

An interdisciplinary major sponsored by the Political Science Department is International Studies. For information on this major, see section on International Studies.

## **CURRICULA**

---

### **Core Program**

Required of ALL Political Science majors and minors (except Government and Public Service majors) are six semester hours in the following basic courses:

PS 111 - American Politics	3 s.h.
PS 101 - World Politics	3 s.h.

### **B.A. in Political Science**

In addition to the Core Program, requirements for the Bachelor of Arts in Political Science are 30 more semester hours in political science, distributed so that at least one course is in three of the following four areas: American Studies, Political Theory, Public Administration, and International Studies. Students preparing for graduate study should take PS 499 - Scope and Methods, at least one Political Theory course, and courses in Computer Science and Statistics.

### **B.A. in Government and Public Service**

This major requires 36 s.h. as follows: PS 251, 370, 371, EC 330, 336; PC 358; SO 345; PC 200 or SO 231; plus 12 semester hours of the following: PS 250, 350, 351, 352, 353, 354, 355, 358, 499, 458 (Internship). Also majors should select one of five interdisciplinary minors prescribed by department. For descriptive information about this interdisciplinary program, contact department chairperson.

### **B.A. in Pre Law-Political Science**

The requirements for this major are the same as for the political science major with the addition of a 21 s.h. pre-law interdisciplinary minor.

For requirements in a pre-law minor students should contact the departmental pre-law adviser.

### **B.S. in Education (Political Science Concentration)**

In addition to the Core Program, requirements for the degree of Bachelor of Science in Education with a major in Social Science, Political Science concentration, are 9 more semester hours in political science. Recommended electives are PS 250, 251, 350, 353, or 354 and 499; desirable alternatives are PS 280, 283, 285, 352, 359, and 382-387.

### **Minor in Political Science**

A minor in political science consists of 15 semester hours in political science, composed of the 6 s.h. Core Program and 9 more semester hours elected from all political science courses.

## **COURSE DESCRIPTIONS**

---

### **Required Courses**

PS 111 AMERICAN POLITICS 3 s.h.  
Introduction to American national government and politics, emphasizing Constitution, Party system, Congress, Presidency, Courts, and problems in national-state relations, civil rights, foreign policy, and social and economic policies.

PS 101 WORLD POLITICS 3 s.h.  
Analysis of contemporary (Post 1945) state system and forces shaping world in which we live. Student is given a framework within which he can analyze contemporary international politics.

### **American Studies**

PS 250 PUBLIC POLICY 3 s.h.  
Emphasizes dynamics of government as they are evidenced in public opinion, pressure groups, political parties and our governmental institutions; attention also directed toward the political-economic nexus within American society.

PS 251 STATE AND LOCAL POLITICAL SYSTEMS 3 s.h.  
Institutions and processes of state and local governments, with special attention to Pennsylvania; emphasis on nature of federalism, state constitutions, and role of state and local government in an urban society.

PS 298 NEWS INTERPRETATION 1 s.h.  
Designed to provide students with techniques for intelligent reading of daily newspaper and weekly news magazines and to give some understanding of current affairs at state, national and international levels.

PS 350 THE PRESIDENCY 3 s.h.  
Examination of Office of President, with attention to constitutional foundations, evolution, structure, powers and functions; some comparisons between presidential and parliamentary systems and between offices of President and Governor.

PS 351 LEGISLATIVE PROCESS 3 s.h.  
Functional study of legislative bodies and process of legislation, covering organiza-

tion of legislative assemblies, operation of committee system, procedures, bill drafting, aids, and controls over legislation.

**PS 352 PUBLIC OPINION** 3 s.h.  
Study of nature of public opinion within political system; attention to formation of public opinion, expression, propaganda, mass media, and interest groups.

**PS 353 AMERICAN POLITICAL PARTIES** 3 s.h.  
The role of people, parties, and pressure groups in politics of American democracy; attention to sectional and historical roots of national politics, voting behavior, pressure group analysis, and campaign activities.

**PS 354 METROPOLITAN PROBLEMS** 3 s.h.  
Analyzes multiplicity of problems facing our metropolitan areas. Contemporary developments such as urban renewal, and shrinking tax base, federal aid to cities, subsidized mass transit, municipal authorities, and political consolidation are examined.

**PS 355 FEDERALISM** 3 s.h.  
Explores characteristics of federal systems of government, with emphasis on theories, origins, institutions, problems in intergovernmental relations in United States, federal systems in other nations, and trends.

**PS 356 MASS MEDIA IN AMERICAN POLITICS** 3 s.h.  
Variant theories of the symbolic relationship between American politics and the press are examined in the light of the American colonial-national experience. The special constitutional rights given to the media are explored, with particular attention to radio-TV.

**PS 358 JUDICIAL PROCESS** 3 s.h.  
Explores nature and limits of judicial power, courts as policy-making bodies, selection of judges, decision process, external forces impinging on the courts, and role of Supreme Court in its relationship with Congress, the Presidency, and federalism.

**PS 359 CONSTITUTIONAL LAW AND CIVIL LIBERTIES** 3 s.h.  
Study of civil liberties and civil rights issues through leading Supreme Court decisions; topics treated include First Amendment rights, procedural due process and the Bill of Rights, and Equal Protection problems in civil rights.

## **Political Theory**

**PS 360 CLASSICAL POLITICAL THOUGHT** 3 s.h.  
Evolution of the Western political tradition of Constitutionalism from Plato and Aristotle to Locke and Montesquieu; religious and rational foundations; medieval theories of authority and representation; early modern theories of the state and sovereignty; concepts of law; natural rights, liberty and equality, and justice treated in detail.

**PS 361 MODERN POLITICAL THOUGHT** 3 s.h.  
Development of Western political thought since the mid-16th century: classic liberalism; conservative thought; modern irrational ideologies such as fascism and national socialism; socialist thought; contemporary collectivist liberalism.

**PS 362 AMERICAN POLITICAL THOUGHT** 3 s.h.  
Develops an understanding of American political thinkers from the Puritans through the current Afro-American writers. Political phenomena is examined relating to past writings and inferences are made for future political behavior.

**Public Administration**

- PS 370 PUBLIC ADMINISTRATION I** 3 s.h.  
Theories of organization and structural organization, personnel processes, executive functions, financial administration, the politics of administration, public relations, and problems of democratic control of bureaucracy.
- PS 371 PUBLIC ADMINISTRATION II** 3 s.h.  
Intensive study of role of Federal agencies and their administrators in determining and developing public policy. Public administration in practice is emphasized by utilizing case studies.

**International Studies**

- PS 280 COMPARATIVE GOVERNMENT I - WESTERN POLITICAL SYSTEMS** 3 s.h.  
Analyzes western political systems with emphasis upon major contemporary democratic governments of Europe. Analyzes and compares their political cultures, political institutions and political processes.
- PS 281 INTERNATIONAL RELATIONS** 3 s.h.  
Provides a conceptual framework for understanding sovereignty, nationalism, power, security, dispute settlement, and diplomatic, legal, economic, and military relations of nation-states.
- PS 283 AMERICAN FOREIGN POLICY** 3 s.h.  
Examines formulation and execution of American foreign policy, with attention to governmental institutions, mass media, interest groups, and public opinion; emphasizes contemporary problems.
- PS 285 COMPARATIVE GOVERNMENT II: NON-WESTERN POLITICAL SYSTEMS** 3 s.h.  
Analyzes major non-western political systems with emphasis upon authoritarian and totalitarian systems. Analyzes and compares in a systematic manner their political cultures, political institutions and political processes.
- PS 320 INTERNATIONAL LAW** 3 s.h.  
Study of the development, nature, and function of international law, including recent trends.
- PS 321 INTERNATIONAL ORGANIZATIONS** 3 s.h.  
Inquiry into purposes, structures, and actions of contemporary international political organizations, such as United Nations, regional and functional organizations.
- PS 380 SOVIET POLITICS** 3 s.h.  
Essential features of Communist party and government of U.S.S.R., including geographical and historical background and ideological and theoretical foundations. PS 280, Comparative Government, should be taken prior to this course.
- PS 382-387 POLITICAL SYSTEMS** 3 s.h. each  
Intensive, comparative study of the government and politics of a selected region. Suggested prerequisites: PS 280 and/or 285. PS 382 - Africa PS 383 - Asia PS 384 - Middle East PS 385 - Central and Eastern Europe PS 386 - Atlantic Community PS 387 - Latin America
- PS 388 POLITICO-MILITARY STRATEGY** 3 s.h.  
Deals with national security problems including decision making and budgeting, levels of strategy, the utility of force, and the impact of the military on American society.



**PS 389 DEVELOPING NATIONS** 3 s.h.  
Suggested prerequisites: PS 280 and/or 285 Political characteristics of emerging nations; impact of economic and social change upon political structure; evolving patterns of political development; and techniques of nation-building.

### **Research Study and Methodology**

**PS 444 SCIENCE/TECHNOLOGY AND POLITICS** 3 s.h.  
Focuses on the interactions of science/technology and politics as they impinge on the public decision-making process. Technology generated socio-political problems are investigated on local, state, national, and international level; the adequacy of political processes and institutions for solving problems in the technological age is questioned.

**PS 480 POLITICAL SCIENCE SEMINAR** 3 s.h.  
Readings and written assignments on a specific topic determined by the instructor in charge.

**PS 481 SPECIAL TOPICS** 1-3 s.h.  
Course focusing on a specific topic determined by the instructor in charge. See Department Office for current listings.

**PS 482 INDEPENDENT STUDIES** 3 s.h.  
Readings and written assignments on a specific topic determined by the instructor and student. Permission required.

**PS 485 HONORS IN POLITICAL SCIENCE** 3 s.h.  
Prerequisites: 15 s.h. in Social Sciences, including 9 s.h. in Political Science, 2.0 QPA in Social Sciences, and permission of department chairperson and instructor.  
Directed readings and one or more papers; topic to be selected by instructor and student.

**PS 458 POLITICAL SCIENCE INTERNSHIP** 2-12 s.h.  
Prerequisites: 9 s.h. in Political Science with 2.0 QPA; PS 111; approval of Internship Director and Chairperson  
Practical experience in government and politics. Log and research project required. Course grade determined by the instructor.

**PS 499 SCOPE AND METHODS** 3 s.h.  
Prerequisite: PS 111  
Explores approaches, methods, and tools of Political Science, designed to prepare student who plans to do graduate work in Political Science. Majors and Minors only.

---

## **SOCIAL SCIENCE**

---

### **COURSE DESCRIPTIONS**

---

**SS 101 CONTEMPORARY SOCIAL SCIENCE** 3 s.h.  
An interdisciplinary study of a current social topic that uses a team teaching approach. Topics may vary from semester to semester. The course is one option in the Social Science General Education Program.

**SS 398 SOCIAL SCIENCE FOREIGN STUDY** 2-6 s.h.  
Directed foreign study, emphasizing historical, political, economic, social and geographical aspects of the area. Background reading, lectures and briefings, diary or evaluative paper. Course credit may be applied as General Education or elective credit. (For details see Center for International Studies.)

**Social Science Minor**

21 s.h.

A Social Science minor consists of course work in three Social Science departments beyond General Education courses.

---

## **SOCIOLOGY-ANTHROPOLOGY DEPARTMENT**

---

**HARVEY HOLTZ, CHAIRPERSON: ARROYO, BENTON, BROWN, GERALD, GRANT, LANHAM, LOUDEN, NEWHILL, NOWAK, OLIN-FAHLE, RAIBOURN, RAWLEIGH, SANDERSON, SNYDER, VEXLER.**

The Sociology-Anthropology Department provides opportunity for studies in sociology, anthropology, and social work. Sociology focuses primarily (though not exclusively) on the analysis of modern industrial societies by studying their basic patterns of social organization, the changes produced within these patterns, and the impact of these patterns on the thought and action of individual human beings. Anthropology is the study of human biological and cultural evolution, and is organized into four subfields: sociocultural anthropology, physical anthropology, linguistics, and archaeology. Social work involves the practical application of social-scientific knowledge toward the improvement of human relationships and the general quality of social life.

The curricula offered by the department are relevant to a variety of careers and lifetime undertakings. Many students plan to affiliate themselves with professional service, governmental, or research organizations, while other students hope to devote themselves professionally to the scholarly analysis of society by pursuing academic careers in sociology or anthropology. Our departmental programs are designed to serve these various needs and interests of students.

Several degree programs are offered by the department. Students may pursue the B.A. in Sociology or the B.A. in Anthropology with either an Academic or Social Work area of concentration. Those choosing the Academic emphasis typically have a serious intellectual interest in these fields and often continue their studies beyond the undergraduate level. On the other hand, those electing the Social Work area of emphasis generally intend to prepare themselves for careers in a variety of social service organizations. In addition to these programs (which are offered under the School of Social Sciences and Humanities), students may pursue a major in Social Science with a concentration in sociology or anthropology leading to the degree of B.S. in Education. This latter program is intended for the preparation of secondary school teachers and is offered within the School of Education. The department also offers minors in both sociology and anthropology.

---

## **CURRICULA IN SOCIOLOGY**

---

### **Bachelor of Arts in Sociology: Academic Concentration**

Students pursuing the B.A. in Sociology with an Academic Concentration are required to complete a total of 30 semester hours distributed as follows: SO 151 - Principles of Sociology, SO 435 - Social Stratification, SO 443 - Development of Social Theory, SO 455 - Social Research Methods, and six elective courses in sociology. A maximum of six semester hours of Internship in Sociology (SO 471) may be counted toward the 30 semester hours required for the major.

### **Bachelor of Arts in Sociology: Social Work Concentration**

Students pursuing the B.A. in Sociology with a Social Work Concentration are required to complete a total of 36 semester hours distributed as follows: SO 151 - Principles of Sociology, SW 301 - Social Work Methods, SW 302 - Intervention Strategies in Social Work, SW 455 - Social Research Methods, SW 346 - Social Welfare Policies or SW 459 - Development of Social Services, SW 471 - Field Placement in Social Work (for a minimum of nine semester hours and 12 additional semester hours in sociology).

### **Minor in Sociology**

A minor in sociology consists of a total of 15 semester hours distributed as follows: SO 151 - Principles of Sociology; SO 231 - Contemporary Social Problems or SO 443 - Development of Social Theory or SO 455 - Social Research Methods; and three other sociology electives.

## **CURRICULA IN ANTHROPOLOGY**

### **Bachelor of Arts in Anthropology: Academic Concentration**

Students pursuing the B.A. in Anthropology with an Academic Concentration are required to complete a total of 27 semester hours distributed as follows: AN 110 - Introduction to Anthropology, AN 222 - Introduction to Physical Anthropology, AN 233 - Cultural Symbolism: Language in Culture and Society, AN 244 - Basic Archaeology, one course from each of the three major groups (A, B, and C) of anthropology courses, and any two additional anthropology courses.

### **Bachelor of Arts in Anthropology: Social Work Concentration**

Students pursuing the B.A. in Anthropology with a Social Work Concentration are required to complete a total of 36 semester hours distributed as follows: AN 110 - Introduction to Anthropology, SW 301 - Social Work Methods, SW 302 - Intervention Strategies in Social Work, SW 455 - Social Research Methods, SW 346 - Social Welfare Policies or SW 459 - Development of Social Services, SW 471 - Field Placement in Social Work (for a minimum of nine semester hours), and 12 additional semester hours in anthropology.

### **Minor in Anthropology**

A minor in anthropology consists of a total of 15 semester hours. Students must take AN 110 - Introduction to Anthropology and four other anthropology courses of their choice.

## **COURSE DESCRIPTIONS**

### **Sociology Courses**

- SO 151 PRINCIPLES OF SOCIOLOGY 3 s.h.  
Scientific study of structure and functioning of human societies, with special attention to factors responsible for organization and transformation of socio-cultural systems. Specific course content varies from one instructor to another.

- SO 231 CONTEMPORARY SOCIAL PROBLEMS 3 s.h.  
Exploration of some pressing problems currently endemic to Western society. Problems are defined and solutions explored in light of historical, political, economic, social, and anthropological data.
- SO 233 CULTURAL SYMBOLISM: LANGUAGE IN CULTURE AND SOCIETY 3 s.h.  
Focuses on social and cultural functions of language. Particular emphasis on analysis of non-Western languages.
- SO 237 NON-WESTERN CULTURES 3 s.h.  
A minimal orientation to study of cultural diversity in human societies. Emphasis on determinants of cultural variability and the problem of ethnocentrism. Recommended for Social Science Education students who concentrate in Sociology or Anthropology.
- SO 251 SOCIOLOGY OF HUMAN SEXUALITY 3 s.h.  
Depth analysis of a formerly taboo topic, human sexuality, whereby current information derived from biological, psychological, and sociological research on human relationships is presented to provide a foundation for self-understanding and societal values.
- SO 314 ETHNOLOGY OF NORTH AMERICAN INDIANS 3 s.h.  
Survey of culture history and culture area characteristics of Indians of North America. Detailed study of representative groups related to historical, functional, and ecological concepts.
- SO 322 CULTURE AND PERSONALITY 3 s.h.  
Prerequisites: PC 101, and SO 151 or AN 110  
Examination of personality characteristics produced in a given cultural milieu or sub-group. Cross-cultural comparisons and analyses made with respect to child-rearing, male-female role differentiation, bodily movements, suppression, mental disturbance, and religious expression.
- SO 332 RACIAL AND ETHNIC MINORITIES 3 s.h.  
Prerequisite: SO 151  
Study of racial, ethnic, and religious minorities and divergent heritages in our national life.
- SO 333 JUVENILE DELINQUENCY 3 s.h.  
Prerequisite: SO 151  
Study of social and cultural factors involved in various youth life styles, including delinquency. Cross-cultural and historical approach used in a review of social norms, social control and socialization institutions, and community-based programs for rehabilitation.
- SO 334 POPULATION TRENDS AND PROBLEMS 3 s.h.  
Prerequisite: SO 151  
Major forces of population change examined. Problems of excessive population growth rates outside of U.S. and declining growth rates in U.S. analyzed. Threats to ecological stability discussed.
- SO 336 SOCIOLOGY OF THE FAMILY 3 s.h.  
Prerequisite: SO 151  
Sociological study of the family from various theoretical viewpoints. Emphasis on relation between structure and function of the family and the existing and emerging social environment.
- SO 339 THE COMMUNITY 3 s.h.  
Prerequisite: SO 151  
Analysis of the social structure of communities on the local level in relation to the national community structure. Examination of current problems and future trends.
- SO 340 SOCIOLOGY OF INDUSTRY 3 s.h.  
Prerequisite: SO 151  
Examination of industrial organizations and their environments. Production systems analyzed in terms of different forms of organization, e.g., bureaucratic, power-equilibrium, and worker-

participation. Special attention paid to who defines production, how such definitions are legitimized, and how constraints are placed on such definitions by union and other political organizations.

SO 341 SOCIOLOGY OF EDUCATION 3 s.h.

Prerequisite: SO 151

Examines the place of education in society. Special attention to development of education in America and its relation to political and economic phenomena. Some attention given to education in other industrial and agrarian societies.

SO 342 SOCIAL AND CULTURAL ASPECTS OF HEALTH AND MEDICINE 3 s.h.

Prerequisite: 6 s.h. in Sociology or Anthropology

Review of fields of medical sociology and anthropology. Focus on such topics as health and illness in cross-cultural context, aging, social and psychological aspects of pain, and social organization of health facilities and services. Definitions of limits of life and death in context of new technological and ethical issues such as euthanasia, genetic counseling, and organ transplants also discussed.

SO 345 INTERPERSONAL DYNAMICS 3 s.h.

Prerequisite: SO 151

Study of interaction between and among individuals and groups in various social settings. Emphasis on small groups, socialization, social influence and compliance, person perception, collective behavior, and mass communication.

SO 346 POLITICAL SOCIOLOGY 3 s.h.

Prerequisite: SO 151

Examination of social context of power and politics, with special reference to such topics as: who controls the state and state policy; the role of the state in - stabilizing capitalism and protecting the power of the upper class; political activities of the middle and upper classes; and labor, civil rights, and welfare rights social movements in America.

SO 352 SOCIOLOGY OF RELIGION 3 s.h.

Prerequisite: SO 151

Nature of religion as a universal social institution. Universal and variable features of human religious activity examined, with special attention to causes and consequences of religious belief and action. Specific topics discussed include: theories of the origin and persistence of religion; evolution of variant forms of religion; relationship between religion and other social institutions, especially economy, polity, and science; types of religious organization in complex societies; revitalization and messianic movements; and the process of secularization.

SO 354 SEXUAL INEQUALITY IN HUMAN SOCIETIES 3 s.h.

Prerequisite: SO 151

Explores current perspectives on sexual inequality. Major topics examined include: sex role socialization, sexual inequality in everyday life, the maintenance of sexual inequality, and the sexes in relation to economy and family in various societies.

SO 357 SOCIOLOGY OF AGING 3 s.h.

Prerequisite: SO 151

Introduction to various problems faced in the process of growing older. Attitudes of society toward elderly and social and cultural impact of an aging U.S. population examined.

SO 371 CULTURAL AREA STUDIES 3 s.h.

Prerequisite: SO 151

Analysis of prehistoric, historic, and contemporary aspects of ethnological studies in a culture area. Social organization, linguistic ties, cultural ecology, folklore, mythology, artistic expressions of the peoples, and their world view are examined. The course may be repeated UNDER DIFFERENT LETTER DESIGNATIONS according to selection of culture area by instructors responsible for the course.

## THE FOLLOWING CULTURE AREAS ARE AVAILABLE:

AN 371A CULTURAL AREA STUDIES: JAPAN

AN 371B CULTURAL AREA STUDIES: CHINA

AN 371C CULTURAL AREA STUDIES: CARIBBEAN

AN 371D CULTURAL AREA STUDIES: NORTHERN EUROPE

- SO 401 SOCIAL AND CULTURAL CHANGE 3 s.h.  
Prerequisite: SO 151  
Exploration of current perspectives on social and cultural change. Special attention to types of changes individuals might want, how these might be implemented, and lessons to be learned from various change efforts.
- SO 435 SOCIAL STRATIFICATION 3 s.h.  
Prerequisite: SO 151  
Examines who gets what and why? Detailed analysis of bases of power for and cohesion of super-rich, middle class, and poor. Also examines mobility and how policies affect inequality in America.
- SO 443 DEVELOPMENT OF SOCIAL THEORY 3 s.h.  
Prerequisites: 9 s.h. in sociology and Junior standing  
Examination of historical development of social theory with special attention to the classical theorists and theoretical ideas which have contributed most significantly to modern sociology.
- SO 447 MODERN SOCIOLOGICAL THEORY 3 s.h.  
Prerequisite: SO 443  
Detailed examination of major theoretical issues, perspectives, and controversies occupying center stage in contemporary sociological analysis. Major attention to nature and logic of social theorizing, primary macro-level theoretical perspectives which compete for attention in contemporary sociology, and the nature of new directions currently being taken within sociological theory.
- SO 455 SOCIAL RESEARCH METHODS 3 s.h.  
Prerequisites: 9 s.h. in sociology and Junior standing  
Examines diverse research designs used in the social sciences, i.e., survey, field study, experiment, documentary, and existing statistical data. Focuses both on logic and practice of social research. Students choose either a number of mini-projects or a major research project.
- SO 459 DEVELOPMENT OF SOCIAL SERVICES 3 s.h.  
Prerequisite: Permission of the instructor  
Examination of ideological and institutional conditions which shape health, unemployment, social security, and welfare services.
- SO 471 INTERNSHIP IN SOCIOLOGY 3-12 s.h.  
Prerequisite: Permission of the instructor  
Supervised experience in public or private organizations that extends and complements coursework at the University.
- SO 480 SOCIOLOGY SEMINAR 1-3 s.h.  
Prerequisite: SO 151  
Seminar for advanced students devoted to an intensive analysis of specialized issues within the discipline.
- SO 481 SPECIAL TOPICS IN SOCIOLOGY 3 s.h.  
Prerequisite: SO 151  
Focuses on special topics in sociology which are not included in regular course offerings.
- SO 482 INDEPENDENT STUDY 1-3 s.h.  
Prerequisite: Permission of the instructor  
An opportunity for students to engage in an in-depth analysis of some topic through consultation with a faculty member. A semester project ordinarily expected.

## SO 483 READINGS IN SOCIOLOGY

1-3 s.h.

Prerequisite: SO 151

Directed readings on special topics in sociology.

**Anthropology Courses****Required Courses**

## AN 110 INTRODUCTION TO ANTHROPOLOGY

3 s.h.

General consideration of human biological and cultural adaptations, stressing analysis of nature of cultural systems as a methods for perceiving and understanding variations among people today

## AN 222 INTRODUCTION TO PHYSICAL ANTHROPOLOGY

3 s.h.

Biological evolution and principles of human genetics; evolution of the primates and the fossil record for human evolution stressed; relationship between race and culture discussed.

## AN 233 CULTURAL SYMBOLISM: LANGUAGE IN CULTURE AND SOCIETY

3 s.h.

Focuses on social and cultural functions of language. Particular emphasis to problems in anthropology with respect to non- Western languages.

## AN 244 BASIC ARCHAEOLOGY

3 s.h.

Investigates basic concepts and goals of archaeology. Models of culture change, dating techniques, artifact analysis, settlement systems, and regional exploration strategies presented. Reconnaissance and excavation methods surveyed. Field and laboratory experience provided.

**Archaeology**

## AN 313 WORLD PREHISTORY

3 s.h.

Prehistory of the world stressing Mesolithic through Urban transitions. Emphasis to technology, chronology, ecology, and cultural processes.

## AN 315 NORTH AMERICAN ARCHAEOLOGY

3 s.h.

Prerequisite: AN 110 or AN 244

Prehistory of North American Indians emphasizing technology and stylistics, history, and cultural ecology.

## AN 317 QUANTITATIVE AND INSTRUMENTAL ARCHAEOLOGY

3 s.h.

Theory and methods for quantitative analysis of archaeological data applied to data recovered by University excavation programs. Instruments used for analysis of artifacts, flotation samples, features, soil samples, and for report preparation will be used by each student.

## AN 320 ARCHAEOLOGICAL FIELD SCHOOL

6 s.h.

Prerequisite: AN 110 or AN 244

Field excavation of selected archaeological sites in Indiana and adjacent counties. Opportunity for varied experience in historic and prehistoric Indian sites. Offered Summer only.

**Areal Ethnography**

## AN 312 WORLD ETHNOGRAPHY

3 s.h.

Detailed study of specific non-literate cultures. Emphasis given to questions of cultural integration.

## AN 314 ETHNOLOGY OF NORTH AMERICAN INDIANS

3 s.h.

Survey of culture history and culture area characteristics of Indians of North America. Detailed study of representative groups related to historical, functional, and ecological concepts.

**AN 371 CULTURAL AREA STUDIES** 3 s.h.  
 Prerequisite: AN 110 or AN 211  
 Analysis of prehistoric, historic, and contemporary aspects of ethnological studies in a culture area. Social organization, linguistic ties, cultural ecology, folklore, mythology, artistic expressions of the peoples, and their world view examined. Course may be repeated UNDER DIFFERENT LETTER DESIGNATIONS according to selection of culture areas by instructors responsible for the course.

THE FOLLOWING CULTURE AREAS ARE AVAILABLE:  
 AN 371A CULTURAL AREA STUDIES: JAPAN  
 AN 371B CULTURAL AREA STUDIES: CHINA  
 AN 371C CULTURAL AREA STUDIES: CARIBBEAN  
 AN 371D CULTURAL AREA STUDIES: NORTHERN EUROPE

### **Topical Anthropology**

**AN 211 CULTURAL ANTHROPOLOGY** 3 s.h.  
 Explores nature of culture as a human survival technique. Provides a framework for appreciation and understanding of cultural differences and similarities in human societies, past and present.

**AN 316 ANTHROPOLOGY OF RELIGION** 3 s.h.  
 Prerequisite: AN 110 or AN 211  
 Explores nature, function, and universal characteristics of religion in human society by utilizing cross-cultural approach. Theories concerning religious phenomena serve as topics for discussion.

**AN 318 MUSEUM METHODS** 3 s.h.  
 Prerequisite: AN 110 or 211 or 244  
 Lecture and laboratory course surveying role of museums as social and educational institutions, types of museums, museum administration, and museum architecture. Procedures for collection, curation, preservation, and storage of anthropological and natural history specimens examined. Multi-media communication stressed in exhibit preparation and gallery design. Provides practical experience in exhibit preparation and installation. Required field trip to Washington, D.C. museums.

**AN 319 KINSHIP AND SOCIAL ORGANIZATION** 3 s.h.  
 Prerequisite: AN 110 or AN 211  
 Survey of mechanisms of integration in social organization and their role in the development of societies. Family, kinship, and ideological systems stressed.

**AN 321 METHODS OF CROSS-CULTURAL ANALYSIS** 3 s.h.  
 Prerequisite: AN 110 or AN 211  
 Comparative methods and techniques reviewed and evaluated in relation to the problems they were designed to solve. Statistics and computational equipment used in the analysis of data derived from the Ethnographic Atlas or the Human Relations Area Files.

**AN 322 CULTURE AND PERSONALITY** 3 s.h.  
 Prerequisites: PC 101, and AN 110 or SO 151  
 Examination of personality characteristics produced in a given cultural milieu or sub-group. Cross-cultural comparisons and analyses made with respect to child rearing, male-female role differentiation, bodily movements, suppression, mental disturbance, and religious expression.

**AN 401 SOCIAL AND CULTURAL CHANGE** 3 s.h.  
 Prerequisite: AN 110 or SO 151  
 Exploration of current perspectives on social and cultural change. Special attention given to types of changes individuals might want, how these might be implemented, and lessons to be learned from various change efforts.



**Additional Anthropology Courses**

- AN 480 ANTHROPOLOGY SEMINAR** 1-3 s.h.  
A seminar for advanced students devoted to an intensive analysis of specialized issues within the discipline.
- AN 481 SPECIAL TOPICS IN ANTHROPOLOGY** 3 s.h.  
Focuses on specialized topics in anthropology which are not included among regular course offerings.
- AN 482 INDEPENDENT STUDY** 1-3 s.h.  
An opportunity for students to engage in an in-depth analysis of some topic through consultation with a faculty member. Some kind of semester project ordinarily expected.
- AN 483 READINGS IN ANTHROPOLOGY** 1-3 s.h.  
Directed readings on special topics in anthropology. Instructor guides selection of readings.

**Social Work Courses**

- SW 238 INTRODUCTION TO SOCIAL WORK** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Introduction to the dynamics of helping relationships.
- SW 301 SOCIAL WORK METHODS** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Examines the four content areas of social work practice: casework, group work, community organization, and human services administration.
- SW 302 INTERVENTION STRATEGIES IN SOCIAL WORK** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Discussion of social work strategies involving the individual, the family, and the group as units of intervention. Attention given to professional relationships, interviewing skills, and the range of practice modalities.
- SW 346 SOCIAL WELFARE POLICIES** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Examination of the historical development of social welfare policies in Western society.
- SW 401 SOCIAL CASEWORK** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Introduction to various strategies of social casework. Special emphasis given to assisting the students in incorporating those values and communication skills necessary for effecting change in the social situations of a variety of clients.
- SW 403 SOCIAL GROUP WORK** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Examines principles and concepts of social group work as a method or strategy; role of the social worker with the group and the individual within the group; consideration of group processes and dynamics of how groups develop; use of program planning and administration.
- SW 405 COMMUNITY ORGANIZATION** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Examination of approaches used in community organization practice at the neighborhood and other community levels. Areas of emphasis include intergroup relationships, community development, social conflict and consensus, and community problem solving.
- SW 407 HUMAN SERVICES MANAGEMENT** 3 s.h.  
Prerequisite: SO 151 or AN 110  
Treats social agencies as social systems. Focuses on interpersonal and intergroup relation-

ships, communication decision making and policy formulation, and administrative implications of training, supervision, fund-raising, consultation, budgeting, and research.

**SW 455 SOCIAL RESEARCH METHODS** 3 s.h.

Prerequisites: 9 s.h. in sociology and Junior standing

Examines diverse research designs used in the social sciences, i.e., survey field study, experiment, documentary, and existing statistical data. Focuses both on logic and practice of social research. Students choose either a number of mini-projects or a major research project.

**SW 459 DEVELOPMENT OF SOCIAL SERVICES** 3 s.h.

Prerequisite: Permission of the instructor

Examination of ideological and institutional conditions which shape health, unemployment, social security, and welfare services.

**SW 471 FIELD PLACEMENT IN SOCIAL WORK** 3-12 s.h.

Prerequisite: Permission of the instructor

Supervised experience in community work with cooperating public and private agencies.

**SW 480 SOCIAL WORK SEMINAR** 1-3 s.h.

Prerequisite: SO 151 or AN 110

Seminar for advanced students devoted to an intensive analysis of specialized issues within the discipline.

**SW 481 SPECIAL TOPICS IN SOCIAL WORK** 3 s.h.

Prerequisite: SO 151 or AN 110

Focuses on special topics in social work which are not included in regular course offerings.

**SW 482 INDEPENDENT STUDY** 1-3 s.h.

Prerequisite: Permission of the instructor

An opportunity for students to engage in an in-depth analysis of some topic through consultation with a faculty member. Semester project ordinarily expected.

**SW 483 READINGS IN SOCIAL WORK** 1-3 s.h.

Prerequisite: SO 151 or AN 110

Directed readings on special topics in social work.



## BOARD OF STATE COLLEGE AND UNIVERSITY DIRECTORS

---

MRS. PATRICIA M. COGLAN, CHAIRPERSON.....	Beaver Falls
LAWRENCE FENNINGER, JR.....	Riegelsville
MISS REBECCA F. GROSS.....	Lock Haven
JO HAYS.....	State College
MRS. ROBERTA J. MARSH.....	Stroudsburg
PETER A. McGRATH.....	Malvern
PERCY D. MITCHELL.....	Williamsport
IRVING O. MURPHY, ESQ.....	Erie
FREDERICK A. REDDIG.....	Shippensburg
RALPH J. ROBERTS.....	Bala Cynwyd
BERNARD F. SCHERER.....	Greensburg
BEVERLY SCHIFFRIN.....	Gladwyne
HONORABLE HARRY E. SEYLER.....	York
DR. JOHN B. VELTRI.....	Pittsburgh
STEPHEN L. YALE.....	Philadelphia

## IUP BOARD OF TRUSTEES

---

SENATOR PATRICK J. STAPLETON, President.....	Indiana
PATRICK F. McCARTHY, Vice President.....	Punxsutawney
FRANK GORELL, Secretary.....	Indiana
A. J. DEREUME, Treasurer.....	Punxsutawney
MIRIAM K. BRADLEY.....	Monroeville
ROBERT J. SHUPALA.....	Fairview
E. JAMES TRIMARCHI.....	Indiana

## ARMSTRONG COUNTY CAMPUS ADVISORY BOARD

---

JAMES WYANT, President	LAWRENCE A. ROSENSON
ROBERT H. DOERR, Secretary	JOHN GAVRAN
JOHN B. McCUE	MARGARET CLAYPOOL
	HERBERT A. BENTON

## PUNXSUTAWNEY CAMPUS ADVISORY BOARD

---

SID CARLTON, President	GLENN HENERY
GEORGE ADAMSON, 1st Vice Pres.	JOHN KELLY
THOMAS BARLETTA, 2nd Vice Pres.	ANDREW LASKA
EUGENE CURRY, Treasurer	NICHOLAS LORENZO, JR.
ELAINE LIGHT, Secretary	PATRICK McCARTHY
GEORGE BROWN, JR.	WALTER MORRIS
M. L. CARLTON	RALPH ROBERTS
WILLIAM COOPER	MRS. JOHN SCHWARTZ
THOMAS CURRY	FRANK SHAW
AUGUST DEREUME	GEORGE WEST
CHARLES ERHARD	SIDNEY WILLAR

# DIRECTORY

## ADMINISTRATIVE OFFICERS

---

<b>JOHN E. WORTHEN</b> .....	<b>President</b>
Robert L. Gaylor .....	Special Assistant to the President
<b>BERNARD T. GILLIS</b> .....	<b>Academic Vice President and Provost</b>
Cyrus A. Altimus .....	Dean, School of Business
J. Christopher Benz .....	Dean, School of Fine Arts
John Chellman .....	Dean, School of Health Services
Stephen E. Gray .....	Associate Dean and Director of Cooperative Medical Program
Herman L. Sledzik .....	Director of Athletics
Ruth Podbielski .....	Associate Director of Athletics
Charles R. Fuget .....	Dean, School of Natural Sciences and Mathematics
Joseph M. Gallanar .....	Dean, School of Social Sciences and Humanities
Jerry T. Ice .....	Dean, School of Continuing Education
Karen L. Chickos .....	Director, General Credit and Extension
Judith L. Cope .....	Director, Adult Education Center
James M. Danko .....	Director, Adult Corrections Education
Karen G. Deichert .....	Director, Adult Advisement Center
Charles J. Gallimore .....	Director, Programs for Business, Industry and Labor
Nancy K. Doverspike .....	Director, CETA Training Program
Robin A. Ferra .....	Assistant Director, CETA Training Program
Helen R. Skinner .....	Assistant Director, CETA Training Program
Paul L. Lang .....	Director, Crime Study Center

Ronald S. Martinazzi.....	Director, Criminology Extension Program
Cleo McCracken.....	Director, Womens Resource Center
Brian J. McCue.....	Director, Community-University Studies
Martin Morand.....	Director, Center for the Study of Labor Relations
Ronald S. Reed.....	Coordinator, Emergency Medical Training Programs
Nancy D. Rubino.....	Coordinator of Continuing Education for Nurses
Shirley J. Sharp.....	Coordinator, Older Americans Program
M. Kathleen Jones.....	Dean, School of Home Economics
Major Ralph Italia.....	Chairperson, Military Science
Charles M. Kofoid.....	Dean, School of Education
Charles D. Foust.....	Associate Dean, School of Education
John Johnson.....	Acting Director of Laboratory Experiences
Warner E. Tobin.....	Director, University School
Robert Warren.....	Associate Provost
Robert H. Doerr.....	Director, Armstrong County Campus
Richard A. Distanislao.....	Assistant to Director, Armstrong
Norman Storm.....	Director, Punxsutawney Campus
Vacant.....	Assistant to Director, Punxsutawney
William E. Lafranchi.....	Director of Libraries
Ronald A. Steiner.....	Associate Director of Libraries
C. Donald Seagren.....	Registrar
Frederick A. Sehring.....	Assistant Registrar
Diane L. Duntley.....	Director, Academic Services and Testing Center
<b>BERNARD J. GANLEY.....</b>	<b>Vice President for Administration</b>
Charles E. Receski.....	Assistant to Vice President for Administration
Vacant.....	Coordinator, Maintenance and Communications
William A. Donatelli.....	Director, Public Safety
Richard Smith.....	Purchasing Officer
Robert L. Marx.....	Director, Campus Planning
Charles T. Buford.....	Personnel Director
Ronald Bartlebaugh.....	Assistant Personnel Director
Robert L. Gaylor.....	Director, Employee Relations
<b>Vacant.....</b>	<b>Vice President for Student Affairs</b>
Fred Dakak.....	Dean of Admissions
Nancy Newkerk.....	Associate Dean of Admissions
Lyman Connor.....	Assistant Dean of Admissions
Robert McGowan.....	Assistant Dean of Admissions
James W. Laughlin.....	Dean of Student Services
John E. Frank,Dir.....	Counseling Services and Veterans Affairs
Alexis Falek.....	Counseling Center
John Reid.....	Counseling Center
Crawford W. Johnson.....	Director, EOP
Ronald Lunardini.....	Assistant Director, EOP
Vacant.....	Counselor, EOP
Alphonse N. Novels.....	Counselor, EOP
Kay Stratton.....	Assistant Director, Program for Scholars
Carolyn J. Wilkie.....	Special Services
Roy A. Moss.....	Acting Director, Career Services
Frederick A. Joseph.....	Director, Financial Aid
Sally C. Abrams.....	Assistant Director, Financial Aid
William R. Srsic.....	Associate Director, Financial Aid
Terrell O. Martin.....	Director, Special Programs and Organizations
Vacant.....	Director, Student Activities
Arnold R. Schaid.....	Director, University Foundation

Ronald W. Thomas	Coordinator of Legal Services and Director, Residence Life
Sherrill A. Kuckuck	Associate Director, Residence Life and Orientation Director
Judith Dayoub	Residence Director
Nancy Doyle	Residence Director
James Falcone	Residence Coordinator
Cassie Douress	Residence Director
Steve Fahnestock	Residence Director
John J. Johnston	Residence Director
Carra Sergeant	Residence Director
Christopher Knowlton	Manager, Student Cooperative Assoc.
Salvadore Ruffulo	Manager, Operations
Charles Potthast	Business Manager
Dennis V. Hulings	Manager, Program Services
Mahlon Halleck	Manager, Lodge-Farm
Gerald Baker	Manager, Bookstore
<b>ISADORE R. LENGLET</b>	<b>Vice President for Development and Finance</b>
John J. Nold	Executive Director, Development Affairs
Maurice Fox	Associate Director, Computer Center
Barbara Eisen	Assistant Director, Computer Center
Thomas P. Cunningham	Assistant Director, Computer Center
Mark Strawcutter	Assistant Director, Computer Center
Ray Homa	Assistant Director, Computer Center
Richard T. Wolfe	Director, Grants, Awards and Conferences
Randall R. Powell	Director, Institutional Research and Planning
Edward J. Norberg	Executive Director, Financial Affairs
Owen J. Dougherty	Director, Housing and Food Service
Susan M. Greene	Associate Director, Housing and Food Service
Melanie Wardrop Assistant	Director, Housing and Food Service
Vacant	Assistant Director, Housing and Food Service
Melvin J. Cochran	Director, Accounting
John Blystone	Director, Budget
Vacant	Director, Payroll
Judith A. Moorhead	Executive Director, Public Affairs
Edward H. Barr	Director, Alumni Affairs
Patricia Heilman	Director, Publications and Advertising
Mary Ellen Lieb	Director, Public Information
Vacant	Director, University Relations
Larry A. Judge	Director, Sports Information
Gerald Thorpe	Director, Center for Community Affairs
Connie M. Howard	Coordinator, Radio and T.V.
Carol A. Miller	Assistant Dir., Center for Community Affairs
Barbara J. Balsiger	Director, University Museum

## **DEPARTMENT CHAIRPERSONS**

---

### **School of Business**

---

DONALD J. ROBBINS	Accounting
ROBERT S. STROCK	Administrative Services and Business Education
ROBERT J. BOLDIN	Finance and Management Information Systems
DONALD S. McPHERSON	Labor Relations

WAYNE E. NELSON..... Management and Marketing

### **School of Education**

---

BRUCE A. MEADOWCROFT ..... Educational Psychology  
 RONALD A. JULIETTE ..... Communications Media  
 DONALD C. McFEELY ..... Elementary  
 ROBERT H. SAYLOR ..... Foundations of Education  
 EUGENE F. SCANLON..... Special Education and Clinical services  
 GEORGE L. SPINELLI..... Counselor Education  
 WARNER E. TOBIN ..... University School

### **School of Fine Arts**

---

DONALD G. EISEN ..... Theater  
 RICHARD S. KNAB ..... Music  
 JOANNE P. LOVETTE ..... Art

### **School of Health Services**

---

ALLAN T. ANDREW..... Allied Health Professions  
 D. SHELBY BRIGHTWELL ..... Health and Physical Education  
 MARY C. KATZBECK ..... Nursing  
 ROBERT J. LAUDA ..... Safety Sciences  
 RUTH PODBIELSKI..... Associate Athletic Director  
 HERMAN L. SLEDZIK..... Athletic Director

### **School of Home Economics**

---

ALMA L. KAZMER..... Home Economics Education  
 RONALD SIMKINS..... Food and Nutrition  
 DONNA L. STREIFTHAU..... Consumer Services

### **School of Natural Sciences and Mathematics**

---

GARY L. BUCKWALTER..... Physics  
 GARY L. BUTERBAUGH..... Computer Science  
 EDWARD A. STANLEY ..... Geoscience  
 DAVID E. GROVER..... Psychology  
 JAMES E. REBER..... Mathematics  
 RICHARD F. WAECHTER..... Biology

### **School of Social Sciences and Humanities**

---

JOSE M. CARRANZA ..... Foreign Languages  
 RICHARD F. HEIGES ..... Political Science  
 ROBERT M. HERMANN ..... Philosophy  
 HARVEY S. HOLTZ ..... Sociology/Anthropology  
 JOHN E. KADLUBOWSKI..... History  
 LAURABELL MILLER..... English and Journalism  
 JOHN THOMAS..... Criminology  
 DONALD A. WALKER ..... Economics  
 RUTH I. WALTERS ..... Geography and Regional Planning

**DIRECTORS OF SPECIAL CLINICS**

JOHN E. FRANK.....	Counseling Center
LAWRENCE T. TURTON.....	Speech and Hearing Clinic
LINDA L. WILLIAMS.....	Reading Clinic

**PECHAN HEALTH CENTER STAFF**

CHARLES B. BEYMER, M.D. ....	Director
ROBERT B. DAVIES, M.D.	
PAUL R. GALUTIA, M.D.	
C. E. WILSON, M.D.	
FLORENCE DONGILLA.....	Supervisor of Nurses

**EMERITI**

LOIS V. ANDERSON .....	Elementary
MAMIE L. ANDERZHON.....	Geography
LEE ROY H. BEAUMONT.....	Business
MARGARET L. BECK .....	English
LOIS C. BLAIR.....	Professional Laboratory Experiences
EDWARD N. BROWN.....	Chemistry
R. MORRISON BROWN.....	English
MAUDE O. BRUNGDAR.....	Speech and Hearing
ROBERT W. BURGGRAB.....	Music
RALPH W. CORDIER.....	Dean of Academic Affairs
ROBERT J. CRONAUER.....	Art
CHARLES A. DAVIS.....	Music
THOMAS G. GAULT.....	Geography and Regional Planning
RALPH M. GLOTT.....	Elementary Education
JAMES R. GREEN.....	Associate Dean of the Humanities
TREVOR HADLEY.....	Vice President of Student Affairs
G. G. HILL.....	Director of Business Education
RICHARD HITCHCOCK.....	Physics
E. SAMUEL HOENSTINE.....	Career Services
DONALD E. HOFFMASTER.....	Biology
JOHN P. HOYT.....	Mathematics
RAYMONA E. HULL.....	English
ARTHUR KANNWISHER.....	Philosophy
MARION KIPP.....	Mathematics
ORVAL KIPP.....	Art
MAY E. KOHLHEPP.....	Elementary Education
RAYMOND L. LEE.....	Political Science
STANLEY W. LORE.....	Psychology
DOROTHY LUCKER.....	English
JOY E. MAHACHEK.....	Chairperson, Mathematics Coordinator of Secondary Education Depts.
REGIS A. McKNIGHT.....	Health and Physical Education
LAWRENCE F. McVITTY.....	Art
JANE S. MERVINE.....	History
ANNA K. OTOOLE.....	Elementary
ELIZABETH S. PARNELL.....	Library
WILLIS E. PRATT.....	Chancellor
DANIEL G. REIBER.....	Chairperson, Department of Physics
RALPH W. REYNOLDS.....	Art
OPAL T. RHODES.....	Chairperson, Home Economics
MAURICE L. RIDER.....	English



ALICE K. SCHUSTER .....	History
MILDRED SHANK .....	Educational Psychology
SAMUEL G. SMITH .....	Health and Physical Education
DWIGHT E. SOLLBERGER .....	Coordinator, Natural Sciences
MARTIN STAPLETON .....	Biology
LAWRENCE C. STITT .....	Music
JAMES K. STONER .....	Chairperson, Business and Distributive Education
GEORGE A. W. STOUFFER .....	Dean, School of Education
BEATRICE THOMAS .....	Business
EUPHEMIA NESBITT WADDELL .....	Library
PAUL M. WADDELL .....	Physics
ALBERT J. WAHL .....	History
FLORENCE WALLACE .....	History
DAVID C. WINSLOW .....	Geography and Regional Planning

## **SCUM (STATE COLLEGE/UNIVERSITY MANAGERS)**

JOHN E. WORTHEN	President
Ed.D., Harvard University	
CYRUS A. ALTIMUS, Manager VI	Dean, School of Business
Ph.D., The Pennsylvania State University	
J. CHRISTOPHER BENZ, Manager VI	Dean, School of Fine Arts
Ed.D., Columbia University	
JOHN CHELLMAN, Manager VI	Dean, School of
Ed.D., George Peabody College for Teachers	Health Services
JAMES M. DANKO, Manager III	Director, Adult Corrections Education
M.A. Wilkes College	
CHARLES D. FOUST, Manager V	Associate Dean, School of Education
Ph.D., Ohio State University	
CHARLES R. FUGET, Manager VI	Dean, School of Natural Sciences
Ph.D., Pennsylvania State University	and Mathematics
JOSEPH M. GALLANAR, Manager VI	Dean, School of Social Sciences
Ph.D., The John Hopkins University	and Humanities
BERNARD J. GANLEY, Manager VI	Vice President for Administration
M.Ed., University of Pittsburgh	
ROBERT L. GAYLOR, Manager III	Special Assistant to President and
M.A., St. Francis College	Director, Employee Relations
BERNARD T. GILLIS, Manager VII	Academic Vice President and Provost
Ph.D., Wayne State University	
STEPHEN GRAY	Associate Dean and Director of Cooperative
Ph.D., George Peabody College	Medical Program, School of
	Health Services
JERRY T. ICE, Manager VI	Dean, School of Continuing Education
Ed.D., Fordham University	
M. KATHLEEN JONES, Manager VI	Dean, School of Home Economics
Ph.D., Ohio State University	
CHARLES M. KOFOID, Manager VI	Dean, School of Education
D.Ed., University of Nebraska	
JOHN J. NOLD, Manager V	Director, Computer Center
M.B.A., Duquesne University	

RANDALL R. POWELL, Manager III M.A., University of Alabama	Director, Institutional Research and Planning
CHARLES E. RECESKI, Manager III M.Ed., Indiana University of Pennsylvania	Assistant to Vice President for Administration
NORMAN STORM, Manager III M.Ed., Indiana University of Pennsylvania	Director, Punxsutawney Branch Campus
ROBERT O. WARREN, Manager VI M. Litt., University of Pittsburgh	Associate Provost

## **FACULTY - MANAGEMENT**

FRED DAKAK, Professor - Mgr. Ph.D., Southern Illinois University	Dean of Admissions
ROBERT H. DOERR, Assoc. Professor - Mgr. M.Ed., Pennsylvania State University Campus	Director, Armstrong County
WILLIAM E. LAFRANCHI, Professor - Mgr. M.S.L.S., University of Illinois	Director of Libraries
JAMES W. LAUGHLIN, Professor - Mgr. D.Ed., Pennsylvania State University	Dean of Student Services
ISADORE R. LENGLET, Professor - Mgr. M.U.A., University of Pittsburgh	Vice President for Development and Finance
RICHARD T. WOLFE, Associate Professor - Mgr. B.S., Indiana University of Pennsylvania	Director of Grants and Awards

## **SCUA (STATE COLLEGE/UNIVERSITY ADMINISTRATORS)**

SALLY C. ABRAMS, Adm. I M.A., Indiana University of Pennsylvania	Assistant Director, Financial Aid
EDWARD H. BARR, Adm. II M.Ed., Indiana University of Pennsylvania	Director, Alumni Affairs
KAREN L. CHICKOS, Adm. II M.S., Indiana University of Pennsylvania	Director, General Credit and Extension Program
JUDITH L. COPE, Adm. II M.Ed., Indiana University of Pennsylvania	Director, Adult Education Center
JUDITH DAYOUB, Adm. I M.Ed., Ohio State University	Residence Director
KAREN G. DEICHERT, Adm. II M.A., Morehead State University	Director, Adult Advisement and Information Center
CASSIE DOURESS, Adm. I M.Ed., Trenton State College	Residence Director
NANCY DOVERSPIKE, Adm. II M.A., Indiana University of Pennsylvania	Director, CETA Training Program
NANCY DOYLE, Adm. I M.Ed., SUNY, Albany	Residence Director
BARBARA EISEN, Adm. IV A.B., Case Western Reserve University	Assistant Director, Computer Center
STEVE FAHNESTOCK, Adm. I M.Ed., Indiana University of Pennsylvania	Residence Director
JAMES FALCONE, Adm. III M.A., Indiana University of Pennsylvania	Residence Coordinator
ROBIN A. FERRA, Adm. I B.S., Indiana University of Pennsylvania	Assistant Director, CETA Training Program

CHARLES J. GALLIMORE, Adm. III B.S., LaSalle College	Director, Continuing Education Program for Business, Industry and Labor
PATRICIA I. HEILMAN, Adm. II B.A., Seton Hall University	Director, Publications and Advertising
CONNIE M. HOWARD, Adm. I	Coordinator, Radio and T.V.
JOHN J. JOHNSTON, Adm. I M.Ed., Indiana University of Pennsylvania	Residence Director
PAUL L. LANG, Adm. II M.A. Indiana University of Pennsylvania	Director, Crime Study Center
TERRELL O. MARTIN, Adm. III D. Ed., Indiana University, Bloomington	Director of Special Programs and Organizations
RONALD S. MARTINAZZI, Adm. II M.A. Indiana University of Pennsylvania	Director, Criminology Extension Classes
ROBERT L. MARX, Adm. V M.A., Indiana University of Pennsylvania	Director, Campus Physical Planning
BRIAN J. McCUE Adm. II M.S. University of Illinois	Director, Community-University Studies
ROBERT J. McGOWAN, Adm. II M.Ed., Wayne State University	Assistant Dean of Admissions
CAROL A. MILLER, Adm. I M.A., Indiana University of Pa.	Assistant Director Center for Community Affairs
NANCY J. NEWKERK, Adm. II M.A., Syracuse University	Associate Dean of Admissions
RONALD R. REED, Adm. I B.S., Indiana University of Pennsylvania	Coordinator, Emergency Medical Training Programs
NANCY D. RUBINO, Adm. II M.N., University Of Pittsburgh	Coordinator of Continuing Education for Nurses
CARRA SERGEANT, Adm. I M.Ed., University of Arkansas	Residence Director
HELEN R. SKINNER, Adm. I B.A., Indiana University of Pennsylvania	Assistant Director, CETA Training Program

## **FACULTY UNIT II (ADMINISTRATORS)**

LYMAN CONNOR, Assistant Professor - Adm. M.A., Indiana University of Pennsylvania	Assistant Dean of Admissions
THOMAS P. CUNNINGHAM, Associate Professor - Adm. M.S., Carnegie-Mellon University	Assistant Director Computer Center
RICHARD A. DISTANISLAO, Instructor - Adm. M.A., Indiana University of Pennsylvania	Assistant to Director, Armstrong County Campus
OWEN J. DOUGHERTY, Associate Professor - Adm. M.Ed., Pennsylvania State University	Housing Director
FREDERICK A. JOSEPH, Assistant Professor - Adm. M.Ed., Kent State	Director of Financial Aid
LARRY A. JUDGE, Instructor - Adm. B.S., Indiana University of Pennsylvania	Director of Sports Information
SHERRILL ANNE KUCKUCK, Assoc. Professor - Adm. M.Ed., University of Pittsburgh	Director, Residence Programming
MARY ELLEN LIEB, Instructor - Adm. B.A., Duquesne University	Director Public Information
CLEO McCracken, Assoc. Professor - Adm. M.Ed., Syracuse University	Director, Womens Resource Center

JUDITH A. MOORHEAD, Assistant Professor - Adm. M.A., Indiana University of Pennsylvania	Executive Director of Public Affairs
ROY A. MOSS, Assoc. Professor - Adm. Ed.D., University of Pittsburgh	Associate Director of Career Services
C. DONALD SEAGREN, Professor - Adm. D.Ed., Pennsylvania State University	Registrar
FREDERICK A. SEHRING, Assistant Professor - Adm. M.Ed., University of Pittsburgh	Assistant Registrar
WILLIAM S. SRSIC, Assistant Professor - Adm. M.Ed., Edinboro State College	Associate Director, Financial Aid
RONALD W. THOMAS, Assoc. Professor - Adm. Ph.D., University of Pittsburgh	Director, Residence Life and Coordinator of Legal Services

## THE FACULTY - UNIT I

CARL F. ADAMS, Assistant Professor M.A., Columbia University	Music
RONALD D. ALI, Instructor M.F.A., Carnegie-Mellon University	Art
BARBARA A. AIERSTOCK, Professor Ed.D., Temple University	Health and Physical Education
ROBERT K. ALICO, Professor Ph.D., St. Bonaventure University, New York	Biology
FRED P. ANDERSON, Assistant Professor M.B.A., University of Michigan	Management and Marketing
RUTH ANDERSON, Associate Professor D.Ed., Pennsylvania State University	Home Economics Education
ALLEN T. ANDREW, Associate Professor Ph.D., Utah State University Professions	Chairperson, Allied Health
JOSEPH S. ANGELO, Professor Ph.D., University of Pittsburgh	Mathematics
ANTHONY A. ANGELONI, Professor D.Ed., Pennsylvania State University	Educational Psychology
IDA Z. ARMS, Professor M.S., University of Illinois	Mathematics
VIRGINIA P. ARROYO, Assistant Professor M.A., Columbia University	Sociology-Anthropology
NOREEN O. ASH, Assistant Professor Ph.D., University of Illinois	Biology
NEIL J. ASTING, Assistant Professor Ph.D., University of Rhode Island	Chemistry
TIBOR BACHMANN, Associate Professor D.Mu., Combs College of Music	Music
MARIE K. BAHN, Assistant Professor M.Ed., Western Maryland College	Special Education and Clinical Services
WILLIAM M. BAHN, Professor Ed.D., West Virginia University	Special Education and Clinical Services
FRANK T. BAKER, Professor Ph.D., West Virginia University	Biology
DONALD J. BALLAS, Professor Ph.D., University of Nebraska	Geography and Regional Planning

FRANCIS BALLAS, Associate Professor Ph.D., West Virginia University	Chemistry
BARBARA J. BALSIGER, Professor Ph.D., University of Pittsburgh	Art
DENNIS BARTHA, Associate Professor M.Ed., University of Pittsburgh	Elementary Education
NANCY R. BARTHELEMY, Associate Professor M.S., University of Wisconsin	Health and Physical Education
CHARLES BATTAGLINI, Instructor M.Ed., Indiana University of Pennsylvania	University School
THOMAS L. BECK, Associate Professor M.Ed., Duquesne University	Health and Physical Education
WILLIAM R. BECKER, Professor Ph.D., University of Iowa	Music
PATRICIA A. BELL, Associate Professor D.Ed., Pennsylvania State University	Home Economics Education
MARGARET BELLAK, Assistant Professor M.N., University of Pittsburgh	Nursing
JAMES M. BENCH, Assistant Professor M.A., Indiana University of Pennsylvania	Special Education and Clinical Services
HERBERT A. BENTON, Assistant Professor M.A., Duquesne University	Sociology-Anthropology
FRANCES P. BENZ, Instructor M.A., New York University	Health and Physical Education
PAUL BEN-ZVI, Associate Professor M.F.A., University of Iowa	Art
MARY J. BERG, Assistant Professor M.N., University of Pittsburgh	Nursing
RICHARD E. BERRY, Professor Ph.D., Princeton	Physics
CHARLES H. BERTNESS, Professor Ph.D., University of Illinois	Mathematics
WILLIAM W. BETTS, JR., Professor Ph.D., Pennsylvania State University	English and Journalism
JOSEPH A. BIANCO, Instructor M.Ed., University of Pittsburgh	Administrative Services and Business Education
GARY J. BIRD, Assistant Professor M.M., North Texas State University	Music
PATRICIA L. BLACK, Assistant Professor M.Ed., Duquesne University	Nursing
WILLIAM A. BLACKSMITH, III, Assistant Professor Ed.D., West Virginia University	Health and Physical Education
JOSEPH BOGAN, JR., Assistant Professor M.Ed., University of Pittsburgh	Criminology
ROBERT J. BOLDIN, Associate Professor Ph.D., University of Pennsylvania	Chairperson, Finance and Management Information Systems
CHARLES N. BONGIOVANNI, Assistant Professor B.S., Indiana University of Pennsylvania	Military Science
DANIEL N. BOONE, Professor Ph.D., Claremont Graduate School	Philosophy
CARL W. BORDAS, Professor D.Ed., Pennsylvania State University	Chemistry
NELSON H. BORMANN, Associate Professor M.A., Western Michigan University	Special Education and Clinical Services

DAVID T. BORST, Associate Professor D.M.A., Eastman School of Music	Music
NORMAN R. BOTTOM, Associate Professor Ph.D., Claremont Graduate School	Criminology
ALBERT E. BOUFFARD, Assistant Professor Ph.D., Duquesne University	Philosophy
MALCOLM E. BOWES, Assistant Professor Ph.D., Ohio University	Theater
DAVID BREYER, Assistant Professor M.B.A., Pennsylvania State University	Management and Marketing
JESSIE BRIGHT, Assistant Professor M.A., University of Rochester	English and Journalism
LORRIE J. BRIGHT, Professor M.A., University of Rochester	English and Journalism
D. SHELBY BRIGHTWELL, Professor Chairperson, P.E.D., Indiana University, Bloomington	Health and Physical Education
KENNETH W. BRODE, Professor Ph.D., University of Pittsburgh	Foreign Languages
JOHN BROUGHTON, III, Professor D.Ed., Oklahoma State University	Mathematics
ANDREW C. BROWE, Assistant Professor Ph.D., Medical College of Virginia	Biology
FREDERICK J. BROWN, Associate Professor M.Ed., University of Pittsburgh	Criminology
KENNETH E. BROWN, Assistant Professor M.S.W., University of Missouri	Sociology-Anthropology
RUTH ANNA W. BROWNING, Assistant Professor M.Ed., Indiana University of Pennsylvania	Home Economics Educa- tion
GARY L. BUCKWALTER, Professor Ph.D., Catholic University of America	Chairperson, Physics
GERALD M. BURIOK, Professor D.Ed., Pennsylvania State University	Computer Science
RONALD I. BURNER, Assistant Professor M.B.A., West Virginia University	Accounting
SANDRA L. BURWELL, Assistant Professor M.Ed., Pennsylvania State University	Art
JOHN F. BUSOVICKI, Associate Professor M.S., Notre Dame	Mathematics
GARY L. BUTERBAUGH, Associate Professor M.A., Syracuse University	Chairperson, Computer Science
THOMAS CAMPISANO, Instructor B.A., Indiana University of Pennsylvania	Athletics
PATRICK A. CARONE, Professor Ph.D., Duke University	Political Science
JOSE M. CARRANZA, Professor Ph.D., University of Pittsburgh	Chairperson, Foreign Languages
BRUCE D. CARTWRIGHT, Associate Professor A.M., West Virginia University	Psychology
CHARLES E. CASAVANT, Associate Professor Ph.D., State University of New York at Buffalo	Music
CHARLES D. CASHDOLLAR, Professor Ph.D., University of Pennsylvania	History

VINCE CELTNIKS, Assistant Professor M.S., University of Montana	Health and Physical Education
MARY ANN CESSNA, Assistant Professor M.Ed., Indiana University of Pennsylvania	Food and Nutrition
CHRISTINA A. CHA, Associate Professor M.S.M., Union Theological Seminary, New York	Music
RICHARD R. CHAMBERLAIN, Associate Professor M.A., University of Denver	Library
BENJAMIN C. CHAN, Professor Ph.D., Temple University	Philosophy
WILLIAM D. CHAPMAN, Assistant Professor M.S., West Virginia University	Special Education and Clinical Services
MICHAEL R. CHARNEGO, Associate Professor M.Ed., Indiana University of Pennsylvania	Biology
EDWARD CHASZAR, Professor Ph.D., The George Washington University	Political Science
R. PHILIP CHEKANSKI, Assistant Professor M.S., Central Missouri State University	Safety Sciences
NICHOLAS CHRISTODOLEAUS, Professor Ph.D., Louisiana State University	Chemistry
DON-CHEAN CHU, Professor Ed.D., Columbia University	Foundations of Education
ROBERTA CHURCH, Assistant Professor M.A., University of Miami (Fla.)	Accounting
GARRY J. CISKOWSKI, Associate Professor Ph.D., University of Oklahoma Health Science Center	Biology
JOSEPH C. CLARK, Associate Professor Ph.D., Stanford University	Geoscience
LOIS A. CLARK, Assistant Professor M.A., Slippery Rock State College	Health and Physical Education
VAUGHN CLAY, Associate Professor D.Ed., University of Pittsburgh	Art
STANLEY COHEN, Professor J.D., Salmon P. Chase, College of Law	Criminology
WILLIAM H. COLBY, Assistant Professor B.A., Marshall University	Military Science
EDWARD G. COLEMAN, Associate Professor M.S., Carnegie Institute of Technology	Chemistry
PATRICIA COLLINS-STOCKTON, Assistant Professor Ph.D., University of Michigan	English and Journalism
FRANK T. COMO, Professor Ph.D., Arizona State University	English and Journalism
CAROLYN J. COMPTON, Instructor M.Ed., Indiana University of Pennsylvania	English and Journalism
CAROL E. CONNELL, Assistant Professor M.L.S., University of Pittsburgh	Library
THOMAS E. CONWAY, Associate Professor Ed.D., West Virginia University	Biology
DAVID M. COOK, Professor Ph.D., Ohio State University	English and Journalism
CHARLES L. COOPER, Professor Ed.D., University of Pittsburgh	Accounting
EDITH CORD, Assistant Professor Licence es Lettres, University of Toulouse, France	Foreign Languages

STEVEN CORD, Professor	History
Ed.D., Teachers College, Columbia University	
JOSEPH J. COSTA, Professor	Assistant Chairperson, Chemistry
D.Ed., West Virginia University	
HARRY CRAIG, Professor	English and Journalism
Ph.D., University of Pittsburgh	
WILLA RUTH CRAMER, Assistant Professor	Consumer Services
M.S., Pennsylvania State University	
CYNTHIA N. CREEKMORE, Instructor	Library
M.S.L.S., University of Tennessee	
BLAINE C. CROOKS, Associate Professor	Mathematics
Ed.M., Harvard	
JOHN W. CROSS, Associate Professor	Economics
M.A., University of Massachusetts	
WALLACE R. CROUP, Instructor	Criminology
M.S., Florida State University	
THOMAS E. CRUMM, Assistant Professor	Chemistry
Ph.D., University of Massachusetts	
WILLIAM H. CULP, Associate Professor	Counselor Education
D.Ed., West Virginia University	
HELEN D. CUNNINGHAM, Assistant Professor	Nursing
M.S.N.E., University of Pittsburgh	
BOB J. CUREY, Professor	English and Journalism
Ph.D., Wayne State University	
WILLIAM E. CUTLER, Associate Professor	Educational Psychology
M.Ed., Pennsylvania State University	
SUSAN S. DAHLHEIMER, Assistant Professor	Food and Nutrition
M.S., Pennsylvania State University	
S. JANE DAKAK, Associate Professor	Health and Physical Education
M.Ed., University of North Carolina at Greensboro	
ALICE L. DAVIS, Professor	Elementary Education
Ed.D., Temple University	
ARLO DEAN DAVIS, Associate Professor	Mathematics
Ph.D., University of Colorado	
BETTY DAVIS, Professor	Assistant Chairperson, Elementary Education
D.Ed., Pennsylvania State University	
CARL D. DAVIS, Associate Professor	Health and Physical Education
M.Ed., University of Pittsburgh	
JOHN A. DAVIS, Associate Professor	English and Journalism
M.A., University of Pennsylvania	
WAYNE J. DAVIS, Professor	Economics
Ph.D., Rutgers University	
MALCOLM M. DAY, Professor	English and Journalism
Ph.D., Western Reserve University	
RUTH DE CESARE, Professor	Music
Ph.D. New York University	
EMILY K. DECICCO, Professor	Elementary Education
Ph.D., University of Pittsburgh	
LEONARD B. DEFABO, Professor	Educational Psychology
M.Ed., Duquesne University	
ANTHONY G. DEFURIO, Professor	Art
Ph.D., Pennsylvania State University	
JAMES M. DEGEORGE, Professor	English and Journalism
Ph.D., Tulane University	



CAROLYN I. DEISHER, Associate Professor M.A., Pennsylvania State University	Mathematics
DANIEL DICICCO, Professor D.M.A., University of Michigan	Music
ALICE D. DICKIE, Assistant Professor M.S., West Virginia University	Health and Physical Education
WILLIAM E. DEITRICH, JR., Associate Professor Ph.D., University of Pennsylvania	Biology
JOHN L. DIETZ, Associate Professor D.M.A., University of Michigan	Music
SALVATORE DINA, JR., Assistant Professor B.A., Temple University	Military Science
THOMAS J. DONGILLA, Assistant Professor M.Ed., Pennsylvania State University	Art
ALBERTA R. DORSEY, Associate Professor D.Ed., University of Pittsburgh	Elementary Education
VICTOR S. DRESCHER, Assistant Professor M.A., Middlebury College	Foreign Languages
JOHN J. DROPCHO, Assistant Professor M.Ed., Pennsylvania State University	Art
DONALD D. DUNCAN, Associate Professor D.Ed., University of Pittsburgh	Mathematics
DIANE L. DUNTLEY, Associate Professor Ed.D., State University of New York, Buffalo	Director, Academic Services and Testing Center
JAMES A. DYAL, Assistant Professor Ph.D., University of Illinois	Economics
JERRY K. EDDY, Professor Ph.D., West Virginia University	Physics
KENNETH F. EDGAR, Professor Ph.D., University of Pittsburgh	Psychology
DONALD G. EISEN, Associate Professor M.A., Western Reserve University	Chairperson, Theater
JOAN B. ELLIOTT, Associate Professor M.A., West Virginia University	Elementary Education
MARY LOUISE ELTZ, Associate Professor M.Ed., East Stroudsburg State College	Health and Physical Education
THOMAS FALCONE, Assistant Professor M.B.A., Kent State University	Management and Marketing
ALEXIS FALEK, Assistant Professor Ph.D., University of Pittsburgh	Counseling Center
CHARLES W. FAUST, Professor M.A., Middlebury College	Foreign Languages
FRANK FAZIO, JR., Professor Ph.D., University of Pittsburgh	Chemistry
GENE A. FELIX, Assistant Professor M.S., Pennsylvania State University	Special Education and Clinical Services
RONALD T. FERGUSON, Professor Ph.D., University of Minnesota	History
VINCENT J. FERRARA, Professor Ph.D., Fordham University	Philosophy
GARY M. FERRENCE, Professor Ed.D., Indiana University, Bloomington	Biology
JERRY FIDDLER, Professor Ed.D., State University of New York, Buffalo	Special Education and Clinical Services

FERNAND FISEL, Associate Professor M.A., Andrews University	Foreign Languages
MARSHALL G. FLAMM, Professor A.M., Temple University	Special Education and Clinical Services
MITCHELL FLEISCHER, Assistant Professor Ph.D., Michigan State University	Psychology
LIDA T. FLEMING, Assistant Professor Ed.M., Pennsylvania State University	University School
PEGGY L. FLETCHER, Assistant Professor M.B.A., University of Pittsburgh	Finance and Management Information Systems
WILLIAM R. FORBES, Associate Professor Ph.D., Indiana University, Indiana	Biology
DEAN C. FORD, Assistant Professor B.S., Montana State University	Military Science
WILLIAM M. FORCE, Associate Professor M.A., Colgate University	English and Journalism
JOHN N. FOX, Professor Ph.D., Wesleyan University	Physics
JOHN E. FRANK, Professor Ph.D., Case Western Reserve University	Counseling Center
JOHN R. FREUND, Professor Ph.D., Indiana University	English and Journalism
ERNEST B. FRICKE, Associate Professor Ph.D., New York University	History
DONALD P. FRITZ, JR., Assistant Professor M.Ed., Indiana University of Pennsylvania	English and Journalism
EDWIN J. FRY, Associate Professor M.M., DePaul University	Music
NORMAN W. GAGGINI, Associate Professor B.S., M.S., Indiana University of Pennsylvania	Physics
ELEANOR M. GALLATI, Assistant Professor M.Ed., Pennsylvania State University	Home Economics Education
WALTER W. GALLATI, Professor Ph.D., Ohio State University	Biology
CLARENCE A. GARVIN, Professor Ph.D., University of Tennessee	Economics
MARION M. GEISEL, Assistant Professor M.Ed., Indiana University of Pennsylvania	Director, Psychological Clinic
CLYDE C. GELBACH, Professor Ph.D., University of Pittsburgh	History
VIRGINIA GOULD GERALD, Associate Professor M.A., University of Arizona	Sociology-Anthropology
GAIL J. GERLACH, Associate Professor M.A., Teachers College, Columbia University	University School
FRANK GHESSIE, JR., Assistant Professor M.Ed., Pennsylvania State University	Administrative Services and Business Education
MOHAMED GHOBASHY, Professor C.P.A., Ph.D., Hochschule fuer Wethandel, Vienna, Austria	Accounting
RAYMOND D. GIBSON, Associate Professor M.A., University of Illinois	Mathematics
CHARLES A. GODLASKY, Professor Ed.D., Penn State University	Health and Physical Education
IRVING GODT, Professor Ph.D., New York University	Music

LOUIS L. GOLD, Professor Ph.D., Ohio State University	Biology
THOMAS D. GOODRICH, Professor Ph.D., Columbia University	History
DONNA B. GRAHAM, Assistant Professor M.A., Indiana University of Pennsylvania	Food and Nutrition
WALTER H. GRANATA, JR., Professor Ph.D., University of Wyoming	Geoscience
BROOKE V. GRANT, Associate Professor M.A., University of Pittsburgh	Sociology-Anthropology
JOHN GEORGE GRASSINGER, JR., Associate Professor M.L.S., University of Pittsburgh	Library
JAMES L. GRAY, Professor Ph.D., Duke University	English and Journalism
THOMAS C. GRAY, Associate Professor D.Crim., University of California at Berkeley	Criminology
WILLIAM F. GRAYBURN, Professor Ph.D., Pennsylvania State University	English and Journalism
WILLIAM G. GRESSLEY, Instructor B.S., Indiana University of Pennsylvania	Food and Nutrition
ROYDEN P. GROVE, Assistant Professor M.Ed., Ohio University	Health and Physical Education
DAVID E. GROVER, Professor Ph.D., University of Kentucky	Chairperson, Psychology
DANIEL S. GRUBB, Professor Ph.D., University of Michigan	English and Journalism
CAROLYN R. GRUNDY, Assistant Professor M.S.L.S., University of Illinois	Library
ANTONIO M. GUARDIOLA, Associate Professor Doctor en Pedagogia, University of Habana (Cuba)	Foreign Languages
AURORA P. GUARDIOLA, Assistant Professor Doctor en Pedagogia, University of Habana (Cuba)	Foreign Languages
CRAIG L. HALBROOK, Assistant Professor B.S., Jacksonville University	Military Science
HARRY W. HALDEMAN, Associate Professor M.A., Pennsylvania State University	English and Journalism
FRANK W. HALL, II, Ph.D., University of Montana	Professor Geoscience
ROBERT W. HAMILTON, Assistant Professor M.Ed., Indiana University of Pennsylvania	Art
MARY M HART, Assistant Professor M.Ed., University of Pittsburgh	Nursing
RICHARD A. HARTLINE, Professor Ph.D., University of California	Chemistry
MARLIN E. HARTMAN, Professor D.Ed., University of Pittsburgh	Assistant Chairperson Mathematics
PATRICK M. HARTWELL, Associate Professor Ph.D., U.C.L.A.	English and Journalism
E. SAMUEL HATFIELD, Associate Professor A.M., West Virginia University	History
EDWARD F. HAUCK, Associate Professor Ph.D., Ohio State University	Communications Media
MALCOLM R. HAYWARD, III, Associate Professor Ph.D., Tulane University	English and Journalism

RICHARD HAZLEY, Professor A.M., Columbia University	English and Journalism
NOLAND R. HEIDEN, Associate Professor A.I.C.P., Ph.D., University of Michigan	Geography and Regional Planning
RICHARD F. HEIGES, Professor Ph.D., Ohio State University	Chairperson Political Science
JACKSON W. HEIMER, Professor Ph.D., University of Cincinnati	English and Journalism
ISABEL T. HELMRICH, Associate Professor M.Ed., University of Pittsburgh	Educational Psychology
WILLARD W. HENNEMANN, Jr., Professor Ph.D., Cornell University	Mathematics
ANITA C. HENRY, Associate Professor M.A., Emory University	Foreign Languages
ROBERT M. HERMANN, Professor Ph.D., University of Pittsburgh	Chairperson, Philosophy
KENNETH E. HERSHMAN, Associate Professor Ph.D., Purdue University	Physics
PAUL R. HICKS, Assistant Professor M.A.L.S., George Peabody College for Teachers	Library
ROBERT H. HOELLEIN, Associate Professor Ph.D., Ohio State University	Educational Psychology
PAUL E. HOFFNER, Assistant Professor M.P.A., Shippensburg State College	Labor Relations
HARRY G. HOLT, Associate Professor M.S., Bucknell University	Economics
OLIVE M. HOLT, Assistant Professor M.S.N., University of Pennsylvania	Nursing
HARVEY S. HOLTZ, Assistant Professor M.A., City University of New York	Chairperson Sociology-Anthropology
JAMES D. HOOKS, Associate Professor M.L.S., University of Pittsburgh	Library
RICHARD HORNFECK, Associate Professor M.S., The George Washington University	Health and Physical Education
HELEN B. HOVIS, Assistant Professor M.Ed., Pennsylvania State University	Home Economics Education
LEON J. HUE, Associate Professor M.Ed., Pennsylvania State University	Biology
MARVIN HUFF, Associate Professor M.Ed., Westminster College	Economics
H. EUGENE HULBERT, Professor Ph.D., West Virginia University	Music
RICHARD T. HULING, Assistant Professor Ph.D., University of Wisconsin	Biology
ARTHUR C. HULSE, Assistant Professor Ph.D., Arizona State University	Biology
JAN G. HUMPHREYS, Professor Ph.D., Virginia Polytechnic Institute	Biology
JAMES M. INNES, Associate Professor M.F.A., Kansas City Art Institute	Art
DOMINIC J. INTILI, Associate Professor Ph.D., Case Western Reserve University	Music
HERBERT EUGENE ISAR, Professor Ph.D., University of Pennsylvania	Foreign Languages

D. ROBERT JACOBS, Professor Ph.D., Wayne State University	Psychology
PEPITA J. JACOBS, Associate Professor Ph.D., The Pennsylvania State University	Psychology
MARY J. JALONGO, Assistant Professor Ph.D., University of Toledo	Elementary Education
RANDY JESICK, Assistant Professor M.S., West Virginia University	English and Journalism
JUDITH L. JOHANSON, Assistant Professor M.M.E., Indiana University, Bloomington, Indiana	Music
CRAWFORD W. JOHNSON, Associate Professor M.A., Atlanta University	Director, EOP
GEORGE B. JOHNSON, Associate Professor M.F.A., Atlanta University	Art
HUGH B. JOHNSON, JR., Professor D.M.E., Indiana University, Bloomington, Indiana	Music
RALPH L. JOHNSON, Associate Professor M.Ed., Slippery Rock State College	Health and Physical Education
ROBERT G. JOHNSON, Professor Ph.D., Bowling Green University	English and Journalism
FOSTER T. JONES, Associate Professor M.A., Indiana University	Foreign Languages
RONALD A. JULIETTE, Associate Professor Ed.D., Indiana University at Bloomington	Chairperson Communications Media
JOHN F. KADLUBOWSKI, Associate Professor Ph.D., University of Maryland	Chairperson, History
NICHOLAS KARATJAS, Assistant Professor Ph.D., SUNY at Stony Brook	Economics
MARY C. KATZBECK, Associate Professor Ph.D., University of Pittsburgh	Chairperson, Nursing
DAVID KAUFMAN, Associate Professor M.L.S., Carnegie Institute of Technology	Library
WILLARD J. KAYLOR, Associate Professor M.A., George Peabody College for Teachers	Health and Physical Education
ALMA L. KAZMER, Associate Professor D.Ed., Pennsylvania State University	Chairperson, Home Economics Education
DAVID SHANKLAND KEENE, Professor Ph.D., Princeton University	Political Science
MICHAEL H. KESNER, Assistant Professor Ph.D., University of Massachusetts	Biology
ROBERT L. KING, Professor Ed.D., Pennsylvania State University	Elementary Education
ROBERT J. KIRBY, JR., Assistant Professor M.S.L.S., Catholic University of America	Library
STEVEN C. KLEIN, Associate Professor Ph.D., University of Kansas	History
MERLE G. KLINGINSMITH, Assistant Professor M.Ed., Pennsylvania State University	Communications Media
RICHARD S. KNAB, Professor D.M.E., Indiana University, Bloomington, Indiana	Chairperson, Music
RICHARD W. KOLACZKOWSKI, Professor Ph.D., Cornell University	Chemistry
L. JUNE KORAB, Assistant Professor M.S., Indiana University, Bloomington	Health and Physical Education

BARBARA KRASZEWSKI, Assistant Professor M.A., Carnegie-Mellon University	English and Journalism
HELEN M. KRESAK, Assistant Professor M.P.H., University of Pittsburgh	Nursing
VANCE R. KRITES, Associate Professor M.A., Central Michigan University	Political Science
JOSEPH S. KRUPNIK, Associate Professor M.A., Pennsylvania State University	English and Journalism
JACK KUHN, Associate Professor Ed.M., University of Pittsburgh	Elementary Education
GOPAL S. KULKARNI, Professor Ph.D., University of Pittsburgh	Geography and Regional Planning
JODELL L. KUZNESKI, Instructor M.N.Ed., University of Pittsburgh	Nursing
DALE E. LANDON, Professor Ph.D., University of Illinois	History
BETTY B. LANHAM, Professor Ph.D., Syracuse University	Sociology-Anthropology
ROBERT J. LAUDA, Professor Ph.D., Iowa State University	Chairperson, Safety Sciences
WALTER R. LAUDE, Associate Professor M.S.L.S., Indiana University (Bloomington)	Library
JACK LAVENBURG, Associate Professor Ed.D., University of Oregon	Communications Media
TERRY C. LEE, Assistant Professor M.S., University of Pittsburgh	Safety Sciences
NEIL B. LEHMAN, Professor Ph.D., Ohio State University	History
EUGENE E. LEPLEY, Professor Ed.D., West Virginia University	Health and Physical Education
JANIS M. LESNESKI, Instructor M.S., Indiana University of Pennsylvania	Communications Media
WILLIAM J. LEVENTRY, Associate Professor Ed.M., University of Pittsburgh	Educational Psychology
FRANCIS W. LIEGEY, Professor Ph.D., St. Bonaventure University	Biology
TIAN-MIN LIN, Associate Professor Ph.D., Boston University	Philosophy
C.T. LINDH, Associate Professor M.S., Duquesne University; C.P.A.	Accounting
WILLIAM C. LINDSEY, Instructor B.S., Howard University	Counselor, EOP
DOROTHY I. LINGENFELTER, Associate Professor M.Ed., Indiana University of Pennsylvania	University School
RENEE LISCINSKY, Associate Professor Doctorat du ze cycle, U. of Besacon, France	Foreign Languages
VICTOR LISCINSKY, Associate Professor L.P.T., University of Pittsburgh	Health and Physical Education
ROBERT I. LLOYD, Associate Professor M.S., Julliard School of Music	Music
A. LYNN LOCKROW, Assistant Professor M.F.A., University of North Carolina at Greensboro	Theater
PATRICIA LOMMOCK, Associate Professor M.Ed., University of Pittsburgh	Health and Physical Education

WILLIAM F. LONG, SR., Associate Professor M.A., Bucknell University	Mathematics
ALWYN LOUDEN, Associate Professor M.Ed., University of Pittsburgh	Sociology-Anthropology
JOANNE P. LOVETTE, Professor D.A., Carnegie-Mellon University	Chairperson, Art
ONEIDA I. LOZADA, Assistant Professor Doctor En Pedagogia, University of Havana	Foreign Languages
A. LYNNE LUCAS, Assistant Professor M.L.S., University of Pittsburgh	Library
JOAN Y. LUCHSINGER, Instructor M.M., University of Illinois	Music
RONALD LUNARDINI, Assistant Professor Assistant M.Ed., Duquesne University	Director, EOP
SANDRA JOYCE LYNN, Assistant Professor M.S., Auburn University	Consumer Services
DONALD M. MacISAAC, Associate Professor M.S., Syracuse University	Communications Media
CHARLES R. MADERER, Associate Professor M.A.T., Brown University	Mathematics
RICHARD D. MAGEE, Professor Ph.D., Temple University	Psychology
CHARLES MAHAN, Assistant Professor M.A., University of Kentucky	English and Journalism
DONALD C. MAHAN, Associate Professor M.Ed., Indiana University of Pennsylvania	Administrative Services and Business Education
MARGARET D. MAHLER, Associate Professor Ph.D., University of Pittsburgh	Educational Psychology Dir., Center for Community Education
W. DELIGHT MALITSKY, Associate Professor M.A., Manhattan School of Music	Music
KATHERYNE MALLINO, Associate Professor M.S.L.S., Drexel Institute of Technology	Library
JAMES H. MAPLE, Associate Professor M.A., Bowling Green State University	Computer Science
IRWIN MURRAY MARCUS, Professor Ph.D., Lehigh University	History
RONALD L. MARKS, Professor Ed.D., Pennsylvania State University	Chemistry
GRACE MARLIN, Instructor M.Ed., Indiana University of Pennsylvania	University School
BARBARA W. MARQUETTE, Assistant Professor Ph.D., West Virginia University	Psychology
ARTHUR H. MARTEL, Professor Ph.D., University of Massachusetts	Economics
LILLIAN G. MARTIN, Associate Professor M.Ed., Pennsylvania State University	University School
JOSEPH M. MASTRO, Associate Professor M.E., University of Pittsburgh	History
JOHN K. MATOLYAK, Associate Professor Ph.D., West Virginia University	Physics
GEORGE M. MATOUS, Associate Professor Ph.D., University of Notre Dame	Physics
DANIEL V. MATTOX, JR., Professor Ph.D., Pennsylvania State University	Communications Media

CHARLES MAWHINNEY, Associate Professor M.B.A., University of Pittsburgh	Finance and Management Information Systems
RICHARD D. McAFOOSE, Associate Professor Litt.M., University of Pittsburgh	Management and Marketing
DOYLE RICHARD McBRIDE, Associate Professor M.A.T., Indiana University, Bloomington, Indiana	Mathematics
RONALD L. McBRIDE, Professor Ph.D., University of Oklahoma	Mathematics
MICHAEL A. McCAFFREY, Assistant Professor M.B.A., University of Pennsylvania	Finance and Management Information Systems
ROBERT E. McCLAY, JR., Associate Professor M.S., North Carolina State University	Safety Sciences
ELSIE M. McCLELLAND, Associate Professor M.Ed., Pennsylvania State University	Administrative Services and Business Education
A. RICHARD McClURE, Assistant Professor M.Ed., Indiana University of Pennsylvania	Accounting
DONALD S. McClURE, Associate Professor Ph.D., Vanderbilt University	English and Journalism
RONALD McCOY, Associate Professor D.Ed., Pennsylvania State University	Mathematics
DONALD C. McFEELY, Professor Ph.D., University of Maryland	Chairperson, Elementary Education
FRANCIS G. McGOVERN, Professor Ph.D., Ohio State University	Management and Marketing
VICTOR D. McGUIRE, JR., Assistant Professor M.P.A., University of Georgia	Criminology
DONALD R. McKELVEY, Professor Ph.D., Carnegie-Mellon University	Chemistry
JOHN J. McMANMON, Professor Ph.D., University of Chicago	English and Journalism
MARK E. McNABB, Assistant Professor M.A., Adams State University	Criminology
PATRICK J. McNAMARA, Associate Professor M.S., University of Detroit	Physics
DONALD S. McPHERSON, Associate Professor Ph.D., University of Pittsburgh	Chairperson, Labor Relations
BRUCE A. MEADOWCROFT, Professor Ed.D., University of Pittsburgh	Chairperson, Educational Psychology
RICHARD P. MEASE, Associate Professor Ph.D., University of Iowa	Special Education and Clinical Services
EDWARD R. MELODINI, Assistant Professor M.Ed., Duquesne University	Criminology
CRUZ MENDIZABAL, Professor Doctor en Filosofia y Letras, Universidad Javeriana, Bogota	Foreign Languages
ROBERT E. MERRITT, Professor Ph.D., University of Tennessee	Biology
JOHN E. MERRYMAN, Professor Ph.D., University of Pittsburgh	Foundations of Education
EDWARD MILEFF, Professor Ed.D., Boston University	Health and Physical Education
JAMES G. MILL, JR., Associate Professor M.Ed., Temple University	Health and Physical Education
JAMES H. MILLER, Associate Professor M.A., Stanford University	Biology



LARRY CARL MILLER, Professor Ph.D., Northwestern University	History
LAURABEL H. MILLER, Assistant Professor M.Ed., Indiana University of Pennsylvania	Chairperson, English and Journalism
VINCENT P. MILLER, JR., Professor Ph.D., Michigan State University	Geography and Regional Planning
ROBERT E. MILLWARD, Associate Professor Ed.D., Pennsylvania State University	Elementary Education
GEORGE R. MILTZ, Professor M.A., University of Cincinnati	Foreign Languages
MARGARET L. MINNICK, Assistant Professor M.Ed., Indiana University of Pennsylvania	Food and Nutrition
JOEL D. MLECKO, Assistant Professor Ph.D., Catholic University of America	Philosophy
KOFIE MONTGOMERY, Instructor M.S., Pennsylvania State University	Health and Physical Education
SHARON MONTGOMERY, Professor Ph.D., University of Pennsylvania	Philosophy
ARCHIE F. MOORE, Associate Professor M.S., Springfield College	Health and Physical Education
EDGAR W. MOORE, Associate Professor M.A., University of Wisconsin, Milwaukee	History
ROBERT N. MOORE, Professor M.S., Bucknell University	Biology
MARTIN J. MORAND, Professor B.S., Cornell University	Labor Relations
BERNARD A. MOREAU, Associate Professor D.Ed., University of Pittsburgh	Administrative Services and Business Education
ROSE MARY MORELAND, Assistant Professor M.F.A., University of Oklahoma at Norman	Theater
THOMAS V. MORLEY, Assistant Professor B.A., Texas A and M University	Military Science
WALLACE F. MORELL, Associate Professor M.S., Clarkson College of Technology	Mathematics
ROBERT L. MORRIS, Professor Ph.D., West Virginia University	Political Science
RUTH S. MORRIS, Assistant Professor M.A., Bucknell University	Administrative Services and Business Education
EDWARD MOTT, Professor D.Ed., Pennsylvania State University	Elementary Education
JOANNE MUELLER, Professor Ph.D., University of Iowa	Mathematics
J. ROBERT MURRAY, Professor Ed.D., Pennsylvania State University	Communications Media
MARIAN A. MURRAY, Professor Ph.D., University of Pittsburgh	Assistant Chairperson, Nursing
ANTHONY J. NANIA, Professor Ph.D., Notre Dame University	English and Journalism
ANTHONY J. NASTASE, Associate Professor M.Ed., Indiana University of Pennsylvania	Biology
WILLIAM A. NEAL, Associate Professor M.A., The George Washington University	Health and Physical Education
LINDA SHEARER NELSON, Associate Professor M.S., Cornell University	Home Economics Education

WAYNE NELSON, Associate Professor Ph.D., University of Arkansas	Chairperson, Management and Marketing
FREDERICK H. NESBIT, Associate Professor Ph.D., West Virginia University	Labor Relations
GINI G. NEWELL, Instructor M.Ed., Indiana University of Pennsylvania	Special Education and Clinical Services
ESKO E. NEWHILL, Professor Ph.D., Syracuse University	Sociology-Anthropology
THOMAS NOWAK, Assistant Professor Ph.D., Cornell University	Sociology-Anthropology
CARL P. OAKES, Associate Professor M.Ed., Pennsylvania State University	Mathematics
ANJA H. OLIN-FAHLE, Associate Professor M.A., Haverford College	Sociology-Anthropology
JAMES M. OLIVER, Professor Ph.D., University of Missouri	History
GARY JAMES OLMSTEAD, Associate Professor D.M.A., Cleveland Institute of Music/Case Western Reserve University	Music
LUDO op de BEECK, Professor Ph.D., University of Pittsburgh	Foreign Languages
NICHOLAS N. PACALO, Assistant Professor M.S., U.C.L.A.	Safety Sciences
DOROTHY ANN PALMER, Associate Professor M.A., Miami University (Ohio)	Political Science
LARRY R. PANAI, Instructor M.A., Indiana University of Pennsylvania	Athletics
FREDERICK R. PARK, Associate Professor M.S., University of Pittsburgh	Geoscience
ROBERT A. PATSIGA, Professor Ph.D., State University College of Forestry, Syracuse University	Chemistry
MARGARET J. PATTERSON, Assistant Professor B.A., Ohio University	English and Journalism
GARY W.R. PATTON, Professor Ph.D., Tufts University	Psychology
JAMES EDWARD PAYNE, Professor A.M., University of North Carolina	Geography and Regional Planning
GERARD C. PENTA, Professor Ph.D., Michigan State University	Foundations of Education
LAURENCE JOHN PERKINS, Assistant Professor M.M., Eastman School of Music	Music
DANIEL PERLONGO, Associate Professor M.M., University of Michigan	Music
SUZANNE PERLONGO, Assistant Professor M.L.S., University of Michigan	Music Library
EVERETT J. PESCI, Professor Ed.D., West Virginia University	Counselor Education
JOSEPH ALEXANDER PETERS, Associate Professor M.S., University of Illinois	Mathematics
JUNE K. PHILLIPS, Professor Ph.D., Ohio State University	Foreign Languages
JERRY L. PICKERING, Professor Ph.D., Rutgers State University	Assistant Chairperson, Biology

DENTON F. PILLION, Associate Professor Ed.M., Worcester State College; Boston College; Clark University	Management and Marketing
EDWARD E. PLATT, Professor Ph.D., University of Connecticut	Political Science
MARK A. PLIVELIC, Associate Professor M.Litt., University of Pittsburgh, C.P.A.	Accounting
RUTH PODBIELSKI, Professor M.Ed., University of Pittsburgh	Associate Director of Athletics, Health and Physical Education
JOHN A. POLESKY, Associate Professor M.Ed., University of Pittsburgh	Administrative Services and Business Education
PAUL A. PRINCE, Professor Ed.M., Harvard University	Geoscience
JOHN P. QUIRK, Professor D.Ed., University of Georgia	Educational Psychology
DOWNEY RAIBOURN, Associate Professor M.A., Indiana University (Bloomington)	Sociology-Anthropology
DAVID L. RAMSEY, Instructor B.A., Washington and Jefferson College	Physics
CHANCY R. RAWLEIGH, Professor Ph.D., Syracuse University	Sociology-Anthropology
RICHARD E. RAY, Professor Ph.D., Bowling Green University	English and Journalism
KAREN E. READY, Associate Professor M.A., Middleburg College	Foreign Language
CLARICE K. REBER, Assistant Professor M.S., University of Michigan	Special Education and Clinical Services
JAMES C. REBER, Associate Professor Ph.D., Duke University	Chairperson, Mathematics
JACK C. REED, Associate Professor M.S., University of Arizona	Safety Sciences
JOHN WALLING REID, Professor Ed.D., Columbia University	Psychological Clinic
L. LEON REID, Professor Ph.D., University of Texas	Special Education and Clinical Services
MILDRED M. REIGH, Professor M.Ed., Pennsylvania State University	Mathematics
JAMES B. REILLY, Professor Ed.D., West Virginia University	Elementary Education
WILLIAM L. RETTIG, Associate Professor Ph.D., Ohio State University	Mathematics
DAVID M. RIBAN, Professor Ph.D., Purdue University	Physics
ALEXANDER R. RICH, Associate Professor Ph.D., Kent State University	Psychology
J. MERLE RIFE, Professor Ph.D., Ohio State University	History
WANDA RIFE, Assistant Professor M.S.L.S., Case Western Reserve University	Library
ROBERT H. RITTLE, Professor Ph.D., Kent State University	Psychology
JOSEPH S. RIZZO, Associate Professor Ph.D., University of Maryland	Elementary Education
DONALD J. ROBBINS, Associate Professor M.Ed., Indiana University of Pennsylvania	Chairperson, Accounting

LIONEL E. ROBERTS, JR., Assistant Professor J.D., Cumberland School of Law	Administrative Services and Business Education
RICHARD D. ROBERTS, Associate Professor M.S., Pennsylvania State University	Physics
BERNARD ROFFMAN, Associate Professor M.A., Fordham University	Foreign Languages
ROSALY ROFFMAN, Assistant Professor M.A., University of Hawaii	English and Journalism
DOUGLAS A. ROSS, Professor Ph.D., Lehigh University	Psychology
FRANK ROSS, Professor D.A., Carnegie-Mellon University	Art
DAVID E. ROTIGEL, Professor Ed.D., University of Illinois	Foundations of Education
PHYLLIS ROUMM, Professor Ph.D., Kent State University	English and Journalism
RICHARD D. ROWELL, Associate Professor Ed.D., University of Georgia	Administrative Services and Business Education
PHILLIP A. RUFFNER, Instructor M.Ed., Indiana University of Pennsylvania	English and Journalism
LOIS B. RUPERT, Associate Professor M.S., Carnegie-Mellon University	Home Economics Education
HOWARD A. RUSSELL, Associate Professor D.A., Carnegie-Mellon University	Art
ROBERT RUSSELL, Assistant Professor M.A.T., Indiana University	English and Journalism
STEPHEN K. SANDERSON, Associate Professor Ph.D., University of Nebraska	Sociology-Anthropology
NORMAN W. SARGENT, Professor Ed.D., Indiana University	Communications Media
NICOLO A. SARTORI, Assistant Professor M.M., University of Michigan	Music
ROBERT H. SAYLOR, Professor Ed.D., Pennsylvania State University	Counselor Education and Chairperson, Foundations of Education
EUGENE F. SCANLON, Professor D.Ed., Pennsylvania State University	Chairperson, Special Education and Clinical Services
R. THOMAS SCHAUB, Associate Professor Ph.D., University of Pittsburgh	Philosophy
JOAN SCHMITT, Instructor M.A., Michigan State University	Consumer Services
MARTHA S. SCHEEREN, Assistant Professor M.S.L.S., University of Pittsburgh	Library
CARL W. SCHNEIDER, Professor Ph.D., Michigan State University	Psychology
GOULD F. SCHROCK, Professor Ph.D., University of Chicago	Biology
JOHN H. SCROXTON, Associate Professor M.S., Alfred University	Chemistry
GEORGE K. SEACRIST, Associate Professor M.Litt., University of Pittsburgh	English and Journalism
ROBERT C. SEELHORST, Professor Assistant Ed.D., Pennsylvania State University	Chairperson, Art
FREDERICK W. SEINFELT, Professor Ph.D., Pennsylvania State University	English and Journalism

CONSTANCE SETTLEMYER, Associate Professor Ph.D., University of Pittsburgh	Nursing
DALE M. SHAFER, Professor Ph.D., University of Oklahoma	Mathematics
RONALD G. SHAFER, Professor Ph.D., Duquesne University	English and Journalism
ESTHER SHANE, Assistant Professor M.S., West Virginia University	Special Education and Clinical Services
JAMES O. SHANNON, Assistant Professor M.Ed., Duquesne University	Criminology
SATYA SHARMA, Associate Professor Ph.D., Ohio State University	Consumer Services
MAHER Y. SHAWER, Professor Ph.D., University of Oklahoma	Mathematics
JOHN SHEPHERD, Assistant Professor M.S., University of Pittsburgh	Finance and Management Information Systems
JACK L. SHEPLER, Professor Ph.D., University of Wisconsin	Mathematics
DAVID L. SHIELDS, Associate Professor M.A., Middlebury College	Foreign Languages
KENNETH LEE SHILDT, Associate Professor M.S., Pennsylvania State University	Finance and Management Information Systems
RUTH I. SHIREY, Professor Ph.D., University of Tennessee	Chairperson, Geography and Regional Planning
DANIEL C. SHIVELY, Associate Professor M.S.L.S., Drexel Institute of Technology	Library
CHARLES J. SHUBRA, JR., Assistant Professor M.S., Pennsylvania State University	Computer Science
RONALD E. SIMKINS, Associate Professor M.Ed., Westminster College	Chairperson, Food and Nutrition
HERMAN L. SLEDZIK, Professor M.Ed., Pennsylvania State University	Athletic Director-Health and Physical Education
JEAN J. SLENKER, Associate Professor M.A., Professional Diploma, Teachers College, Columbia University	Art
ROBERT EUGENE SLENKER, Associate Professor M.A., Professional Diploma, Teachers College, Columbia University	Art
EDWARD L. SLONIGER, Professor Ph.D., University of Illinois	Health and Physical Education
MAXINE SMATLAK, Assistant Professor M.N., University of Pittsburgh	Nursing
BERT A. SMITH, Associate Professor M.A., University of Missouri	Political Science
EDWIN SMITH, Professor Ed.D., Ball State University	Mathematics
HELENA M. SMITH, Professor Ph.D., Pennsylvania State University	English and Journalism
WILLIAM R. SMITH, Professor Ed.M., Harvard University	Mathematics
W. WAYNE SMITH, Professor Ph.D., University of Maryland	History
RONALD F. SMITS, Assistant Professor D.Ed., University of Massachusetts	English and Journalism
MARIE E. SNEAD, Associate Professor A.M.L.S., University of Michigan	Library

KAY SNYDER, Associate Professor Ph.D., Cornell University	Sociology-Anthropology
JAMES SOLAK, Assistant Professor M.Ed., Indiana University of Pennsylvania	Finance and Management Information Systems
HAROLD M. SOMMER, Associate Professor Ed.D., University of Georgia	Foreign Languages
ANTHONY J. SORENTO, Associate Professor Doctor of Romance Philology, University of Madrid	Foreign Languages
ROBERT D. SOULE, Associate Professor M.S., Purdue University	Safety Sciences
ELWOOD R. SPEAKMAN, Associate Professor M.A.T., Brown University	Mathematics
JOSEPH B. SPIEKER, Associate Professor Ph.D., Catholic University	Foreign Languages
GEORGE L. SPINELLI, Professor Ed.D., University of Pittsburgh	Chairperson, Counselor Education
VIRGINIA S. SPRENKEL, Assistant Professor M.N., University of Pittsburgh	Nursing
KATHERINE L. STAHLMAN, Instructor M.S., Case Western Reserve University	Food and Nutrition
EDWARD A. STANLEY, Professor Ph.D., The Pennsylvania State University	Chairperson, Geoscience
JAMES G. STAPLES, Associate Professor D.M.A., Eastman School of Music	Music
JOANNE B. STEINER, Assistant Professor M.S., University of Wisconsin	Food and Nutrition
RONALD A. STEINER, Associate Professor M.S.L.S., Case Western Reserve University	Associate Director of Libraries
CHARLES B. STEVENSON, Associate Professor M.A., George Washington University	Management and Marketing
MERLE STILWELL, Professor Ph.D., Cornell University	Mathematics
LLOYD K. STIRES, Professor Ph.D., Duke University	Psychology
ROBERT J. STONEBRAKER, Professor Ph.D., Princeton University	Economics
KAY STRATTON, Assistant M.A., McCormick Theological Seminary	Professor EOP
RICHARD M. STRAWCUTTER, Professor M.S., Columbia University	Biology
DONNA L. STREIFTHAU, Professor Ph.D., Ohio State University	Chairperson, Consumer Services
ROBERT S. STROCK, Associate Professor M.Ed., Shippensburg State College	Chairperson, Administrative Services--Business Education
ALVIN J. STUART, Professor Ph.D., Ohio University	Elementary Education
ELEANOR B. SUHRIE, Associate Professor Ph.D., University of Pittsburgh	Nursing
KATHLEEN T. SULLINGER, Instructor M.A., Indiana University of Pennsylvania	Health and Physical Education
FRANCIS L. SULLIVAN, Assistant Professor M.S., Washington State University	Criminology
MARIO SUSSMAN, Assistant Professor Ph.D., University of Illinois	Psychology

CONNIE J. SUTTON, Assistant Professor M.Ed., Indiana University of Pennsylvania	Geoscience
LOUIS R. SUTTON, Professor Ed.D., West Virginia University	Health and Physical Education
CRAIG G. SWAUGER, Professor Ed.D., University of Pittsburgh	English and Journalism
JOHN J. SWEENEY, JR., Assistant Professor M.S., University of Pittsburgh	Computer Science
FORD HARRIS SWIGART, JR., Professor Ph.D., University of Pittsburgh	English and Journalism
MARY E. SWINKER, Instructor M.A., Kent State University	Consumer Services
AUGUSTA SYTY, Professor Ph.D., University of Tennessee	Chemistry
STANFORD L. TACKETT, Professor Ph.D., Ohio State University	Chairperson, Chemistry
DANIEL J. TANNACITO, Associate Professor Ph.D., University of Oregon	English and Journalism
LEONARD P. TEPPER, Associate Professor Ph.D., University of Pittsburgh Regional Planning	Geography and
CAROL A. TETI, Associate Professor D.M.A., University of Michigan	Music
EUGENE F. THIBADEAU, Professor Ph.D., New York University	Foundations of Education
JOANN E. THISTLETHWAITE, Instructor M.S.N.E., University of Pittsburgh	Nursing
JOHN C. THOMAS, Associate Professor J.D., West Virginia University	Chairperson, Criminology
RAYMOND L. THOMAS, Professor Ph.D., Pennsylvania State University	English and Journalism
RICHARD E. THORELL, Associate Professor M.Ed., University of Rochester	Music
GORDON F. THORNTON, Associate Professor Ph.D., Ohio University	Psychology
GERALD L. THORPE, Professor Ph.D., Wayne State University	Political Science
DENNIS D. TIGER, Professor D.Ed., University of Pittsburgh	Accounting
WARNER E. TOBIN, Professor D.Ed., Penn State	Director of University School
HOWARD E. TOMPKINS, Professor Ph.D., University of Pennsylvania	Computer Science
MARTHA A. TROXELL, Associate Professor L.L.M., Temple University	Administrative Services and Business Education
J.DAVID TRUBY, Professor Ph.D., Pennsylvania State University	English and Journalism
LAWRENCE R. TUCKER, Associate Professor M.S., Ohio State University	Health and Physical Education
LAWRENCE J. TURTON, Associate Professor Ph.D., Western Reserve University	Special Education and Clinical Services
HENRY H. VALLOWE, Professor Ph.D., University of South Dakota	Biology
LEON D. VANDECREEK, Professor Ph.D., University of South Dakota	Psychology

MURRAY M. VARNER, Assistant Professor M.Ed., University of Pittsburgh	Administrative Services and Business Education
POTHEN VARUGHESE, Assistant Professor Ph.D., Kent State University	Chemistry
RICHARD VEXLER, Assistant Professor M.A., University of Pittsburgh	Sociology-Anthropology
LESLIE VICKERS, JR., Assistant Professor M.Ed., Indiana University of Pennsylvania	Special Education and Clinical Services
FRANK A. VIGGIANO, JR., Assistant Professor M.S., University of Wisconsin--Stout	Consumer Services
ROBERT J. VISLOSKY, Professor D.Ed., Pennsylvania State University	Art
JACOB U. VOELKER, Associate Professor M.A., University of Notre Dame	Foreign Languages
DOROTHY C. VOGEL, Professor Ph.D., New York University	History
EVA VOUKLIZAS, Associate Professor M.M., Indiana University	Music
JAMES A. WADDELL, Associate Professor M.A., University of North Carolina	English and Journalism
RICHARD F. WAECHTER, Professor D.Ed., Pennsylvania State University	Chairperson, Biology
SUSAN C. WAGNER, Assistant Professor M.L.S., University of Pittsburgh	Library
DONALD A. WALKER, Professor Ph.D., Harvard	Chairperson, Economics
NORMA E. WALKER, Professor Ph.D., Pennsylvania State University	Consumer Services
JOANN E. WALTHOUR, Assistant Professor M.M.E., University of Pittsburgh	University School
GEORGE B. WALZ, Professor Ph.D., Lehigh University	Psychology
STEPHEN B. WARE, Associate Professor B.A., Ohio Wesleyan University	Economics
HELEN LOUISE WARREN, Assistant Professor M.Ed., Indiana University of Pennsylvania	English and Journalism
JANE WASHBURN, Associate Professor M.Ed., Indiana University of Pennsylvania	Counselor Education
WILLIAM M. WASKOSKIE, Associate Professor M.Litt., University of Pittsburgh	Biology
JOHN G. WATTA, Assistant Professor M.Litt., University of Pittsburgh	English and Journalism
CALVIN E. WEBER, Professor Assistant Ed.D., University of Illinois	Chairperson, Music
CHARLES E. WEBER, Professor Ed.D., Columbia University	Geography and Regional Planning
WILLIAM F. WEGENER, Associate Professor Ed.S., University of Northern Colorado	Criminology
RONALD M. WEIERS, Associate Professor Ph.D., University of Pittsburgh	Management and Marketing
CHRISTOPHER L. WEILAND, Associate Professor M.F.A., Rochester Institute of Technology	Art
JAMES E. WELKER, Assistant Professor M.B.A., University of Pittsburgh	Finance and Management Information Systems



NED O. WERT, Assistant Professor M.Ed., Pennsylvania State University	Art
JACK R. WESTWOOD, Associate Professor M.S., Bucknell University	Mathematics
ROBERT L. WHITMER, Associate Professor Ph.D., University of Pittsburgh	Foreign Languages
DENNIS W. WHITSON, Professor Ph.D., University of Pittsburgh	Physics
JAMES HERBERT WILDEBOOR, Associate Professor M.M.E., University of Kansas	Music
GEORGE T. WILEY, Professor Ph.D., Western Reserve University	History
LINDA S. WILLIAMS, Associate Professor D.Ed., University of Pittsburgh	Elementary Education
HALLEY O. WILLISON, JR., Associate Professor M.Litt., University of Pittsburgh	Mathematics
CHRISTINE F. WILSON, Assistant Professor M.A., University of Akron	Consumer Services
EDWARD D. WILSON, Professor Ph.D., University of Oklahoma	Political Science
JAMES C. WILSON, Professor Ed.D., University of Pittsburgh	Counselor Education
T. KENNETH WILSON, Associate Professor B.A., University of Buffalo	English and Journalism
RAY L. WINSTEAD, Assistant Professor Ph.D., North Carolina State University	Biology
EDWARD G. WOLF, Professor Ph.D., University of Pittsburgh	Library
RICHARD E. WOLFE, Professor Ph.D., University of Illinois	Mathematics
BETTY LOU WOOD, Assistant Professor M.Ed., Indiana University of Pennsylvania	Consumer Services
JOHN T. WOOD, Assistant Professor Ph.D., University of Pittsburgh	Chemistry
SUSAN E. WOOD, Associate Professor M.A., Kent State University	Geography and Regional Planning
MELVIN R. WOODARD, Professor Ed.D., Oklahoma State University	Mathematics
ALLEN M. WOODS, Associate Professor M.Ed., University of Pittsburgh	Chairperson, Food and Nutrition
DON W. WOODWORTH, Associate Professor M.A., Indiana University	English and Journalism
DALE W. WOOMER, Professor D.Ed., Pennsylvania State University	Administrative Services and Business Education
JOHN C. WORZBYT, Professor Ed.D., University of Rochester	Counselor Education
HELEN J. WRIGHT, Associate Professor M.Ed., Duquesne University	Nursing
PAUL R. WUNZ, JR., Professor Ph.D., University of Delaware	Chemistry
JOHN A. YACKUBOSKEY, Assistant Professor M.A., Emory University	History
MYRON M. YAGEL, Associate Professor Ed.D., University of Virginia	Special Education and Clinical Services

JOAN R. YANUZZI, Professor Ph.D., Cornell University	Educational Psychology
ROBERT YARUP, Assistant Professor M.A., West Virginia University	English and Journalism
HAROLD J. YOUCIS, Professor Ed.D., Indiana University	Foundations of Education
DAVID L. YOUNG, Professor Ph.D., Ohio State University	Communications Media
MAURICE M. ZACUR, Professor D.Ed., Pennsylvania State University	Geography and Regional Planning
DANIEL E. ZALAZAR, Associate Professor Ph.D., University of Pittsburgh	Foreign Languages
GENO ZAMBOTTI, Associate Professor M.Ed., Indiana University of Pennsylvania	Chemistry
MARY L. ZANICH, Assistant Professor Ph.D., University of Pittsburgh	Psychology
CYRIL J. ZENISEK, Professor Ph.D., Ohio State University	Biology
CARLEEN ZONI, Associate Professor M.N., University of Pittsburgh	Nursing

### **Adjunct Professors--Medical Technology**

The individuals named below provide programs affiliated solely with Indiana University of Pennsylvania. Administrators and teaching staffs of other hospital schools are awarded Adjunct Professorships in years when Indiana students are in attendance.

EDWARD J. BENZ, M.D.

Director, School of Medical Technology, St. Lukes Hospital,  
Bethlehem, PA; M.D., University of Pittsburgh

SUSTANA BHATTACHARJI, M.D.

Director, School of Medical Technology, Harrisburg Hospital,  
Harrisburg, PA

MARGARET BLACK, B.S., M.T. (ASCP)

Coordinator of Education, School of Medical Technology,  
Polyclinic Hospital, Harrisburg, PA; B.S., Lebanon Valley  
College

VIRGINIA DELL CRAIG, B.S., B.A., M.T. (ASCP)

Technology Coordinator, Benedum School of Medical  
Technology, Western Pennsylvania Hospital, Pittsburgh, PA;  
B.S., B.A., Texas Womans University

JOANNE R. DeNOFA, B.S., M.T. (ASCP), M.A.

Educational Coordinator, School of Medical Technology,  
St. Lukes Hospital, Bethlehem, PA; M.A., Lehigh University

JOHN W. EIMAN, M.D.

Director, School of Medical Technology, Abington Memorial  
Hospital, Abington, PA; M.D., University of Pennsylvania

JANICE FOGLEMAN, S.M., M.T. (ASCP)

Educational Coordinator, School of Medical Technology,  
Harrisburg Hospital, Harrisburg, PA

JOANNE GROTE, B.S., M.T. (ASCP)

Assistant Program Director, School of Medical Technology,

- Latrobe Area Hospital, Latrobe, PA; B.S., St. Francis College
- NORMA HOENSHEL, B.S., M.T. (ASCP), M.A.**  
Program Director, School of Medical Technology, Latrobe Area Hospital, Latrobe, PA; B.S., California State College; M.A., Central Michigan University
- WALTER W. JETTER, M.D.**  
Director of Pathology Laboratories and School of Medical Technology, Latrobe Area Hospital, Latrobe, PA; M.D., University of Buffalo
- CARLOS C. LAMAS, M.D.**  
Associate Director, Benedum School of Medical Technology; Western Pennsylvania Hospital, Pittsburgh, PA; M.D., Madrid University Medical School
- JULIAN W. POTOK, D.O.**  
Associate Director, School of Medical Technology, Polyclinic Hospital, Harrisburg, PA; D.O., Philadelphia College of Osteopathic Medicine
- BARBARA J. SCHEELJE, M.T. (ASCP)**  
Educational Coordinator, School of Medical Technology, Abington Memorial Hospital, Abington, PA; B.S., Colby- Sawyer College
- EUGENE SNEFF, M.D.**  
Director, School of Medical Technology, Altoona Hospital, Altoona, PA; M.D., Hahnemann Medical College
- ALEXANDER STAURIDES, M.D.**  
University of Pennsylvania  
Western Pennsylvania Hospital, Pittsburgh, PA; M.D., University of Thessaloniki, Thessaloniki, Greece
- WILLIAM O. UMIKER, M.D.**  
Director, School of Medical Technology, St. Joseph Hospital, Lancaster, PA; M.D., University of Buffalo
- JACQUELINE YANDLE, M.T. (ASCP)**  
Educational Coordinator, School of Medical Technology, Altoona Hospital, Altoona, PA; B.S., Juniata College
- GARY W. AMBERSON, R.R.T.**  
Director, Respiratory Therapy Department, Mercy Hospital of Pittsburgh, Pittsburgh, PA; B.S., Indiana University of Pennsylvania
- CLAUS L. ANDERSON, M.D.**  
Lecturer in Pulmonary Medicine, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; M.D., Temple University
- PAUL G. BEAM, R.R.T.**  
Instructor, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; B.S., Indiana University of Pennsylvania
- GRAYCE BELL**  
Director, Cardiopulmonary Laboratory, The Western Pennsylvania Hospital, Pittsburgh, PA
- THOMAS CARLISLE**  
Associate Director, Cardiopulmonary Laboratory, The Western Pennsylvania Hospital, Pittsburgh, PA
- EDWARD H. HALE, M.D.**  
Lecturer in Internal Medicine, School of Respiratory

- Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; M.D., Meharry Medical College
- DAVID C. HENRY, R.R.T.  
Instructor, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; B.S., Indiana University of Pennsylvania
- THOMAS C. HON, R.R.T.  
Instructor, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; B.S., Indiana University of Pennsylvania
- WILLIAM J. MALLEY, R.R.T.  
Assistant Director, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; B.S., Indiana University of Pennsylvania
- ROBERT A. MARTIN, R.R.T.  
Director, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; B.S., Indiana University of Pennsylvania
- PATRICK F. MUTCH  
Assistant Executive Director, Western Pennsylvania Hospital B.A., M.P.H., University of Pittsburgh
- JOHN H. SCOTT, M.D.  
Chief of Pulmonary Medicine and Medical Director, School of Respiratory Therapy, The Western Pennsylvania Hospital, Pittsburgh, PA; M.D., University of Pittsburgh
- LAWRENCE T. SLATTERY  
Director, Respiratory Therapy Department, The Western Pennsylvania Hospital, Pittsburgh, PA, R.R.T.
- JOHN M. NEALE, M.D.  
Staff member of Indiana Hospital; private practice in pediatrics. B.S., IUP; M.D., Georgetown University

### **Adjunct Professors--Psychology**

- JAMES A. BESHAI  
Director of Psychology Services at Dixmont State Hospital, Sewickley, Pennsylvania; Ph.D., University of Kentucky
- JAMES KLINEDINST  
Director, Indiana County Guidance Center, Indiana, Pennsylvania; Ph.D., University of Minnesota
- HERBERT I. LEVIT  
Director of Undergraduate Training, Woodville State Pittsburgh, Pennsylvania; Ed.D., Temple University
- ANTHONY J. PALMER  
Director of Undergraduate Training, Woodville State Hospital, Carnegie, Pennsylvania; Ed.D., West Virginia University
- NOEL A. PLUMMER  
Director of Psychological Services, Woodville State Hospital, Carnegie, Pennsylvania; Ph.D., University of Florida
- ALAN W. RUSNAK  
Director of Graduate Training, Psychology Department, Woodville State Hospital, Carnegie, Pennsylvania; Ph.D., University of Florida

# Index

## A

Academic Good Standing	43
Academic Grievances	51
Academic Honors	46
Academic Policies	41-52
Academic Violations	44-46
Accounting Department	77-80
Activities Board	62
Activity Fees	26,28
Adjunct Professors	344-346
Administrative Officers	314-316
Administrative Services and Business Education Department	80-91
Admission and Registration	17-23
Advanced Placement Program	73-74
Advance Registration Fee	26
Advisory Program	49
Allied Health Professions	160-162
Anthropology	305; 309-311
Application Fee	18
Application for Graduation	74
Application for Housing	55
Applied Music	149
Aquatics School	170-172
Armstrong County Campus Advisory Board	313
Art and Art Education	135-140
Artist Series	62
Athletic Department	162
Athletics	63
Audit Fee	26
Audit Policy	47
Automobiles	56

## B

Bad Check Charge	27
Basic Fees	25-29
Billings and Payments	29
Biology Dept.	206-214
Board of State College and University Directors	313
Bookstore	60
Branch Campuses	9-16
Buildings and Grounds	7
Business-Accounting Department	77-80
Business-Administrative Services	80-91
Business Education	80-91
Business and Distributive Education	80-91
Business-Finance and Management Information Systems Department	91-95
Business-Labor Relations	95-96
Business-Management and Marketing Department	96-99
Business Associate Degree Program	10

## C

Calendar	3
----------	---

Cancelled Semester Policy	43-44
Career Services	58
Certification for Teachers	109
Certification in Education for Safe Living	169-170
Certification Students	22
Chairpersons of Departments	316-318
Changes of Curriculum	48
Cheating	44
Chemistry Department	214-219
Child Development/Family Relations Program	194-195
Class Attendance	46-47
Clubs and Organizations	64-67
Classification of Students	41-42
Clinics	57-58; 108-109
Co-Curricular Activities	60
College Board Examinations	18-19
Commonwealth Association of Students	61
Communications Media	111-114
Communications and Publications	62-63
Community-University Studies Series	101-103
Computers	57
Computer Center	7
Computer Science Department	219-224
Consumer Services	182-188
Continuing Education	13; 101-103
Counseling Center	57
Counselor Education	115
Course Number Abbreviations	51-52
Course Withdrawal Policy	48
Criminology Department	254-259
Criminology Associate Degree Program	10
Criteria Governing Continuance at IUP	43

## D

Damage Fees	29
Dean's List	46
Degree Candidacy	21-22
Degree Fee	28
Delinquent Accounts	29
Departments (course descriptions)	
Accounting	79-80
Administrative Services and Business Education	88-91
Allied Health Professions	160-162
Medical Technology	161-162
Respiratory Therapy	160-161
Art and Education	135-140
Athletic	162
Biology	206-214
Chemistry	214-219
Communications Media	111-114
Computer Science	219-224
Consumer Services	182-188
Counselor Education	115
Criminology	254-259
Economics	259-265

Educational Psychology .....	115-117
Elementary Education .....	117-119
English and Journalism .....	265-275
Communications Major .....	266-267
B.A. in Speech .....	270
Finance and Management Information Systems .....	91-95
Food and Nutrition .....	188-192
Foreign Languages .....	275-283
Foundations of Education .....	120-121
Geography and Regional Planning .....	283-288
Geoscience .....	224-230
Health and Physical Education .....	163-172
History .....	288-292
Home Economics Education .....	192-198
International Studies .....	292-293
Labor Relations .....	95-96
Linguistics .....	293-295
Management & Marketing .....	96-99
Mathematics .....	232-239
Military Science .....	199-202
Music and Music Education .....	141-149
Natural Sciences .....	239
Nursing .....	172-175
Philosophy .....	295-298
Physics .....	239-245
Political Sciences .....	298-303
Psychology .....	245-249
Safety Sciences .....	175-179
Social Science .....	303
Sociology-Anthropology .....	304-312
Special Education & Clinical Services .....	121-133
Theater .....	149-153
Department Chairpersons .....	316-318
Department Clubs .....	64-67
Departmental Abbreviations .....	51-52
Dietetics Curriculum .....	189
Dining Room Policy .....	55-56
Directors of Special Clinics .....	318
Directory .....	314-346
Disciplinary Dismissal .....	46
Distributive Education .....	80-91
Driver Education .....	169
Duke Cooperative Program in Forestry and Environmental Studies .....	206; 209
Duisburg Program .....	252

## E

Early Admissions Program .....	20
Earth and Space Science .....	226
Educational Psychology .....	115-117
Education of Exceptional Children .....	122-124
Education of Hearing Impaired .....	131-133
Economics Department .....	259-265
Elementary Education Department .....	117-119
English Department .....	265-275
Emeriti .....	318-319
Employment .....	32-33
Exemption Examinations .....	73
Extra-Curricular Activities (Branch Campuses) .....	11-12

## F

Faculty Management .....	320
Faculty — Unit I .....	322-344
Faculty — Unit II .....	321-322
Fees .....	25-29
Finance and Management Information Systems .....	91-95
Finances .....	25-39
Financial Aid .....	31-39
Financial Delinquency Policy .....	27
Food and Nutrition .....	188-192
Food Service Management Option .....	189
Food Services .....	11, 26, 55-56
Foreign Languages Department .....	275-283
Foreign Language Requirement .....	70, 204, 252
Foreign Study Program .....	252-253, 278
Forestry and Environmental Studies Cooperative Program .....	206; 209
Foundations of Education Department .....	120-121
Fraternities and Sororities .....	66
Freshman Applicants .....	18-20
Freshman Orientation .....	53
Full-Time Student .....	41

## G

General Education .....	69-73
Geography and Regional Planning .....	283-288
Geology Minor .....	225
Geoscience Department .....	224-230
Government and Public Service .....	299
Grade Reports .....	42
Grades and Quality Points .....	42-43
Graduate Program in Labor Relations .....	95-96
Graduate School .....	155
Graduation Requirements .....	69-74
Grants .....	35-36
Guaranty Student Loan Program .....	33
Guidelines for Student Conduct .....	59

## H

Handbook .....	63
Health Fee .....	26; 28
Health and Physical Education Department .....	163-172
Health and Physical Education Regulations .....	50
Health Services .....	57
Health Services, School of .....	157-179
History Department .....	288-292
History of the University .....	5
Home Economics Education .....	192-198
Honorary Societies .....	65
Housing Fee .....	26, 28
Housing .....	54-55
How to Apply for Admission .....	17-20
Humanities .....	70

## I

Indiana Penn .....	62
Infirmery .....	57
Interdisciplinary Linguistics Minor .....	293-295
International Studies .....	293-294
Internship Programs .....	206; 253-254
Insurance .....	56-58
Intramurals .....	63
IUP Board of Trustees .....	313

## J

Jefferson Medical College-IUP Physician Shortage Area Program .....	158-159; 206
Journalism .....	268-270
Junior Standing .....	49-50

## K

Key for Course Numbers .....	51-52
------------------------------	-------

## L

Late Registration Fee .....	27
Library and Media Services .....	7-8
Linguistics Minor, Interdisciplinary .....	293-295
Loans .....	33-35
Labor Relations .....	95-96
Location of the University .....	6

## M

Management and Marketing Department .....	96-99
Management Information Systems and Finance .....	91-95
Mail .....	59
Major Violation Procedure .....	45-46
Marine Science Consortium-Special Credit Program .....	204-205; 230-232
Mathematics Department .....	232-239
Media Services .....	7-8
Medical Technology .....	161-162
Medical Technology Fee .....	27
Mexico Program .....	253
Military Science Department .....	199-202
Military Fee .....	27
Mine Safety Management .....	175; 176-177
Minor Violation Procedure .....	44-45
Music and Music Education .....	141-149

## N

Nancy Program .....	252-253
National Direct Student Loan .....	33
Natural Sciences .....	71; 239
Natural Sciences — Pre-Professional Programs .....	205
Nursing Department .....	172-175

## O

Oak, The .....	62
Occupational Home Economics Option .....	194
Organizations and Activities .....	62-67
Orientation .....	53
Out-of-State Student Fee .....	25-26; 28

## P

Payment of Fees .....	29
Part-Time Study .....	21-22; 25
Pass-Fail Policy .....	47-48
Pechan Health Center Staff .....	318
Philosophy Department .....	295-298
Physician Shortage Area Program .....	158-159
Physics Department .....	239-245
Placement Services .....	58
Political Science Department .....	298-303
Pre-Law English .....	268
Pre-Law History .....	288
Pre-Law Political Science .....	299-300
Pre-Professional Programs .....	205; 253
Pre-Scheduling and Registration .....	22
Private Instruction in Music .....	27; 149
Profession! Education .....	108
Professional Practicum .....	108
Program for High School Juniors .....	22
Psychology Department .....	245-249
Publications .....	62-63
Public School Nursing .....	109-111
Punxsutawney Campus Advisory Board .....	313
Purposes of the University .....	5

## Q

Quality Points .....	42-43
----------------------	-------

## R

Reading Clinic .....	57
Readmission Policy .....	22; 43
Refund Policy .....	29; 31
Refrigerator Rentals .....	56
Rehabilitation Education .....	128-131
Religious Life .....	63
Religious Organizations .....	65
Religious Studies .....	295-296
Required Courses .....	70-73
Requirements for Graduation .....	69-74
Reserve Officers Training Corps .....	50; 199-202
Residence Hall Association .....	61
Residence Halls .....	54-55
Residency Requirements .....	73
Respiratory Therapy .....	160-161
ROTC .....	50; 199-202
Rules and Regulations For Student Behavior .....	59

## S

Safety Sciences Department .....	175-179
Scholarships .....	36-39

Scholastic Aptitude Test .....	18
School of Business .....	75-99
School of Continuing Education .....	101-103
School of Education .....	105-133
School of Fine Arts .....	135-153
School of Health Services .....	157-179
School of Home Economics .....	181-198
School of Natural Sciences and Mathematics .....	203-249
School of Social Sciences and Humanities .....	251-312
Science/Math Electives .....	72-73
Second Baccalaureate Degree .....	74
Selective Service and Military Affairs Counselor .....	58-59
Self-Instruction In Critical Languages ....	253
Semester Hour Load .....	47
Service Facilities .....	59-60
Senate .....	61
Smoke Signals .....	62
Social Sciences .....	71-72; 303
Sociology-Anthropology Department .....	304-312
Sophomore Screening .....	49-50; 107
Sororities .....	65-66
Speech .....	270
Special Education and Clinical Services .....	121-133
Education of Exceptional Children	122-124
Speech Pathology and Audiology	124-128
Rehabilitation Education .....	128-131
Education of Hearing Impaired .....	131-133
Special Fees .....	28-29
Special Interest Clubs .....	66-67
Speech Pathology and Audiology ....	124-128
Speech and Hearing Clinic .....	57
Sports and Recreation Clubs .....	67
SCUA (State College University Administrators) .....	320-321
SCUM (State College University Managers) .....	319-320
Student Activity Fee .....	26; 28
Student Assistance and Information Center .....	57
Student Cooperative Association .....	61
Student Employment .....	32-33
Student Government Association .....	60-61
Student Life and Services .....	53-67

Student Personnel Services .....	57
Student Publications .....	62-63
Students' Rights .....	31-32
Student Study Abroad Fee .....	27
Student Teaching .....	108
Student Union .....	59
Summer Sessions .....	3; 23; 28
Summer Session Fees .....	28
Systems, Management Information and Finance .....	91-96

## T

Teacher Certification .....	109
Telephones .....	56
Theater Department .....	149-153
Three-Year Degree Program .....	74
Time of Payments .....	29
Transcript Fees .....	28-29
Transfer Students .....	20-21

## U

University, The .....	5-8
University Clinics .....	57-58; 109
University Concert Committee .....	62
University Extension Program .....	101-103
University Farm .....	60
University Lodge .....	60
University Residence Halls .....	54-55
University School .....	108
University Senate .....	50-51; 61
University Sponsored Loan Program ....	33-35
Urban Education .....	120

## V

Valladolid Program .....	252
Veterans .....	58-59
Vocational Rehabilitation Assistance .....	39

## W

Withdrawal Policy .....	30; 48; 49
Work-Study Program .....	32-33



