



Undergraduate
Summer Sessions Bulletin

INDIANA
UNIVERSITY OF PENNSYLVANIA

INDIANA, PENNSYLVANIA

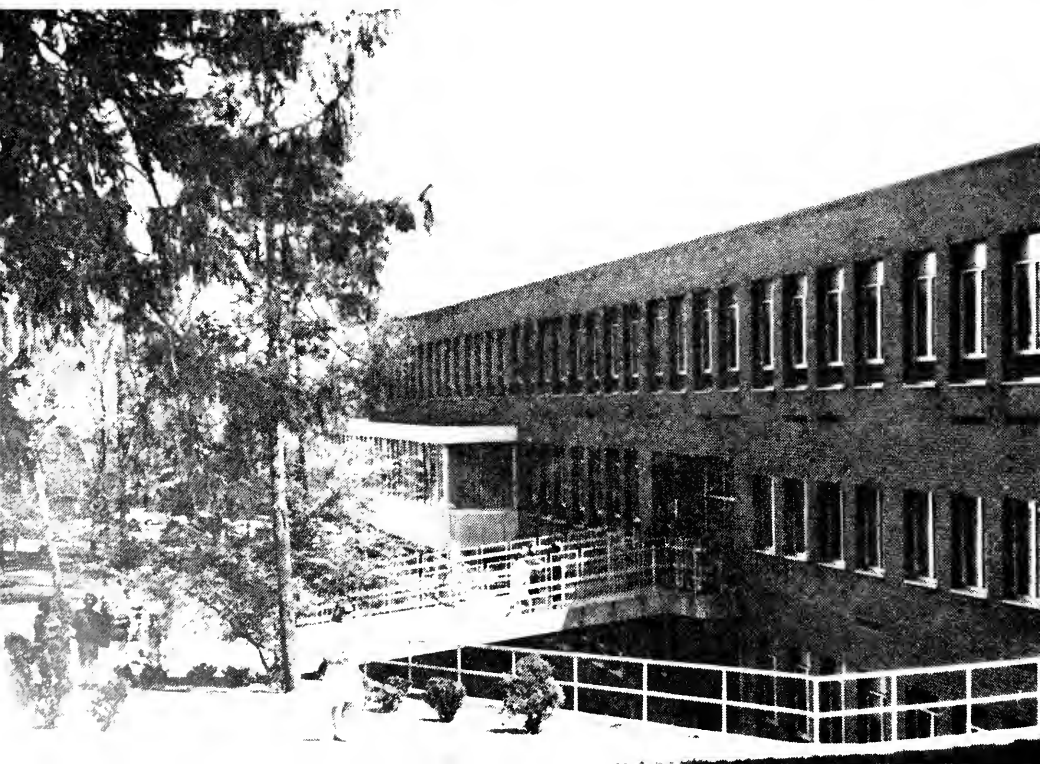
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Indiana University Bulletin

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INDIANA UNIVERSITY OF PENNSYLVANIA
INDIANA, PENNSYLVANIA

SUMMER SESSIONS

(UNDERGRADUATE)

Pre-Session June 8 to June 26

Main Session June 29 to August 7

Post-Session August 10 to August 28

1970



This University is Accredited by the
Middle States Association of Colleges
and Secondary Schools
and
The National Council for Accreditation of
Teacher Education

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DEPARTMENT OF PUBLIC INSTRUCTION**

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UNIVERSITY CALENDAR 1970

Pre-Session

Classes Begin Monday, June 8
 Session Ends Friday, June 26

Main Session

Classes Begin Monday, June 29
 Session Ends Friday, August 7

Post-Session

Classes Begin Monday, August 10
 Session Ends Friday, August 28

First Semester 1970-1971

Classes Begin September 9

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SUMMER SESSIONS 1970

There will be three sessions in the summer of 1970, two of three weeks each and one of six weeks. The pre-session will begin on Monday, June 8, and extend through Friday, June 26. The main summer session starts June 29 and extends through August 7. The post-session of three weeks begins August 10 and continues through August 28.

Students may earn three to four credits in the pre- and post-sessions and six in the main session. Any one or all three sessions may be attended making it possible to earn from three to twelve credits.

Four credit courses in the pre- and post-sessions will begin on the regular opening day and will run six days per week, with longer class periods.

OBJECTIVES OF THE SUMMER SCHOOL

The summer school program at Indiana University of Pennsylvania is designed to meet the needs of many students. Courses, workshops and seminars will be offered in the Liberal Arts, in Teacher Education, and in other fields of study.

Regular college students, including entering freshmen, who wish to **accelerate** their program of studies will find both general education and special courses in all fields of study.

Indiana students who were freshmen during the school year 1969-70 are given until the end of the Main summer session of 1970 to achieve their required quality point average of 1.6. Upper classmen who were in attendance during the school year 1969-70, likewise are given to the end of the Main summer session 1970 to attain their required quality point average of 2.0.

Students from other colleges and universities may take courses in our summer school. Indiana University of Pennsylvania is accredited by the Middle States Association of Colleges and Secondary Schools and by the National Council for Accreditation of Teacher Education. Its credits are recognized by other accredited colleges and universities. Students from other colleges who attend Indiana University of Pennsylvania

in the summer should request our Registrar to send a transcript of the credits they earn to their respective institutions.

Teachers-in-service will find courses in our summer program to serve their varied needs. They may take work to qualify for permanent certification. They may take refresher courses in their field of specialization, or they may take courses for the purpose of extending their certification to a new field.

Other individuals than the foregoing will be admitted to our summer school. They may take any of the courses offered and participate in the workshops and seminars which they may find useful or interesting to them.

READMISSION FOR SUMMER SCHOOL STUDY

Indiana students who had been dismissed for academic reasons and who were not in attendance during the academic year 1969-70 are required to apply for readmission to Indiana as a regular student. This application must be filed with the Dean of the university school in which they were enrolled. The application must be filed with such Dean by April 1, 1970.

Student Advisory Services

All students who plan to attend the summer sessions and who are enrolled in the summer sessions are requested to consult the Dean of their respective school if they wish advice and help in regard to the following matters.

1. Planning their summer school program
2. Revising their summer school program
3. Determining their academic standing
4. Determining their graduation requirements
5. Making a request for refunds

REGISTRATION

Advanced Registration

A Summer Session Course Request Card has been included with this catalog on which you may indicate your course interests and needs. All courses listed in this catalog will be offered if there are fifteen or more students enrolled in each

course. Additional sections of a course will be opened if the need indicates.

Receipt of the Course Request Card will serve to assure you a place in the summer school, and will provide the Dean of Men/Women with your desired meals and housing requirements. Whether you can obtain the specific courses entered on the Course Request Card will depend upon the conditions indicated in the paragraph above.

Please return the Course Request Card to Dr. R. W. Cordier, Director of Summer School, by May 8, 1970 if you will begin in the Pre-Summer Session; by May 22, 1970, if you will begin in the Main Summer Session; and by July 2, 1970, if you will attend only the Post Summer Session.

Students who submit a Summer Sessions Course Request Card will receive registration materials in the mail at their home address before each session begins. Students attending the spring semester, 1969, may complete a Summer Sessions Course Request Card during the pre-programming period for the fall semester. These students will have the opportunity to both procure and submit registration materials for the pre-session before the spring semester is concluded. Students in attendance during the Pre or Main Sessions will be afforded the opportunity to pick up registration materials for the following session.

Submission of mail registration materials, including fee payments, within the specified time limits, will free the student from attending an on-campus registration. Only if the student has requested a course or section which is closed, and has not indicated an open alternate, will he or she be notified to attend the late registration for the session in order to re-program. (See **Late Registration** section below)

In the event that no notification of closed courses or alternate course assignment is received, the student may assume enrollment in his originally scheduled first choice course or courses, and may report directly to his classes on the first day.

Late Registration

All students who do not register by mail are expected to attend Late Registration according to the following schedule.

All questions pertaining to fees, programs of classes, and room assignments should be settled at this registration so that classes may assume full time the day following registration. In the Pre-Session and Post-Session, classes will meet at 1:00 P.M. and 2:00 P.M. for one hour the first day. Those wishing credits evaluated should see the Deans of the School in which they are enrolled.

Late registration Pre-Session—8:30 A.M.-12 Noon,
Monday, June 8, 1970.

Late registration Main Session—8:30 A.M.-12 Noon,
Monday, June 29, 1970.

Late registration Post Session—8:30 A.M.-12 Noon,
Monday, August 10, 1970.

All late registrations will be held in Memorial Field House.

All students who must or wish to attend a late registration should, at that time, be prepared to:

1. Make out their programs.
2. Arrange for meals and housing as desired.
3. Pay their tuition and activity fees.

Books may be secured at the Book Store in the Student Union Building as soon as texts are specifically designated for courses taken.

How to pay Fees. All fees, except the degree fee, are to be paid either by mail registration, according to the deadlines prescribed, or on the day of late registration for each session. (See **Late Registration** section for dates)

Change in Fees. The foregoing fees are subject to change without notice.

All checks and postal money orders for fees **except** dormitory and activity fees should be made payable to the "Commonwealth of Pennsylvania". Checks and postal money orders for dormitory fees should be made payable to the "I. U. P. Dormitory Account". Checks and postal money orders for payment of the activity fee should be made payable to the "Student Cooperative Association".

Room Reservation

Room reservations will be made from your Summer Course Request Card or in Memorial Field House on Registration day for those who do not pre-register. An advance registration deposit is not required to reserve a room for summer sessions.

Since the number of single rooms is limited, prospective resident students will be assigned a roommate. Please indicate a choice of roommate on your course Request Card if you have a preference. Notification of room assignment will be printed on the revenue card you receive before the session begins.

Residence halls will be open for students on the Sunday before the Session begins at 12 noon. Students should report directly to the head resident of the building where you have been assigned. The residence halls will be open for students on June 7, June 28, and August 9.

MEALS: All students living in a residence hall are required to pay for meals. The only exception is made for women living in Carriage House.

Financial Aid

A limited amount of financial aid may be available to full-time summer session students. Any student interested in this possibility should contact the Director of Financial Aid, Room 318, Clark Hall, for further information. Deadline for filing applications, May 1, 1970.

Withdrawal Policy

A student may withdraw from a course or courses within the time periods specified below for each Summer Session provided he completes an appropriate withdrawal form (available in departmental offices) for each course. In such case a grade of "W" will be assigned by the instructor on the grade card submitted at the conclusion of the Session.

Pre and Post Session	First four days
Main Session ..	First eight days
Special 4-week Courses	First six days

EXPENSES AND FEES

(Subject to Change)

Contingent Fee

All Schools—\$22.50 per semester hour. (Minimum Contingent Fee for each session \$67.50).

Out-of-state students, \$30.00 per semester hour of credit. (Minimum contingent fee for each session \$90.00).

Other Fees

Degree Fee, to be paid only by those who graduate at the end of the summer session, \$5.00.

Approximate expenses for books—\$10.00 to \$20.00.

Room and Board Fees. The fee for room and board in University housing is \$19.00 per week. Housing fees for private dormitories vary.

Late Registration Fee. A student who registers after the date officially set for registration—June 8 for the pre-session, June 29 for the regular session, and August 10 for the post-session—will pay an additional fee of \$1.00 per day until the student is in regular attendance. Every late registrant must pay his fee unless excused in advance by the Dean of the school in which he is enrolled because of illness or other unavoidable cause. Even with the payment of a late fee no registration will be accepted after the second day of the Pre and Post sessions and after the fourth day of the Main session.

Activity Fee. The activity fee for the regular summer session is \$7.00 and \$3.50 for the Pre and the Post session.

PLACEMENT SERVICE**E. Samuel Hoenstine, Director**

The services of the Placement Office are available to students who are graduating, students who are attending for certification, students who have been admitted to the graduate school, and alumni. The directors of the various departments take an active interest in the placement of their graduates. The Office supplies credentials to employers who are seeking applicants for positions, arranges for interviews, and serves as a center where graduates may keep their records up-to-date. A computerized information retrieval system is available which permits experienced college graduates to make their qualifications known to employers seeking to fill their company's open positions. Positions are not guaranteed by the university, but Indiana's record of placement is one of the very best in Pennsylvania. The Placement Office also receives and makes avail-

able to graduates and undergraduates lists of vacancies in summer camp counseling.

SUMMER GRADUATION

Students who plan to graduate in the summer must have completed all requirements for **graduation** by the **end of the Main Summer Session**.

The summer commencement for 1970 will be held on Sunday afternoon, August 23. The responsibility for graduation rests upon students. All students who plan to graduate in the summer of 1970 should write or call at the office of the Dean of their respective schools to secure application forms for graduation. These forms properly filled in must be returned to the office of the Deans of these schools not later than May 30, 1970.

GENERAL INFORMATION

Admissions Policies. Admission to the Summer School program in no way implies assured admission toward a degree at Indiana University of Pennsylvania. Credits taken in the summer months, however, are applicable toward degree programs and are transferable to other institutions. Acceptance of summer credits at other institutions, of course, will depend upon the consent of these institutions. High school graduates not officially admitted to Indiana University of Pennsylvania may take summer work as a special student with the understanding that it would constitute college credit but not acceptance as a degree candidate. Students attending summer sessions must have earned a high school diploma and, if a degree candidate at another institution, be in good standing both academically and socially at that institution. Students not meeting these requirements may be asked to withdraw from the University.

University Regulations. Students attending the Indiana University summer sessions are expected to maintain acceptable standards of social behavior suitable to a college community. The University reserves the right at all times to ask students to withdraw from the summer sessions if such standards are not maintained.

Schools and Major Departments

Arts and Sciences—English, Philosophy, History, Political Science, Economics, Anthropology and Sociology, Geography, Psychology, Criminology, Mathematics, Biology, Chemistry, Physics, Speech and Theatre, Foreign Language.

Business—Business Management, Business Education.

Education—Dental Hygiene, Elementary Education for Mentally Retarded, Academic subjects, Public School Nursing, Speech and Hearing, Rehabilitation Education.

Fine Arts—Art, Art Education, Music, Music Education.

Health Services—Health and Physical Education, Nursing, Safety Education, Medical Technology, and Physical Therapy.

Home Economics—Home Economics Education, Institutional Food Services.

Class Hours. During the pre- and post-sessions some classes will begin at 8:00 a.m., run to 9:30 and then resume at 11:00 and run to 12:30 o'clock. Others will begin at 9:30 a.m., run to 11:00 and then resume at 12:30 and run to 2:00 o'clock. In the main session classes begin at 8:15 a.m. and close at 2:25 p.m., each period being 75 minutes. Some laboratory periods, field trips, practice periods for musical organizations, and similar activities are conducted in the afternoon. Each student should make certain that he can adjust his time to these periods as arranged before making his program. The time followed will be that of the Indiana Community.

The Rhodes R. Stabley Library named for the late Dr. Rhodes R. Stabley, chairman of the English-Speech Department from 1941 to 1958, was completed in the spring of 1961. The three story building will eventually house 380,000 books and provide study room for about 550 students.

An instructional program in the use of library tools and reference books is carried on by the staff to develop needed skills in the library use. The well-organized general holdings of 300,000 volumes are enhanced by the reference collection, 2,500 current magazines, extensive files of bound and micro-filmed magazines and newspapers, state and federal documents, pamphlets, and curriculum materials.

Library hours are posted at Stabley Library for Summer Sessions and during vacation periods.

Student Living Conditions. The men's dormitory will be open during the summer. It is important for men who wish to room at the college during any of the summer sessions to write to the Dean of Men at least ten days in advance of the session they plan to attend so that plans can be made to prepare sufficient rooming accommodations. Men who do not wish to room in a dormitory should contact the Secretary in Gordon Hall regarding approved rooms in town which are available for rent.

Slight illnesses are cared for in the university infirmary without charge for a period of three days. After three days, a charge includes the regular nurse and medical services, but does not include special nurse or special medical service.

All students who live in the university must provide themselves with blankets, as the university furnishes only the linen and spreads. Each student must also provide soap, towels and needful toilet articles.

Clothing. To enjoy sports activities such as hiking, swimming and tennis, women students will find slacks, comfortable shoes, swim suits, and shorts very useful.

Summer activities usually include a party for which a summer evening dress is suitable. For all other occasions, cool, comfortable dresses and spectator sports clothes will meet all needs.

RELAXATION AND RECREATION AT INDIANA

Accent on the finest in recreational activities combined with a pleasant environment and favorable climatic factors make the university at Indiana an ideal spot for summer study and relaxation.

The university campus itself provides many sources of entertainment. A notable example of this is the Summer Theater Guild in which students participating in the regular summer drama workshop, together with people from the community and imported actors and directors, will present at least six full length plays during the main session. In the past these productions have been acclaimed equal to or surpassing professional and summer stock performances.

Present plans for the summer of 1970 call for the continuation of the Summer Theater Guild program in Fisher Auditorium under the direction of Mr. Robert Ensley. The university-community summer theater will present at least six full length plays each for four nights a week. Students of the Main Session will receive tickets for admission to all six of these plays on their activity cards. Last summer, students thoroughly enjoyed the presentations of "Visit to a Small Planet," "Hogan's Goat", "When We are Married", "Who was That Lady I Saw You With?", "Yes, My Darling Daughter", and "The Country Wife".

An exceptional summer lecture series has been developed as a feature of the Indiana University summer sessions. Attendance is voluntary, but these events have proved to be one of the highlights of the summer program. Last summer's series included:

David Halberstam—"Vietnam—The Making of a Quagmire"

Willie Morris—"Autobiography as an American Literary Form"

"The Civil Rights Movement Through the Eyes of a Journalist"

Ron Stevenson & Isadore Shrensky—"Responsibilities of News Media" Panel Discussion

James Brann—"Student Riots—Are They Valid?"

Harold Taylor—"Education in the Time of Change: A New Emphasis"

M. Stanton Evans—"Against the Liberal Establishment"

Benjamin Demott—"The Politics of Confrontation in Higher Education"

Murray Levin—Guest Speaker at Union Lecture Lounge

Norman Nadel—"New Theatre Forms Lecture"

Lelia Gousseau—Piano Recital

The recreation program is ample and varied enough so that each individual may find an interesting outlet for his particular tastes and desires. The recreation program has been developed by a student-faculty committee. Tentative plans for the 1969 sessions include many of the old favorite activities of previous summer sessions and some new ones suggested by former students.

The entire Indiana area has many places that are of great natural or historic interest. Busses will be chartered for visits and field trips to many of these places. During the summer of 1969 tour groups chartered busses to attend Pittsburgh Press Newspaper Tour and Discussion, professional baseball games at Forbes Field, Miss Pennsylvania Contest, a visit to Frank Lloyd Wright's famous house, "Fallingwater" and others.

One of the most popular features of the summer sessions has been the regular Monday night presentations of full length feature movies and hi-fi concerts of good music at Flagstone Theater.

Much of the summer recreation program centers at the University Lodge near Indiana where many picnics, outings, steak fries, informal parties and hikes are held in a woodland environment. On the campus proper, the Field House is open for swimming and athletic activity, while indoors the Student Union provides an attractive setting for informal dances, art exhibits, jazz and folk sessions, pool, games, and visiting.

PROGRAM OF STUDIES

The summer school program of studies consists primarily of a liberal offering of basic and advanced courses. The program includes courses in general education, advanced courses in various fields of academic interest, as well as courses in the field of professional education. The program also features a number of institutes, workshops, seminars and clinics. These are provided to meet the special needs and interests of students who may take them on a credit or non-credit basis. Most of them will be directed by or will feature recognized resource people who will be brought to the campus for our summer program.

GENERAL EDUCATION PROGRAM

The following program in general education is required of all undergraduate students.

I. Humanities	19-22 cr.
English I and II	8
Literature I (Tragic Themes in Literature) or Literature II (Literature of Social Criticism)	2

Introduction to Art or Introduction to Music or Introduction to Theatre	3
*Foreign Language (Completion of intermediate sequence)	6
General Electives—Students who do not take Foreign Language may elect 3 courses from the following list or 2 from this group and 1 from the General Electives in Natural Science. Students who take Foreign Lan- guage may elect 1 from the General Elec- tives list for either Humanities or Natural Science.	3- 9

Aesthetics	Intro to Philosophy
Art History I or II	History of Civ. I
Ethics	Logic I, General Logic
Modern American Fiction	The English Bible as Literature
Music History I	World Religions

*Required of all Liberal Arts students. Optional for other students.

II. Natural Science **11-14 cr.**

Laboratory Science	8
Foundations of Math I	3

General Electives:

Astronomy	Geology
Computer Mathematics	Statistics

*Foundations of Mathematics II

III. Social Science **15 cr.**

Each student will elect 5 courses from the following:

American Citizenship	History of Civ. II
Intro. to Anthropology	**Hist. of U. S. & Pa. II
Principles of Economics	**General Psychology
World Geography	Principles of Sociology

*Required of all Elementary Education majors.

**Required of School of Education students.

IV. Physical Education or ROTC **Men** **4 cr.**

MS 101 Military Science I	2 cr.
MS 102 Military Science I	2 cr.

OR

HPE 110 Physical Education I	1 cr.
HPE 111 Physical Education II	1 cr.
HPE 101 Personal and Community Health	2 cr.

THE SCHOOL OF ARTS AND SCIENCES

Francis G. McGovern, Dean

Many of the courses, institutes, workshops and seminars in our summer school program are applicable to the Liberal Arts. The program of studies in the School of Arts and Sciences is designed to enable the student to pursue a general program, a study in depth within a chosen subject, an interdisciplinary program or a pre-professional program of study. All students in this school are required to take the program in General Education of 52 semester hours as outlined on page 14. Each student also must elect a major in one of the subject fields in the Humanities, Natural Sciences or the Social Sciences. He may also elect a minor in a field approved by his adviser. The overall graduation requirement is 124 credits.

Students in the Liberal Arts program may receive either the Bachelor of Arts or Bachelor of Science degree depending on their program of study. Students in the Humanities and Social Sciences will be awarded the A.B. degree, whereas those in Natural Science who complete the prescribed requirements for a single area of concentration may receive the B.S. degree or the A.B. degree depending upon the program elected. The major fields of study in the three divisions are as follows:

Humanities	Natural Sciences
English, Speech-Theater	Biology
Foreign Languages	Chemistry
Philosophy	Mathematics
	Medical Technology
	Physics
	Social Sciences
Economics	Psychology
History	Geography
	Political Science
	Sociology-Anthropology

THE SCHOOL OF FINE ARTS

Harold S. Orendorff, Dean

The School of Fine Arts consists of four departments in two administrative units; the Art and Art Education Department, and the Music and Music Education Department.

One requirement in the General Education program for all students of the University, is the option of a course in Art, Music or Theatre. The School of Fine Arts offers Introduction to Art and Introduction to Music to fulfill this requirement.

After a two year core program, the Art student may major in Art Education; Art History; drawing, painting and sculpture; or Design.

The Music student may major in Music Education or Music Performance.

All students in the School of Fine Arts must complete the requirements in General Education as listed in their sequence in the main catalogue. Those majoring in Art Education and Music Education must also complete the requirements in Professional Education.

THE SCHOOL OF BUSINESS **Albert E. Drumheller, Dean**

The establishment of a School of Business was authorized by the Board of Trustees of the University in May, 1966. In doing so, it was indicated that the School should consist of several departments.

The Department of Business Education, which has been one of Indiana's areas of specialization for some fifty years, represents one of the departments. This area of education is designed to prepare business teachers for the secondary schools. The Department of Distributive Education was recently created to prepare Teacher-Coordinators for those schools offering programs in marketing and distribution. Another newly instituted department was designated as the Department of Business Management. The primary purpose of this area of study is to prepare students for activity in the world of business and industry.

GENERAL EDUCATION

The credit requirements in General Education are the same in the School of Business as they are in all other Schools of the University. Slight variations in specific courses needed to meet the General Education requirements exist in the several departments of the School.

AREA OF CONCENTRATION

Business and Distributive Education. Those persons enrolled in the Business Education Program have a choice of four areas of specialization. Accounting, Data Processing, Stenography, and the Retailing field represent the possibilities. A new area of concentration is available in Distributive Education, a vocational program preparing teacher-coordinators. It is a requirement of the department, that all persons enrolled in these areas choose two of the fields according to their interests and desires, in order to meet the department's standard for graduation. All state requirements for certification are more than adequately met in Indiana's curriculum. Additional hours beyond the State's requirement enrich the student's preparation for teaching in their chosen fields. Student Teaching under supervision provided at the centers where this experience is gained combined with supervision from the college during this stage of training provides a fine conclusion to the preparation for teaching. It is an experience which brings together in a useful form all of the trainees' academic preparation.

Business Management Department consists of a curriculum that provides students with a choice of four areas of concentration in their preparation for positions in business and industry. These areas are Accounting, General Business, Office Management, and Systems Analyst. In each of these areas provision has been made for a generous selection of a wide variety of courses in business and economics designed to broaden the student's background. Not only is it possible to concentrate in a particular area, it is also possible to include training in the other areas because of the available electives in each area of concentration.

THE SCHOOL OF EDUCATION

George A. W. Stouffer, Jr., Dean

The School of Education offers many fields of major study leading to certification to teach these subjects in the public as well as the private schools of Pennsylvania. The program includes studies in general education, specialization in both academic subjects and special fields, and professional education including directed student teaching.

General Education. All students in the School of Education

are required to take the same general education program as indicated for liberal arts students, but for 60 semester hours. Approximately two-thirds of this work is taken during the first two years of college.

Major Fields of Study. Major studies may be pursued in the academic subjects of Biology, Chemistry, Earth Science, English, French, Geography, German, History, Mathematics, Physics, Russian, General Science, Social Science and Spanish. Students may also major in Art, Business, Home Economics, Music, in Elementary Education, and in such special fields as Speech and Hearing, Mentally Retarded, Public School Nursing, Dental Hygiene, and Rehabilitation.

In most instances the number of semester hours required for a major in the foregoing fields exceeds the requirement for certification. The course and semester hour requirements for these major fields of study may be found in the regular university catalog.

Professional Education. Students in the School of Education are required to take from 24 to 27 semester hours of professional education. Within this program all students are required to take History and Philosophy of American Education, Educational Psychology, Evaluation Methods, a course in the teaching of their major subject and 14 semester hours of Student Teaching and Professional Practicum. Elective courses in Psychology and Professional Education are offered for those who are interested in increasing their professional competence.

THE SCHOOL OF HEALTH SERVICES

John Chellman, Dean

The establishment of a School of Health Services provides an opportunity to educate needed personnel representing various health disciplines. The School offers professional curricula leading to appropriate baccalaureate degrees for men and women in physical education; medical technology; physical therapy; and nursing. Indiana University of Pennsylvania is affiliated with approved schools and hospitals for specialized training in all programs of the allied health professions and nursing. A certification (12 semester hours) in safety education is also offered.

At the present time, the School of Health Services includes five departments:

1. Allied Health Professions
2. Nursing
3. Health and Physical Education for Women
4. Health and Physical Education for Men
5. Athletic

General Education. All students in the School of Health Services are required to complete the general education program as stated in the main catalog. Allowances are made for those students in nursing, medical technology and physical therapy who complete the clinical phase of their work off campus.

Professional Education. Students who plan to be certified for teaching are required to complete twenty-seven (27) semester hours of professional education courses.

PHYSICAL EDUCATION REQUIREMENTS

PHYSICAL EDUCATION or R.O.T.C.—MEN (4 credits)

MS 101	Military Science I	2 cr.
MS 102	Military Science I	2 cr.
	(or)	

HPE 110	Physical Education I	1 cr.
HPE 111	Physical Education II	1 cr.
HPE 101	Personal and Community Health	2 cr.

PHYSICAL EDUCATION—WOMEN (4 credits)

HPE 101	Personal and Community Health	2 cr.
HPE 102	Physical Education I	1 cr.
	Swimming-Badminton or Swimming-Tennis or Swimming-Basketball	
HPE 201	Physical Education II	1 cr.
	Fencing-Volleyball or	
HPE 202	Physical Education II	1 cr.
	Archery-Dance	
HPE 203	Physical Education II	1 cr.
	Bowling-Golf	

THE SCHOOL OF HOME ECONOMICS

Margaret E. McGeever, Dean

The School of Home Economics offers two major areas of study. One leads to certification to teach general and vocational home economics in the public as well as private schools, and the second leads to certification in school food service and to a dietetic internship. The educational program includes studies in general education, in home economics and in professional education including directed student teaching and school food service experiences. Upon graduation dietetic internship appointments are available to qualified students.

General Education. All students in the School of Home Economics are required to complete the general education program planned for all university students. Approximately two-thirds of this work is taken during the first two years of college.

Major Areas of Study. Major areas of study may be pursued in home economics education and in institutional food services. The number of semester hours required for a major in the foregoing areas may exceed the requirements for certification. The course and semester hour requirements for each of these two major areas of study may be found in the regular college catalog.

Professional Education. Students in the School of Home Economics are required to take from 16 to 22 semester hours of professional education. Within this program all students are required to take History and Philosophy of American Education, Educational Psychology, Audio-Visual Education, Methods of Teaching and directed student teaching or a school food service experience. For qualified School of Home Economics graduates a dietetic internship in approved hospitals or other types of institutional food service operations is available.

THE GRADUATE SCHOOL

I. Leonard Stright, Dean

Indiana University of Pennsylvania offers programs of study leading to the degrees: Master of Arts, Master of Education, Master of Science, Doctor of Education in Elementary Education, and Doctor of Philosophy in English.

Graduate credit is issued to students who are admitted to the Graduate School and who are registered in the graduate courses. (Courses numbered 500 or above.)

The graduate programs and courses are **not** listed in this bulletin but are shown in the "Graduate Bulletin." Interested persons should write to the Dean of the Graduate School for information regarding admission, course offerings, and degree requirements. Applications for admission to the Graduate School for summer work should be filed in the Graduate Office prior to May 15.

A qualified graduate student may earn the Master of Arts Degree in English, History, Geography, and Counseling Services. The Master of Education Degree is offered in Art, Biology, Business, Chemistry, Counselor Education, Elementary Education, Elementary Science, English, Geography, Home Economics, Mathematics, Music, Physics, Science, Social Science, Spanish, Special Education, and Speech & Hearing. A program leading to the Master of Science Degree is available in Mathematics, Geography, Physics, Chemistry, and Biology.

There are Specialist Certification Programs in Learning Resources and Public School Psychology.

INSTITUTES, WORKSHOPS, CLINICS, AND SEMINARS

Aerospace Workshop

3 cr.

This workshop will be conducted as a seminar with a number of visiting aerospace authorities. It treats of the atmosphere and space environment; history of flight and flight problems; satellites and space probes; manned orbital and space exploration projects; propulsion; communication, and other systems. Problems of teaching and bibliography at the various elementary and secondary levels will be considered. An indoctrination flight in a small craft and field trips to air age installations and projects fortify learning.

A field trip fee of \$20.00 will be collected for the air trips and supplies with the understanding that meals and lodgings at points visited will be available to the students at nominal costs. The group will be limited to 25 due to air flight arrangements and field trip preparations.

This course may be taken for graduate (Geog 565), undergraduate (Geog 491), or as a non-credit course.

Argentine Seminar

The University will cooperate with the Regional Council for International Education in sponsoring an Argentine Seminar program in Buenos Aires during the Main and Post sessions of summer school. Six semester hours credit may be earned: Three credits in conversational Spanish and three credits in Social Science Special Studies.

The total cost of the program is \$795.00. This includes the cost of transportation, tuition, room and board. Applicants must have completed the intermediate sequence in Spanish.

For additional information contact: Dr. Robert L. Morris, Director, Center for International Studies.

Drama Workshop

3 to 6 cr.

For the past twelve summers the university has conducted a very successful drama workshop, which has attracted widespread attention. Sets, make-up, properties, publicity and ticket distribution are among the important and exacting duties in the day's work for those in the workshop. Eight full-length plays of good quality, given during the summer sessions, offer opportunity for acting, prompting and assisting in many phases of production.

Students who participate in this Workshop may receive credit for one, two, or three of the following courses: Dramatic Arts, Play Production, Creative Dramatics and Story Telling, Costume and Make-up, and Stagecraft and Scenic Design. Each of these courses carries three semester hours credit.

The drama workshop cooperates with the Summer Theater Guild, a university-community summer theater project which uses university facilities in Fisher Auditorium for the presentation of the eight plays. The Sunday edition of the **New York Times** regularly carries notices of its offerings. Guild personnel will again include community people and some imported actors, directors, and technical specialists. Working with these people provides excellent experience in dramatics for university students and yields from three to nine hours of credit.

Home Economics Study Tours

The School of Home Economics will offer two foreign tours—one in Foods and one in Clothing and Textiles. Number 597 (Graduate) and 408 (Undergraduate) will be offered in Post-session. The Oriental study tour in Foods will be offered during Main-session. Graduate number 598, Undergraduate number 405.

For students working toward their Master's degree, it is necessary to furnish the Graduate Office with a transcript showing 2.5 honor point value on all undergraduate work, or as an alternative qualify by examination. Deadline dates for submitting application and transcript for graduate students are: June 1 for Main-session and July 15 for Post-session.

Please indicate early interest in the tour (or tours) of your choice.

Description of Courses:

MAIN-SESSION

Oriental Study Tour in Foods **6 cr.**

Undergraduate no. 405, Graduate no. 598

“Oriental Study Tour in Foods” is a course designed to broaden the experience and knowledge of students who have had basic training in Foods and Nutrition. The Oriental Tour will probably begin in Alaska and continue on to Japan, Singapore, Thailand, Hongkong with possible stops in Indonesia and Honolulu. The cost will be approximately \$1475.00 and will include all academic work, all sight-seeing, first class hotels with twin beds and bath, all transportation, two meals per day. Academic work will include cooking schools, meal preparation, lectures by Oriental people, hotel and restaurant investigation, the largest food markets of the world, and the famous “Klong” (Canals) trip where all food of the Orient will be observed.

POST-SESSION

European Study Tour in Clothing and Textiles **4 cr.**

Undergraduate no. 408, Graduate no. 597

“European Study Tour in Clothing and Textiles” is a course designed to broaden the experience and knowledge of

students who have had basic training in both Clothing and Textiles. Tentatively, at least six European countries will be included in three weeks of travel where Clothing and Textile industries are the most important in Europe. Probably, Ireland, Scotland, England, France, Holland, Belgium and Spain or Italy will be visited. The approximate cost is around \$716.00 which includes all academic work, all sight-seeing, first class hotels with twin beds and bath, two meals per day, all transportation. The academic work will include visits to lace making houses, fibers and weaving, tapestries, rug making and leather work.

PRE-SESSION

Contemporary Europe, 1970

2, 3, 4 s.h.

The Social Science Division will sponsor a three-week study tour of Europe during June, 1970. The tentative itinerary emphasizes major European cities: London, Paris, Venice, Florence, Rome, Lisbon. Credit will vary from 2-4 semester hours. Interested students should write to Dr. James M. Oliver, Director, Contemporary Europe, 1970. Keith Hall, Indiana University of Pennsylvania, 15701.

Archaeological Field School

6 cr.

Archaeological excavation of American Indian living sites will be conducted as a training program and a research project for undergraduate students. In 1970 excavation will proceed on Late Woodland and Middle Woodland village sites in the Miami River drainage of Southern Ohio.

Excavation techniques taught will include: methods for establishing and maintaining horizontal and vertical controls; feature recognition; excavation and recording methods; soil sampling procedures; flotation sample treatment; and field photography for records and public relations.

Evening seminars will focus on the following major topics: analytical procedures for artifactual and feature data; photography of specimens; elementary statistical comparisons; Ohio Valley culture history and areal problems acculturation and cultural evolution.

A limited number of field trips will be made to classic Adena-Hopewell and Fort Ancient sites in the Miami and Ohio River valleys.

Housing facilities will be arranged in the vicinity of the sites being excavated. Research facilities and collections of The Dayton Museum of Natural History, Dayton, Ohio will be available to students for additional study. Approximate cost \$350.00. Prerequisite: Introduction to Anthropology. Interested students should write to Mrs. Virginia Gerald, Uhler Hall, Indiana University of Pa., Indiana, Pa. 15701.

Washington Seminar

The Political Science Department will sponsor a three-day Washington seminar during Pre-Session in connection with its basic course in American Citizenship. Featured will be briefings at a government department, and major interest group, (such as The U. S. Chamber of Commerce). Students will attend a variety of Congressional hearings, visit House and Senate galleries, attend musical events at the National Gallery of Art and the Watergate, visit the National Museum of History and Technology, tour the major monuments and Arlington Cemetery. Total cost is estimated at something less than \$20. Interested students may reserve space on this seminar by forwarding a \$5.00 deposit to Dr. Richard F. Heiges, Chairman, Political Science Department.

School Food Service Institutes

For the twelfth year Indiana University of Pennsylvania will participate in the summer institute program offered for school food service employees. No college credit is given, but every effort is made to solve the problems of employees in all positions. State, Federal and regional specialists assist. The Indiana School systems provide supplementary facilities. Expenses include a \$38 registration fee plus an additional charge for Sunday tea, lodging, breakfasts and three dinners.

Managers and school food service employees who have attended several institutes should seriously consider enrolling in such credit courses as Meal Management, Advanced Foods, Nutrition, Food & Service Management, Nutrition Education, Food Purchasing, Methods in Teaching, Physiology, Chemistry,

or Microbiology, since certification requirements are a future necessity in this field.

Student Teaching Clinic and Professional Practicum 3 to 6 cr.

A student teaching clinic will be offered in the field of Special Education—the Mentally Retarded during the Main Summer Session. The clinic will fulfill the student teaching requirements for certification in this field. Students should take the course in Special Class Methods for the Mentally Retarded along with this Clinic unless they have already had the course. Students will receive three semester hours credit for the clinic and three semester hours credits for the course in Special Class Methods.

Observation and Participation

Students of the college desiring to observe a class or an activity in the University School during the main session may do so as individuals or as members of organized groups. Arrangements for such observations are made with the Director of The University School.

ATHLETIC CAMPS FOR BOYS

Ages 9-18 years

Football Camp—June 7-10, 10-13, 14-17, 17-20

August 9-12, and 12-15

Wrestling Camp—June 14-19

Swimming Camp—June 21-26 (Girls and boys)

Basketball Camp—June 21-26 and August 2-7

SUMMER CHILDREN'S PHYSICAL EDUCATION PROGRAM

The physical education program for faculty and staff children will be offered from 9:00 a.m. to 12:00 noon, Monday through Friday, during Main Session. A fee of \$10.00 per student (ages 7-14) will be charged for supplies, insurance, and instructional salaries. The program will be under the direction of Dr. Louis Sutton of the Men's Health and Physical Education Department. He will be assisted by three graduate students and a number of men and women physical education majors.

Each student will become involved in team and individual physical activities designed to promote maximum physical and social growth.

SEQUENCE IN URBAN EDUCATION

June 8 - August 28, 1970

The twelve hour sequence of courses comprising the Inner City Education program is designed for teachers who have completed their undergraduate work and who want specialized instruction in urban education. Completion of the program should enable participants to teach in "ghetto" schools with a greater degree of confidence and understanding, especially in the areas of sociology and psychology. The courses are planned so that students will receive a realistic exposure to actual educational situations they are likely to encounter, in addition to an academic consideration of problems from the standpoint of theory alone.

The twelve hour sequential program is offered as a unit. Credits earned in urban education can be applied toward certification for the State of Pennsylvania. The program is open to juniors and seniors, to teachers in-service and others who are or contemplate teaching in urban areas.

Advanced Course Registration

Students who are interested in enrolling in the urban education program described in this brochure should write to: Dr. George A. W. Stouffer, Dean of the School of Education, Indiana University of Pennsylvania, Indiana, Pa. 15701, by May 1.

Pre-Session

(6:30 p.m. to 9:15 p.m.)

June 8 - June 26

En Ed 458 Orientation to Teaching in Urban Centers 3 cr.

This course is designed to give students an understanding of children and youth in urban centers where specialized knowledge of learning and behavior problems is required. Instructional personnel consists of experienced teachers at the elementary and secondary levels who are actively engaged in urban education. Emphasis will be given to developing an un-

derstanding of the special needs of the disadvantaged child and how the origin of attitudes and values affects the relationship which exists between students and teachers. Special attention will also be given to the practical application of theoretical information to the problems of urban education. Classes will meet from 6:30 p.m. to 9:15 p.m.

Main-Session

June 29 - August 7

Ed 440 Field Experiences 6 cr.

This course is planned to provide a specialized experience for students desiring to teach in inner-city schools. Students taking the course should have completed student teaching requirements at the undergraduate level. Aspects of urban education to be emphasized include the physical characteristics of the community, the background and aspirations of the children and youth, and specialized teaching competencies; classroom management, planning, instructional materials, teaching strategies, and evaluation. Students are encouraged to take Fn Ed 458, Orientation to Teaching in Urban Centers, as a prerequisite; however, admission to Ed 440 will be dependent upon the results of a personal interview. Records of comprehensive experiences in urban areas will be taken into consideration in making student teaching assignments. Schools selected for the student teaching experience are located in Pittsburgh.

Post-Session

August 10 - August 28

Ed Psy 482 Interpreting Urban Teaching Experiences 3 cr.

The purpose of this course is to study and evaluate learning and behavior problems encountered during the student teaching experience in urban schools. A flexible approach will be stressed to encourage a wide range of investigation and exploration of psychological and sociological problems as they affect education. Supervision and guidance for investigating specific problems will be provided by specialists from fields of psychology, sociology and education. These specialists will function as resource personnel, providing direction which will enable students to combine experiences gained by teaching in urban schools with recent and pertinent theoretical information.

DEPARTMENT OF ART AND ART EDUCATION
Lawrence F. McVitty, Chairman

**Art Courses Leading to Permanent Certification in Art—
 Advanced Study**

Art graduates who are seeking Permanent Certification may attend courses as scheduled either as an undergraduate (for advanced credit under an upper level number (451-460) or as a graduate student in graduate classes. Students attending classes under a graduate number (500 series) must first be admitted to the Graduate School and must have completed their undergraduate certification requirements. Courses numbered in the four hundred series do not count toward graduate credit.

Art 101 Introduction to Art 3 cr.

Studies in the understanding and enjoyment of the visual arts as modes of expression, feeling, and communication make up the content of this course. Reproductions, demonstrations, slides, moving pictures as well as field trips to see original works of art, are used in sampling our cultural heritage.

Art 112 Drawing II (Composition and Figure Drawing) 3 cr.

Figure construction, anatomy, and life drawing are studied. Included are pictorial design and composition.

Art 113 Design I (Color and Design) Art Majors 3 cr.

Basic elements and principles of design and color are studied. Problems in two dimensional design are developed and translated in color.

Art 115 Art History I—Open to all students 3 cr.

The visual arts are examined as modes of expression in relation to the life of the individual in the home and in the community. The period covered is from Prehistoric times to the Renaissance (No prerequisite).

Art 116 Art History II—Open to all students 3 cr.

This is a combination of Art History in which appreciation and critical judgment of old and modern masterpieces are

goals. The relation of art to the world from the Renaissance to the 20th Century is presented. A brief survey of modern art is presented in the latter part of the course (No prerequisite).

Art 212 Painting II (Oil Color and Mixed Media) 3 cr.

This is a beginning course in painting with opaque plastic media. The student is introduced to the technical as well as the aesthetic and philosophical basis of painting through a creative approach to the design possibilities inherent in these plastic materials and their associated used in processes.

Art 213 Crafts I (Crafts in Metal and Wood) 3 cr.

In this course the student is given an opportunity to develop design sensitivity through experiencing those craft processes associated with wood and metal. Hand and power tools are used to experiment with these materials in discovering inherent design and construction possibilities.

Art 124 Ceramics I—Prerequisite to Art 312 3 cr.

A basic introduction to the art and craft of ceramics. Wheel throwing, hand building, and ceramic sculpture methods will be dealt with. Understanding of basic glaze composition, firing methods and decorative techniques will be explained in theory and demonstrated in practice.

Art 217 Printmaking I—Prerequisite to Art 315 3 cr.

The basic techniques of graphic expression will be studied. They will include: relief, intaglio, lithograph, and serigraph prints.

**Art 218 Graphic Design I
(Lettering and Commercial Art) 3 cr.**

Projects are designed to provide student with a variety of experiences in numerous areas of commercial art. Emphasis is on design in layout and lettering as applied to advertising and illustration.

Art 312 Ceramics II 3 cr.

A continuation and expansion of the skills and attitudes fostered in Ceramics I. In this course glazes will be studied in more depth, i.e., the student will be required to color test a given glaze by the line blend method and to evaluate his and his classmates' results. More specific form goals will be established in the work with a choice by the student of an area of concentration in the pieces to be made. Each student will assist in the loading and firing of oxidation kilns and be conversant with the techniques of reduction, salt, and raku firing.

Art 315 Printmaking II (Graphic Arts) 3 cr.

The basic techniques of graphic expression will be expanded to provide the student with a wider range of possibilities within the techniques of printmaking.

Art 330 Arts and Crafts for the Mentally Retarded 3 cr.

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, crippled, or need special help for any reason.

Art 451 Advanced Crafts 3 cr.

This course is designed to have the student explore the crafts area in depth. The design and construction of functional objects will be undertaken with emphasis on innovation.

He 213 Principles of Design—Open to all students 3 cr.

Principles of Design and Color are studied and applied to an original work.

El 213 Art for the Elementary Grades 3 cr.

The creative growth and the development of artistic expression is studied. Students are given experiences in the basic art materials and media, as well as an opportunity to plan art motivations for children.

El 214 Teaching Art in Elementary Grades 3 cr.

This course provides the student with elementary craft experiences with art materials supplemented by scrap. Emphasis is placed upon the creative challenge of a materials experience.

Note: Persons seeking advanced credit for Certification I or II under the new certification law, July 1, 1969, may select any of the above undergraduate courses by consulting with the department chairman.

BIOLOGY DEPARTMENT
Francis W. Liegey, Chairman

Biol. 103 General Biology I **4 cr.**

This course deals with the principles of biology. Topics include cellular structure and physiology, growth and repair, reproduction and development, control, sources of food energy, inheritance, and man's interrelationship with his biological environment. The classification of plants and animals is reviewed briefly.

Biol. 104 General Biology II **4 cr.**

A continuation of General Biology I.

Sci. 111 Science in Modern Civilization **4 cr.**

This course is designed to acquaint the secondary student with some of the major discoveries of science in all fields and the effects of discoveries upon man's way of life. Emphasis is placed upon developing an understanding of science and its implications. Discoveries leading to more abundant supplies of energy, discoveries contributing to better health and longer life, more rapid transportation, to a more abundant and better food supply, better housing, better clothing and to greater destructive potential are some of the topics developed.

Biol. 251 Field Botany **3 cr.**

Prerequisites: General Biology I and II.

This is a course in the taxonomy of the vascular plants of the region. It includes the ferns, fern allies, shrubs, trees and herbaceous plants. The use of the standard manuals for the identification of plant materials is stressed. Students are required to make collections for their future use.

**Biol. 272 Conservation of Plant and
Animal Resources** **3 cr.**

Prerequisites: General Biology I and II.

In this course special attention is devoted to a study of accepted practices in soil, water, forest, and game conservation. Numerous local and state conservation specialists are called in to assist in the discussion of the specialized fields of conservation. Field work is an essential part of the course.

Biol. 381 Mycology**3 cr.**

Prerequisites: Botany II, Microbiology or consent of instructor.

This course is designed to introduce the student to the study of the fungi. Myxomycetes and Eumycophyta including the classes Phycomycetes, Ascomycetes, Basidiomycetes, and Fungi Imperfecti will be studied. Emphasis will be given to those organisms which are of economic importance as casual organisms of disease in plants and animals. The investigation will introduce taxonomy, morphology, physiology and ecology of the fungi. Techniques of isolation, growth in pure culture, and identification will be stressed.

Biol. 271 Evolution**3 cr.**

Prerequisites: General Biology I and II.

This course deals with the principles of organic evolution. Various lines of evidence for evolution are studied as well as the operational mechanisms involved which have resulted in present-day organisms. Consideration is given to the origin and phylogenetic relationships of biologic groups. The historical development of evolutionary thought is also considered.

Biol. 285 Biotechniques**3 cr.**

Prerequisites: General Biology I and II; General Chemistry I and II.

Through laboratory work, student will gain manipulative skills and allied information pertaining to techniques frequently used by biologists. Major consideration will be given to microscope slide preparation with lesser emphasis on specialized microscopy and the use of various instruments. Two combined lecture laboratory sessions of three hours each.

**REQUIRED COURSES FOR STUDENTS IN
ELEMENTARY EDUCATION****Biol. 311 Environmental Biology****4 cr.**

This is a laboratory and field course that provides the student with basic knowledge in biology as well as some practical aspects.

El. 312 Teaching of Elementary Science 3 cr.

The fundamental areas of physics and chemistry are covered in this course. Student participation is fundamental to their understanding of the basic principles that can be transferred to the elementary classroom, and to their familiarization with scientific equipment. The latter part of the course is devoted to a survey of the biological environment and continues the work begun in Elementary Science.

**REQUIRED COURSES FOR STUDENTS IN
HOME ECONOMICS****Biol. 151 Physiology for Home Economics 3 cr.**

This is a study of the various physiological processes occurring in the human body and the functioning of the various tissues and organs.

Biol. 361 Microbiology 3 cr.

This course is a study of microscopic forms of life, both plant and animal, which are commonly encountered in biological work. Some emphasis is placed on the study of disease-producing species of man and his domesticated animals.

SCHOOL OF BUSINESS**A. E. Drumheller, Dean**

The courses listed below (prefix BUS.) are available to all students in the School of Business regardless of Departmental affiliation but subject to Departmental requirements.

Bus. 101 Business Organization and Management 3 cr.

This introductory course is an overview of the major aspects of business and business management. The interrelated activities of a business firm are integrated through the major functions of management: planning, organizing, directing and controlling. Emphasis is placed upon principles, practices, and methods common to most business firms in a private enterprise system.

Bus. 131 Principles of Typewriting**3 cr.**

For those persons who have had 1½ or more years of experience in this area in high school, a test is given and exemption from taking the course granted if course standards are met.

This introductory course places emphasis on the development of correct techniques in typewriting. The student is introduced to the basic styles of business letters, simple tabulations and simple manuscripts. Individual remedial work is given. Specific standards of speed and accuracy are required.

Bus. 132 Intermediate Typewriting**3 cr.**

This course continues the development of speed and accuracy. Students learn to type tabulated reports, special problems in letter arrangement and business forms, rough drafts, and prepare materials for duplicating. Production ability is developed.

Bus. 233 Marketing**3 cr.**

A study of the system of interacting business activities necessary to the planning, pricing, promoting, and placing of want-satisfying goods and services for use by household consumers and industrial users. Concepts and principles will be analyzed in order to give a basic understanding of the marketing system and its significance today.

Bus. 251 Intermediate Accounting**3 cr.**

Prerequisite: Bus. 221, a "C" average in Business Mathematics and English.

Special consideration is given in connection with accruals and deferred items; the significance and handling of evaluation accounts and the interpretation of the effect of all types of transactions on the operation of the business are stressed throughout the course. Attention is given to the voucher system and to the preparation of columnar records for different types of businesses along with the preparation and interpretation of comparative financial reports. Consideration is given to the legal and accounting aspects, payroll and partnership organization, operation and dissolution.

Bus. 271 Advanced Typewriting 3 cr.

Prerequisite: Bus. 132.

Emphasis is placed upon the further development of speed and accuracy and the use of special duplicating materials and equipment. Advanced letter forms, legal documents, stencil duplication, statistical reports and typing from problem situations are given much attention. Improvement in production ability is stressed.

Bus. 321 Business Communications 3 cr.

Prerequisite: "C" average in English 101 and 102.

This is a course rich in the fundamentals of grammar; study of the vocabulary of business; setup of business forms and modern business letters; emphasis of the "you" attitude in writing of letters of inquiry, response, order letters, adjustment letters, sales letters; preparation of data sheets, and application letters.

Bus. 335 Office Machines 3 cr.

This course covers the various fundamentals of operating office machines—rotary, key driven and printing calculators; key punch; dictating and transcribing machines; bookkeeping machines. It includes instruction in records management.

Bus. 336 Business Law II 3 cr.

Prerequisite: Bus. 235.

The basic aim of this course is the same as that stated for Business Law I. Attention is given to kinds of business organizations, sales, insurance, surety and guaranty, leases and mortgages, trusts and estates, bankruptcy, business torts and crimes.

Bus. 352 Corporate Accounting 3 cr.

Prerequisite: Bus. 251.

This course is a continued study of the financial principles and practices of accounting with emphasis on the characteristics, records, and financial reports of corporations.

The following topics are included: corporate capital, depreciation, revaluation of plant and equipment, intangibles, inventory valuation, cash and temporary investments, and receivables.

Bus. 353 Cost Accounting **3 cr.**

Prerequisite: Bus. 352.

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 and estimated cost systems is also considered.

Bus. 454 Federal Taxes **3 cr.**

Prerequisite: Bus. 352.

This course is designed to enable the students to gain a familiarity with the Federal Income Tax Laws as they pertain to individuals, single proprietorships and partnerships. The Social Security Tax Law will also be considered as a phase of this course. In addition to studying the Internal Revenue Code in connection with the above topics, problems will be considered which involve the use of the different forms that are necessary in tax accounting. The case method is utilized in the study of this subject.

**BUSINESS EDUCATION AND
DISTRIBUTIVE EDUCATION DEPARTMENTS**

James K. Stoner, Chairman

BE 111 Foundations of Mathematics (Business) **3 cr.**

This is a review of the fundamental processes with emphasis on speed and accuracy through adequate drill and practical application in the handling of the fundamental business operations. Topics considered which especially concern business are the 60-day 6 per cent method of computing interest; compound interest; bank, cash, and trade discounts; and partial payments.

BE 212 Business Mathematics II 3 cr.

Prerequisite: BE 111.

The purpose of this course is to teach students to apply principles of business mathematics with speed and accuracy in solving advanced problems encountered by the businessman and the consumer. The mathematics of production, marketing, accounting, finance, and management correlate with the accounting courses.

BE 311 Methods of Teaching Business Courses 3 cr.

This course includes methods of teaching general business courses, as well as shorthand, typewriting, and bookkeeping. Unit plans, demonstrations, and lesson planning are emphasized. Aims, techniques, and procedures of teaching, grade placement of subjects and classroom management are considered items of the course. All courses in the student's major area along with the two psychology courses must have been cleared before this course is taken.

BE 312 Evaluative Techniques in Business Courses 3 cr.

This course includes the construction, administration, scoring, treatment, and grading of various type tests. The analysis of test results, remedial teaching and retesting, the evaluation of tests, all tied together in the psychological foundation of good methods as they function in the field of Business Education.

BE 433 Retail Practice 6 cr.

Prerequisite: Bus. 332.

This is a practical course of cooperative part-time training in the retail establishments of Indiana. The student spends a minimum of 15 clock hours per week for a semester in actual retail work at which time he puts into practice the theories of retailing studied in previous courses. This course may be taken by the student in or near his home town during the summer term by special arrangement and provided the distance is no greater than sixty miles from Indiana. Each of these plans is under the close supervision of store officials and the university.

DE 434 Supervised Work Experience and Seminar in Distributive Education **6 cr.**

Prerequisite: Bus. 333.

Students will gain supervised work experience in selected business establishments operating in the field distribution. This work experience will be conducted under the guidance of competent store personnel and the college supervisor. As part of this program, the students will attend weekly evening seminars in which discussions will center on daily problems. The trainees will be required to submit regular progress reports.

BUSINESS MANAGEMENT DEPARTMENT

Charles L. Cooper, Chairman

BM 111 Foundations of Math (Management) **3 cr.**

This course is designed to provide a broad survey of the fundamental processes of mathematics as applied to business. Emphasis will be placed on the principles of solving business problems by the use of mathematics. Specific areas of concentration include: percentage, interest, discount, annuities, valuation of stocks and bonds, sinking funds, amortization plans, factoring, depreciation, pricing, taxes, insurance, and valuation.

BM 201 Personnel Management **3 cr.**

The fundamental principles involved in maintaining harmonious human relations at all levels of a business enterprise form the nucleus of this course. The basic elements involved in planning, organization, direction, and controlling personnel will be developed. Major topics included are the selection, training, evaluation, motivation, and remuneration of employees.

BM 215 Business Statistics **3 cr.**

Prerequisites: BM 111, Math. 362.

The major objective of this course is the application of statistical methods which are useful in guiding business decisions. Emphasis will be placed upon such statistical techniques as measures of central tendency, measures of dispersion, measure of relationship, sampling, and index numbers.

BM 241 Finance **3 cr.**

A study of the financial structures of the various types of business organizations. The methods of securing and managing funds on a short-term, intermediate-term, and long-term basis when financing their inception and their operations. An analysis of fixed and working capital requirements.

BM 380 Principles of Investments **3 cr.**

The analysis and evaluation of various types of securities and other forms of investment possibilities and a study of the principles of sound investment policies. Factors influencing the general movement of security prices and the return from investments are considered.

BM 434 Advertising **3 cr.**

An introduction to the principles, practices, advantages, and limitations of advertising, including the purposes, techniques, media, and organization of advertising campaigns. The legal, economic, and social aspects of advertising are also considered.

CHEMISTRY DEPARTMENT

Paul R. Wunz, Jr., Department Chairman

Chem. 101-102 Home Economics Chemistry
I and II **3 cr. each**

This course is planned to include those topics from the fields of inorganic chemistry, organic chemistry and biochemistry that are most important for the student of home economics and nursing. This information then serves as a basis for the study of various materials encountered by a professional home economist, whether teaching or employed by private industry or in the nursing profession.

Chem. 103 Chemistry for Nurses (Phys. Ed.) **3 cr.**

This course is open only to students in the nurses' training program connected with the hospital and to physical education majors. It is a one semester course, designed to survey the areas of inorganic, organic and biochemistry, particularly

those topics which are related to the fields of medicine, nursing, and health. Three hours lecture and two hours laboratory per week.

Chem. 111-112 General Chemistry I and II **4 cr. each**

General Chemistry I includes the study of the nature of matter, atomic structure, periodic law, chemical bond, stoichiometry, gases, liquids, solids, and solutions. General Chemistry II includes chemical kinetics, chemical equilibrium, electrical energy and chemical change, oxidation and reduction, descriptive chemistry, and organic chemistry.

Chem. 231-232 Organic Chemistry I and II **4 cr. each**

Prerequisites: General Chemistry I and II.

A study of the compounds of carbon with special emphasis being placed on the structure and reactions of the more important classes of carbon compounds. The laboratory work involves the preparation and purification of representative compounds. Two hours lecture and four hours laboratory per day.

**Chem. 305-306 New Approaches to Teaching
High School Chemistry** **3 cr. each**

A course designed to acquaint the teacher and prospective teacher with the newer approaches to high school chemistry. One semester would consider the Chemical Bond Approach curriculum and the other semester the Chem. Study curriculum. The student must be at least a junior chemistry education major. Arts and Science majors may take the course but will not be given credit towards graduation. Three hours to be divided between lectures and laboratory.

Chem. 321 Quantitative Analysis **4 cr.**

Prerequisites: Chem. 111 and 112.

The theory and practice of quantitative analysis includes gravimetric and volumetric analysis. Special emphasis is placed on perfecting the student's laboratory technique and application of general chemical knowledge through problem solving. Lectures, three hours per week; laboratory four hours per week.

Chem. 322 Instrumental Analysis 4 cr.

Prerequisite: Chem. 321.

This course is designed to instruct the student in Modern Instrumental Methods of Chemical Analysis. The student will learn the theory behind the instrument, the principles of operation, the interpretation of the data obtained, and the limitations of the methods. Two hours of lecture and six hours of laboratory.

Chem. 341 Physical Chemistry I 4 cr.

Prerequisites: Calculus II and Organic Chemistry I and II.

Classical thermodynamics, thermochemistry, gases, solutions and other topics as time permits. Three hours lecture and four hours laboratory per week.

Chem. 342 Physical Chemistry II 4 cr.

Prerequisite: Physical Chemistry I.

Application of classical thermodynamics to the study of phase equilibria, kinetics, diffusion, and other topics as time permits. Introduction to statistical thermodynamics and quantum physics. Three hours lecture and four hours laboratory per week.

Chem. 351 Biochemistry 3 cr.

Prerequisite: Organic Chemistry I.

A study of the chemistry of carbohydrates, lipids, proteins, minerals, and vitamins as well as the biological functions of each. Two hours lecture and three hours lab per day.

Chem. 355 Biochemistry and Nutrition 3 cr.

Prerequisites: Home Economics Chemistry I and II.

A study of the chemistry and biological function of biologically active compounds with respect to nutritional requirements.

Sci. 106 Physical Science II 4 cr.

A course designed to fulfill the University science requirement for non-science majors. This course will survey the fields of chemistry and geology.

Chem. 302 Industrial Chemistry 3 cr.

Prerequisites: Organic Chemistry I and II.

This course is a study of the applications of chemistry and science to the industries of Western Pennsylvania for the science teacher. The course consists of lectures, laboratory work, and field trips to representative industries. Two hours lecture and three hours laboratory per week.

CRIMINOLOGY DEPARTMENT

John G. Melleky, Chairman

Crmn. 101 General Administration of Justice 3 cr.

Administration of criminal justice in the United States. Deals with the role of the police, courts, and the correctional process.

Crmn. 102 Criminology 3 cr.

General survey of the nature and causes of crime and its prevention and treatment.

Crmn. 340 Crime Prevention 3 cr.

Organization and function of crime prevention agencies; police techniques in the prevention of crime; case work; role of the policewoman; community resources in preventing crime. (By appointment only.)

Crmn. 431 Etiology of Delinquent Behavior 3 cr.

An analysis of the aberrant behavior of children and youth in terms of modern behavioral sciences. Personality and social factors are examined with the view toward developing prevention and control procedures. (By appointment only.)

Crmn. 432 Treatment and Control of Delinquency 3 cr.

An analysis of juvenile court procedures, juvenile probation, juvenile institutions and juvenile parole in the treatment and control of delinquency. Offered during the summer. (By appointment only.)

Crmn. 490 Crime and Modern Society 3 cr.

An analysis of the nature and extent of crime at the 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.

Crmn. 497 Internship 6 cr.

A practicum designed to broaden the educational experience of students through appropriate observational and work assignments with governmental agencies and private firms. (By appointment only.)

ECONOMICS DEPARTMENT**Donald A. Walker, Chairman****Econ. 101 Basic Economics 3 cr.**

General education elective. Acceptable in the departmental majors program in lieu of Econ. 121 only upon achievement of 3.0 grade or better.

Major characteristics of the American economy: nature of capitalism; major distinctions from other economic systems; role of the price system; national income; employment theory; money and banking; market structures; resource use; current domestic and international problem areas.

Econ. 121 Principles of Economics I 3 cr.

Introduction to the nature and scope of economics; examination of universal principles and laws of economic activity; study of the structure of American capitalism; the role of money and banking; the role of government; national income, its fluctuations and growth.

Econ. 122 Principles of Economics II **3 cr.**

The study of what determines values: the problem of pricing goods and services; the problem of pricing the factors of production; understanding the kinds of competition; introduction to the problems of labor, international trade, world poverty, competing economic systems.

Econ. 321 History of Economic Thought **3 cr.**

Prerequisite: Econ. 121, or Econ. 101 if accepted in substitution.

Contributions of the more prominent early philosophers through to the modern economists and of the major schools of economic thought: Mercantilists, Physiocrats, Classicists, Socialists, Marginalists, Institutionalists, Neo-Classicalists, Keynesians, Post-Keynesians.

Econ. 325 Money, Banking, and Monetary Policy **3 cr.**

Prerequisite: Econ 121, or Econ 101 if accepted in substitution.

Organization, operation, and economic significance of American monetary institutions; commercial banks and the Federal System; monetary theory and policy; the mechanism of international payments.

Econ. 350 Comparative Economic Systems **3 cr.**

Prerequisite: Econ. 121, or Econ. 101 if accepted in substitution.

Capitalism, socialism, communism, and fascism subjected to economic analysis: their principles, practices, institutions, and philosophies.

EDUCATIONAL PSYCHOLOGY DEPARTMENT
Anthony A. Angeloni, Chairman
PROFESSIONAL EDUCATION COURSES

Ed. Psy. 302 Educational Psychology **3 cr.**

(Required of all Education Majors)

Prerequisite: General Psychology. (It is recommended that this course should be taken just before the teaching experience)

A course designed to promote a better understanding of the principles of psychology that govern human behavior, with particular emphasis on their relation to the learner, the learning process and the learning situation. The significance of evaluation, individual variation, group dynamics, and child growth and development will be stressed throughout the course.

Ed. Psy. 305 Evaluation Methods **3 cr.**

Prerequisite: General Psychology. (It is recommended that this course should be taken just before the student teaching experience.)

The design and scope of this course is to acquaint the student with the major methods and techniques of evaluation that are used to assess and report the growth, development, and academic achievement of individuals. Emphasis is placed upon an understanding of various objectives, qualities, and characteristics desired in methods of evaluation and on the use and construction of teacher-made tests. The course also provides the student with a basic understanding of elementary statistics and standardized tests.

Ed. Psy. 362 Developmental Reading **3 cr.**

Prerequisite: General Psychology. (It is recommended that this course should be taken by secondary students just before the student teaching experience.)

This course, planned especially for the teacher of secondary students, will assist the participating student to understand the developmental reading process. The study will in-

clude such areas as objectives, background knowledge and understandings of the reading process, an overview of the elementary program, the preadolescent and the adolescent and their needs in reading, finding and providing for instructional needs, and special problems. Specific helps, experiences, techniques, and materials will be considered.

GENERAL ELECTIVES OR FOR PERMANENT CERTIFICATION

These courses satisfy post-graduate certification requirements and serve as electives for undergraduate students of teacher education.

Ed. Psy. 372 Psychology of Childhood Education 3 cr.

Prerequisite: Education Psychology.

This course is designed to emphasize the relationship which physical, social, emotional and intellectual development have on the theory and practice of childhood and pre-adolescent education.

Ed. Psy. 373 Psychology of Adolescent Education 3 cr.

Prerequisite: Educational Psychology.

This course is concerned with the study of the significant characteristics and behavior of adolescents with emphasis on developing an understanding of the relationship these factors have for educational and social problems which occur during this period of development.

Ed. Psy. 376 Study of Problem Behavior 3 cr.

Prerequisite: Educational Psychology.

This course explores the emotional and social aspects of behavior problems encountered in classroom situations. The assumption that behavior is learned and purposeful forms a basis for study in the course.

PRE-SESSION
June 8-June 26

Begins June 29
8:15 A.M. to 9:40 A.M.

MAIN SESSION
11:25 A.M. to 12:50 P.M.

Ends August 7
1:00 P.M. to 2:25 P.M.

POST SESSION
August 10 to August 28

Art	1 Art 115 Art Hist I - ABC	Art 213 Art for El Gr	Art 101 Intro to Art (sec. 1)	Art 116 Art Hist II [±]	Art 101 Intro to Art (sec. 2)	1 Art 116 Art Hist II
	1 El 213 Art for El Gr [±]	El 211 Tech Art in El Gr	Art 211 Ceramics I [±] or Art 312 Ceramics II [±] (same time)	Art 312 Drawing II	Art 112 Drawing I (C&F) (sec. 2)	1 HE 213 Prin of Des
	1 El 213 Tech Art in El Gr	Art 112 Drawing I (C&F) (sec. 1)	Art 218 Graphic Art	Art 451 Advanced Crafts [±]	Art 217 Printmaking I	2 Art 217 Printmaking I
	2 Art 101 Intro to Art (sec. 1)	Art 115 Art Hist I [±]		*See write-up		2 Art 315 Printmaking II (same time)
	2 Art 101 Intro to Art (sec. 2)					
	2 Art 330 Art for Ment Retarded [±]					
	2 HE 213 Prin of Design					
Persons seeking advanced credit for Certification I or II under the new Certification Law, July 1, 1969, may select any of the above and graduate courses by consulting the department chairman.						
Biology	1 Bio 103 Gen Bio I* (sec. 1)	Bio 103 General Biology I (sec. 1 - June 29 to July 24 - 1 cr.)	Bio 361 Microbiology			1 Bio 101 Gen Bio II* (sec. 1)
	1 Bio 103 Gen Bio I* (sec. 1)	Bio 103 General Biology I (sec. 2 - June 29 to July 24 - 1 cr.)				1 Bio 101 Gen Bio II* (sec. 2)
	1 Bio 103 Gen Bio I* (sec. 2)	Bio 101 General Biology II (sec. 1 - July 27 to August 21 - 4 cr.)				1 Bio 101 Gen Bio II* (sec. 3)
	1 Bio 103 Gen Bio I* (sec. 3)	Bio 311 Environmental Bio (June 29 to July 24 - 4 cr.)				1 Scl 111 Sci in Mod Civilization
	1 Bio 272 Conservation (sec. 1)	Bio 361 Microbiology				2 Bio 251 Field Bot
	1 Bio 331 Microbio (sec. 1)					2 Bio 101 Gen Bio II* (sec. 1)
	1 Bio 331 Microbio (sec. 2)					2 Bio 101 Gen Bio II* (sec. 2)
	2 Bio 103 Gen Bio I* (sec. 4)					2 Bio 101 Gen Bio II* (sec. 3)
	2 Bio 103 Gen Bio I* (sec. 5)					2 Bio 101 Gen Bio II* (sec. 4)
	2 Bio 103 Gen Bio I* (sec. 6)					2 Bio 101 Gen Bio II* (sec. 5)
	2 El 312 Tech of El Science					2 Bio 311 Environ. Bio* *Meets 6 days per wk 1 credit
	2 Bio 285 Biotechniques *Meets 6 days per wk 1 credit					
Business Education	1 Bus 101 Bus. Org & Mgt	Bus 352 Corp Acctg (cont'd from	Bus 251 Inter Acctg	Bus 336 Bus Law II (cont'd from	BE 311 Meth of Tech Bus Courses (cont'd from	1 BE 312 Eval Tech (from Main 3:00-9:30)
	1 Bus 352 Corp Acctg 8-9:30 cont'd into Bus 1	Bus 131 Prin of Typing	Bus 355 Ofc Mchngs	Bus 321 Bus Comm		2 Bus 353 Cust A. etc (from Main 9:30-11:00)
	2 Bus 336 Bus Law II (cont'd from Bus 1)	Bus 132 Bus Typing	Bus 451 Federal Taxes			
	1 Bus 112-130 cont'd into Bus 1	Bus 271 Adv Typing				
	1 Bus 336 Bus Law II (cont'd from Bus 1)	Bus 111 Found of Math				
	2 BE 311 Meth of Tech Bus Courses (cont'd from Bus 1)	BE 212 Bus Math II				
	2 BE 311 Meth of Tech Bus Courses (cont'd from Bus 1)	BE 335 Retail Prac (6 cr.)				
		BE 131 Superv'g Work Exp & Sem (6 cr.) by arrangement				
		Bus 353 Bus Acctg (begins July 29 to August 28)				

PRE-SESSION June 8-June 26		MAIN SESSION 9:50 A.M. to 11:15 A.M. 11:25 A.M. to 12:50 P.M. 1:00 P.M. to 2:25 P.M.		Ends August 7 August 10 to August 28	
Business Management					
2	BM 201 Personnel Mgt	BM 111 Found of Math (Mgt)	BM 241 Finance	BM 215 Bus Statistics	1 BM 434 Advertising
Criminology		BM 380 Prin of Invest	Crmn 101 Gen Adm of Crim Justice	Crmn 490 Crime and Mod Society	1 Crmn 102 Criminology 1 Crmn 340 Crime Prev.* *Institute
1	Crmn 101 Gen Adm of Crim Justice	Crmn 497 Internship—6 cr (to be arranged)			
1	Crmn 370 Community Rel (Inst)*	Crmn 340 Crime Prevention			
	By appt. only	Crmn 432 Trt. & Control of Delinquency			
		Crmn 431 Etiology of Del. Behavior*			
		*Institute			
Chemistry					
1	Chem 101 Home Ec Chem I (sec. 1—June 29 to July 17—3 credits)	Chem 101 Home Ec Chem I (sec. 2—June 29 to July 17—3 credits)	Chem 101 Home Ec Chem I (sec. 3—June 29 to July 17—3 credits)	Chem 101 Home Ec Chem I (sec. 1—July 29 to August 7—3 credits)	1 Chem 102 Home Ec Chem I (sec. 1)
1	Chem 101 Home Ec Chem I (sec. 1)	Chem 101 Home Ec Chem I (sec. 2)	Chem 101 Home Ec Chem I (sec. 3)	Chem 102 Home Ec Chem I (sec. 1—July 20 to August 7—3 credits)	1 Chem 102 Home Ec Chem I (sec. 2)
1	Chem 101 Home Ec Chem I (sec. 2)	Chem 102 Home Ec Chem II (sec. 1—June 29 to July 24—4 credits)	Chem 102 Home Ec Chem II (sec. 2—June 29 to July 24—4 credits)	Chem 102 Home Ec Chem II (sec. 3—July 20 to August 7—3 credits)	1 Chem 305 New Appr to Tchg Hi Sch Chem I
1	Chem 306 New Appr to Tchg Hi Sch Chem I	Chem 103 Nurses Chem (For Phys Ed) June 29 to August 7—3 credits)	Chem 111 Gen Chem I (sec. 1—June 29 to July 24—4 credits)	Chem 106 Phys Sci II* (sec. 1)	1 Chem 351 Biochem (sec. 1)
1	Chem 355 Biochem & Nutr	Chem 111 Gen Chem I (sec. 2—June 29 to July 24—4 credits)	Chem 111 Gen Chem I (sec. 3—June 29 to July 24—4 credits)	Chem 106 Phys Sci II* (sec. 2)	1 Chem 106 Phys Sci II* (sec. 3)
1	S 1 106 Phys Sci II* (sec. 1)	Chem 112 Gen Chem II (sec. 1—July 27 to August 21—4 credits)	Chem 112 Gen Chem II (sec. 2—July 27 to August 21—4 credits)	Chem 106 Phys Sci II* (sec. 1)	*Meets 6 days per wk
1	Sci 106 Phys Sci II* (sec. 2)	Chem 231 Org Chem I (sec. 1—June 29 to July 24—4 credits)	Chem 231 Org Chem I (sec. 2—June 29 to July 24—4 credits)	Chem 106 Phys Sci II* (sec. 2)	4 credits
	Meets 6 days per wk	Chem 232 Org Chem II (sec. 1—July 27 to August 21—4 credits)	Chem 232 Org Chem II (sec. 2—July 27 to August 21—4 credits)	Chem 106 Phys Sci II (sec. 3)	Aug. 10 to Aug. 29
1	June 8-June 27	Chem 321 Quant Anal (sec. 1—June 29 to July 24—4 credits)	Chem 321 Instrumental Analysis (sec. 1—July 27 to August 21—4 credits)		
1	Chem 302 Industrial Chemistry	Chem 341 Physical Chem I (sec. 1—June 29 to July 24—4 credits)	Chem 342 Physical Chem II (sec. 1—July 27 to August 21—4 credits)		
		Sci 106 Physical Science II (June 29 to July 24—4 credits)			
Economics					
1	Econ 101 Basic Econ Prin of Econ I	Econ 101 Basic Econ Prin of Econ I	Econ 321 Hist of Econ Thought	Econ 122 Prin of Econ II	1 Econ 121 Prin of Econ I
1	Econ 350 Comp Econ Systems				2 Econ 241 Cont Econ Problems
2	Econ 121 Prin of Econ I				

PRE-SESSION June 8-June 26	Begins June 29 8:15 A.M. to 9:40 A.M.	MAIN SESSION 9:50 A.M. to 11:15 A.M.	11:25 A.M. to 12:50 P.M.	Ends August 7 1:00 P.M. to 2:25 P.M.	POST SESSION August 10 to August 28
Foundations of Education 1 Fd Ed 302 Hist & Phil of Amer Ed (sec. 1) 1 Fd Ed 302 Hist & Phil of Amer Ed (sec. 2)	Fd Ed 302 Hist & Phil of Amer Ed (sec. 1) Fd Ed 454 Public Sch Adm (sec. 2)	Fd Ed 302 Hist & Phil of Amer Ed (sec. 2) Fd Ed 455 Comparative Ed	Fd Ed 454 Public Sch Adm (sec. 2)	Fd Ed 454 Public Sch Adm (sec. 2)	1 Fd Ed 456 Issues & Trends in Ed
Geography 1 Geog 101 World Geography (sec. 1) 1 Geog 251 Geog of Anglo-America 2 Geog 101 World Geography (sec. 2) 2 Geog 422 Aero-space (non-major)	Geog 101 World Geography (sec. 1) Geog 149 Econ Geography Geog 491 Geographic Thought	Geog 101 World Geography (sec. 2) Geog 251 Geog of Anglo-Am. (sec. 1) Geog 455 Hist Geog of Cities	Geog 101 World Geography (sec. 3) Geog 251 Geog of Anglo-Am. (sec. 2)	Geog 458 Urban Plan Studies	1 Geog 101 World Geog (sec. 1) 1 Geog 149 Econ Geog 2 Geog 101 World Geog (sec. 2) 2 Geog 251 Geog of Anglo-Am. 2 Geog 462 Field Tech in Geog (2 cr) 2 Geog 271 So. America
Geoscience 1 Geos 225 Geology of Penna.	Geos 121 Physical Geology	Geos 498 Prob in Geoscience (Use of Planetarium)	Geos 122 Historical Geology	Geos 461 Field Tech in Geoscience	1 Geos 461 Field Tech in Geoscience
Health & Phys Ed 1 HPE 344 Tests & Meas of Sch Health Program 1 HPE 404 Org & Adm of Safety Educ 2 HPE 251 Intro to Safety Educ	HPE 321 Tech Health & Phys Educ (or HPE 314) HPE 101 Health (2 cr) HPE 101 Health (2 cr) HPE 251 Intro to Safety Educ (sec. 2) HPE 255 Psych of Accid Prevention	HPE 321 Tech Health & Phys Educ (or HPE 314) HPE 101 Health (2 cr) HPE 101 Health (2 cr) HPE 252 Driver Educ HPE 110 Archery-Golf (sec. 1-1 cr)	HPE 101 Health (2 cr) HPE 101 Health (2 cr) HPE 204 First Aid (1 cr) HPE 254 Org & Adm of Safety Educ HPE 102 Swimming-Tennis HPE 203 Golf-Bowling (sec. 1-1 cr) HPE 110 Archery-Golf (sec. 2-1 cr) HPE 111 Badminton-Cond (sec. 1-1 cr)	HPE 101 Health (2 cr) HPE 101 Health (2 cr) HPE 253 Meth & Mat in Safety Educ HPE 344 Advanced Phys Educ Prog (2 cr) HPE 102 Swimming-Tennis (sec. 2-1 cr) HPE 203 Golf-Bowling (sec. 2-1 cr) HPE 343 Physiology of Exercise (2 cr) HPE 111 Badminton-Cond (sec. 2-1 cr) *HPE 262 Water Safety Inst. (1 cr) *HPE 346 First Aid Inst (1 cr)	1 HPE 251 Intro to Safety Educ 1 HPE 101 Health (2 cr) HPE 261 Senior Life Saving (1 cr) (9:40 to 11:00) HPE 262 Water Safety Instructor's (12:40 to 2:00-1 cr)

*2:35 to 4:00

PRE-SESSION June 8-June 26		Begins June 29 8:15 A.M. to 9:40 A.M.		MAIN SESSION 9:50 A.M. to 11:15 A.M. 11:25 A.M. to 12:50 P.M. 1:00 P.M. to 2:25 P.M.		POST SESSION August 10 to August 28	
History							
1 Hist	101 Hist of Civ I (sec. 1)	Ed	455 Tech. S.S. in Sec. Studies	Hist	101 Hist of Civ I (sec. 2)	Hist	104 Hist of US & Pa II (sec. 4)
1 Hist	102 Hist of Civ II (sec. 1)	Hist	101 Hist of Civ I (sec. 1)	Hist	103 Hist of US & Pa I (sec. 2)	Hist	104 Hist of US & Pa II (sec. 1)
1 Hist	101 Hist US & Pa I (sec. 1)	Hist	102 Hist of Civ II (sec. 1)	Hist	101 Hist of US & Pa II (sec. 3)	Hist	360 Soc. Studies in History
1 Hist	101 Hist US & Pa I (sec. 2)	Hist	103 Hist of US & Pa I (sec. 1)	Hist	101 Hist of Civ II (sec. 2)	2 Hist	101 Hist of Civ II (sec. 2)
1 Hist	317 Civl War and Reconstr.	Hist	101 Hist of US & Pa II (sec. 1)	Hist	102 Hist of Civ II (sec. 2)	2 Hist	104 Hist of US & Pa II (sec. 2)
2 Hist	101 Hist of Civ I (sec. 2)						
2 Hist	102 Hist of Civ II (sec. 2)						
2 Hist	103 Hist of US & Pa I (sec. 1)						
2 Hist	101 Hist of US & Pa II (sec. 3)						
2 Hist	373 Hist of Europe 1815-1914						
Home Economics							
1 HE	111 Meal Mkt (sec. 1)	HE	113 Manag. & Equip Home Ec Chem I (sec. 1)*			HE	211 Adv Foods (sec. 1)
1 HE	111 Meal Mkt (sec. 2)	Chem	101 Home Ec Chem I (sec. 2)*	HE	315 Consumer Econ & Family Finance	HE	211 Adv Foods (sec. 2)
1 HE	213 Prin of Deskn	Chem	102 Home Ec Chem II (sec. 1)**			HE	213 Prin of Des (sec. 1)
1 Chem	101 Home Ec (sec. 1)	Chem	102 Home Ec Chem II (sec. 2)**			1 Chem	102 Home Ec II (sec. 2)
1 Chem	101 Home Ec (sec. 2)		*June 29 to July 17			1 Chem	351 Biochemistry
1 PSN	302 Nutr & Comm Health		**July 20 to Aug. 7			1 HE	408 European Study Tour* (Clothing)
1 Chem	555 Biochem & Nutr	LRes	301 AV Education	LRes	AV Education		*1 cr. See write-up
1 HE	417 Clothing III						
Learning Resources							
1 LRes	301 AV Educ			LRes	AV Education	1 LRes	301 AV Education
2 LRes	301 AV Educ					2 LRes	301 AV Education

PRE-SESSION June 8-June 26	Begins June 29 8:15 A.M. to 9:40 A.M.	9:50 A.M. to 11:15 A.M.	11:25 A.M. to 12:50 P.M.	Ends August 7 1:00 P.M. to 2:25 P.M.	POST SESSION August 10 to August 28
Mathematics					
1 Math 101 Found of Math (sec. 1)	Math 157 Calc I* (June 29-July 24)	Math 257 Calc II* (June 29-July 24)	Math 167 Calc I (cont from 1st)	Math 257 Calc II (cont from 2nd)	1 Math 101 Found of Math (sec. 1)
1 Math 101 Found of Math (sec. 2)	Math 257 Calc II* (July 27-Aug. 21)	Math 357 Calc III* (July 27-Aug. 21)	Math 257 Calc II (cont from 1st)	Math 357 Calc III (cont from 2nd)	1 El 160 Num Theory (sec. 1)
1 El 160 Num Theory I (sec. 1)	Math 152 Alg & Trig* (sec. 1)	Math 335 Found of geom	Math 152 Alg & Trig (cont from 1st)	Math 361 Diff Equations	1 El 313 Tech Math in El School
1 El 313 Tech Math in Elem Schools	Math 371 Linear Algebra	Math 101 Found of Math	Math 365 Comp Math I	Math 452 Seminar (1 cr)	1 Ed 456 Tech Math in Sec School
1 Math 375 Intro to Mod Math	Math 152 Alg & Trig* (sec. 2)	Math 182 Alg & Trig (cont from 1st)	Math 182 Alg & Trig (cont from 1st)	2 Math 101 Found of Math (sec. 2)	2 El 160 Num Theory (sec. 2)
2 Math 101 Found of Math (sec. 3)	*4 credits			2 Math 341 Theory of Numbers	
2 El 160 Num Theory I (sec. 2)	*6 credits				
2 Math 362 Prob & Stat					
2 Math 363 Math Stat I					
Military Science					
	MS 101 Military Science Class (2 cr)				
	MS 102 Military Science Class (2 cr)				
	(Time to be arranged)				
Music					
1 Mus 160 Class Brass (1 cr)*	Mus 112 Sight Sing II (2 cr)*	Mus 331 Elem Methods (2 cr)	El 211 Mus for El Gr (2 cr)	Mus 111 Sight Sing I (2 cr)	1 Mus 111 Sight Sing I (2 cr)
1 Mus 111 Sight Sing I (2 cr)*	Mus 116 Theory II (2 cr)*	Mus 155 Strings Sem (1 cr)	Mus 303 Mus Hist II (1 cr)	Mus 113 Ear Train I (1 cr)	1 Mus 113 Ear Train I (1 cr)
1 Mus 113 Ear Train I (1 cr)*	Mus 101 Intro to Music (2 cr)*	Mus 101 Intro to Music (1 cr)	Mus 161 Woodwind Sem (1 cr)	Mus 115 Theory I (2 cr)	1 Mus 115 Theory I (2 cr)
1 Mus 115 Theory I* (2 cr)*	Mus 221 Mus Lit II (1 cr)*	Mus 159 Brass Seminar (1 cr)**	Mus 313 Instru Cond (2 cr)	Mus 333 Second Methods (2 cr)	1 Mus 101 Intro to Music
1 Mus 334 Instru Meth (2 cr)	Mus 158 Class Perc II (1 cr)*	Mus 114 Ear Train II (1 cr)**	Mus 411 Composition (2 cr)	Mus 408 March Band Tech (2 cr)	1 Mus 101 Intro to Music See Course Write-ups
1 Mus 112 Sight Sing II (2 cr) 8-9:00	Mus 306 Counterpoint (2 cr)*	*9:50-10:50	Mus 302 Mus Hist II (2 cr)	Mus 304 Form and Analysis (2 cr)	
1 Mus 116 Theory II (2 cr) 11-12:00	Mus 312 Choral Cond (2 cr)**	**10-10:50			
1 El 211 Mus for El Gr (sec. 1)	*8:15-9:15				
1 Mus 101 Intro to Mus (sec. 1)	**8:40-9:40				
1 Mus 301 Mus Hist I (1 cr)*	See Course Write-ups for detailed information.				
1 Mus 162 Class Woodwinds (1 cr)*					
2 Mus 101 Intro to Mus (sec. 2)					
2 Mus 311 Fund of Cond (1 cr)**					
2 Mus 156 Class Strings (1 cr)**					
2 Mus 157 Class Perc I (1 cr)**					
*8-9 and 11-12:00					
*9:30-10:30 and 12:30-1:30					
See Write-ups					

PRE-SESSION June 8-June 26	Begins June 29 8:15 A.M. to 9:40 A.M.	MAIN SESSION 9:50 A.M. to 11:15 A.M. 11:25 A.M. to 12:50 P.M. 1:00 P.M. to 2:25 P.M.	POST SESSION August 10 to August 28
Philosophy 1 Phil 120 Intro to Phil 2 Phil 310 World Religions	Phil 120 Intro to Phil Phil 221 Logic I, Gen Logic	Phil 222 Ethics	1 Phil 120 Intro to Phil 2 Phil 221 Logic I, Gen Logic
Nursing 1 Nur 300 Intro to Nursing (Lathrobe Hospital)	Nur 301 Nursing I (6 cr) (Lathrobe Hosp)		
Physics 1 Sci 105 Phys Sci I (sec. 1) 1 Sci 105 Phys Sci I (sec. 2) 1 Sci 105 Phys Sci I (sec. 3) (4 cr-meets 6 days per week)	Phil 221 Logic I, Gen Logic Phil 222 Ethics		1 Phys 111 Physics I* (sec. 1) 1 Phys 111 Physics I* (sec. 2) *3 cr-meets 6 days per week 1 Phys 121 Phys I Lab** (sec. 1) 1 Phys 121 Phys I Lab** (sec. 2) **1 cr 1 Sci 105 Phys Sci I† (sec. 1) 1 Sci 105 Phys Sci I† (sec. 2) †4 cr-meets 6 days per week
Political Science 1 PolS 111 Am Cit (sec. 1) 1 PolS 111 Am Cit (sec. 2) 1 PolS 361 Mod Pol Thought 1 PolS 250 Cont Pol Prob 2 PolS 111 Am Cit (sec. 3) 2 PolS 353 Am Pol Parties 1 I.E. 101 World Politics	Phil 111 Am Cit (sec. 2) PolS 353 Am Pol Parties PolS 382 Africa, I.E. 101 World Politics	PolS 111 Am Cit (sec. 3) PolS 281 International Relations	1 PolS 111 Am Cit (sec. 1) 1 PolS 111 Am Cit (sec. 2) 1 PolS 250 Cont Pol Problems 2 PolS 111 Am Cit (sec. 3) 2 PolS 352 Public Opinion
ADVANCED COURSES			
Phys 498 Problems in Physics* *1 to 4 credits Hours Arranged	Phys 223 Mechanics II	Phys 231 Electronics	
Sci 105 Phys Sci I (sec. 1) Sci 105 Phys Sci I (sec. 2) Sci 105 Phys Sci I (sec. 3)	Phil 221 Logic I, Gen Logic Phil 222 Ethics	PolS 111 Am Cit (sec. 2) PolS 283 Am Foreign Pol PolS 360 Political Phil	1 PolS 111 Am Cit (sec. 4) PolS 281 International Relations
(Note: Student should register for a Physics lecture and a Physics Laboratory. Students taking Physics are registered for a full load and should plan to attend lecture and laboratory sections as scheduled by the Physics Department.)			

Ed. Psy. 377 Educational Tests and Measurements 3 cr.

Prerequisite: Educational Psychology.

A course which emphasizes an understanding of the various evaluation instruments with attention being focused on standardized tests. The use and interpretation of information and test results are studied in relation to educational problems which occur in the classroom. The teachers role in the selection, administration, and interpretation of group tests is emphasized.

Ed. Psy. 378 Seminar in Problems of Learning 3 cr.

Prerequisite: Educational Psychology.

This course is intended to help teachers who deal with learning problems in the several basic skill and subject areas in a typical school setting. The course will attempt to develop a rationale for working with children who have learning problems. Emphasis will be placed on actual application of techniques discussed and developed in class.

ELEMENTARY EDUCATION DEPARTMENT

P. David Lott, Chairman

REQUIRED COURSES**Psy. 215 Child Development 3 cr.**

This course is designed to enable the teacher to understand and help children. A survey of human development from conception through early adolescence is made in terms of basic scientific data. Aspects of growth and behavior are presented through research, discussion, observation and audio-visual techniques.

El. 221 Children's Literature 3 cr.

In this course the students acquire 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 are presented. Principles and techniques of successful story-telling are studied and practiced.

El. 222 Teaching of Reading 3 cr.

This course is given before the first student teaching experience. Emphasis is placed upon methods and materials used in the developmental reading program. Its objective is to provide the student with a general background of knowledge and techniques for teaching children in the elementary school to read. Students are introduced to the experience, textbook, and individualized reading approaches to the teaching of reading.

El. 314 Teaching of Health and Physical Education 3 cr.

This course includes games, stunts, rhythms, relays, tumbling, dancing and skills suitable for the elementary school child. The teaching of health in the elementary school is emphasized. Methods, materials and lesson planning are a part of the course.

El. 411 Teaching of Social Studies 3 cr.

This course gives an overview of social studies in the elementary school. It includes study of objectives, trends, areas of content, patterns and principles of organization. Emphasis is placed on unification of subject matter and on implication of research in child development for content and methods.

Students will have experience in preparing an individual resource unit and in planning, participating in, and evaluating social studies in class.

El. 413 Teaching Language Arts 3 cr.

This course is designed to give the elementary student a knowledge of the latest techniques, methods and materials in the language arts area. Research and trends are studied. The fields of handwriting, spelling, and oral and written communication, and vocabulary development are included.

ELECTIVES OR FOR PERMANENT CERTIFICATION**El. 355 Guidance in Elementary Schools 3 cr.**

This course is designed to give the student an initial understanding of the guidance of young children. Study and dis-

discussion center around the child himself—his characteristics, needs, problems, motives, and relations with others—and around the techniques and procedures for identifying, studying, and giving help to children in respect to their facets of personality.

El. 463 Workshop in Elementary Teaching 3 cr.

Designed for in-service teachers and those returning teachers who are working with the elementary school child, this course provides for reorientation and investigation of the subject matter, materials, methods and procedures currently used in the elementary classroom. Emphasis will be placed upon observation of methods and procedures used in the University School; examination of materials; practice in the selection, organization and preparation of subject matter in unit and lesson plans; and construction of teaching aids useful in the participant's own classroom.

El. 351 Creative Activities in the Elementary School 3 cr.

This course is planned to provide the student with a wide range of creative experience in the subjects taught in the elementary school. Emphasis is placed upon how to help children develop their abilities to express themselves creatively.

El. 352 Diagnostic and Remedial Reading 3 cr.

This course is planned for in-service teachers and students who have done their student teaching. It deals with methods and materials which help teachers to increase the reading abilities of children who are retarded in reading. Attention is given to recent research findings in the areas of readiness; word recognition, including phonics; comprehension; evaluation and textbook selection.

El. 451 Teaching of Reading in the Primary Grades 3 cr.

This course is concerned with the teaching of developmental reading, consistent with child growth, in the primary grades.

Methods and techniques for readiness, word perception, comprehension, work-study skills, independent reading in both group and individualized approaches will be studied.

Consideration will be given to the nature of reading, significant research in the field, the curriculum, selection of materials and the use of formal and informal tests.

El. 452 Social Studies in the Primary Grades 3 cr.

With El. 411, Teaching of Social Studies, as a prerequisite, this course will include a more detailed examination of content, objectives, and resource materials for social studies in kindergarten through third grade. Research problems will be examined and representative units developed.

**El. 461 Organization of the Elementary School
and Its Curriculum 3 cr.**

A study of the organization of the elementary school from the standpoint of curriculum design and development. The role of the teacher will also be examined as it relates to the evaluation, improvement, and development of the elementary school curriculum. Course is especially designed for those who have completed student teaching or are postgraduates.

ENGLISH DEPARTMENT

Craig Swauger, Chairman

REQUIRED FOR GENERAL EDUCATION

Eng. 101 English I 5 cr.

English I, a basic required course for all students, should be taken in the first semester of study at Indiana University of Pennsylvania. Seven theme-length expository papers are written during the semester in addition to shorter exercises and a written final examination. The program for the course is based on readings in the nature and history of language, language analysis, and problems in rhetoric, in order to develop competence in those language skills necessary for successful college study. Students are encouraged to confer with their instructors throughout the semester about their writing problems.

Eng. 102 English II 5 cr.

English II, the second required general education English course, may be taken after a student has received a passing

grade in English I. Readings in imaginative literature continue the development of at least four long papers, including a research exercise based on a literary or other source book. Exemption from English II may be granted on the recommendation of the English I instructor, who will supervise the completion of a research paper by independent study of the exemptee.

Eng. 201 Literature I: Tragic Themes in Literature 3 cr.

The aims of this course are twofold: to introduce the student to one of the main thematic preoccupations of western literature, and to stimulate the student's desire to read on his own initiative. The literary works are drawn from the three major genres: poetry, drama, and prose fiction.

Eng. 301 Literature II:

The Literature of Social Criticism 3 cr.

This course focuses primarily on the satiric and comic modes, although reflective essays may also be included if their major concern is social criticism. An attempt has been made to select works which reflect the social attitudes of most of the major periods of Western thought from Plato to Bertrand Russell. Selection has been made from all major literary genres.

ENGLISH ELECTIVES

English elective courses in the summer serve several purposes. They may be used by:

1. English teachers in service with a provisional certificate to earn credits toward the 24-hour requirement for permanent certification.
2. Teachers certified in subjects other than English who wish to add English to their certification. (For this purpose they should consult with the chairman of the English department to be certain that such courses will apply to the approved certification program at Indiana University.)
3. Undergraduate elementary majors who wish to make English their academic concentration.

4. Regular undergraduate English majors who wish to accelerate their programs or who need to make up deficiencies.

Eng. 211 Classical Literature 3 cr.

A course for English majors that replaces Literature I or Literature II in the general education program. The masterpieces studied range from those of ancient Greece to 19th century Europe. English literature and American literature are excluded.

Eng. 212 American Literature to 1865 3 cr.

This course provides a general survey of major American writers from colonial times through the Civil War.

Eng. 214 Shakespeare 3 cr.

Shakespeare's development as a poetic dramatist is studied against the background of the Elizabethan stage; the audience, textual problems, language, imagery and philosophy are examined. A few plays are read in detail and others are assigned for rapid reading.

Eng. 221 Journalistic Writing 3 cr.

This course places special emphasis upon the writing of the news story, the column, the feature, and the editorial.

Eng. 242 The American Novel 3 cr.

Novels, ranging from Hawthorne to contemporary pieces of fiction, are read to trace the rise and development of the American novel.

Eng. 243 Contemporary Short Fiction 3 cr.

In this course attention is given to the form, the structure, and the art of the modern short story, British, American, and Continental.

Eng. 244 Poetry and Its Forms 3 cr.

This course offers a study in the appreciation of poetry, with special attention to the technique of the poet and the structure of poetry.

Eng. 245 Modern Drama 3 cr.

The reading of plays will start with Ibsen and other Scandinavian dramatists, followed by plays by outstanding Continental, British, and American playwrights such as Becque, Chekhov, Pirandello, Wilde, Shaw, O'Casey, O'Neill, Williams, and Miller.

Eng. 251 History of the English Language 3 cr.

The historical development of the English language is studied as a basis for a better understanding of modern American English. An examination is made of changes in sound, vocabulary enrichment from various sources, and changes in syntax and usage. The course is open to students from all departments and curricula but is especially recommended to Elementary majors and English majors.

Eng. 271 Modern American Fiction 3 cr.

Major American writers of fiction since 1900 will be considered in this course. This course may be used as an elective in the humanities area of the general education program.

Eng. 272 American Negro Literature 3 cr.

The course will analyze significant American Negro literature of a variety of types—autobiography, essay, fiction, poetry.

Eng. 363 The Structure of English 3 cr.

Training is given in the analysis of modern English by the methods and materials of structural linguistics. An elementary study of phonology is used as the basis for describing the patterns of the statement, substitution within patterns, the word classes, inflection, and structure words, as well as varieties of modern American English usage. This course is a prerequisite to Ed. 452, Teaching English. Speech and Reading in the Secondary Schools.

**Ed. 452 Teaching of English, Speech and Reading in
the Secondary Schools** 3 cr.

This course introduces the student to the current professional practices in the teaching of English and Speech in high

school. Background for competence in teaching is provided through (1) study of professional literature, (2) individual reports, (3) writing of unit plans and lesson plans, (4) observing teaching in high school classes, (5) participating in class demonstrations. Eng. 363 is a prerequisite to this course and this course is in turn a prerequisite to student teaching in English.

Drama Workshop

In the pre-session three credits and in the main session from three to six credits may be earned for the following courses by combining participation in the Summer Theater program with class instruction:

- Eng. 231 Dramatic Arts
- Eng. 371 Play Production
- Eng. 377 Creative Dramatics
- Eng. 378 Costume and Makeup
- Eng. 379 Stagecraft and Scenic Design

FOREIGN LANGUAGE DEPARTMENT

Charles W. Faust, Chairman

Fr. 151-152 French I and II	3 cr. each
Ger. 151-152 German I and II	3 cr. each
Sp. 151-152 Spanish I and II	3 cr. each

This elementary sequence is designed primarily for the general student. Its basic objectives are maximum reading ability, accuracy of pronunciation, some ability to understand the spoken word and in self-expression, and an introduction to the motives and currents of the background cultures.

Fr. 251-252 French III and IV	3 cr. each
Ger. 251-252 German III and IV	3 cr. each
Sp. 251-252 Spanish III and IV	3 cr. each

This sequence is designed for students who have had two years of the language in high school or one year in college, and continue in the same language, either to fulfill a language requirement or for specialization. The course is a systematic review of grammar and an intensive study of cultural texts, incorporating discussions and written exercises. Material of

literary and cultural interest will be studied, and strong emphasis is given to the development of oral skills. Majors in French, German, and Spanish must take 053 and 054 concurrently; non-majors are invited to do so if they desire and their schedules permit additional work in oral practice.

Ling. 421 Language and Society **3 s.h.**

The work of this course is designed to inform the student as to the salient facts of language and its fundamental role in the development and continuity of society and culture. Some points considered are: language families and their characteristics, factors of linguistic change and development, reciprocal influences of culture and language, linguistic borrowing, language and religion, and systems of writing.

**Ed. 453 Teaching of Foreign Languages in the
Secondary School** **3 cr.**

Prerequisite: Successful completion of 351-352 in whatever Language is taken.

The objective of this course is to prepare teachers of modern foreign languages for the modern high school. It considers methods and materials of instruction, current theories and techniques, and requires preparation and presentation of illustrative units. Training in the administration of the language laboratory constitutes a significant part of the course.

FOUNDATIONS OF EDUCATION DEPARTMENT
Don-chean Chu, Chairman

Fd Ed. 302 History and Philosophy of Education **3 cr.**

This course is designed to promote a clearer understanding of the modern educational system through a study of historical changes in instructional processes and ideas underlying it. Through the emphasis placed upon the study of educational beliefs and points of view, the course seeks to foster critical thinking which will lead to better judgment about the role of the school in our social structure, the meaning of democracy, the teacher and his profession, and the methods and objectives of the school.

Fd Ed. 454 Public School Administration 3 cr.

The course is designed to acquaint the teacher with the administration and organization of the American public school. Attention is given to the cultural role of the schools. Treatment is given to decision-making in the operation of the schools and the total task of school operation with emphasis on what should be done. The functions and methods of all professional personnel in the operation and improvement of the schools will be considered.

Fd Ed. 455 Comparative Education 3 cr.

The educational purposes, curriculum, methods, administration, school system, teacher education and other educational features in some western European, "underdeveloped" and communist nations will be analyzed, evaluated and compared with those in the United States. It is especially to gain insight into American education and to develop educational ideas and practices appropriate to American culture.

Fd Ed. 456 Issues and Trends in Education 3 cr.

This course is designed to examine the important current issues in American education and to explore the possible solutions of those issues through examining the factors which give rise to the divided opinion and the obstacles which prevent solutions. This will be followed by a critical analysis of the trends including new approaches and innovations. Wherein possible, experts may be utilized to help in a critical examination of each issue or trend; a seminar approach may be employed.

GEOGRAPHY DEPARTMENT**Thomas G. Gault, Chairman****Geog. 101 World Geography 3 cr.**

The purpose of this course is to develop a knowledge and appreciation of patterns of the natural environment throughout the world, such as patterns of soil, climate, vegetation—and of man's adjustment to them, with special emphasis on man's economic and cultural responses. This course is prerequisite to all other courses in the department.

Geog. 149 Economic Geography 3 cr.

This course develops an understanding of world patterns of producing and consuming regions, population distributions, world trade routes, and related natural factors. It also deals with the applications of these understandings to the solution of national and international economic problems.

Geog. 251 Geography of Anglo-America 3 cr.

A regional study of the United States and Canada concerned with the investigation of man's adjustment to his environment as influenced by the physical factors of climate, vegetation, relief, soils, and natural resources as well as recognition of cultural adjustments to the geographic environment, and the interrelations between the two countries and the rest of the world. **(This course may not be taken if the student has completed Geog. 112, now discontinued.)**

Geog. 271 Geography of South America 3 cr.

A regional study is made of South America with special emphasis placed on regional differences and similarities. South America relations with other areas, especially the United States, are stressed. The unique problems of South America, with special attention to tropical land use are considered.

Geog. 422 Aerospace Science 3 cr.

Prerequisites: Geog. 101, 151, or 153.

A seminar conducted by a number of visiting aerospace authorities. It treats of the atmosphere and space environment; history of flight and flight problems; satellites and space probes; manned orbital and space exploration projects; propulsion, communication, and other systems. Problems of teaching and bibliography at the various elementary and secondary levels will be considered. An indoctrination flight in a small craft and field trips to air age installations and projects fortify learning.

**Geog. 455 Historical Geography of Cities and
City Planning 3 cr.**

Prerequisite: 12 s.h. of Geography.

This course is intended to give the student a basic understanding of the beginning of city planning and how it has developed under the influence of the fundamental physical relationships of social, economic, and geographic conditions to reflect the art and science of present city planning. This course will examine the process of city planning as practiced during the ancient, medieval, and renaissance periods, and will give a review of early planning efforts in America, as well as the present influences in city planning.

Geog. 458 Urban Planning Basic Studies and Analysis 3 cr.

Prerequisite: Geog. 456.

Research, analytical design and plan making techniques in urban and regional planning including studies of natural resources, land use, circulation, community facilities, public utilities, economic base, employment, population, market analyses, source and use of statistical data. This course will examine the basic study items necessary upon which to prepare urban and regional comprehensive plans.

Geog. 462 Field Techniques in Geography 2 cr.

Prerequisite: 12 hours in Geography or consent of instructor.

This course proposes to give experience in the study of land utilization and use of geographic tools and techniques of the field.

Geog. 491 Geographic Thought and Philosophy 3 cr.

Prerequisite: 18 semester hours in Geography.

The seminar is limited to senior and graduate geography majors or minors. The emphasis will be upon individual study, research, and presentation of geographic data—both written and oral. This course will be offered every semester and all geography majors (graduate and undergraduate) are required to complete this for major in education or in an area of concentration within the Liberal Arts.

GEOSCIENCE DEPARTMENT**Robert L. Woodard, Acting Chairman****Geos. 121 Physical Geology 3 cr.**

A basic course, with no college prerequisites, designed to meet the need of science and non-science majors. It provides a survey of the physical forces molding, modifying and destroying earth structures. Laboratory work includes map study, the identification of rocks and minerals, and field trips. Two hours of lecture and one three hour laboratory per week.

Geos. 122 Historical Geology 3 cr.

Prerequisite: Physical Geology or permission of instructor.

A basic course providing a history of our planet from the fiery beginnings to the present. Special consideration is given to rock stratigraphic sequences, invertebrate fossil distribution and geologic map interpretation. Laboratory work includes field studies. Two hours of lecture and one three hour laboratory per week.

Geos. 225 Geology of Pennsylvania 3 cr.

Pennsylvania is fortunate to possess a wide variety of fascinating geologic phenomena. An appreciation of Pennsylvania geology is not merely an end in itself, but can provide the geologic insight for understanding other areas with similar geologic features. The Appalachian Mountains in Pennsylvania are a classic area in which to study geosynclinal development, processes of folding, faulting and mountain building. The glaciated areas of North Pennsylvania, the highly complicated igneous and metamorphic terrain of south east Pennsylvania, along with the Triassic basin and the coastal plain all may serve as fine examples of different types of geologic development.

Geos. 461 Field Technique in Geoscience 3 cr.

Instruction on the methods employed in the field to obtain and interpret geologic information.

Geos. 498 Problems in Geoscience**1-3 cr.**

(Use of the Planetarium)

A course designed to prepare earth and space science teachers for utilizing the planetarium in the public school curriculum. Techniques adaptable to both elementary and secondary level instructor will be discussed and practiced. Some aspects of the mechanical adjustment and minor repair of the Spitz planetarium will also be undertaken.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT**John Chellman, Dean****Dr. C. Elizabeth McCauliff, Chairman****Health and Physical Education Department for Women****Dr. J. J. Miller, Chairman****Health and Physical Education Department for Men****HPE 101 Personal and Community Health****2 cr.**

The understanding of the scientific approach to personal health problems and the development of desirable attitudes and practices in all areas of personal health constitute the major part of the course. The cause, prevention, and control of various diseases are also considered.

HPE 102 Physical Education I (W)**1 cr.**

Swimming-Tennis. The basic fundamentals and game techniques of the activities are taught. Proper drills and conditioning exercises are also a part of the course.

HPE 110 Physical Education I (M)**1 cr.**

Archery-Golf. The basic fundamentals and game techniques of the activities are taught. Proper drills and conditioning exercises are also a part of the course.

HPE 111 Physical Education II (M)**1 cr.**

Badminton-Conditioning. The basic fundamentals and game techniques of the activities are taught. Proper drills and conditioning exercises are also a part of the course.

HPE 203 Physical Education II (W) 1 cr.

Bowling-Golf. The basic fundamentals and game techniques of the activities are taught. Proper drills and conditioning exercises are also a part of the course.

HPE 261 Senior Life Saving (M & W) 1 cr.

This course emphasizes the swimming and rescue skills necessary to complete the American Red Cross Senior Life Saving Course. Certificates are awarded upon successful completion of the course.

HPE 262 Water Safety Instructor's (M & W) 1 cr.

This course emphasizes the teaching aspect of the skills, techniques and attitudes that are necessary in all areas of swimming. Those students successfully completing the course are qualified to hold such positions as water front directors, aquatics directors and other similar positions.

Prerequisite: HPE 261 or other proof of validated Senior Life Saving Certificate.

HPE 341 Tests and Measurements 3 cr.

The study and application of tests in physical fitness, motor ability, motor educability, sports skills, and health education, are taught. The evaluation of tests results and the application of elementary statistical methods to the health and physical program are also considered.

Prerequisite: Math 362.

HPE 343 Physiology of Exercise 2 cr.

The physiological aspects of various types of exercise on the human body are studied. The major factors of diet, conditioning, physical fitness, maximum performance level, and fatigue are considered. The latest research in sports physiology are also a part of the course.

Prerequisites: HPE 221 and Biol. 151.

HPE 344 Adapted Physical Education Program 2 cr.

The physiological principles of exercise and movement as they relate to the student with limited physical capacities are

stressed. Modified and remedial activities for the disabled or handicapped student are taught. Administrative considerations for the adapted program are discussed. Screening tests and the appraisal of postural deviations are considered.

Prerequisite: HPE 342.

HPE 346 First Aid Instructor's 1 cr.

American Red Cross Standard, Advanced and Instructors certification will be awarded upon completion of this course.

**HPE 404 Organization and Administration
of the School Health Program 3 cr.**

A comprehensive study of the principles, methods, course content, and role of a complete school health program are considered. Primary emphasis is given to curriculum planning at all school levels, pupil needs, community resources, the school environment, and the school health services. Administrative relationships and procedures conclude the course.

Prerequisite: HPE 101.

**HISTORY DEPARTMENT
Clyde C. Gelbach, Chairman**

Hist. 101 History of Civilization I 3 cr.

A survey course presenting in integrated form the origin and development of man's major political, social, economic, religious, and intellectual institutions from historical times to 1600 A.D. Although part of the course is devoted to Oriental and Near Eastern civilizations, the major emphasis remains on Greek, Roman, Medieval, and early Modern European civilizations. Through comparison an effort is made to point up both the similarity and the uniqueness of these civilizations. Through the presentation of detail and conflicting historical interpretations an effort is made to create an appreciation of the depth and complexity of man's past.

Hist. 102 History of Civilization II 3 cr.

This course deals with man's development from 1600 to the present. Among the topics discussed are: The Commercial

Revolution; the Age of Reason; the Age of Revolution—political, economic, and social; the rise of constitutional governments; nationalism and the clash of cultures incident to the growth of empire. Considerable attention is given to democracy, capitalism, communism, fascism, and socialism as the major ideologies of the nineteenth and twentieth centuries. The course concludes with an examination of the various formulas for world order proposed or attempted since 1900.

**Hist. 103 History of the United States
and Pennsylvania I**

3 cr.

A course covering the period in American history from the discovery of America to 1865 with emphasis on the history of Pennsylvania. Special attention is given to the colonial foundations of our nation, the emergence of our Federal Union, the rise of an American culture, territorial and economic growth of the United States, the rise of political democracy, social reform, and the controversy over sectionalism and slavery.

**Hist. 104 History of the United States
and Pennsylvania II**

3 cr.

A course in the history of the United States and Pennsylvania from 1865 to the present in which the industrialization of America, urbanization, the rise of organized labor, and the development of a distinctly American culture are stressed. Attention is also given to the political, economic, and social reform movements of this period in our history as well as to the increasing role of the United States in world affairs.

Hist. 347 Civil War and Reconstruction

3 cr.

A study of the failure of American democracy to cope with the issues of the mid-nineteenth century followed by the political, economic, military, and social developments during the war and the reconciliation of the North and South.

**Hist. 350 History of Latin America:
Colonial Period, 1450-1820**

3 cr.

A study of the life of the people, the Indian cultures, the conquest by the Spaniards and Portuguese, the government during the Colonial Period, and the Wars of Independence.

Hist. 354 History of Russia**3 cr.**

A general survey of Russian history, culture, and institutions. Special consideration is given to the study of these historical forces which were formative of the Revolution of 1917.

Hist. 360 Special Studies in History**3 cr.**

Selected periods or problems for intensive study.

Hist. 365 History of Pennsylvania**3 cr.**

A study of the foundings and development of Pennsylvania from its colonial beginnings to the present time. Emphasis is placed on the social, economic, and political developments in the different periods of its history. Special attention is given to the diversity of the people, their institutions and problems, and the growth of Pennsylvania to a leading position in our modern industrial world.

Hist. 373 History of Europe: 1815-1914**3 cr.**

A study of Europe in the nineteenth century with emphasis on political, diplomatic, military, and economic affairs. Approximately two-thirds of the course is devoted to a description of the major European states in this century. An effort is made to integrate this account through diplomatic history and by devoting approximately one-third of the course to topical consideration of such items as Imperialism, Nationalism, Socialism, and the Industrial Revolution.

**Ed. 455 Teaching Social Studies
in the Secondary Schools****3 cr.**

This course provides an opportunity for the prospective teacher to develop understandings and competencies for teaching social studies. Emphases in the course include: values and goals in social studies, the teaching process, materials and learning activities, evaluation of learning, and planning for classroom teaching. This course is a prerequisite to student teaching in the social studies.

HOME ECONOMICS DEPARTMENT**Margaret E. McGeever, Dean****HE 111 Meal Management 3 cr.**

Basic principles of meal planning, food selection and preparation are studied as they relate to family meals and good nutrition. Management of time and energy, good work habits, correct use of food budget, food service for various family meals and food storage are integral parts of the course. Demonstrations, laboratory and other teaching techniques provide a variety of experiences.

HE 113 Management and Equipment 3 cr.

Management, decision making processes and organization relative to the administration of a home, is emphasized. Principles needed for the wise selection, efficient operation and care of kitchen, laundry and other household equipment are studied and applied. Comparative studies of operation and efficiency of various kinds of equipment, procedures and cleaning materials, and work processes are emphasized. Good management in arrangement, storage and working heights and procedures that will save time, energy, and money and secure good results in family living form the basis of the course.

HE 211 Advanced Foods 3 cr.

Foods studied and prepared present more advanced problems in cookery and meal service than those of Foods I. Some of these relate to food preservation, freezing of foods, meat and poultry selection and cookery, methods of making breads, cakes and pastry, sugar cookery and frozen desserts. Recent research and improved methods of cookery are considered. Demonstrations and other teaching techniques serve as a preparation for teaching.

HE 213 Principles of Design 3 cr.

Principles of design and color are studied and applied to a crafted object. The major emphasis is on the aesthetic quality inherent in designing with materials.

HE 218 Child Development **3 cr.**

Prerequisite: Psy. 201.

The physical, emotional, social and intellectual development of the child from conception through the early adolescent period is studied and analyzed. Research from psychology, anthropology, sociology, and human development is analyzed in terms of contributing toward better understanding of normal development and behavior of the child.

HE 311 Family Health* **1 cr.**

Family health problems are recognized and solutions investigated. An understanding of the part the home plays in positive health is developed. Principles of the care of the sick in the home and needs in time of disaster and emergencies are studied. Practical laboratory experience is provided. American Red Cross requirements are met.

HE 315 Family Finance and Consumer Education **3 cr.**

Economic, sociological and psychological principles are applied to family money management problems. Production, distribution, retailing, and consumer aid and protection are investigated. Income (real and psychic) budgeting, installment buying, savings and investment, banking and wise use of time, materials and human resources are related to consumer satisfactions. Ways of living better on a given income are emphasized.

HE 412 Nursery School* **3 cr.**

Prerequisites: Psy. 201, 302 and HE 218.

Participation in the nursery school as a teacher assistant applying principles and concepts of child development is the major focus of this course. Techniques of planning for and managing a group of pre-school children are emphasized.

HE 414 Home Management (Residence House)* **3 cr.**

Decision making in group living is emphasized. Satisfying human relations are developed as family members care for a baby; plan, prepare and serve nutritious meals; use and care

for equipment and furnishings; and provide for individual and group needs in various other ways.

HE 417 Clothing III—Tailoring **3 cr.**

Prerequisites: HE 112, 214 or equivalent.

Various tailoring methods are studied and applied in the selection, fitting and construction of a tailored garment. Comparative study is made of commercial-tailored garments.

*The block of HE 414 Home Management Residence, HE 412 Nursery School, and HE 311 Family Health is open only to regular majors in the Department of Home Economics Education.

PSN 402 Nutrition and Community Health **3 cr.**

A study is made of nutritional problems of family members from infant to aged people of the community. Emphasis is placed on reorganizing good nutritional status and ways of guiding families toward better nutrition. School lunch is also emphasized.

UNIVERSITY SCHOOL
Alvin J. Stuart, Director

The University School provides professional laboratory experiences such as. observation, participation, and student teaching for college students in the elementary department. University School classes meet from 9:00 to 12:00 during the main summer school session. Professional laboratory experiences in University School may be planned and scheduled with the Director of The University School.

LEARNING RESOURCES AND MASS MEDIA
DEPARTMENT

Norman W. Sargent, Chairman

LRes 301 Audio-Visual Education **3 cr.**

(Professional course required of all students in education)
Prerequisite: General Psychology.

A consideration of the needs for sensory techniques and

the integration of all learning resources is given, with attention to the psychological processes involved. Through class and laboratory work the student will have an opportunity to become acquainted with materials and equipment and skilled in audio-visual techniques within the teaching field. Activities will include actual production of materials for class use and participation in their use.

MATHEMATICS DEPARTMENT

Melvin R. Woodard, Chairman

Math. 101 Foundations of Mathematics **3 cr.**

This course is designed to familiarize students with some of the ideas underlying the development of mathematics and an elementary treatment of problem solving and decision making. The primary objective is not to develop "computational" skills but to study mathematics in its role as both an art and a science.

Topics to be studied include: numeration and number systems with special emphasis on recognizing patterns and structure; intuitive set theory and applications, including probability and statistics; and informal logic in its relation to mathematics, both in algebra and geometry.

Math. 152 Algebra and Trigonometry **6 cr.**

Number systems and equations; plane trigonometry; inequalities; functions and graphs; complex numbers, theory of equations; mathematical induction; the binomial theorem. Prerequisite: Satisfactory score on the Placement Examination.

Math. 157 Analytic Geometry and Calculus I **4 cr.**

Prerequisites: Algebra and Trigonometry or permission of the department.

Analytic Geometry of the straight line; circle; and the conics; polynomials and their graphs; elements of differential and integral calculus with applications involving polynomials.

Math. 257 Analytic Geometry and Calculus II 4 cr.

Prerequisites: Analytic Geometry and Calculus I.

Differential and integral calculus of algebraic and transcendental functions with applications to the physical sciences.

Math. 341 Theory of Numbers 3 cr.

Prerequisite: Consent of Instructor.

A study of the foundation of number theory with special attention being given to such topics as repeating decimals and congruences; number theoretic functions; diophantine equations, continued fractions.

Math. 355 Foundations of Geometry I 3 cr.

Prerequisite: Math. 375.

The initial approach in this course is a synthetic treatment of Euclidean Geometry using Hilbert's axioms. Projective geometry is studied in some detail in order to acquaint the student with non-Euclidean, projective, and other geometries.

Math. 357 Analytic Geometry and Calculus III 4 cr.

Prerequisite: Analytic Geometry and Calculus II.

This course will extend the background of the student in elementary calculus and will consider infinite series, Taylor's and Maclaurin's expansions, partial differentiation, multiple integrals, and an introduction to ordinary differential equations.

Math. 361 Ordinary Differential Equations 3 cr.

Prerequisite: Math. 257.

In the first course in differential equations the 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 the differential operator, the Laplace transform and infinite series are introduced.

Math. 362 Probability and Statistics 3 cr.

This course is intended for non-mathematics majors. The

course emphasis is on applications as opposed to theoretical developments of principles and formulas. The topics covered in this course are: frequency distributions, measures of central tendency, variation, elementary probability, sampling, estimation, testing hypothesis, and linear correlation and regression.

Math. 363 Mathematical Statistics I **3 cr.**

Prerequisite: Math. 257.

Probability theory necessary for an understanding of mathematical statistics will be developed in this course. Applications of the theory will be given with emphasis on the binomial, the Poisson, and the normal distributions. Distributions of sums and a central limit theorem will be developed. Statistical applications will include point and interval estimation and testing statistical hypothesis.

Math. 366 Computer Math. I **3 cr.**

Language rules of the FORTRAN compiler system are presented. FORTRAN is used for writing digital computer programs which are compiled and executed on the College computer. Satisfactory completion of at least three programs is required.

Math. 371 Linear Algebra **3 cr.**

Topics considered in this course are vector spaces, linear transformations, and matrices. The emphasis is on the theory for arbitrary finite dimensional spaces. Applications to Euclidean n -space are considered briefly.

Math. 375 Introduction to Modern Mathematics **3 cr.**

This course is a preparatory course to the courses Abstract and Linear Algebra, Advanced Calculus, and Geometry.

An introduction to formal logic sets the stage for a thorough study of the development of the complex number system from a postulational viewpoint, starting with the natural numbers, through the integers, rationals, reals and finally the complex numbers. The concepts of group, ring, integral domain and field are basic to the development.

Math. 452 Seminar in Mathematics **1 cr.**

This course requires the student to do independent study in some area of mathematics beyond the scope of the courses he has taken. The course is conducted in one of two ways. In the first method the student chooses the area for investigation upon the approval of the instructor. Upon completion of the study, the student gives an oral presentation of his findings to other members of the group. In the second method the various instructors offer seminars in selected topics. The student chooses the topic of interest to him and the class studies the particular topic in depth.

El. Math. 160 Numeration Theory I **3 cr.**

Prerequisite: 3 years high school academic mathematics.

This course is designed for those students whose major is elementary education and is one of the first two courses in the concentration of mathematics.

Among the topics included in this course are: Development and the structure of numeration systems; properties of the rational reals, their subsets and the operations defined on them; tests for divisibility; modular arithmetic; primes; factorization; fundamental theorem of arithmetic; introduction to mathematical systems.

El. Math. 250 Numeration Theory II **3 cr.**

Prerequisite: Math. 160.

This course is a continuation of Math. 160 and will include such topics as: Rules for divisibility; properties of and operations with real numbers; finite and infinite sets; Venn diagrams; order relations; modular and clock arithmetic; introduction to algebra and geometry; informal look at probability; truth tables; linear functions.

**El. 313 Teaching Mathematics in
the Elementary School** **3 cr.**

Prerequisite: Math. 101.

In this course emphasis will be given to the place of arithmetic in the elementary school and to the recent changes in

curriculum and method; to techniques for developing concepts and processes; to recent research in the field of arithmetic; and to books and materials helpful to prospective teachers. Observation of master teachers at work will be planned.

**Ed. 456 Teaching Mathematics in
the Secondary Schools**

3 cr.

The major objective of the course is to prepare teachers of mathematics for the modern secondary schools. The principal activities in the class are the preparation and presentation of lessons on concepts from the secondary schools mathematics courses; study of the principles of teaching and learning; observations; study of current mathematics curricula; and learning to use curriculum materials effectively.

MILITARY SCIENCE DEPARTMENT

Colonel William S. Wiley, Jr., Chairman

MS 101 Military Science I

2 cr.

Male students have the option of taking Military Science (Reserve Officer Training Corps) for two semester hours for two semesters or of taking a combination of Health for two semester hours and Physical Education for two semesters of one credit for each semester. One semester of Military Science is given during Main Session. Cadets are furnished uniforms, equipment and texts. A deposit of \$10.00 is required against possible loss of uniform components. A refund of the deposit is made at the completion of Main Session.

The Military Science course is designed to give young men of draft age an appreciation of the History, Organization and Mission of the ROTC, the U.S. Army and the Department of Defense. Other subject material includes Leadership Laboratory, Marksmanship and vital Selective Service information. Two, Three, and Four Year Scholarships are available through the ROTC program. Many extra-curricular activities offer the student an opportunity to further his leadership training.

MUSIC DEPARTMENT
Hugh Johnson, Chairman

MUSIC LITERATURE AND HISTORY

Mus. 101 Introduction to Music 3 cr.

The course "Introduction to Music" presumes no technical background, but does utilize as fully as possible the varied musical experiences of each individual to help him extend his interest as far as possible. Various concerts of college organizations, cultural life events, and visiting artist concepts are required to augment the listening experiences of the student.

Mus. 111 Sight Singing I 2 s.h.

Sight Singing I is designed to develop the student's skill at interpreting written music by the use of his own voice. Areas of study include: all major and minor scales; treble, alto, tenor, and bass clefs; all diatonic intervals; duple and triple meter with rhythmic dictation drills; phrase-wise thinking; and elementary form analysis. The sol-fa syllables with movable do are used.

Mus. 113 Ear Training I 1 s.h.

Ear Training I involves dictation skills and notation in the following areas: primary harmonies in all inversions, and melodic dictation with implied and actual harmonies.

Mus. 115 Theory I 3 s.h.

Theory I includes the playing and writing of primary harmonies in all inversions, using the chorale style of harmonization; and the study of phrase and period through the analysis and study of melodies to be harmonized.

Note: Music 111, 113, and 115 will be offered as a single block in Pre, Main and Post Sessions for two (2) hours per day (10 per wk) with grade to be given only at the end of the Post Session (6 s.h.).

Mus. 112 Sight Singing II 2 s.h.

Prerequisite: Sight Singing I with a mark of C or better.

A continuation of the development of skills in the areas of Sight Singing I, as well as the following additional areas:

sensitivity to intonation, part singing, compound meters, written melodic and rhythmic dictation.

Mus. 116 Theory II **3 s.h.**

Prerequisite: Theory I with a mark of C or better.

The content of Theory I is broadened to include secondary triads and seventh chords, mastery of the circle of fifths, and modulation to related keys. Harmonization in the piano style is introduced and developed as well as the writing of original melodies. The double period and phrase group serve as units for analysis.

Mus. 334 Instrumental Methods **2 s.h.**

A treatment of the necessary understandings, techniques, equipment, and materials necessary to develop an effective instrumental music program in the public schools. Demonstrations and laboratory work are designed to give the student the competencies needed to meet successfully the various teaching situations in instrumental music from the grades through the high school. Guided observations are required.

Note: Music 116, 112, and 114 will be offered in Pre and Main Sessions in the following manner: (1) Music 116 to be taken both Pre and Main Sessions for (1) hour per day; (2) Music 112 to be taken both Pre and Main Session for one (1) hour per day; (3) Music 114 to be taken Main Session for one (1) hour per day.

El. 211 Music for the Elementary Grades **3 cr.**

The content of this required course for all Elementary Students includes the following: review of music fundamentals, keyboard knowledge, the teacher's voice, care and development of the child voice, problems of the non-singer, rhythmic activities, listening activities, creative activities, rote to note process, special days, and lesson planning. To get practical application of class activities, students will be assigned observations in the University School. Emphasis is placed on the primary grades.

Mus. 301 History of Music I **3 s.h.**

A study of the development of music from the ancient Greek and Roman cultures through the Baroque period. Al-

though the approach is an historical one, considerable analytic listening is required.

Mus. 311 Fundamentals of Conducting **2 s.h.**

Emphasis will be placed on the fundamental physical skills of the conducting process. Various beat patterns will be mastered and elementary score reading and interpretation will be considered.

Mus. 114 Ear Training II **1 s.h.**

Prerequisite: Ear Training I with a mark of C or better.

A continuation of the development of dictational and notational skills of Ear Training I as well as the following areas: secondary triads, seventh chords, and modulation to related keys.

Mus. 331 Elementary Methods **2 s.h.**

Included in Elementary Methods are the following topics: analytical study of texts, recordings, equipment, instruments, and other material suitable to musical development of elementary pupils; proper treatment of the 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.

Mus. 333 Secondary Methods **2 s.h.**

The following topics will be treated: the General Music Class, choral organizations, the 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 observations.

Mus. 408 Marching Band Techniques **2 s.h.**

The following topics are considered: building a band show; alignment of ranks and files; development of a standard pace of 6 to 5 and 8 to 5; selection of music; instrumentation; techniques of developing morale; and fundamentals of uniform design.

Mus. 304 Form and Analysis I**2 s.h.**

Prerequisite: Theory IV.

A thorough study of the smaller forms of music. The student will analyze as many of the smaller forms as possible, both through listening and reading of the works.

Mus. 312 Choral Conducting**2 s.h.**

Prerequisite: Fundamentals of Conducting with a mark of C or better.

Choral Conducting will provide the opportunity for the student to apply his basic conducting techniques to the choral area. Each student will conduct the rest of the class in many of the standard choral works of the literature. Also a survey of suitable literature, organizational problems, voice testing, rehearsal techniques, program building, interpretation, and diction will be included.

Mus. 221 Music Literature II**1 s.h.**

Major works of the Nineteenth Century will be covered in the same manner as Music Literature I.

Mus. 303 History of Music III**3 cr.**

Starting with the 19th Century and Beethoven, History of Music III is the historical study of the development of music through to the present. Analytic listening required through all available sources.

Mus. 313 Instrumental Conducting**2 s.h.**

Prerequisite: Fundamentals of Conducting with a mark of C or better.

Instrumental Conducting will provide the student with the opportunity to apply his basic conducting skills to the various instrumental ensembles. Each student will conduct the rest of the class as well as the available instrumental ensembles in the department. Also a survey of suitable literature, organizational problems, audition procedures, rehearsal techniques, program building, and interpretation will be considered.

Mus. 306 Counterpoint I 2 s.h.

Prerequisite: Theory IV.

After an intensive study and analysis of the style of the 16th Century contrapuntal writing, the student will do original writing using the techniques and devices of the period. As time permits, the same approach will be made to explore the style of the 17th and 18th Century composers.

Mus. 411 Composition I 2 s.h.

Prerequisite: Theory IV.

Instruction in Composition I will of necessity be highly individualized due to the uniqueness of the creative process. Compositional devices will be studied through the analysis of works by major composers. Students will do original works in the smaller forms of music.

Mus. 302 History of Music II 3 s.h.

Starting with the Eighteenth Century with Haydn and Mozart, History of Music II is the study of the development of music to the present. Analytic listening is required through all available sources.

APPLIED MUSIC

Students will be allowed to enroll for private applied lessons for nine (9) weeks, to include Pre and Main **or** Main and Post sessions, for a total of two (2) hours credit, grade to be given at the end of the second of the two sessions. A student will receive a total of eighteen (18) half-hour lessons or nine (9) hour lessons. A student may enroll for Main Session only for a total of one hour credit and receive twelve (12) half-hour lessons or six hour lessons.

Mus. 155	Strings Seminar	1 s.h.
Mus. 156	Class Strings	1 s.h.
Mus. 157	Class Percussion I	1 s.h.
Mus. 158	Class Percussion II	1 s.h.
Mus. 159	Brass Seminar	1 s.h.
Mus. 160	Class Brass	1 s.h.
Mus. 161	Woodwind Seminar	1 s.h.
Mus. 162	Class Woodwinds	1 s.h.

DEPARTMENT OF NURSING
Marian A. Murray, Chairman

Nur. 300 Introduction to Nursing **3 cr.**

This course is designed as an introduction to nursing as a profession, the history of nursing, and ethics and legal aspects of nursing.

Nur. 301 Nursing I (Fundamentals of Nursing) **6 cr.**

The course combines nursing theory with an introduction to clinical practice in patient care. Basic technical skills will be learned; principles of pharmacology, nutrition, communication theory, records, and reports.

PHILOSOPHY DEPARTMENT
Robert M. Hermann, Chairman

Phil. 120 Introduction to Philosophy **3 cr.**

A survey of basic issues and fundamental concepts. Designed for the beginning student, this course attempts a critical appraisal of the major "isms" of philosophy. Emphasis is placed upon an understanding of problems in the field, rather than upon individual thinkers.

Phil. 110 World Religions **3 cr.**

A non-sectarian and introductory course in which material from several academic disciplines is brought to focus on religion as an objective problem. Defining "religion"—forms of worship in prehistoric cultures—regional and national religions of the past—history and comparative theology of major contemporary faiths—religious behavior viewed psychologically and sociologically—some philosophical perspectives.

Philosophy Electives

Phil. 221 Logic I—General Logic **3 cr.**

The Art of Reasoning—The Science of Critical Thinking. Designed for the general student, this course aims at a basic familiarity with the broad range of problems currently of in-

terest to logicians, together with the acquisition of at least minimal skill in the evaluation of inferential claims.

Phil. 222 Ethics 3 cr.

An introduction to significant ethical theory. Selected writings both ancient and modern are examined and discussed critically. The student is encouraged not only to develop a consistent ethical formulation of his own, but to make application of each view studied to current moral problems.

PHYSICS DEPARTMENT

Richard E. Berry, Department Chairman

***Phys. 111-112 Physics I and II 3 cr. each**

A two-semester non-calculus course in general college physics. It is intended to supply the student with a sufficiently broad coverage of physics and to help them appreciate physics, including its recent advances. In Physics I, mechanics, heat and sound are studied; in Physics II, electricity and magnetism, light, atomic and nuclear physics, and an elementary introduction to relativity and quantum mechanics. The mathematical sophistication is at the level of elementary algebra and trigonometry. Three hours lecture per week.

***Phys. 121-122 Physics Laboratory I and II 1 cr. each**

This is a two-semester sequence of physics laboratory at the same level as Physics I and II. Physics 121 is comprised of experiments in mechanics, wave motion and sound. Physics 122 is comprised of experiments in optics, electricity and magnetism, and radioactivity. Three hours laboratory per week.

***Phys. 131-132 Physics I-C and II-C 3 cr. each**

This is a two-semester calculus-level course in general college physics. The topics covered in this course are the same as Physics 111-112. Use of calculus greatly simplifies the presentation and eliminates memory of formulas replacing them with a small set of physical laws. Calculus-level physics would normally be required of upperclass students in mathematics and chemistry and elected if desired by students in biology, geology, oceanography, earth science and the various social

sciences. Students should consult their department's requirements and their advisor for additional guidance in choosing between Physics 111-112 and calculus level Physics 131-132.

***Phys 141-142 Physics Laboratory I-C and II-C 1 cr. each**

This is a two-semester sequence of physics laboratory at the same level as Physics I-C and II-C. Physics 141 is comprised of experiments in mechanics, wave motion, sound and kinetic theory. Physics 142 is comprised of experiments in optics, electricity and magnetism, and radioactivity. Three hours laboratory per week.

Phys. 223 Mechanics II 3 cr.

Prerequisites: Phys. 222, Math. 357.

This course, the sequel to Physics 222, includes: mechanics of a rigid body, constraints, oscillations, wave motion, mechanics of fluid and introduction to advanced mechanics, relativistic mechanics, and wave mechanics. Three hours lecture per week.

Phys. 231 Electronics 4 cr.

Prerequisites: Physics 111 and 112, Math. 157.

This course introduces electronic circuitry and instrumentation. A brief introduction to circuit theory includes direct current transients, alternating currents, and response of simple networks to pulses and square waves. This theory is then applied equally to vacuum-tube circuits and transistor circuits. The laboratory provides opportunity for each student to use dual-trace oscilloscopes, signal generators, and power supplies. The following concepts are emphasized in the course: frequency response, input and output impedance, feedback, and electronic noise. Three hours lecture and three hours laboratory per week.

Phys. 498 Problems in Physics 1-4 cr.

Under this title there is offered an opportunity for advanced students to study, in vigorous mathematical detail, special topics in Physics such as Fourier Series, Vibrating String Theory, Vector Analysis and others which the student

or staff member might propose. The amount and quality of the work done would determine the number of credit hours earned. In general the idea is to have the student deal in a more sophisticated manner with topics which receive elementary treatment in the regular courses.

*Note: The completion of the Physics 111-112 and Physics 121-122 sequences or the Physics 131-132 and Physics 141-142 sequences will satisfy the requirement of eight hours of a laboratory science in the General Education program.

GENERAL EDUCATION COURSES

Sci. 105 Physical Science I **4 cr.**

A study of the physical world, focusing on the fundamental concepts of matter and energy. Emphasis is placed on what science is, how scientific knowledge is acquired, and the emergence of the more fundamental physical laws. Topics include those often associated with astronomy, chemistry, geology and physics. Three hours lecture and two hours laboratory.

Sci. 106 Physical Science II **4 cr.**

A continuation of Physical Science I. Three hours lecture and two hours laboratory.

POLITICAL SCIENCE DEPARTMENT

Richard F. Heiges, Chairman

PolS 111 American Citizenship **3 cr.**

This course is largely concerned with our Federal and State governments. Emphasis is placed upon the constitutional basis of government, organization and structure of government, division of governmental powers, Federal and State relations, public finance, organization and role of political parties, and services of government. Attention is given such problems as foreign policy and world relations, economic and social security, and the promotion of the general welfare.

PolS 250 Contemporary Political Problems **3 cr.**

This course emphasizes the dynamics of government as they are evidenced in public opinion pressure groups, political

parties and our governmental institutions. Attention is also directed toward the political-economic nexus within American society.

PolS 280 Comparative Government 3 cr.

Analyzes the major foreign political systems, with emphasis upon Contemporary Europe including the Soviet Union. Authoritarian and democratic systems are compared, with the emphasis upon institutions and processes.

PolS 281 International Relations 3 cr.

Consideration is given to the fundamentals of the state system, sovereignty and nationalism; the elements of national power; the diplomatic, legal, economic, organizational and military relations of states; procedures for the settlement of disputes; power-security problems and patterns of power to cope with the problems. The course attempts to provide a conceptual framework on the basis of which international events can be sorted out and made meaningful.

PolS 283 American Foreign Policy 3 cr.

An analysis of the formulation and execution of American foreign policy. An examination of the roles of the formal governmental institutions mass media interest groups and public opinion in the policy-making process. Special emphasis to be given to contemporary foreign policy problems.

PolS 351 Legislative Process 3 cr.

Organization and procedure of the United States Congress, with special reference to the theory and practice of representative government, lobbying, and bicameralism.

PolS 352 Public Opinion 3 cr.

A study of the nature of public opinion within the political system. Attention is given to the formation of public opinion and its expression, propaganda, and mass media, and interest groups.

PolS 353 American Political Parties 3 cr.

The role of people, parties and pressure groups in the politics of American democracy. Attention will be devoted to: campaign activities of candidates; party support for the candidates; voting behavior; sectional and historic roots of national politics; the institutional politics of Congress and the Presidency; the competition for power among business, labor, agriculture, and the other major organized interests.

PolS 359 Constitutional Law and Civil Liberties 3 cr.

A study of the development of constitutional law through leading Supreme Court decisions. Topics treated include the scope of federal powers, civil liberties and civil rights, the nature of judicial review, federal-state relations. Attention is given to the continuing controversy over the role of the Supreme Court in American society.

PolS 360 Political Philosophy 3 cr.

The evolution of the Western political tradition of Constitutionalism from Plato and Aristotle to Locke and Montesquieu. The religious (Judeo-Christian) and rational (Graeco-Roman) foundations. Medieval theories of authority and representation in church and state. Early modern theories of the state and sovereignty (Bodin and Hobbes). Emphasis on analysis of writings of leading theorists. Concepts of law natural rights, liberty and equality and justice are treated in detail.

PolS 361 Modern Political Thought 3 cr.

The development of political thought since the mid-16th century (Rousseau). Classic Liberalism of the Philosophic Radicals. Conservative thought since Burke. The nature and origin of modern irrational ideologies such as fascism and national socialism. Socialist thought (Marxist and non-Marxist). Contemporary collectivist liberalism.

PolS 382 Political Systems: Africa 3 cr.

An intensive, comparative study of government and politics in Africa.

International Studies**I.E. 101 World Politics****3 cr.**

An analysis of the contemporary (Post 1945) state system and the forces shaping the world in which the student lives. Subtopics include the revolution in military technology, the nationalist and social revolutions in developing nations and the confrontation of Communism with the Western democracies. The student is given a framework within which he can analyze contemporary international politics.

PSYCHOLOGY DEPARTMENT**Richard D. Magee, Chairman****Psy. 201 General Psychology****3 cr.**

A comprehensive study of the origins, motives and modifications of human behavior with emphasis on the scientific approach in analyzing behavior patterns; the importance of man's biological inheritance, and the significance of social environment in influencing human living. Attention is given to an appreciation of simpler techniques in psychological experimentation.

Psy. 311 Experimental Psychology**3 cr.**

Prerequisite: Psy. 201, Math. 362.

A laboratory course on designing, conducting and evaluating experiments. Students carry out both original and classical experiments in the major areas of psychology. Outstanding studies in each area are surveyed.

Psy. 352 Mental Hygiene**3 cr.**

Prerequisite: General Psychology.

This course is designed for aiding the development of strong hygienic personalities; mental hygiene as related to the child, adolescent, and teacher in the home, classroom, and social situation; maladjustments and mental diseases with emphasis on prevention.

Psy. 353 Child Psychology 3 cr.

Prerequisite: General Psychology.

This course aims to study the developmental changes in intellectual, emotional, motor, and social behavior from early infancy to adolescence. Outstanding experimental, clinical and theoretical contributions that show the important practical relationships between self-understanding, understanding of others, and the process of helping children to discover themselves will be given special attention.

Psy. 355 Adolescent Psychology 3 cr.

Prerequisite: General Psychology.

This course is a study of the adolescent, his growth and development, behavior, personality, and problems. All areas in his experience will be considered, the physical, mental, emotional, social, and spiritual. Attention will be given to attitudes, relationships, and all other facets of his living. Some attention will be given to the early development of the child, the pre-adolescent, the young adult, and the adolescent in other cultures. Study and discussions will include the exception as well as the normal individual.

Psy. 371 Personality 3 cr.

Prerequisite: General Psychology.

The leading experimental and clinical findings on personality and motivation and the major theories of personality, including Freudian theories.

Psy. 452 Social Psychology 3 cr.

Prerequisite: General Psychology.

A study of the interaction of people, either in pairs or in groups. Examination of the effects of their respective personalities, motives, attitudes and cultural backgrounds upon each other. Also a study of leadership, role playing, group conformity and group effectiveness.

Psy. 461 Abnormal Psychology 3 cr.

Prerequisite: General Psychology.

The systematic study of the full range of psychological

functioning from the basic and accepted normal to the most extreme aberrations. Etiology, dynamics, symptomatology, treatment, and prognosis of the psychoneuroses, psychoses, psychomatic disorders, character disorders, and disorders of intelligence constitute the major emphases of the course.

Psy. 481 Industrial Psychology

3 cr.

Prerequisite: Psy. 201.

A systematic consideration of the practical applications of psychology to business and industry. Attention is given to the effects of industrial organization upon individual motivation. Problems of communications, personnel, and the development of social relationships within the industrial setting are studied.

PUBLIC SCHOOL NURSING

George A. W. Stouffer, Jr., Director

The college offers a degree program in Public School Nursing. This requires 60 semester hours beyond graduation from an approved School of Nursing. Much of the required work is in general and professional education and may be taken in the summer.

PSN 301 Public School Nursing

3 cr.

The general purpose of this course is to provide the public school nurse an opportunity to understand and appreciate the historical development, the fundamental principles and the present trends in public health nursing in a democratic and industrial society. Emphasis will be placed on the integration of public health nursing in our schools.

PSN 402 Nutrition and Community Health

3 cr.

A study is made of the nutritional problems of family members from infant to aged people of the community. Emphasis is placed on recognizing good nutritional status and ways of guiding families toward better nutrition. School lunch is also emphasized. The course is designed to help the public school nurse and teachers.

SOCIOLOGY-ANTHROPOLOGY DEPARTMENT**Myron H. Levenson, Chairman****Anth. 110 Introduction to Anthropology 3 cr.**

Anthropology attempts to bring the student a comprehensive view of man's biological and cultural heritage. His similarities and variations, both physiological and social, are studied as a continuity, from the earliest evidence supplied by archaeology, to detailed studies of primitive societies in our own times. The predictability of future change in ethnological phenomena is also considered.

Anth. 320 Archaeological Field School 6 cr.

Prerequisite: Introduction to Anthropology.

Supervised field excavation of archaeological sites. Areal and problem focus will vary from year to year. Training offered will include basic field techniques, artifact identification and classification procedures, notational methods, and report presentation. (See page).

Soc. 151 Principles of Sociology 3 cr.

Sociology is the science of the structure and functioning of human groups. Taking culture concepts and social institutions as its basic materials, it explores the content, methodology, and interrelationship of those studies seeking to record and explain man's social behavior in the modern world. Problems of social change, and the attendant efforts to direct and control such change, are integral parts of the course.

Soc. 331 Contemporary Social Problems 3 cr.

Prerequisite: Principles of Sociology.

A course which explores pressing social issues and the solutions offered for their alleviation. Within its scope fall race and minority discrimination, juvenile delinquency, crime, family, disintegration, personal maladjustment, population shifts, the role of culture, the nature of social change, and the possibility of social planning. Problems are defined and solutions are explored in the light of historical, political, economic, social, and anthropological data.

Soc. 337 World Cultures 3 cr.

Students are provided with a minimal orientation to the study of the cultural diversity of human societies. There will be an emphasis on the determinants of cultural variability and the problem of ethnocentrism resulting from this diversity.

Soc. 338 Introduction to Social Work 3 cr.

Prerequisite: Principles of Sociology.

The principles of social work; their application to problems of family and child welfare, casework and group techniques.

Soc. 339 The Community 3 cr.

Prerequisite: Principles of Sociology.

An analysis of the social structure of communities at the local level in relation to the national community structure. Examination of current problems and future trends.

Soc. 344 Introduction to Social Research 3 cr.

Prerequisite: Principles of Sociology.

An overview of basic quantitative methods, survey and interview techniques, and general problems of research design. Brief problems and projects will be assigned.

**DEPARTMENT OF SPECIAL EDUCATION
AND CLINICAL SERVICES**

Morton Morris, Chairman

SpE 216 Mental Health in the Schools 3 cr.

This course aims to acquaint the student with the advantages and ideals of education for mental health and human relations. The concept of mental health is developed in terms of optimal human functioning and concentrates on positive aspects and modifications of behavior rather than on malfunctioning and clinical treatment of mental and emotional disorders. The practical application of mental health principles in the school setting is emphasized.

SpE 220 Introduction to Exceptional Children 3 cr.

This survey course deals with the different types of exceptional children. This course is designed to aid the student in identifying those children who deviate from the average in areas of physical, mental, emotional, and educational development. This will enable the teacher to identify for referral or to plan for those pupils who need special class placement or a special instructional program with the regular classroom.

SpE 255 Development of Language in Children 3 cr.

This course explores not only the levels and sequences of the child's linguistic acquisition at various ages but also his burgeoning sensitivity to extra-language information by which he must operate with others, and the complex processes instrumental in the formulation of his responses.

**SpE 301 Reading and Other Language Arts
for the Mentally Retarded 3 cr.**

Prerequisite: El. 222 or Ed. 362.

This course deals with the preparation and execution of teaching units in reading, vocabulary development, spelling, handwriting, and or written communication. The emphasis will be on what retarded children can reasonably be expected to do at elementary and secondary levels. Consideration will be given to objectives, procedures and experiences designed to meet the unique needs of the mentally retarded.

SpE 320 Psychology of Mentally Retarded Children 3 cr.

Prerequisite: SpE 220 Introduction to Exceptional Children.

This course will point up the importance of viewing retarded children and youth as living, adjusting individuals who respond to many kinds of personal and social situations and who are capable of far more than usually imagined. The importance is stressed of the ways in which the retarded develop, learn, and adapt in various home, school, community, or sheltered settings.

**SpE 411 Health and Physical Education
for Exceptional Children 3 cr.**

Prerequisite: SpE 220.

This course will provide an opportunity for the prospective teacher of the mentally retarded to gain a thorough understanding of a program of health, physical education and recreation as it applies to individuals with mental and physical handicaps. Special attention will be given to the needs of children with physical handicaps or developmental problems which may accompany mental retardation.

SpE 421 Student Teaching of the Mentally Retarded 3 cr.

Students will be required both to observe and to participate in the teaching of mentally retarded students. Ordinarily this course will be offered in conjunction with SpE 451.

**SpE 451 Special Class Methods for the
Mentally Retarded 3 cr.**

The chief emphasis of this course will be upon practical and workable methods and materials which can be used effectively with slow-learning children. It is intended to be offered in conjunction with SpE 421 as well as to serve as a course in specific techniques which the classroom teacher will find to be valuable in actual classroom teaching of the mentally retarded.

**SpH 111 Introduction to Speech and
Hearing Problems 3 cr.**

Prerequisite for all other required courses in the Department except Phonetics.

Basic orientation to the field of speech and hearing therapy. A survey of the major types of speech disorders, their prevalence, and causes. The genetic development of speech sounds and a study of when speech can be considered defective. Observation of children with normal and defective speech.

SpH 122 Phonetics 3 cr.

The study of the sounds of the English language from a physical and acoustical point of view. Mastery of the Interna-

tional Phonetic Alphabet for transcription and translation to speech sounds. Application of phonetics to clinical speech problems. The study of research techniques through classroom experimentation, reading and movies.

SpH 232 Speech Pathology I **3 cr.**

Background study of the symptoms, causes, and treatment of speech abnormalities. The functional disorders of articulation, voice, and rhythm will be emphasized.

SpH 310 Speech Clinic I **2 cr.**

Orientation to theory and technique of speech and hearing therapy as applied to specific clients. Diagnosis of problems and planning programs of treatment. Introduction to lesson planning and writing of case history and reports. Observation of clients.

SpH 311 Speech Reading and Auditory Training **3 cr.**

Prerequisite: SpH 222 Introduction to Audiology.

The basic principles of understanding language by observing the speaker's lips, and facial expressions, and developing residual hearing to the maximum. Educational and rehabilitative considerations for hard-of-hearing children and adults. Observation of hard-of-hearing.

SpH 320 Speech and Hearing Clinic II **2 cr.**

Advanced practicum with children or adults presenting speech and hearing problems. Students are expected to assume greater responsibility and self-direction in the handling of clients, than in Clinic I. Lesson planning, writing of reports and case histories of a detailed nature.

SpR 310 The Physical Basis of Disability **3 cr.**

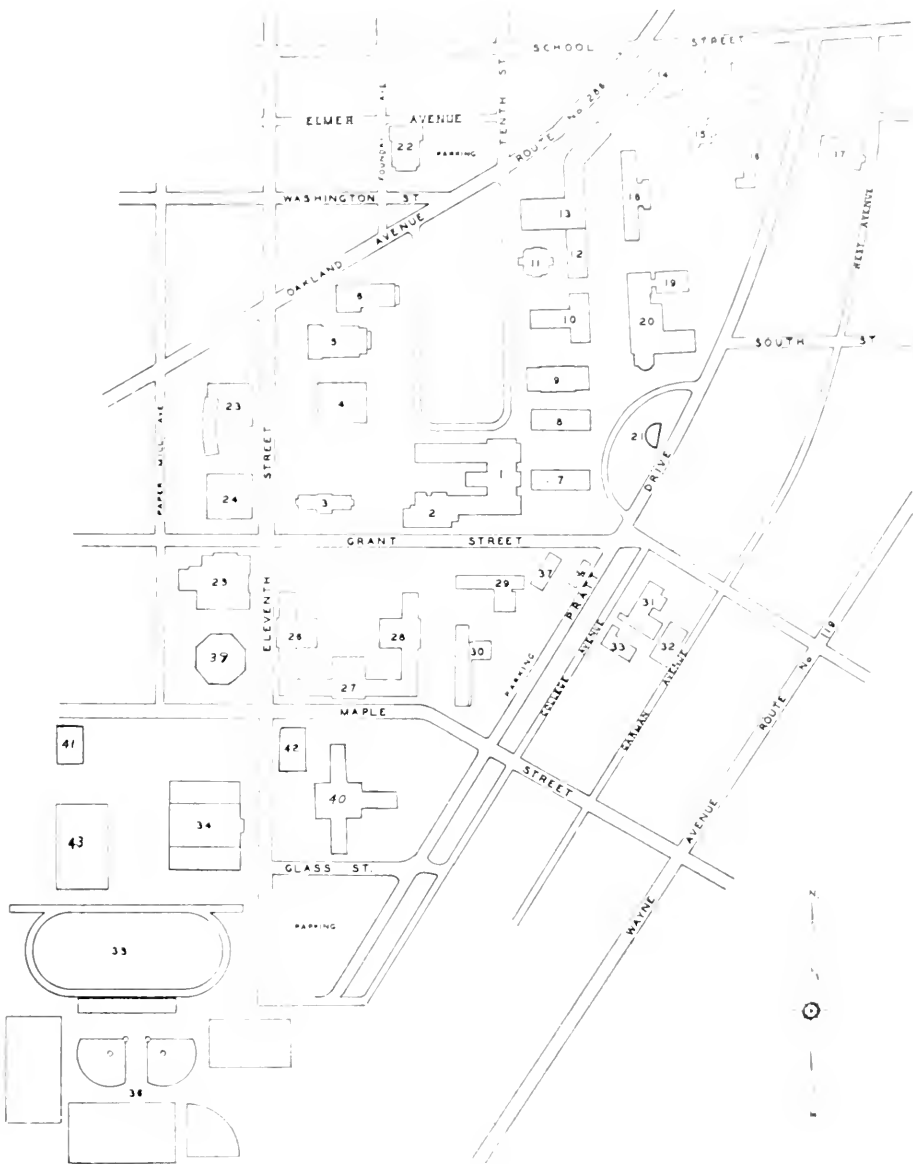
This course explores the structural and physiological changes from the normal occurring in selected disabilities of individuals whom the rehabilitation coordinator frequently encounters: the blind and visually handicapped; the cardiac, diabetic, and amputee; the deaf and hard-of-hearing; the cere-

bral-palsied, cleft palate, the cerebro-vascular accident, and the laryngectomized. Prerequisites: General Biology and Introduction to the Exceptional Child.

Psy. 451 Psychology Practicum

3 cr.

In the summer of 1970 Indiana University of Pennsylvania will offer for the seventeenth year an unusual work-study practicum in psychology for twenty selected students at the Torrance State Hospital. Those chosen will work a 40-hour week as attendants at the Torrance State Hospital concurrent with a planned lecture and demonstration course taught by members of the hospital staff. They will earn full pay as hospital attendants in addition to earning three credits in psychology. If interested write immediately to: Mrs. Marion M. Geisel, Director of the Psychological Clinic, Indiana University of Pennsylvania, Indiana, Pennsylvania. Prerequisite: 6 hours of psychology.



KEY TO BUILDINGS

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| 1. John Sutton Hall | 16. Whitmyre Hall | 31. Boiler Plant |
| 2. Thomas Sutton Hall | 17. Student Union | 32. Maintenance Building |
| 3. Clark Hall | 18. Gordon Hall | 33. Shop Building |
| 4. Stables Library | 19. Special Education Building | 34. Memorial Field House |
| 5. Fisher Auditorium | 20. Keith Hall | 35. Miller Stadium |
| 6. Waller Gymnasium | 21. Flagstone Theater | 36. Athletic Fields |
| 7. Ackerman Hall | 22. Uhler Hall | 37. Military Hall |
| 8. Classroom Hall (proposed) | 23. Cogswell Hall | 38. Greenhouse |
| 9. McElhaneey Hall | 24. Classroom Hall (proposed) | 39. John Davis Hall and University School |
| 10. Leonard Hall | 25. Foster Dining Hall | 40. Men's Dormitories |
| 11. Wilson Hall | 26. Mack Hall | 41. Military Hall (proposed) |
| 12. Walsh Hall | 27. Stewart Hall | 42. Infirmary |
| 13. Weyandt Hall | 28. Turnbull Hall | 43. Tennis Courts |
| 14. Elkin Hall | 29. Wahr Hall | |
| 15. Art Ed. Annex | 30. Langham Hall | |

