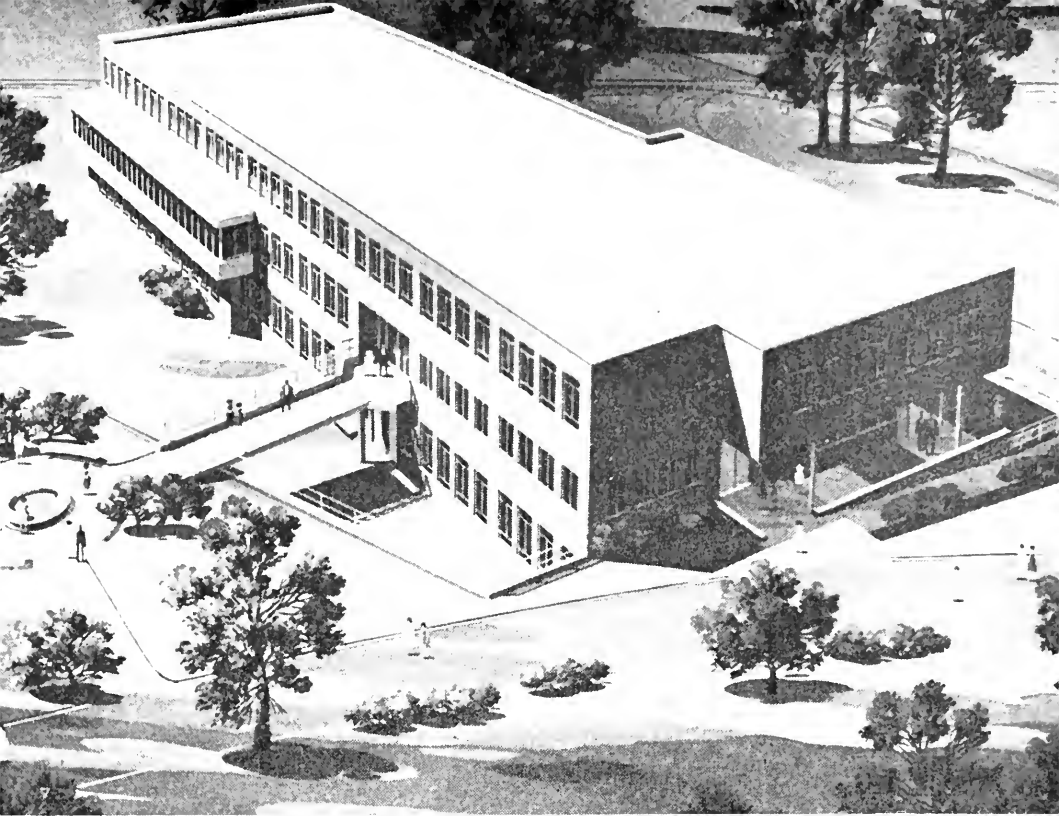
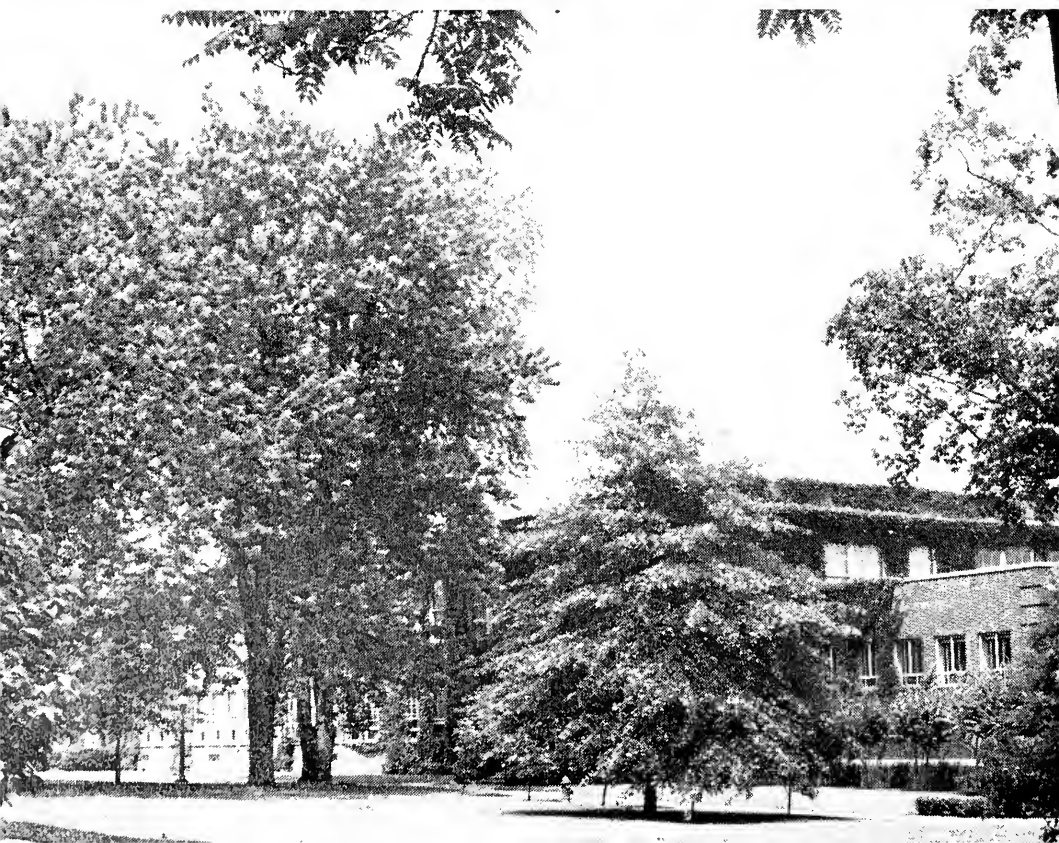


Summer Sessions, 1964
STATE COLLEGE, INDIANA, PENNA.

Undergraduate Bulletin

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Indiana College Bulletin

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Number 3

STATE COLLEGE
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

1964



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

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COLLEGE CALENDAR
1964

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 1964-1965

Registration September 9-12

Classes Begin September 14

ADMINISTRATIVE OFFICERS
Summer Sessions 1964

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and Dean of Academic Affairs

George A. W. Stouffer Dean, School of Education

A. Dale Allen Assistant Dean, School of Education

William W. Hassler Dean, School of Liberal Arts

Samuel Hoenstine Director Laboratory School and Placement

Samuel F. Furgiuele Director of Public Relations

S. Trevor Hadley Dean of Students and Director
of Summer School Activities

Elwood Sheeder Dean of Men

Nancy J. Newkerk Dean of Women

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B.S., Clarion State College; M.A., University of Pittsburgh	
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WILLIAM R. BECKER	Music
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B.A., M.A., University of Oregon; Ph.D., Ohio State University	
LOIS C. BLAIR	Keith School
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CARL W. BORDAS	Science
B.S., M.Ed., Ed.D., Pennsylvania State University	
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KENNETH W. BRODE	Foreign Language
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CATHERINE C. CARL	Music
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B.S., Slippery Rock State College; Ed.M., University of Pittsburgh; Ed.D., George Peabody College for Teachers	
DON-CHEAN CHU	Education-Psychology
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B.B.A., City College of New York; M.A., Ph.D., Columbia University	
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A.B., Manchester College; A.M., Ph.D., Ohio State University	
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A.B., Geneva College; M.Litt., University of Pittsburgh	
ROBERT J. CRONAUFER	Art
B.S., State College, Indiana, Pennsylvania; M.A., Columbia University	
BLAINE C. CROOKS	Mathematics
A.B., Pennsylvania State University; Ed.M., Harvard	
WILLIAM C. DAVIES	Elementary
A.B., M.A., Ph.D., University of Pittsburgh	
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B.S., State College, Indiana, Pennsylvania; A.M., New York University	
DANIEL DICICCO	Music
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THOMAS DONGILLA	Art
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OWEN J. DOUGHERTY	Health and Physical Education
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GENE K. ESCHELSON	Foreign Language
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NORMAN J. FEDDER	English-Speech
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JULIAN B. FICKLEN	English-Speech
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B.S., State College, Indiana, Pennsylvania; Ed.M., University of Pittsburgh	
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B.S., Middle Tennessee State College; A.M., Ed.D., George Peabody College for Teachers	
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A.B., M.Litt., Ph.D., University of Pittsburgh	
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RAYMOND D. GIBSON	Mathematics
B.S., Slippery Rock State College; M.Ed., Westminster College; M.A., University of Illinois	
RALPH M. GLOTT	Elementary
B.S., California State College; Ed.M., Ed.D., University of Pittsburgh	
DAVID S. GREEN	Education-Psychology
B.S., Syracuse University; M.A., Teachers College, Columbia University; Ph.D., Purdue University	
JAMES R. GREEN	Chairman, English-Speech
B.S., Lafayette College; A.M., Columbia University; Ph.D., New York University	
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ROBERT C. HAWKINS	Elementary
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A.B., Geneva College; A.M., Stetson University	
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PAUL R. HICKS	Assistant Librarian
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Columbia University
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B.S., State College; Clarion, Pennsylvania; M.S., Library School, University of Illinois
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B.S., University of Rhode Island; M.S., Pennsylvania State University
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B.S., Leocoming College; Ed.M., Pennsylvania State University
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Coordinator of Secondary Education Departments
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Geography
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Health and Physical Education
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- ROBERT L. MORRIS
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B.A., University of Arkansas; M.A., University of Missouri
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B.S., State College, Edinboro, Pennsylvania; Ed.M., Pennsylvania State University
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B.A., Central Washington College of Education; M.A., Ed.D., Teachers College, Columbia University
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- EDWIN R. PAGE
B.S., Western Michigan University; M.A., Ohio University
Education-Psychology
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Social Science
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Assistant Librarian
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English-Speech
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Art
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Health and Physical Education
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Keith School
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B.A., Morris Harvey College; M.A., University of Wisconsin
Social Science
- ELWOOD SHEEDER
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- ARTHUR G. SHIELDS Science
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- CLELL T. SILVEY Music
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 School of Music; Ph.D., Peabody College for Teachers; Doc.Ch., Music Diploma, Ecole
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- DWIGHT SOLLBERGER Chairman, Science
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- MARTIN L. STAPLETON Science
 B.S., State College, Kutztown, Pennsylvania; M.A., Lehigh University
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 A.B., University of Pittsburgh; M.A., Columbia University
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 B.S., State College, Indiana, Pennsylvania; M.A., University of Pittsburgh
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- ROBERT C. VOWELS Social Studies
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 A.B., College of Wooster; M.S., Library School, University of Illinois
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 B.S., State College, Indiana, Pennsylvania; M.Litt., University of Pittsburgh
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- EDWARD G. WOLFE Library
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 Ph.D., Cornell University
- MELVIN R. WOODARD Mathematics
 B.S., Mansfield State College; M.A., University of Illinois
- HAROLD YOUICIS Education
 B.M.E., Drake University; M.S., Ithaca College; Ed.D., Indiana University
- CYRIL J. ZENISEK Science
 B.S., M.S., Ohio State University; Ph.D., Ohio State University

SUMMER SESSIONS 1964

There will be three sessions in the summer of 1964, 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 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.

ADVANCED COURSE RESERVATION

At the close of this catalog will be found a form on which you may indicate your course interests and needs. All courses listed in this catalog will be offered if there are twelve or more students enrolled in each course. Additional sections of a course will be opened if the need justifies doing so.

Receipt of the form at the close of the catalog will serve to assure you a place in the Summer School. Please fill it in and return it to Dr. R. W. Cordier, Dean of Academic Affairs, by April 15, 1964.

OBJECTIVES OF THE SUMMER SCHOOL

The summer school program at Indiana State College 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. Students can **repeat** courses in which they may have received a grade of D or F. Students on probation may attain **good standing**, and students who have been dropped for academic reasons may qualify for **readmission** by taking a full summer of work in which grades of a C or better are required.

Students from other colleges and universities may take courses in our summer school. Indiana State College 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 State College in the summer should request our Registrar to send a transcript of the credits they earn to their respective institutions.

Liberal Arts College graduates who wish to qualify for teaching certificates will find a liberal offering of professional education courses in our summer program. The opportunity to take a six weeks course in student teaching is qualified by the requirement that such students must have had not less than 12 semester hours of course work at Indiana.

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.

PLACEMENT SERVICE

The services of the Placement Office are available to all graduates of the College. The Office supplies credentials to employers who are seeking applicants for positions, arranges for personal interviews, and compiles vacancy lists for distribution to students. Alumni are using the service increasingly. The Office also maintains a file of occupational information. Positions are not guaranteed by the College, but Indiana's record of placement is among the very best in Pennsylvania.

KEITH SCHOOL

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

SUMMER GRADUATION

The summer commencement for 1964 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 1964 should write or call at the office of the Dean of School of Education or Liberal Arts to secure application forms for graduation. These forms properly filled in must be returned to the office of the Dean of the School of Education or Liberal Arts not later than June 1, 1964.

EXPENSES AND FEES

(Subject to Change)

CONTINGENT FEE

School of Education — \$12.50 per semester hour. (Minimum Contingent Fee for each session \$37.50.)

Special Curriculum Fees in addition to above:

	Pre-session	Main Session	Post-session
Art	\$3.00	\$ 6.00	\$3.00
Business	2.00	4.00	2.00
Home Economics	4.50	9.00	4.50
Music	7.50	15.00	7.50

School of Liberal Arts — residents of Pennsylvania, \$15.00 per semester hour of credit. (Minimum contingent fee for each session \$45.00.) Out-of-state students, \$20.00 per semester hour of credit. (Minimum contingent fee for each session \$60.00.)

OTHER FEES

	Pre-session	Main Session	Post-session
Room and Meals	\$48.00	\$96.00	\$48.00

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.

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, provided that the total amount of the Late Registration Fee shall not exceed \$5.00. Every late registrant must pay his fee unless excused in advance by the Dean of Academic Affairs because of illness or other unavoidable cause.

Additional Special Fees for Private Instruction in Music. In addition to the fee mentioned above, a charge of \$8.00 for the main session is made for one lesson per week, in voice, piano, band, or orchestral instruments. A charge of \$14.00 for the main session is made for one organ lesson per week. This fee is to be paid by students who wish private instruction other than that assigned by the Department Chairman, and also by persons not registered in the Music Department who wish music instruction.

The fee for practice use of piano, band, or orchestral instruments for one period per day for the regular summer session is \$2.00; the fee for practice use of organ for one period per day is \$12.00 for the regular summer session.

Activity Fee. The activity fee for the regular summer session is \$7.00 and \$3.50 each for the pre- and the post-session.

Out-of-State Fees. Students who are not residents of Pennsylvania will pay a basic fee (contingent fee) of \$20.00 per semester hour with a minimum charge of \$60.00 for each session. If enrolled in the School of Education in a special curriculum, they will pay the same special fee as resident students.

How to Pay Fees. All fees except the degree fee are to be paid on the day of registration for each session: pre-session Monday, June 8, regular session, Monday, June 29, and post-session, Monday, August 10, 1964.

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

Checks for fees except activity fee should be made payable to the Commonwealth of Pennsylvania; postal money orders should also be made payable at the Harrisburg Post Office. Checks for the activity fee should be made payable to Jack Hazlett, Treasurer; money orders for this fee should be made payable at the Post Office at Indiana, Pennsylvania.

Room Reservation. Room reservations can be made by writing to the Dean of Women. An advance registration deposit will not be required to reserve a room for summer sessions.

Students are not expected to room alone. Therefore, prospective students are urged to apply in pairs. In this way each student is assured a congenial roommate. Single applications are handled to the best possible advantage, but the college prefers that students make their own choices whenever possible. Applications for rooms are filled in the order in which they are received.

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 Dean of Students' Office, Room 217, Clark Hall, for further information.

GENERAL INFORMATION

Registration. Students are expected to register on the first day of each session. All questions pertaining to fees, programs of classes, and room assignments should be settled so that classes may run on full-time the day following registration. In the Pre-session and Post-session classes will meet at 1:00 and 2:00 p.m., for one hour the first day. Those wishing credits evaluated should see Dr. George A. W. Stouffer, Dean of the School of Education or Dr. William W. Hassler, Dean of the School of Liberal Arts.

Registration for Pre-session — 8:15 a.m. - 3:30 p.m., Monday, June 8.

Registration for Main Session — 8:15 a.m. - 3:30 p.m., Monday, June 29.

Registration for Post-session — 8:15 a.m. - 3:30 p.m., Monday, August 10.

The dormitories will be open for students Sunday, June 7, at 3:00 p.m. Women students will be housed in John Sutton and Thomas Sutton Halls. Men students will be housed in Whitmyre Hall.

At the time of registration students should:

1. See the Dean of Women or Dean of Men and get room assignments.
2. Get programs made out in Waller Gymnasium.
3. See the Registrar in Keith School Gymnasium and pay fees.
4. Secure books at the Book Store as soon as texts are specifically designated for courses taken.

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 organ-

izations, 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.

Student Living Conditions. Women who will not commute from home daily and who plan to enroll in any of the summer sessions should write to the Dean of Women at least ten days in advance of the session they plan to attend so that arrangements for rooming on the campus can be made.

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 Whitneyre Hall regarding approved rooms in town which are available for rent.

The main college dining hall is open throughout all the summer sessions. The appropriate Dean should be informed concerning an individual's desire to have meals at the college.

Slight illnesses are cared for in the college 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 college must provide themselves with blankets, as the college 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 college at Indiana an ideal spot for summer study and relaxation.

The college 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 1964 call for the continuation of the Summer Theater Guild program in Fisher Auditorium. This college-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 card. Last summer students thoroughly enjoyed the presentations of "The Matchmaker," "A Thurber Carnival," "Marriage-Go-Round," "Death of A Salesman," "Angel Street," and "Come Blow Your Horn."

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

Don Bolt, authority on Latin America and former Chicago commentator for NBC.

Lionel Wiggam, award-winning American poet and playwright.

Dr. Rowland M. Myers, noted lecturer and author.

Dr. Zelma George, sociologist and member of the United Nations.

Ambassador Willard L. Beaulac, former ambassador to Cuba.

Bosley Crowther, motion picture editor of the New York Times.

Mrs. Irma Rogell, harpsichordist.

Dr. W. N. Francis, linguistics expert.

Fulton Lewis, III and James Burkhardt, debate team.

Doraine and Ellis, popular and professional singing duo.

No attempt is made to have all summer session students participate in all activities, but 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 1964 session 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. Buses will be chartered for visits and field trips to many of these places. Music fans may get a group together to attend the Civic Light Opera at Pittsburgh. They may be joined by a group more interested in professional baseball at Forbes Field. Several trips will attempt to take advantage of Western Pennsylvania's rich industrial enterprises. Field trips to steel mills, research laboratories, and atomic energy installations were all part of last summer's activity program. In addition departmental seminars will be scheduled with invited discussion leaders.

Morning pickups in the Dining Hall where students meet for a snack and conversation several times each week have been so popular during the last few summers that they will be continued and improved. Informal student activities including speakers on popular topics will be held in the new Student Union Building. One of the most popular features of the summer sessions have been the outdoor presentations of full length feature movies and hi-fi concerts of good music at the Flagstone Theater.

Much of the summer recreation program centers at the College Lodge near Indiana where many picnics, outings, steak fries, informal parties and hikes are held in a woodland environment. On the campus proper there are many facilities for swimming and games such as bowling on the green, archery, croquet, badminton, and softball, while indoors the Student Union provides an attractive setting for formal and informal dances and the reception lounge in John Sutton Hall provides a comfortable area for cards, singing, or visiting. Other lounges in John Sutton Hall and Whitmyre Hall are provided as places for meeting friends, visiting, or just reading or loafing. Several television sets provided by the Alumni Association are available for student use in well located places.

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.

THE SCHOOL OF LIBERAL ARTS

Many of the courses, institutes, workshops and seminars in our summer school program are applicable to the Liberal Arts. Students wishing to qualify for a Bachelor of Arts degree at Indiana are required to take 55 semester hours in the field of general education and 36 semester hours as a basic major in the humanities, natural sciences or social sciences. The remainder of the 128 semester hours required for graduation may be taken as a concentration in a subject of their interest within their general education major.

General Education Program. The following program in general education is required of all students in the School of Liberal Arts:

Humanities		24 sem. hrs.
Communications I and II	10	
Introduction to Literature	2	
Introduction to Art or Music	3	
Anthropology or Philosophy	3	
Foreign Language	6	
Natural Sciences		12 sem. hrs.
Foundations of Mathematics	4	
Biology of Physical Science	8	
Social Sciences		15 sem. hrs.
History of Civilization II	3	
History of U. S. and Pa. II	3	
American Citizenship	3	
World Geography	3	
General Psychology	3	
Health		4 sem. hrs.
Health	2	
Physical Education I and II	2	
		—
Total		55 sem. hrs.

Fields of Major Study. The student in the School of Liberal Arts may choose to major in the humanities, natural sciences or social sciences. The programs of study within these three fields of major study are as follows:

Humanities	36 sem. hrs.
English	6
Shakespeare	3
History of the English Lang.	3
Speech and Theater	6
Oral Reading	3
The Nature of the Drama	3
Foreign Language	6
French Culture and Civil.	3
History of French Literature	3
(Or in Spanish, German or Russian)	
Art	6
Art History to 1500	3
Art History since 1500	3
Music	6
Music History II	3
Music History III	3
Philosophy	6
Logic	3
Ethics	3
Natural Sciences	36 sem. hrs.
Mathematics	9
Analytic Geometry and Calculus	4
Algebra and Trigonometry	5
Biological Science	8
Zoology I	4
Zoology II	4
Chemistry	8
General Chemistry I	4
General Chemistry II	4
Physics	8
Physics I	4
Physics II	4

Earth Science	3	
Astronomy I or Geology I	3	
Social Sciences		36 sem. hrs.
History	6	
History of Civilization I	3	
History of United States I	3	
Political Science	6	
International Relations	3	
Contemporary Political Prob.	3	
Economics	6	
Principles of Economics	3	
Contemporary Economic Prob.	3	
Sociology	6	
Principles of Sociology	3	
Contemporary Social Prob.	3	
Geography	6	
Economic Geography	3	
Geography of U. S. & Canada	3	
Psychology	6	
Social Psychology	3	
Mental Hygiene	3	

Areas of Concentration. The student in the School of Liberal Arts may use his or her 37 elective credits to pursue a particular subject of study within his or her major field of interest. Subjects to be elected in the humanities include English, Speech and Theater, French, Spanish, German, Russian, Fine Art and Music. Subjects in the natural sciences include Mathematics, Biology, Chemistry, Physics and Earth Science. Subjects in the social sciences include History, Political Science, Anthropology-Sociology, Economics, Geography, Earth Science, and Psychology.

The student may use his elective credits to pursue further study of several related subjects within his major field of study. Or if he is interested in the study of a culture area or an interdisciplinary program of study he may choose his elective subjects from the several areas of general education.

THE SCHOOL OF EDUCATION

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 of 55 semester hours as indicated for liberal arts students. 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 and Dental Hygiene.

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 college catalog.

Professional Education. Students in the School of Education are required to take from 24 to 30 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, 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 GRADUATE SCHOOL

Indiana State College offers a program of graduate studies leading to the degree of Master of Education. Students may pursue major studies in the fields of Art, Business, Elementary Education, English, Geography, Guidance, Mathematics, Music, Biology, Chemistry, Elementary Science, General Science, Physical Science, and Social Science.

Students who are admitted to the Graduate School are required to do six semester hours of acceptable work before they may apply for candidacy for the degree. All students are required to take a basic course in professional education and the course in Elements of Research. They may elect to do a research project or a master's thesis. Academic courses may be chosen from the field of general education and from their field of specialization. Thirty semester hours are required for graduation.

Interested persons should write to the Dean of the Graduate School for information regarding admission to the school, course offerings, graduation requirements and other desired information.

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.

Elementary Education Workshop

1 cr. or non-credit

"Science in the Environment" will be the topic for the series of meetings during the week of June 15-19, 1964. The week is planned to help the elementary teacher to become better acquainted with interesting possibilities for teaching children about interrelationships in their environment.

The attractive College Lodge will be used for many of the sessions. Here opportunities for first-hand observations and interpretations will be provided. Persons interested in this opportunity for learning ac-

tively in an informal setting should write to: Dr. P. D. Lott, Chairman, Elementary Education Department, State College, Indiana, Pennsylvania.

The Workshop should be of value to those who are interested in evaluating their own programs and initiating the use of newer materials and techniques.

Attendance at the Workshop can be on a non-credit or 1-credit basis for the \$12.50 fee. For further information address Director of Summer Sessions, State College, Indiana, Pennsylvania.

Drama Workshop

3 to 6 cr.

For the past nine summers the college 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. Six full-length plays of good quality, given during the main session, offer opportunity for acting, prompting and assisting in many phases of production.

Students who participate in this Workshop may receive credit for one or two of the following courses: 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 college-community summer theater project which uses college facilities in Fisher Auditorium for the presentation of the six 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 college students and yields from three to nine hours of credit.

Casavant Marching Band Workshop

1 cr. or non-credit

The Casavant Marching Band Workshop is comprised of a series of workshops extending from June 22 to July 4. The Workshop will be directed by Professor A. R. Casavant, noted author and band director of Chattanooga, Tennessee. A special fee ranging from \$10.00 to \$30.00 will be charged for each of the workshops. The sessions of these workshops will be scheduled as follows:

Drum Major Workshop — June 25, 26, 27

Open to high school and college students who are concerned with the technique of "running" a band for parades or on the football field.

Precision Drill Workshop — June 22, 23, 24

The fundamentals of precision drill will be presented for high school band members. This workshop is designed to help the band director who makes use of student leaders or "rank captains." This workshop is also open to band directors who have never studied the elements of drill.

Directors Workshop — June 29-July 3

One or two "laboratory" high school bands will be here for the practical application of the theory of precision drill. Band directors will be coached on the system of developing precision drills and will be given the opportunity of seeing their drills performed.

All Eastern Marching Band Clinic — July 3-4

Band directors are invited to attend this one-day clinic. Demonstrations by two high school bands and a Clinic presented by A. R. Casavant.

Student Teaching Clinic and Professional Practicum 3 to 7 cr.

Student teaching is offered in the Main Summer Session and is provided on both the elementary and secondary levels. The program is offered for liberal arts college graduates and transfer students from other colleges who are interested in qualifying for certification and for individuals who are returning to teaching and who wish a refresher course or wish to complete their student teaching requirement. Students who have not had School Law are required to take it with their student teaching. In this case the student will receive six semester hours for student teaching and one semester hour for School Law.

A student teaching clinic will also 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 credit for the course in Special Class Methods.

Students wishing to do student teaching in our summer school must have had at least 12 semester hours of acceptable work at Indiana. Applications for student teaching will be received and approved by the Director of Student Teaching.

COURSES OFFERED IN PRE-SESSION

June 8 - June 26, 1964

	8:00-9:30 and 11:00-12:30	9:30-11:00 and 12:30-2:00
ART	Art 111 Drawing in All Media El 214 Teaching Art in Elementary Grades	Art 101 Introduction to Art
BUSINESS	Bus 311 Methods of Teaching Business Courses	
EDUCATION	Ed 301 Audio-Visual Education (Section 1) Ed 302 History & Philosophy American Ed. (Section 1) Ed 305 Evaluative Methods (Section 1) Psy 302 Educational Psychology (Section 1) SpII 211 Phonetics for Clinicians Psy 451 Psychological Practicum	Ed 301 Audio-Visual Education (Section 2) Ed 302 History & Philosophy of American Ed. (Section 2) Ed 305 Evaluative Methods (Section 2) Psy 201 General Psychology Psy 302 Educational Psychology (Section 2)
ELEMENTARY	El 351 Creative Activities in Elementary School El 460 Elementary Workshop (June 15-19, 1 wk. - 1 cr.)	Psy 215 Child Development
ENGLISH	Drama Workshop Eng 201 Literature I Eng 301 Literature II Eng 232 Oral Reading	Eng 244 Poetry & Its Forms Eng 214 Shakespeare Eng 245 Modern Drama Eng 221 Journalism
GEOGRAPHY	Geog 453 Political Geography Geog 491 Aero-Space Workshop Ed 451 Teaching of Geography	Geog 101 World Geography Geog 112 Geography of U.S. & Pa.
HEALTH	El 314 Teaching of Health & Physical Ed. HPe 204 Physical Education III (9:30-11:00, 1 cr.)	HPe 102 Physical Education I (1:00-2:30, 1 cr.) HPe 203 Physical Education II (1:00-2:30, 1 cr.)
HOME ECONOMICS	PSN 402 Nutrition & Community Health	HE 417 Clothing III
MATH	Math 101 Foundations of Math (Section 1) (4 cr.)* Math 101 Foundations of Math (Section 2) (4 cr.)*	Ed 451 Teaching Math in Secondary Schools Math 151 Math Analysis I (4 cr.) (4-wk. course)
MUSIC	El 211 Music for Elementary Grades	Mus 101 Introduction to Music
PUBLIC SCH NURS	Ed 301 Audio-Visual Education Ed 302 History & Philosophy of Amer. Ed. PSN 402 Nutrition & Community Health	
SCIENCE	Chem 151 Inorganic Chemistry Sci 111 Science in Modern Civilization Biol 103 General Biology I* (4 cr.) Sci 105 Physical Science I* (4 cr.)	Chem 211 Qualitative Analysis Biol 361 Microbiology ESci 222 History of Geology Chem 351 Biological Chemistry
SOCIAL SCIENCE	SS 202 History of Civilization II (Section 1) SS 202 History of Civilization II (Section 2) SS 302 History of U.S. & Pa. II (Section 1) SS 401 American Citizenship (Section 1) SS 401 American Citizenship (Section 2) SS 410 Introduction to Anthropology SS 251 Principles of Sociology SS 346 Economic Development SS 377 History of Latin America SS 353 American Political Parties	SS 301 History of U.S. & Pa. I SS 302 History of U.S. & Pa. II (Section 2) SS 302 History of U.S. & Pa. II (Section 3) SS 401 American Citizenship (Section 3) SS 420 Introduction to Philosophy SS 240 Principles of Economics SS 333 Juvenile Delinquency SS 379 History of Russia

All Classes 3 credits unless otherwise indicated.

*Students who schedule Foundations of Math, General Biology I, and Physical Science I, in the Pre-Session are requested to register for the courses at 8:30 A.M. at the Programming Center in Clark Hall, Friday, June 5. These classes will begin on Friday, June 5. They will meet 6 days per week during the Pre-Session.

	8:15-9:40 A. M.	9:50-11:15 A. M.	11:25-12:50 P. M.	1:00-2:25 P. M.
ART	El 213 Art for Elementary Grades Art 113 Color & Design Art 213 Lettering, Commercial Art & Illustration Art 315 Pottery & Ceramics	Art 101 Introduction to Art Art 314 Oil Color & Mixed Media	Art 112 Composition & Figure Drawing Art 215 Crafts in Metal & Wood	Art 211 Mechanical Drawing & Industrial Design Art 114 Des. Vol. & Space
	Bus 221 Introduction to Accounting Bus 251 Intermediate Accounting	Bus 352 Corporate Accounting Bus 131 Principles of Typewriting Bus 132 Intermediate Typewriting Bus 271 Advanced Typewriting Bus 433 Retail Practice (Store Practice)	Bus 111 Business Math I Bus 212 Business Math II Bus 353 Cost Accounting	Bus 335 Clerical Practice & Office Machines
BUSINESS	Ed 301 Audio-Visual Education (Section 1) Psy 302 Educational Psychology Psy 352 Mental Hygiene Psy 353 Child Psychology SpII 322 Speech and Hearing Clinic I SpII 353 Speech and Hearing Clinic II SpII 451 Special Class Methods for Mentally Retarded Psy 452 Social Psychology Psy 451 Psychological Practicum	Ed 320 History & Philosophy of American Education Ed 305 Evaluation Methods Ed 454 Public School Administration Psy 201 General Psychology Ed 421 Student Teaching Mentally Retarded	Ed 301 Audio-Visual Education (Section 3) Ed 420 Teaching Mentally Retarded Psy 320 Psychology of Mentally Retarded Ed 302 History & Philosophy of American Education Psy 302 Educational Psychology Psy 461 Abnormal Psychology	Ed 301 Audio-Visual Education (Section 4) Ed 305 Evaluation Methods Ed 220 Introduction to Exceptional Child Psy 201 General Psychology Ed 362 Developmental Reading SpII 354 Audiometry for PS Nurses
ELEMENTARY	El 222 Teaching of Reading El 451 Reading in Primary Grades	El 352 Diagnostic & Remedial Reading El 413 Teaching Language Art (EngS 231, 371, 378, 379) (5 cr.) (5 cr.) (5 cr.) (5 cr.) (5 cr.)	Ed 356 Guidance in Elementary Schools El 351 Creative Activities in Elementary Schools	El 411 Teaching of Social Studies (6 cr.) (5 cr.) (5 cr.) (5 cr.) (5 cr.) (5 cr.) (5 cr.)
ENGLISH	Drama Workshop Eng 101 English I (Section 1) Eng 101 English I (Section 2) Eng 102 English II (Section 1) Eng 102 English II (Section 2) Eng 102 English II (Section 3) Eng 211 World Literature Eng 243 Contemporary Short Fiction	Eng 301 Literature II (Section 1) Eng 301 Literature II (Section 2) Eng 363 Structure of English	Eng 101 English I (Section 3) Eng 101 English I (Section 4) Eng 101 English I (Section 5) Eng 101 English I (Section 6) Eng 101 English I (Section 7) Eng 101 English I (Section 8) Eng 101 English I (Section 9) Eng 222 Advanced Composition Eng 212 American Literature to 1865	Eng 451 Teaching of English & Speech Eng 246 Modern American Literature
FOREIGN LANGUAGE	Fr 101 French I	Ger 101 German I	Sp 101 Spanish I	Geog 101 World Geography
GEOGRAPHY	Geog 154 Cultural Geography	Geog 251 Geography of U.S. & Canada HPe 253 Methods & Materials in Safety Education	Geog 252 Geography of Pennsylvania Geog 149 Economic Geography HPe 204 Physical Education III (1 cr.) HPe 254 Organization & Administration of Safety Education	HPe 102 Physical Education I (1 cr.) HPe 203 Physical Education II (1 cr.)
HEALTH	HPe 252 Driver Education HPe 251 Intro. to Safety Education El 314 Teaching of Health & Physical Education			

HOME ECONOMICS	HE 403 Home & Family Living	HE 214 Clothing II	HE 413 Consumer Economics	HE 314 Textiles & Care
	HE 411 Family Relations	HE 313 Food Service Management	PSN 403 Family Case Work	HE 215 Home Furnishing
KEITH	Secondary Student Teaching Clinic			
	Math 375 Introduction to Modern Math	EI 313 Teaching Math in Elementary Grades	Math 253 Theory of Equations	Math 101 Foundations of Math (4 cr.)
MATH	Math 361 Ordinary Differential Equation		Math 302 Probability & Statistics	Math 355 Foundations of Geometry I
	Math 152 Math Analysis II (5 cr.) (5 week course)			
MUSIC	EI 212 Teaching Music in Elementary Grades	Mus 302 History of Music II	Mus 121 Instrumental Ensemble (No cr.)	Mus 101 Introduction to Music
		Ed 454 Public School Administration		
PUBLIC SCH NURS	Psy 302 Educational Psychology	SS 401 American Citizenship	EngS 101 Communications I	SS 302 History of U.S. & Pa.
	Psy 352 Mental Hygiene		PSN 403 Family Case Work	SpII 354 Audiometry for PS Nurses
SCIENCE	Biol 111 Botany I		(First 4 wks., 4 cr.)	
	Biol 112 Botany II		(Second 4 wks., 4 cr.)	
	Chem 111 General Chemistry I (Section 1)		(First 4 wks., 4 cr.)	
	Chem 111 General Chemistry I (Section 2)		(First 4 wks., 4 cr.)	
	Chem 112 General Chemistry II (Section 1)		(Second 4 wks., 4 cr.)	
	Chem 112 General Chemistry II (Section 2)		(Second 4 wks., 4 cr.)	
	Phys 111 Physics I (Section 1)		(First 4 wks., 4 cr.)	
	Phys 111 Physics I (Section 2)		(First 4 wks., 4 cr.)	
	Phys 112 Physics II		(Second 4 wks., 4 cr.)	
	Biol 103 General Biology I (Section 1)		(First 4 wks., 4 cr.)	
	Biol 103 General Biology I (Section 2)		(Second 4 wks., 4 cr.)	
	Biol 103 General Biology I (Section 3)		(First 4 wks., 4 cr.)	
	Biol 104 General Biology II (Section 1)		(Second 4 wks., 4 cr.)	
	Biol 104 General Biology II (Section 2)		(Second 4 wks., 4 cr.)	
	Biol 104 General Biology II (Section 3)		(First 4 wks., 4 cr.)	
	Sci 105 Physical Science I (Section 1)		(Second 4 wks., 4 cr.)	
Sci 105 Physical Science I (Section 2)		(First 4 wks., 4 cr.)		
Sci 106 Physical Science II (Section 1)		(Second 4 wks., 4 cr.)		
Sci 106 Physical Science II (Section 2)		(Second 4 wks., 4 cr.)		
Biol 251 Field Botany -- Plus 30 hrs. Lab hrs. to be arranged	Sci 311 Elements of Earth Science			
Biol 151 Physiology for Home-Economics				
SS 401 American Citizenship (Sec. 1)	SS 401 American Citizenship (Sec. 2)	SS 401 American Citizenship (Sec. 3)	SS 401 American Citizenship (Sec. 4)	
SS 201 History of Civilization I	SS 301 History of U.S. & Pa. I	SS 202 History of Civilization II	SS 202 History of Civilization II (Section 3)	
SS 302 History of U.S. & Pa. II (Section 1)	SS 338 Contemporary Political Problems	SS 302 History of U.S. & Pa. II (Section 2)	SS 302 History of U.S. & Pa. II (Section 3)	
SS 342 Contemporary Economic Prob.	SS 202 Hls. of Civilization II (Sec. 1)			
SS 374 History of the 20th Century World	SS 492 World Cultures	SS 420 Introduction to Philosophy	SS 410 Introduction to Anthropology	
		SS 331 Contemporary Social Problems		

All Classes 3 credits unless otherwise indicated.

Limitations — No student will be permitted to take more than 6 semester hours during the Main Session unless it is required for graduation in August — except, that a 3-credit course may be taken with a 4-credit course in Mathematics or Science or a 1-credit course in Physical Education may be taken with any 6-credit program.

COURSES OFFERED IN POST-SESSION

August 10 - August 28, 1964

	8:00-9:30 and 11:00-12:30	9:30-11:00 and 12:30-2:00
ART	El 214 Teaching Art in Elementary Grades Art 330 Arts & Crafts for Mentally Retarded	Art 101 Introduction to Art
BUSINESS	Bus 312 Evaluative Techniques in Business Courses	
EDUCATION	Ed 301 Audio-Visual Education Ed 305 Evaluative Methods Psy 302 Educational Psychology Psy 355 Adolescent Psychology SpH 253 Articulation Disorders	Psy 201 General Psychology Ed 302 History & Philosophy of American Ed.
ELEMENTARY	El 221 Children's Literature	
ENGLISH	Eng 301 Literature II	Eng 356 English Essay Eng 251 History of the English Language
FOREIGN LANGUAGE	Fr 102 French II Ger 102 German II	Sp 102 Spanish II
GEOGRAPHY	Geog 101 World Geography	Geog 151 Earth & Space Science
HEALTH	HPe 204 Physical Education III (9:30-11:00, 1 cr.) HPe 251 Introduction to Safety Education	HPe 102 Physical Education I (1:00-2:30, 1 cr.) HPe 203 Physical Educational II (1:00-2:30, 1 cr.)
HOME ECONOMICS	HE 113 Management & Equipment	
MATH	Math 101 Foundations of Math (Sec. 1) (4 cr.)* Math 101 Foundations of Math (Sec. 2) (4 cr.)*	
MUSIC	Mus 101 Introduction to Music	
PUBLIC SCH NURS	EngS 301 Literature II PSN 301 Public School Nursing (2 cr.) (2 wks.) SS 202 History of Civilization II	
SCIENCE Biol 112 Botany II Chem 112 General Chemistry II (Section 1) Chem 112 General Chemistry II (Section 2) Phys 112 Physics II Biol 104 General Biology II (Section 1) Biol 104 General Biology II (Section 2) Biol 104 General Biology II (Section 3) Sci 106 Physical Science II (Section 1) Sci 106 Physical Science II (Section 2) Sci 104 General Biology II (4 cr.)* Sci 106 Physical Science II (4 cr.)* Chem 212 Quantitative Analysis	El 312 Teaching of Elementary Science Chem 152 Organic & Biochemistry (Home Ec)
SOCIAL SCIENCE	SS 202 History of Civilization II (Section 1) SS 302 History of U.S. & Pa. II (Section 1) SS 401 American Citizenship (Section 1) SS 341 Industrial Relations SS 240 Principles of Economics SS 420 Introduction to Philosophy SS 302 History of U.S. & Pa. II (Section 2)	SS 202 History of Civilization II (Section 2) SS 302 History of U.S. & Pa. II (Section 3) SS 401 American Citizenship (Section 2) SS 410 Introduction to Anthropology SS 373 History of Europe 1815-1914 Ed 451 Teaching Social Studies in Secondary Schools

All Classes 3 credits unless otherwise indicated.

*Students who schedule Foundations of Math, General Biology II, and Physical Science II, in the Post-Session are requested to register for the courses at 8:30 A.M. at the Programming Center in Clark Hall, Friday, August 7. These classes will begin on Friday, August 7. They will meet 6 days per week during the Post-Session.

THE ART DEPARTMENT**Orval Kipp, Department Chairman****Art 101 Introduction to Art 2 cr.**

Studies in the understanding and enjoyment of the visual arts as modes of expression and communication make up the content of this course.

Art 111 Drawing in All Media 2 cr.

Problems in pictorial composition and methods of drawing are studied and executed in various media.

Art 112 Composition and Figure Drawing 2 cr.

Pictorial design and composition are studied in still life, landscape, and figure arrangement. Figure construction, anatomy, and life drawing are also included.

Art 113 Color and Design 2 cr.

Basic experiences in the functional use of color are given: Color theories are studied. The elements and principles of design are developed from two and three dimensional designing.

Art 114 Design, Volume and Space 2 cr.

Crafts experiences are given in various materials and processes suitable to the needs of the elementary teacher. The intention is to develop a creative attitude and resourcefulness in the use of three dimensional materials.

Art 211 Mechanical Drawing and Industrial Design 2 cr.

The principles and methods of instrumental drawing and shape description are studied in theory and in practice. Modern industrial design practices are studied through the planning and building of three dimensional products.

Art 213 Lettering, Commercial Art and Illustration 3 cr.

Design is the major concern in this study of the methods of planning and preparing art work for reproduction including lettering, layout, and illustration. Single stroke pen and brush types of lettering are practiced for rapid execution in making signs, showcards, and posters.

El 213 Art for Elementary Grades 2 cr.

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

El 214 Teaching Art in Elementary Grades 3 cr.

This course provides the student with a wide variety of two and three dimensional art experiences with the emphasis on a developmental sequence from simple to more complex variations of a craft. Emphasis is placed on the creative challenges of the art experience.

Art 215 Crafts in Metal and Wood 2 cr.

In this course the student is given an opportunity to develop his design awareness 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 314 Oil Color and Mixed Media 3 cr.

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

Art 330 Arts and Crafts for 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. The feeling of achievement and the good emotional state which come with expression at the level of the individual's ability are examined to show teachers how they may be achieved and used in education.

THE BUSINESS DEPARTMENT

Albert E. Drumheller, Department Chairman

Bus 221 Introduction to Accounting 3 cr.

This is the first course in this area and a prerequisite. Its purpose is to introduce the students to the keeping of records for the professional man as well as a mercantile enterprise involving the single proprietor. Emphasis is placed upon the distinction between keeping records on the cash basis as compared to the accrual basis of book-keeping. Consideration is given to special journals, the combined-cash journal, auxiliary records, and business papers.

Bus 251 Intermediate Accounting 3 cr.

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. Special 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. Special consideration is given to the legal and accounting aspects, payroll and partnership organization, operation and dissolution.

Bus 352 Corporate Accounting 3 cr.

Special attention is given to the records and reports peculiar to the corporate form of organization as well as to the methods of handling capital and surplus. Emphasis is given to the methods of accounting for inventories, tangible and intangible fixed assets, investments, long-term liabilities, funds and reserves and the methods of amortizing bond premium and discount.

Bus 353 Cost Accounting 3 cr.

This course is designed to give the students an understanding of the theory of costing used in manufacturing establishments. The voucher system is introduced in this course and attention is given to budgeting, estimating and prorating of manufacturing expenses, the technical aspects of charting production data, and investigating time and motion study techniques.

Bus 111 Business Mathematics I 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 discount; along with partial payments. The course is a prerequisite and designed to lay a groundwork for Business Mathematics II.

Bus 212 Business Mathematics II 3 cr.

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 business man and the consumer. The mathematics of production, marketing, accounting, finance, and management correlate with the accounting courses.

Bus 131 Principles of Typewriting 2 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 2 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 manuscripts. Production ability is developed.

Bus 271 Advanced Typewriting 2 cr.

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

Bus 335 Clerical Practice and Office Machines 2 cr.

Clerical office routine is covered, together with the fundamentals of operating various office machines — calculators, adding machines, dictaphones, and various office appliances; also, the theory and practice of office management is stressed.

Bus 311 Methods of Teaching Business Courses 3 cr.

This 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.

Bus 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.

Bus 433 Retailing Practice 6 cr.

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 retail training 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 fifty miles from Indiana. This plan is operated under close supervision of store officials and a representative of the College. This plan can also be used in connection with office work for those in Stenographic and the Accounting fields.

EDUCATION AND PSYCHOLOGY DEPARTMENT

Stanley W. Lore, Department Chairman

Ed 301 Audio-Visual Education 3 cr.

A consideration of the needs for sensory techniques and materials 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.

Ed 302 History and Philosophy of American Education 3 cr.

This course is designed to promote a clearer understanding of modern educational practice through a study of historical changes in instructional process 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 judgments about the role of the school in our social culture, the meaning of democracy, the teacher and his profession, and the objectives and methods of the school.

Ed 305 Evaluation Methods 3 cr.

This course includes elementary statistics concerning graphs, sampling, frequency distribution, averages, measures of central ten-

gency and dispersion, and the normal curve. Emphasis is placed on an understanding of the various evaluation instruments with much attention being given to standardized tests, how to select them wisely, and how to interpret and use the results. The course also includes the use and construction of tests made by the teacher, and the systems of reporting pupil growth and development.

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 302 Educational Psychology **3 cr.**

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 learning process, the learning situation, and the learner himself. The significance of evaluation, individual variation, group dynamics, and child growth and development will be stressed throughout the course. Prerequisite: General Psychology.

Psy 352 Mental Hygiene **3 cr.**

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.**

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. Prerequisite: General Psychology.

Psy 355 Adolescent Psychology **3 cr.**

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. Prerequisite: General Psychology.

Psy 452 Social Psychology 3 cr.

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. Prerequisite: Psy 201.

Psy 461 Abnormal Psychology 3 cr.

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. Prerequisites: General Psychology and Introduction to Personality.

Psy 451 Psychology Practicum 3 cr.

In the summer of 1964 Indiana State College will offer for the twelfth year an unusual work-study practicum in psychology for twenty selected students at the Torrence State Hospital. Those chosen will work a 40-hour week as attendants at the Torrence 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: Dr. John W. Reid, Director of the Psychological Clinic, State College, Indiana, Pennsylvania. Prerequisite: 6 hours of psychology.

Ed 362 Developmental Reading 3 cr.

This course, planned especially for the teacher of secondary students, will assist the participating student to understand the developmental reading process. The study will include such areas as objectives, background knowledge and understandings of the reading process, an overview of the elementary program, the pre-adolescent 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.

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.

SPEECH AND HEARING HANDICAPPED
SpH 211 Phonetics for Clinicians 3 cr.

This course provides background in English speech sound classification systems; translation and transcription using the International Phonetic Alphabet system; and clinical applications of phonetics, including phonetic analyses, speech sound discrimination tests, auditory memory span tests, diadochokinetic tests, and research findings in experimental, acoustic, and motor phonetics that apply to clinical problems. Projects will be stressed.

SpH 253 Articulation Disorders 3 cr.

This course considers the nature of articulatory development, recognized etiologies of articulatory disorders, and principles and methods of diagnosis and therapy. Demonstrations and observations of articulation therapy will be provided. Prerequisites: Speech Problems, Phonetics for Clinicians.

SpH 322 Speech and Hearing Clinic I 3 cr.

This course offers the student elementary practicum in clinical methods of diagnosis and therapy. Practice is given in the use of clinical instruments, lesson planning, case reports and histories, and treatment in both individual and group classes. Prerequisites: All required background courses in Groups 1-2. Each semester, each year.

SpH 353 Speech and Hearing Clinic II 3 cr.

This course provides advanced practicum with children presenting more severe speech and hearing problems. The student is expected to assume greater responsibility and self-direction, even though he will be supervised. Prerequisites: Speech and Hearing Clinic I; Speech Pathology or Stuttering.

SpII 354 Audiometry for Public School Nurses 3 cr.

This course is designed to give public school nurses a foundation in audiometry which will enable them to understand better the techniques of audiometric testing and the nature of different types of hearing loss. Emphasis will be placed on the practical applications of audiology both in doing the tests and in understanding their results.

MENTALLY RETARDED**Ed 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 typical in areas of physical, mental, emotional, and educational development. This will enable the teacher to identify for referral those pupils who need special class placement or a special instructional program within the regular classroom.

Psy 320 Psychology of Mentally Retarded Children 3 cr.

This course will point-up the importance of viewing the retarded child as a living, adjusting individual who responds to many kinds of situations and who is capable of far more than usually imagined. The importance of the way in which he adjusts as especially relevant to the nature and manifestation of his retardation will be stressed. An attempt will be made to promote an understanding of all of the factors that influence his development and adjustment. To do this it will be necessary to explore the forces that operate within and upon him and the dynamic way in which he attempts to resolve them.

**Art 330 Arts and Crafts for Teachers of Special Education
and 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. The feeling of achievement and the good emotional state which come with expression at the level of the individual's ability are examined to show teachers how they may be achieved and used in education.

Ed 420 Teaching Mentally Retarded Children 3 cr.

This course will consider the basic design, philosophy, and procedure developed for teaching mentally retarded children. Emphasis

will be placed upon how to organize for teaching the mentally retarded child, how to guide the activities of the mentally retarded child, and how to teach the "fundamental processes" to the mentally retarded child.

Ed 421 Student Teaching of the Mentally Retarded 3 cr.

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

Ed 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 as a supplement to Ed 420 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.

ELEMENTARY EDUCATION DEPARTMENT

P. David Lott, Department Chairman

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 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 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. The Pennsylvania Course of Study for this area is studied. 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. A variety of learning experiences and materials will be used and evaluated.

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.

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, com-

prehension, 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.

Ed 356 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 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.

ENGLISH DEPARTMENT

James R. Green, Department Chairman

Eng 101 English I 5 cr.

This course is designed to develop skills in the major uses of language through studies in literature, general semantics, the structure of English, and a review of the mechanics of written and oral composition. The student is trained to read and listen perceptively and critically, and to write and speak effectively — especially in those areas which relate to his own observation and personal experience.

Eng 102 English II 5 cr.

This course continues to refine and intensify those skills developed in Communication I, provides additional study and practice in editorial, critical and argumentative exposition, and gives instruction and practice in library research and the writing of the research paper. Prerequisite: Communication I.

Eng 201 Literature I 2 cr.

Selected lyric poems, short stories, novels and plays from the literature of the Western World are read with a view to learning how to read and enjoy creative literature.

Eng 211 World Literature 3 cr.

A course for English majors that replaces Literature I and II. The masterpieces studied range from those of ancient Greece to 19th

century Europe. English literature and American literature are excluded.

Eng 232 Oral Reading 3 cr.

Study and practice is given in the fundamentals of oral reading, beginning with the nature and function of the speech mechanism, speech production, and pronunciation with some attention to phonetics. Practice is given in the techniques of effective oral reading.

Eng 301 Literature II 2 cr.

This course follows the general pattern of Literature I, its prerequisite, but the selections chosen have a greater philosophic content and present a greater challenge to the student. Some writing of an original and constructive nature may be expected of the student, who will enroll during his junior year.

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. Phonograph recordings of complete plays, and of scenes and speeches by professional actors are used.

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. Some attention is given to college and school publications and to make-up and editorial policy.

Eng 222 Advanced Composition 3 cr.

This course primarily seeks to improve writing style, particularly in the more utilitarian forms such as the magazine article and the personal essay. Opportunity is offered also for developing creative ability in the more imaginative types such as the short story, the one-act play, and poetry. The student is expected to develop artistic sensibility in handling and judging language and literary forms.

Eng 231 The Dramatic Arts 3 cr.

This course will deal with the basic problems that confront a director of plays in high school. The course will study the principles of

play selection, rehearsal procedures, scenic demands, and all other aspects pertinent to a successful production.

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 246 Modern American Literature **3 cr.**

This course provides a study of major American writers from the Civil War to the present.

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 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 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 451, Teaching English and Speech in the Secondary Schools.

**Ed 451 Teaching of English and Speech
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 and 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

See page 21 of this Bulletin for explanation of Drama Workshop.

FOREIGN LANGUAGE DEPARTMENT

Edward W. Bieghler, Department Chairman

Fr 101-102	French I and II	3 cr. each
Ger 101-102	German I and II	3 cr. each
Sp 101-102	Spanish I and II	3 cr. each

This elementary sequence is designed primarily for the general student. Its basic objective is maximum reading ability; further but secondary objectives are 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. The formalities of grammar are reduced to their functional minimum in terms of the reading objective.

GEOGRAPHY DEPARTMENT

Thomas G. Gault, Department Chairman

Geog 111 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 112 Geography of the United States and Pennsylvania 3 cr.

This course gives a comprehensive treatment of the adjustments of the peoples of Pennsylvania and the United States to the physical factors — structure, relief, climate, soil, and natural resources — which mold their destiny. The inter-relationships between the United States and Pennsylvania and the rest of the world are stressed. Prerequisite: World Geography.

Geog 151 Earth and Space Science 3 cr.

(This course may not be taken by majors or minors)

Spatial relationships in the universe, origin of the earth, structure and composition of land masses, the nature of oceans, the facts of the land and water surfaces, the activities of the atmosphere are given special attention. This survey course is designed to give the non-major or non-minor an introduction to the physical environment wherein he lives.

Geog 251 Geography of the United States and Canada 3 cr.

This course is a regional study of the United States and Canada, concerned with the investigation of man's adjustment to his environment as determined by the physical factors of climate, vegetation, relief, soils and natural resources. Recognition of political adjustments to the geographic environment and the inter-relations between the two countries and the rest of the world are stressed.

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 252 Geography of Pennsylvania 3 cr.

This course is especially designed for majors. The topography, climate, natural vegetation, natural resources, population, agriculture, manufacturing, mining, etc., are treated. Internal and external relationships are studied to gain an insight into the various regions of the state and Pennsylvania's world relationships.

Geog 154 Cultural Geography 3 cr.

(Prerequisite — World or Physical Geography)

This course includes study of the geographical aspects of population, settlement, ethnogeography, and the cultural landscape. It considers the relationships of various ethnic and cultural groups to the natural environment. The student is acquainted with the tools, philosophy, and literature of cultural geography and related disciplines.

Geog 453 Political Geography 3 cr.

This course considers geographic elements as related to geopolitical concepts, types and distribution of political systems, major political units and association, factors which influence political power, areas of friction, conflict and arbitration.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

John Chellman, Department Chairman

HPe 101 Health 2 cr.

Health consists of a study of the individual and community problems with the chief emphasis placed on the improvement of the student's own health.

HPe 102 Physical Education I 1 cr.

This course provides a seasonal program of sports and activities that will have some carry-over value. The activities will improve the physical fitness of the student and develop a number of sport skills.

HPe 203 Physical Education II 1 cr.

A continuation of Physical Education I with greater emphasis on participation in activities learned in Physical Education I.

HPe 204 Physical Education III 1 cr.

This course will provide for greater specialization in selected activities to bring personal performance ability to advanced levels. "The equivalent of the American Red Cross Standard First Aid Course will be included in this course."

El 314 Teaching of Health and Physical Education 3 cr.

The Teaching of Health and Physical Education covers units designed to present the meaning, aim, scope and materials related to Healthful School Living, Health Service, Health Instruction, Elementary Grade Activities in Physical Education, Lesson Planning and Practice Teaching.

**CERTIFICATION IN THE FIELD OF EDUCATION
FOR SAFE LIVING**

HPe 251 Introduction to Safety Education 3 cr.

The Introduction to Safety Education course is one which will be valuable to teachers of all grade levels and all departments. It deals with the recognition of unsafe conditions and practices, and the methods by which they may be eliminated or minimized, in an accident prevention program. The study includes home, school, occupational and public safety.

HPe 252 Driver Education 3 cr.

Driver Education is a combination of class instruction in traffic safety and driver training in actual behind-the-wheel practice in a dual-control car. It prepares the student to teach driver education in a high school. The prerequisites for the course are: the student should have driving ability above the average and evidence of holding a driver's license, plus at least two years of driving experience without having a major accident for which the driver is responsible.

**HPe 254 Organization and Administration of
Safety Education 3 cr.**

The Organization and Administration of Safety Education deals with the basic principles of organizing, administering and supervising safety education procedures in schools. A large part of the course is devoted to methods of teaching pupil safety activities in school and community.

**HPe 253 Methods and Materials in Safety Education
in the Secondary Schools 3 cr.**

Methods and Materials in Safety Education in the Secondary Schools is a course that emphasizes the use of correlating and integrating safety with many different subjects and school activities, teaching as a separate subject and centering safety education around pupil organizations and special projects.

HOME ECONOMICS DEPARTMENT

Opal T. Rhodes, Department Chairman

HE 314 Textiles and Care 3 cr.

The manufacture of fabrics and the making and retailing of ready-made garments is considered in relation to retail cost. Selection and upkeep of clothing and household textiles is studied from the standpoint of quality of fiber, fabric and finish. Labels and laws governing the sale of fur, fabrics and manufactured articles are investigated.

HE 352 Home and Family Living 3 cr.

Many needs of men and women as heads of families and homemakers and as parents are met. Units studied are: how nutritionally adequate meals provide for body food need; food purchasing, preparation and service, child care, development and guidance; the family and the role of each member; clothing selection and care; housing the family; furnishing and equipping the home; house care and management; and wise use of human and material resources.

HE 313 Food Service Management 3 cr.

This course provides instruction and fundamental experiences essential to quantity food service. These experiences include planning, preparing and serving lunches that are nutritionally adequate, attractive and inexpensive. The requirements of the National School Lunch Program are emphasized.

HE 413 Consumer Economics 3 cr.

An understanding of economic problems of consumer buyers is sought. Problems of production, distribution, merchandising, and buying are studied. Emphasis is placed upon help available from

government, private agencies and consumers themselves. A program for the education of intelligent consumers is planned. Gaining maximum satisfaction from goods and services available to each family is an important goal.

HE 214 Clothing II **3 cr.**

An intensive study of the practical methods of solving fitting problems and applying the principles of dress design form the basis for this course. Practical applications are made by flat pattern designing and the construction of a dress. Students demonstrate difficult construction processes in sewing. Cost of fabric is approximately \$15.00. Prerequisite: Clothing I.

HE 417 Clothing III **3 cr.**

A coat or suit is tailored and a garment remodeled. Additional ability is gained in pattern construction and use, construction techniques, selection and care of clothing. Constructed garments are compared with ready-to-wears. The cost of fabric is approximately \$40.

HE 411 Family Relations **3 cr.**

Students have opportunity to gain knowledge and understanding of personality development and the importance of early family and community influence in well adjusted lives and family stability. Emphasis is on preparation for marriage and problems of human relations within homes. Reading, discussion, and conferences are used in facing and solving problems.

HE 414 Home Management **3 cr.**

Students experience activities of home living as a group. Managerial ability is developed and human values and relations emphasized. Child care and guidance; planning, buying, preparing and serving meals; the use and care of all household equipment; care and management of the home; entertaining and providing for better living are supervised and improved.

HE 215 Home Furnishing **3 cr.**

Students develop ability to create attractive livable homes and judgment in selecting and purchasing suitable home furnishings. Floors, walls, and windows, the arrangement of furnishings and furniture and remedies for problem rooms and houses are studied. Improvising, mending, remodeling, and refinishing furniture, making curtains, slip covers, and draperies, etc., provide practical problems.

HE 113 Management and Equipment

3 cr.

Management, decision making 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.

KEITH SCHOOL**E. Samuel Hoenstine, Director****Student Teaching**

Student teaching in the summer is offered in the Main Session only and is provided on both Elementary and Secondary levels. To be eligible a student must meet the following requirements: (1) One semester of resident work at Indiana. (2) At least twelve hours of work in professional courses. (3) Transfer students must meet the above requirements and in addition must have the approval of the Committee on Professional standards. Approval in general depends upon meeting the requirements for Junior Standing.

Student teaching is scheduled for the Main Session only beginning June 29. Applications must be filed by May 1 to assure enough opportunities for all who desire to do their student teaching this summer.

MATHEMATICS DEPARTMENT**James E. McKinley, Department Chairman****Math 111 Foundations of Mathematics**

4 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. Prerequisites: High School Algebra and Geometry.

Math 151 Mathematical Analysis I **4 cr.**

This course is the first of two in an integrated organization of topics usually covered in College Algebra, Trigonometry, and Analytic Geometry. The central idea in the organization of the material is the function concept. Topics considered are absolute value; inequalities; algebraic functions and their graphs; solutions of systems of equations; exponential, logarithmic, trigonometric and inverse trigonometric functions and their graphs; trigonometric formulae; the properties of circular functions; trigonometric representation of complex numbers with application of DeMoivre's theorem.

Math 152 Mathematical Analysis II **5 cr.**

As a continuation of Mathematical Analysis I the principal topics considered are permutations, combinations, probability; arithmetic and geometric sequences and series; equations of geometric loci of the plane, including the straight line and conic sections; the general equation of the second degree and transformation of axes; polar coordinates; parametric equations; and the geometry of points, lines and planes in three dimensions.

Math 253 Theory of Equations **3 cr.**

Among the topics considered are algebraic equations; determination of roots; algebraic solutions of cubic and quartic equations; systems of equations; determinants; matrices and symmetric functions.

Math 355 Foundations of Geometry I **3 cr.**

The elements of plane and solid geometry up to and including congruence from the metric point of view, followed by a discussion of the synthetic point of view; historical development; parallelism; similarity; area; volume; substantial experience with at least one other geometry (preferably hyperbolic non-Euclidean geometry). Prerequisites: Analytic Geometry and Calculus II.

Math 361 Ordinary Differential Equations **3 cr.**

The topics considered will include linear differential equations of first and higher order, those of first order but not of first degree,

and applications to geometry and the sciences. Prerequisite: Math 257.

Math 362 Probability and Statistics 3 cr.

This course is intended as a beginning course in statistics with emphasis on applications rather than on theoretical developments of principles and formulas. Calculus is not a prerequisite. The areas of study in this course are: frequency distributions, measures of central tendency and variation, elementary probability, sampling, estimation, testing of hypotheses, linear correlation and regression, and multiple and partial correlation.

Math 375 Introduction to Modern Mathematics 3 cr.

This course is designed to acquaint the prospective teacher with new methods and content in mathematics. A thorough study of the development of the complex number system for a postulational viewpoint, starting with the natural numbers, through the integers, fractions, rationals, irrational, real, and finally the complex numbers, serves as a model of the rigorous methods used in mathematics today. Set theory and its applications in serving to unify topics in high school algebra and geometry are of primary importance. The study of mathematical structures, including that of groups, rings, integral domain, and fields, acquaints the student with the knowledge that there are many algebras and geometries and points out the true nature of a mathematical system. Boolean algebra and arithmetic modular systems serve as examples to illustrate these systems. An attempt is made throughout the course to strengthen but not replace, the traditional mathematics with the new.

Ed 313 Teaching Mathematics in the Elementary School 3 cr.

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. Prerequisite: Math 101.

Ed 451 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 prin-

ciples of teaching and learning; observations; study of current mathematics curricula; and learning to use curriculum materials effectively.

MUSIC DEPARTMENT

Harold S. Orendorff, Chairman of Department

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. One or two field trips are planned each semester to Pittsburgh to attend the Pittsburgh Opera and/or the Pittsburgh Symphony. In addition, various concerts of college organizations, cultural life events, and visiting artist concerts are required to augment the listening experiences of the student.

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.

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 Laboratory School. Emphasis is placed on the primary grades.

El 212 Teaching of Music in the Elementary Grades 3 cr.

A continuation of skills and understandings as developed in El 211 is treated with emphasis on methods and materials for the upper grades. Additional opportunities for growth in music reading and part singing are provided. Lessons are developed in correlation of music with other areas. Type lessons are taught by students and constructively evaluated by the instructor and the class. Prerequisite: El 211.

PUBLIC SCHOOL NURSING**George A. W. Stouffer, Jr., Director**

The college offers a degree program in Public School Nursing. This requires 45 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. Consult pages 31 to 59 for various course descriptions in these fields.

PSN 301 Public School Nursing (2 wks.) 2 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.

PSN 403 Family Case Work 3 cr.

Goals of family life, changes brought by crises, the attitudes and relation of the family to welfare, approaches and solutions to family problems and the psychology of inter-personal relations are studied. Readings, problem solving, specific family situations and conferences are used.

SCIENCE DEPARTMENT**Dwight E. Sollenberger, Chairman of Department****Sci 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 inter-relationship with his biological environment. The classification of plants and animals is reviewed briefly. Three hours lecture and two hours laboratory.

Sci 104 General Biology II 4 cr.

A continuation of General Biology I. Three hours lecture and two hours laboratory.

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.

Biol 111 Botany I 4 cr.

Botany I is primarily a study of the flowering plants. Topics include the anatomy and life processes of plant cells, leaves, stem, roots, flowers, seeds, and fruits. The economic importance of plants used by man and the recognition and classification of the seed plants in the immediate environment of the college are included. Three hours lecture and three hours laboratory per week.

Biol 112 Botany II 4 cr.

Botany II is concerned primarily with the non-flowering plants. It considers both the anatomy and life processes of selected algae, bacteria, fungi, mosses, ferns, and their allies. The economic importance and health implications of certain of these groups are emphasized. The recognition and classification of the non-flowering plants of the immediate surroundings are stressed. Prerequisite: Botany I. Three hours lecture and three hours laboratory per week.

Biol 251 Field Botany 3 cr.

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 in teaching situations. Two hours lecture and three hours laboratory per week.

Chem 111-112 General Chemistry I and II 8 cr.

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. Three hours lecture and three hours laboratory per week.

Chem 211 Qualitative Analysis 4 cr.

A study of the chemical properties of certain elements and various ionic equilibria involved in their reactions. The student achieves understanding of these principles through solution of selected problems and carefully arranged experimental work, including the identification of unknown ions. Many useful skills and techniques are acquired during the course of the laboratory work. Two hours lecture and six hours laboratory per week. Prerequisites: General Chemistry I and II.

Chem 212 Quantitative Analysis 4 cr.

A study of the chemical properties of certain elements and various ionic equilibria involved in their reactions. The student achieves understanding of these principles through solution of selected problems and carefully arranged experimental work, including the identification of unknown ions. Many useful skills and techniques are acquired during the course of the laboratory work. Two hours lecture and six hours laboratory per week. Prerequisites: General Chemistry I and II.

Chem 351 Biological Chemistry 3 cr.

A study of the chemistry of carbohydrates, lipids, proteins, minerals, and vitamins as well as the biological functions of each. Three hours lecture per week. Prerequisite: Organic Chemistry I.

Sci 111 Science in Modern Civilization 3 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 and 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.

Phys 111-112 Physics I and II 8 cr.

A two-semester course constituting the usual first year's work in general college physics. In Physics I, mechanics, heat and sound are studied; in Physics II, electricity and magnetism, light, and atomic and

nuclear physics. A working knowledge of elementary algebra is essential. Three hours lecture and three hours laboratory per week.

ESci 222 Historical Geology **3 cr.**

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. Prerequisite: Physical Geology or permission of instructor.

**REQUIRED COURSES FOR STUDENTS IN
ELEMENTARY EDUCATION**

ESci 311 Elements of Earth Science **3 cr.**

This course is designed to make elementary teachers more aware of the science in their environment. While the biological environment is briefly reviewed, greater stress is placed upon the areas of geology, astronomy and meteorology. Field study and lectures strive to include both scientific principles and practical classroom activities that the teacher may use in the elementary classroom.

EI 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. Two hours lecture and two hours laboratory per week.

Chem 151-152 Organic and Biochemistry **6 cr.**

This course is planned to include those topics from the fields of organic chemistry and biochemistry that are most important for the

student of home economics. The structures, properties, and preparation of the various classes of organic compounds are surveyed. 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. Three hours of lecture and two hours of laboratory per week.

Biol 361 Microbiology (Sanitation) 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. Methods of culturing forms used in high school teaching are studied. Two hours lecture and three hours laboratory per week.

SOCIAL STUDIES DEPARTMENT

Raymond L. Lee, Department Chairman

SS 201 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, aesthetic and intellectual institutions from preliterary times to approximately 1500 A. D. including the Oriental and Near Eastern cultures as well as the more familiar Greek, Roman, and Germanic contributions to world society, the course deals with broad historical movements rather than with the details of individual peoples and nations.

SS 202 History of Civilization II 3 cr.

Using the same approach as in History of Civilization I, this course deals with man's development from 1500 A. D. 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 government; and 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 for world order proposed or attempted since 1900.

SS 301 History of the United States and Pennsylvania I 3 cr.

turies. The course concludes with an examination of the various for-

A course covering the period in American History from the discovery of America to 1865 with emphasis on the history of Pennsyl-

vania. 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.

SS 302 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. Due attention is 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.

SS 373 History of Europe: 1815-1914 3 cr.

A comprehensive study of the factors contributed by the European people in their national organization through their political, social and economic activities. The understanding of the casual and inter-group relationships are essentially basic to analysis and interpretations of the difficulties facing the European world today.

SS 374 History of Twentieth Century World 3 cr.

This course examines political, economic, social and intellectual trends in the world since 1900, with a major emphasis on European contributions. Consideration is given to the causes and results of twentieth century warfare and the search for international order and stability.

SS 379 History of Russia 3 cr.

A general survey of Russian history, culture and institutions. Special consideration is given to the study of those historical forces which were formative of the Revolution of 1917. Consideration is also given to post-Revolution Russia.

SS 377 History of Latin America 3 cr.

The course surveys the development of the Latin American countries from the period of discovery to the present. The economic, social, political and cultural areas receive special attention first as domestic problems, then as they are related to the various political units involved. The influence of European and American relations as they are reflected in local changes are given consideration.

SS 401 American Citizenship

3 cr.

This course is 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 the place of the citizen in government. In the study of the functions 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.

SS 353 American Political Parties

3 cr.

This course will trace historically the development of American Political Parties. Major emphasis will be placed on modern party developments since 1900.

SS 358 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.

SS 251 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 inter-relationship 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.

SS 331 Contemporary Social Problems

3 cr.

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. Prerequisite: Principles of Sociology.

SS 333 Juvenile Delinquency

3 cr.

Principal topics are the cause of delinquency, its forms, consequences, and the methods that may best be used in its prevention. Prerequisite: Principles of Sociology.

SS 492 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.

SS 252 Principles of Economics 3 cr.

A course in which a study is made of the major areas in the field of economics; production, exchange, distribution, and consumption. Special consideration is given wages, interest, rent, profits, price determination, money and banking, and national income.

SS 241 Contemporary Economic Problems 3 cr.

A course which briefly analyzes the world-wide clash of Communism, Socialism, and Capitalism, and examines in some detail the contemporary internal problems of American Capitalism. Controversial problems implicit in the rise of big business, big labor, big agriculture, and big government are explored, and proposed solutions are examined. Students are encouraged to reach tentative individual conclusions on the basis of their independent study. Prerequisite: Principles of Economics.

SS 346 Economic Development 3 cr.

An empirical and theoretical analysis of the nature of the economic growth of nations. Special emphasis given to the problems of underdeveloped countries. Prerequisite: Principles of Economics.

SS 341 Industrial Relations 3 cr.

A study of the problems involved in the relations between the workers and management in a dynamic industrial society, and the economic aspects of the solutions of these problems proposed or attempted by labor, management, and the government. Prerequisite: Principles of Economics.

SS 410 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 archeology, to detailed studies of primitive societies in our own times. The predictability of future change in ethnological phenomena is also considered.

SS 420 Introduction to Philosophy 3 cr.

A course in which attention is given to the method of reflective thought and reasoned inquiry, the nature of truth, man's place in the universe, and the relation between science and religion. Special emphasis is given such schools of thought as humanism, rationalism, naturalism, and idealism as well as the great thinkers who dominated these schools of thought.

Ed 451 Teaching Social Studies in the Secondary School 3 cr.

This course seeks to familiarize prospective teachers with current trends and developments in the field of social education, with effective procedures for teaching social studies in the secondary school, and to develop a professional interest in social education. Emphasis is placed on the objectives of social education, courses of study, organization of content of teaching, effective procedures and techniques, instructional materials and resources, and evaluation.

Dr. R. W. Cordier
Director, Summer Sessions
State College
Indiana, Pennsylvania

Dear Sir:

I plan to register in the School of Education _____ or
(Department)
School of Liberal Arts _____ for the following courses in
(Major field)
the 1964 Summer School:

Pre-Session (One three credit course constitutes a normal load)

First Period
Second Period

Main Session (Two three credit courses constitute a normal load)

First Period
Second Period
Third Period
Fourth Period

Post-Session (One three credit course constitutes a normal load)

First Period
Second Period

I desire on-campus housing () Yes () No
Board () Yes () No

Please return this form by April 15.

Name

Address

