

Undergraduate Bulletin 1969-70

**BLOOMSBURG
STATE
COLLEGE**

1869-1969 One Hundred Years
Of Teacher Education



**BLOOMSBURG
STATE COLLEGE
UNDERGRADUATE
BULLETIN
1969-1970**

**Serving the Commonwealth of Pennsylvania
for 130 years**

ACCREDITED BY

The Middle States Association of Colleges and Secondary Schools
The Pennsylvania State Board of Education
The National Council for the Accreditation of Teacher Education

**The College welcomes qualified students, faculty,
and staff from all racial,
religious, ethnic, and socio-economic backgrounds.**

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CALENDAR FOR ACADEMIC YEAR 1969-1970

Summer Sessions 1969

PRE SESSION

Classes Begin Monday, June 9
Session Ends Friday, June 27

MAIN SESSION

Classes Begin Monday, June 30
Session Ends Friday, August 8

POST SESSION

Classes Begin Monday, August 11
Session Ends Friday, August 29

First Semester 1969

Registration Monday, September 8
Registration Tuesday, September 9
Registration — Evening Students Tuesday, September 9
Classes Begin at 8:00 A.M. Wednesday, September 10
Registration — Graduate Students Wednesday, September 10
Classes Begin for Graduate Students Thursday, September 11
Thanksgiving Recess Begins After Last Class Tuesday, November 25
Thanksgiving Recess Ends at 8:00 A.M. Monday, December 1
Christmas Recess Begins at 12:00 Noon Friday, December 19
Christmas Recess Ends at 8:00 A.M. Monday, January 5
Final Examination Week Begins at 8:00 A.M. Monday, January 12
Commencement Friday, January 16
Final Examination Week Ends at 12:00 Noon Saturday, January 17
First Semester Ends at 12:00 Noon for both Graduate Saturday, January 17
and Undergraduate Students

**Second Semester
1970**

Registration	Monday, January 26
Classes Begin	Tuesday, January 27
Registration — Evening Students and Graduate Students	Monday, January 26
Registration	Tuesday, January 27
Classes begin for Graduate Students	Tuesday, January 27
Easter Recess Begins at 12:00 Noon	Wednesday, March 25
Easter Recess Ends at 8:00 A.M.	Wednesday, April 1
Final Examination Week Begins at 8:00 A.M.	Friday, May 15
Final Examination Week Ends	Saturday, May 23
Classes End for Graduate Students at 12:00 Noon	Saturday, May 23
Second Semester Ends at 12:00 Noon	Saturday, May 23
Baccalaureate and Commencement	Sunday, May 24

**Summer Sessions
1970**

PRE SESSION

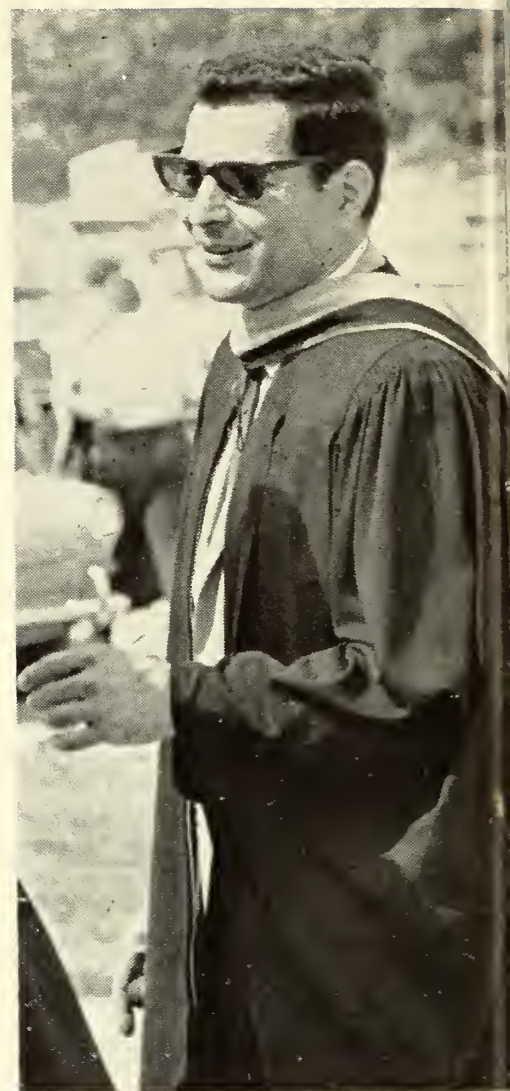
Classes Begin	Monday, June 8
Session Ends	Friday, June 26

MAIN SESSION

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

POST SESSION

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



GENERAL INFORMATION

Academy, Literary Institute, State Normal School, State Teachers College, and then State College — such has been the development of Bloomsburg since its inception in 1839. Seventeen years old, the Academy became the Bloomsburg Literary Institute in 1856. The institution was recognized as a State Normal School in 1869 but remained privately owned until 1916 when it was purchased by the Commonwealth of Pennsylvania. Transition from Normal School to State Teachers College came in 1927 when the authority to confer the Bachelor of Science degree in Education was granted. Finally, in 1960, the institution became Bloomsburg State College.

Undergraduate degrees are now offered in Education, Business, the Humanities, the Natural and the Social Sciences. The Graduate Program offers both Master of Arts and Master of Education degrees.

Today, Bloomsburg State College has more than 3700 undergraduates and is growing rapidly. The construction of new buildings is one sign of this growth. A sixty-eight acre new campus will soon be rising adjacent to the present one; it will more than double existing facilities. More important are the investigations of new ideas, expanding curricula, and participation in vigorous efforts to improve education.

Bloomsburg has a faculty excellently qualified in terms of academic training and teaching experience. More than 30% hold doctor's degrees. Bloomsburg is, moreover, a school where the possibilities of fruitful student-faculty contact are dependent upon the student's interests and not on the scheduling difficulties of an overworked professor.

A BRIEF HISTORY OF BLOOMSBURG STATE COLLEGE

Bloomsburg State College began in 1839 when a private academy was opened in Bloomsburg. During the next two years, under the leadership of C. P. Waller, a graduate of Williams College, it became a successful and well-established school. After Mr. Waller left in 1841, the academy continued through varied fortunes until 1856, when it was chartered and incorporated as the Bloomsburg Literary Institute.

The following decade was a period of struggle for the Institute, but in 1866 the election of Professor Henry Carver as principal brought a change. Under his strong leadership new policies were established and a building to instruct 300 students was erected. This building, the present Carver Hall, was dedicated with gala observance by the townspeople and students on April 4, 1867. Members of the first class at the new school — including D. J. Waller, Jr., George E. Elwell, and Charles Unangst — by popular subscription raised \$1,200 in a single week for a bell which called the students to classes.

In the autumn of the same year, a view of the new school on the hill “ablaze with lights” suggested to John P. Wickersham, State Superintendent of Public Instruction, that the location would be ideal for a State Normal School whose establishment in the Sixth District was then pending. After necessary negotiations, official action, and the construction of a new dormitory, the school became the Bloomsburg Literary Institute and State Normal School on February 19, 1869.

The next eight years were trying ones that included the resignation of Professor Carver, two interim principalships, a fire that totally destroyed the dormitory, and the short-term principalship of Dr. T. L. Griswold (1873-1877). In Dr. Griswold’s administration the school began paying expenses and constructed a new dormitory, the original part of the present Waller Hall. The installation of Dr. D. J. Waller, Jr., in 1877 as principal, brought thirteen years of stability and growing prosperity to the school.

Dr. Judson P. Welsh became principal in 1890, when Dr. Waller resigned to become State Superintendent of Public Instruction. Additions to the four-story dormitory and to the gymnasium were

built under Dr. Welsh, and Science Hall was opened in 1906, shortly after his resignation.

Dr. Waller returned as principal in 1906. In 1916 the Bloomsburg Literary Institute and State Normal School was purchased by the Commonwealth of Pennsylvania becoming the Bloomsburg State Normal School. In 1920, at the age of 74, Dr. Waller retired.

The emphasis of instruction at the Normal School was changed by its next principal, Dr. Charles H. Fisher (1920-1923), from secondary and college preparatory work for special teachers to full-time education of teachers. Dr. G. C. L. Riemer followed Dr. Fisher as principal and remained in office until the institution became a State Teachers College in May, 1927.

Under the administration of President Francis B. Haas (1927-1939), the college made great advances in the program of teacher education and in the physical plant. Eighteen acres of land were added to the college plant; several buildings were constructed, including a laundry, the elementary training school, the gymnasium, the junior high school, and the shop and maintenance building; and other construction work was completed. Dr. Haas resigned in August, 1939, to assume, for the second time, the duties of State Superintendent of Public Instruction for Pennsylvania.

Dr. Harvey A. Andruss, who had organized and directed the Department of Business Education and had served as Dean of Instruction from 1937-1939, was appointed to succeed Dr. Haas as president. During the next two decades the campus was enlarged, new buildings were added, and the number of students and faculty quadrupled.

Early in 1960, Bloomsburg became a State College. In the same year the college received approval from the State Council of Education to inaugurate a program of graduate studies leading to the Master of Education degree.

The 1968-69 college year marks the 100th year of teacher education at Bloomsburg, the 130th anniversary of the founding of the college, and the 30th anniversary of the administration of President Andruss.

At the present time the college is passing through a period of rapid but controlled expansion. A long range campus plan for building and development, originally prepared in 1957 but since re-

vised, calls for renovation of the lower campus and construction of an entirely new upper campus. On the lower campus this has meant, in approximately the last ten years, the construction of three women's dormitories, two men's dormitories, two science and classroom buildings, the college Commons, the Haas Auditorium, and the Andruss Library. In the near future the lower campus will also have a second Dining Hall, another classroom building, another women's dormitory, a new Student Center, and additional parking areas. The upper campus, formerly the Bloomsburg Golf Course, will have new athletic facilities, more dormitories, more classrooms, and more parking areas. Within less than a decade these facilities (both campi) will accommodate some six thousand students.

COLLEGE BUILDINGS and FACILITIES

The lower campus, which currently contains all facilities for living, learning, and recreation, consists of approximately 60 acres and is bound by Penn Street, Second Street, and Light Street Road. A recently purchased tract of 68 acres of land, which was formerly the Bloomsburg Country Club, is located north of Light Street Road, a short distance from the lower campus. This area, the upper campus, has a magnificent view and will eventually provide sites for all varsity intercollegiate athletic activities, as well as parking areas, dormitories, classroom buildings, and related facilities. The Bloomsburg State College campus overlooks the town of Bloomsburg and the picturesque Susquehanna River. The many new buildings intermingle with the older buildings, reflecting the growth of the institution.

CARVER HALL, named for Henry Carver, the first principal, stands at the entrance to the college campus. Built in 1867, it is the oldest of the college buildings. Its white bell tower and pillared entrance are an attractive introduction to the campus. The building contains an auditorium which seats 900 and a number of administrative offices including those of the President, the Assistant to the President, the Registrar, the Director of Financial Aid, and the Business Manager.

WALLER HALL, was named for Dr. D. J. Waller, Jr., principal of the college for twenty-seven years. It is four stories high with a frontage of 165 feet and a wing span enclosing a patio and

fountain, which are fronted by Long Porch, a familiar campus landmark and gathering place over the years. The ground floor contains a lobby, the guest suite, the College Store, Duplicating Room, and offices for the Dean of Instruction, the Dean of Students, the Director of Secondary Education, the Comptroller of Community Activities, the Alumni Association, and the Superintendent of Buildings and Grounds. The spacious lobby, with its comfortable furniture, is a favorite meeting place and is frequently used for art exhibits. Faculty and student mailboxes and the central telephone exchange are also located in this building.

The second floor provides office space for faculty offices, many student organizations, and the Infirmary which has registered nurses in attendance.

The Alumni Room, located on the first floor of Waller Hall, is furnished as a reception room for alumni and faculty. College trophies are displayed in this room, as well as two beautiful tapestries embroidered with the college seal.

The Faculty Lounge, situated adjacent to the Alumni Room in Waller Hall, is an attractively furnished room reserved for faculty. It contains lounge chairs, sofas, and an apartment-style kitchen unit. Faculty committees frequently meet in this room.

The Husky Lounge, a former gymnasium, adjoins Waller Hall on the northwest side. In addition to the Snack Bar, tables, and booths, there is a battery of vending machines which provide a wide selection of food and beverages for students. "Husky" is one of the most popular meeting places on campus. The offices of the College Community Government Association and the Director of Student Activities are located near its main entrance. An extension of Husky is an attractive television lounge.

SCIENCE HALL, built in 1906, contains classrooms, lecture rooms, faculty offices, and the Day Men's Lounge. Originally built for science classes, the building has been used more recently as a general classroom building. In the basement is the Day Men's Lounge which is furnished and equipped to supply a restful atmosphere for the commuting men students. This building will be demolished in 1970 to furnish a site for a recreation area.

BENJAMIN FRANKLIN, which is used for college classes and faculty offices, also houses the offices of the Director of Admissions, the Director of Development and Public Relations, the

Director of the Elementary Division, the Director of Placement, and the Director and Supervisors of Student Teaching. The Day Women's Lounge and classrooms occupy large areas of the basement.

NAVY HALL was made available to the United State Navy for its V-12 Officer Training Program during World War II. It contains eleven classrooms as well as faculty offices. In 1961 the ground floor was completely remodeled to provide facilities for the Department of Special Education. This area includes clinics for Speech and Hearing therapy, reading improvement, and psychological services. A large area designed for group activities and clinical observation augments the more specialized functions of the department. The offices of the Director of Graduate Studies, and two language laboratories are located on the first floor along with an Arts and Crafts Center.

HARTLINE SCIENCE CENTER, named for Professor Daniel S. Hartline, former "Old Guard" faculty member, his wife (also on the faculty), and their son, Dr. H. Keffer Hartline, the 1968 Nobel Prize laureate and recipient of the B.S.C. Alumni Distinguished Service Award. This air-conditioned building completed in 1968 contains laboratories, classrooms, seminar rooms, several large lecture rooms, faculty offices, facilities for the Data Processing Center, an exhibit area, and special facilities for study and research in science.

COLLEGE COMMONS, a dining hall built in 1956, accommodates 800 students who dine at tables with places for eight; a continuous glass wall on the south side of the building creates a light and airy atmosphere for its attractively decorated interior. A partially underground passage connects the lobby of Waller Hall with the Commons. The latest facilities in cooking and refrigeration are used to provide a tasteful selection of food prepared by a national catering service.

NORTH HALL, a three story men's residence completed in 1960, has complete facilities for 200 men. A large lounge and TV room is located on each floor with food vending machines in the ground floor lounge. Coin-operated machines provide complete laundry facilities.

SOUTH HALL, a four story residence for 300 women adjacent to the College Commons, was completed in September, 1967. The

structure has lounge and recreation areas, post office boxes, an inter-communication system, storage areas, study rooms, administrative offices, and an apartment for a resident counselor.

EAST HALL and WEST HALL, two residence halls with accommodations for 500 women, were occupied for the first time in 1964. Each hall, divided into four wings, is four stories high with fully automatic hydraulic elevators. Special features include large recreation rooms, lounge areas on each floor, post office boxes, inter-communication systems, storage areas for luggage, and well-furnished study rooms.

ELWELL HALL, named after Judge William Elwell and his son George E. Elwell, both former trustees of the college and the judge's grandson, G. Edward Elwell, a former French instructor, is a men's residence hall facing East Second Street. This nine story structure, completed in 1968, provides accommodations for 690 men, an apartment for a member of the Dean of Men's staff, two apartments for resident advisors, and has recreation rooms, lounges, a TV room, guest rooms, study rooms, two automatic elevators, laundry rooms, a mail room, and storage areas.

CENTENNIAL GYMNASIUM is located on East Second Street at the top of the hill. This building contains a large main gymnasium seating 1,200 to 2,000, two auxiliary gymnasiums, locker rooms, swimming pool, athletic offices, and complete office and classroom facilities for the Department of Health and Physical Education. The Director of Athletics and the nine varsity athletic teams at Bloomsburg State College will continue to use Centennial Gymnasium as their headquarters until the new gymnasium-field house is completed on the upper campus.

SUTLIFF HALL, named for William Boyd Sutliff, a former Dean of Instruction, is adjacent to Centennial Gymnasium and has fourteen classrooms plus faculty offices. The first floor houses classrooms and laboratories for the teaching of science courses and eight specialized classrooms are located on the second floor for instruction in business education. The office of the Director of the Business Education Division is located on the second floor.

ANDRUSS LIBRARY, completed in August, 1966, is located near Navy Hall and the Benjamin Franklin building. The library includes seating for 750 readers, shelving for 200,000 volumes, two general classrooms, a seminar room, a curriculum materials center,

and special facilities for audio-visual education. Constructed at a cost in excess of \$1,000,000, the library is completely air-conditioned.

HAAS AUDITORIUM is located at the end of Spruce Street near Navy Hall and is air-conditioned. Completed in August, 1967, it has a main floor and balcony seating 2,000 people, a projection room, classrooms and specialized work and practice rooms for music, debating, and drama groups, lounges, areas for exhibits and display purposes, and offices for faculty.

PRESIDENT'S RESIDENCE, located on Light Street Road at the northeast end of the main campus, was originally the home of U. S. Senator Buckalew from 1863-1869. The surrounding area is attractively landscaped to further enhance the architectural structure.

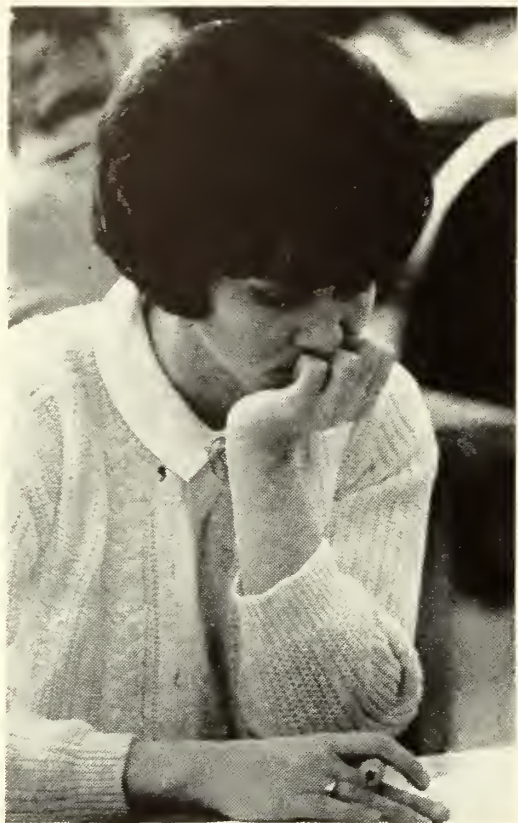
HEATING PLANT, situated on the northwest corner of the lower campus, has been recently enlarged and fully modernized to take care of the increased needs of the present and proposed building additions on the lower campus.

LAUNDRY, located between East Hall and North Hall, provides the best modern equipment for handling the laundry needs of the college.

MAINTENANCE BUILDING is a modern brick building adjacent to the laundry and is used for maintenance and storage purposes.

PURCHASING AND RECEIVING DEPARTMENT is on the north side of Light Street Road opposite the Heating Plant.

DILLON HOUSE, opposite the President's Residence, is used for faculty offices.



ADMISSION TO THE COLLEGE

Bloomsburg State College seeks students with the qualities of character and intelligence that will fit them for leadership in the fields of teaching, business, science and the liberal arts. Students who seek admission to the college must meet the following requirements.

Applicants must be graduates of approved secondary schools or must have made equivalent preparation as determined by the Credentials Evaluation Division of the Pennsylvania Department of Public Instruction.

A detailed examination of the applicant's secondary school record will be made by college authorities. This, and the College Board Examinations described in the following paragraph, is done to determine the applicant's capacity to perform satisfactory college work.

All candidates for admission must complete the Scholastic Aptitude Test, the English Composition Achievement Test, and the Mathematics (Levels I or II) Achievement Test of the College Entrance Examination Board. Candidates who expect to major in one of the following subjects must complete a third Achievement Test in one of the appropriate areas listed here:

Proposed College Major or Area of Concentration	Required College Board Achievement Test
Physics	Chemistry
Chemistry	Chemistry
History	American History and Social Studies or European History and World Cultures
French	French
German	German
Spanish	Spanish
Biology	Biology

Applicants whose proposed major is not among those listed above are required to complete only the Scholastic Aptitude test, and the English Composition and Mathematics Achievement tests. **Arrangements for taking these tests must be made by the applicant.**

Applicants must have satisfactory character and personality traits as well as proper attitudes and interests as determined by the high school principal, guidance director, or other school officials acquainted with the student.

Applicants must submit, through their personal physician, a report on their health and current physical condition. This report is to be made on a prescribed form (available from the admissions office) and must be approved by the college physician. No student will be admitted who has, in the opinion of the college, disabilities which would impair his ability to pursue a normal college program.

Applicants for special curricula may be required to take appropriate aptitude tests in their special field of interest.

Although a personal interview is not a requirement for all candidates, the college may request that a candidate report for an interview at a time designated by the Director of Admissions.

The following credentials must be in the candidate's file before admissions consideration can be given:

1. Application for admission and application fee — filed by applicant.
2. A Physical examination form — filed by the physician.
3. A High School transcript and personality rating — filed by High School.
4. The official results of the applicant's Scholastic Aptitude test of the College Entrance Examination Board — filed at the student's request by the College Entrance Examination Board in Princeton, New Jersey.

Necessary application materials, as well as a detailed instruction sheet, will be forwarded to applicants upon request. Personal interviews may be arranged by contacting the Director of Admissions. These interviews may be scheduled on Monday through Friday 9:00 a.m. to 5:00 p.m. and on Saturday from 9:00 a.m. to noon.

CONDITION OF ADMISSION

Upon entering Bloomsburg State College all Freshmen are asked to sign a pledge similar to the following:

As a condition of admission, I will acquaint myself with the rules, policies, and regulations of Bloomsburg State College as set forth in the College catalog and/or student handbooks and I agree to be governed by these rules, policies, and regulations during the period of my enrollment.

REQUIREMENTS FOR TRANSFER STUDENTS

Students who wish to transfer to Bloomsburg State College must be in good standing (academically and otherwise) at the institution previously attended, must have a record of honorable dismissal or completion of their work at that college or university, and must have a cumulative quality point average of C-plus or better.

Generally, not more than 60 transfer credits will be accepted. All transfer candidates must complete their final 30 credits in residence at Bloomsburg State College.

Transfer students follow the admissions procedures for new applicants and must also file the following additional credentials:

1. A complete college transcript(s) — filed by the previous college or university at the applicant's request.
2. A clearance form—to be obtained from the Bloomsburg Office of Admissions and to be completed by the appropriate official at the previous college or university.
3. A letter explaining in detail the student's reasons for wishing to transfer to Bloomsburg State College.

These procedures must be completed by June 1 for admission to the fall semester, and by January 1 for admission to the spring semester.

The applications of students meeting the transfer requirements and completing the necessary transfer procedures will receive the same consideration as those of other new candidates, but the applicant must demonstrate better-than-average results on the Scholastic Aptitude Test of the College Entrance Examination Board and have personal characteristics pointing to success as a student at Bloomsburg.

READMISSION OF FORMER STUDENTS

Students who have attended Bloomsburg State College and have withdrawn for acceptable reasons may request readmission by writing directly to the Admissions Office for an Application for Readmission. Any student who has interrupted his normal progress of studies (has failed to complete either Fall or Spring Semester),

and wishes to re-enroll for a subsequent semester, must request re-admission before the deadlines listed below.

All those seeking readmission who have attended other colleges or universities since leaving Bloomsburg must send a complete transcript to the Director of Admissions at Bloomsburg.

All readmission applications must be filed not later than June 1 for the fall semester or January 1 for the spring semester.

EVALUATION OF CREDITS

All evaluations are made by the Dean of Instruction *after* the student has been admitted and are subject to change according to any revisions made in the requirements for graduation.

Courses to be transferred must have been completed in an accredited college or university, must carry a "C" or better grade, must be within the general framework of the student's proposed curriculum at Bloomsburg and must be comparable in content and in scope to courses offered at Bloomsburg State College.

No student may obtain a Bachelor of Science or Bachelor of Arts degree at Bloomsburg without a minimum residence of one year in the curriculum in which the student intends to graduate.

Correspondence courses are not offered or accepted by Bloomsburg State College.

All evaluations are tentative until a student has satisfactorily completed at least one full semester at Bloomsburg.

Present Bloomsburg students desiring to take work at any other institution must make written application to the Dean of Instruction for approval in advance, otherwise credits may not be accepted.

OPPORTUNITIES FOR VETERANS

The educational opportunities for Veterans authorized by Public Law 90-77 (Veterans Pension and Readjustment Assistance Act of 1967), and, in special cases Public Law 87-815, are available. Veterans of at least 281 days of continuous active duty any part of which occurred after January 31, 1955 or who were released from active duty after January 31, 1955 for a service connected disability, may use their eligibility for educational benefits. The college cooperates with the Veterans' Administration in offering the regular degree curriculums in the arts and sciences and to those desiring to teach in the fields of elementary, secondary, business, or special education.

Graduates of approved four year high schools are admitted to these educational programs upon application, in conformity with the established entrance requirements.

Veterans who are not graduates of four-year high schools may be admitted to the college under certain provisions as set forth in Bulletin I, *The Pennsylvania Plan for Evaluation of Secondary Credentials, for Examinations and for the Issuance of the High School Equivalent Diploma under Act Number 212, Approved May 15, 1945*, issued by the Department of Public Instruction, September 7, 1945. Veterans who desire information should contact the Director of Admissions to determine whether or not they are eligible for admission under this plan.

To qualify for educational benefits under the G. I. Bill of Rights, all Veterans are required to present a *Certificate for Education and Training*, secured from the nearest Regional Veterans Administration Office, at time of original registration.

The college does not accept credits for courses taken under the United States Armed Forces Institute Program, but credits earned in residence or in extension work at accredited colleges or universities will be evaluated for transfer by the Dean of Instruction. All evaluations are tentative until the student has been in residence for one semester.

ENROLLMENT TRENDS

Number of Different Students

	1963	1965	1967
Regular Students	2047	2454	3110
Part-time Students	129	200	260
Summer Session Students			
No. of Different Students	1475	1843	2118
Total Enrollment	(2390)	(2756)	(3389)
	—	—	—
Totals	3651	4497	5488

Adjusted Enrollment on Full-Time Basis

Regular Students	2047	2454	3110
Part-time Students	46	67	87
Summer Session Students	631	777	982
	—	—	—
Totals	2724	3298	4179



FEES AND FINANCIAL AID

The official expenses paid by students attending Bloomsburg State College are described in the following order: fees, deposits, refunds, miscellaneous expenses. A brief discussion of the financial aid programs available at Bloomsburg closes this chapter. This section of the catalogue is alphabetically and numerically divided for easy reference.

A. UNIFORM FEES

I. COMMUNITY ACTIVITIES FEE

This fee covers the cost of student activities in athletics, lectures, entertainments, student publications, organizations, et cetera. It amounts to \$25 a semester. Students taking extension courses, or regular session students taking less than eleven credit hours, may secure the benefits of the Community Activities Program by the payment of the fee.

II. BASIC FEES

1. Semester of eighteen weeks

(a) Students in each curriculum are charged the following fees. These fees were set by the Board of Trustees as provided in Section #2008 of the School Laws of Pennsylvania.

	<i>Regular</i>	<i>Special</i>	<i>Totals</i>
Elementary Education	\$175	(none)	\$175
Secondary Education	175	(none)	175
Business Education	175	\$12	187
Business Administration	175	(none)	175
Special Education	175	\$10	185
Arts And Sciences	175	(none)	175

(b) Students taking eleven or less credit hours shall pay at the rate of \$15 per credit hour; students taking twelve or more credit hours shall pay the regular basic fees; basic fees for special curriculums shall be prorated on the basis of a twelve or more credit hour load.

(c) Students taking extension courses shall pay at the rate of \$15 per credit hour, provided that the regular fees for special curriculums shall be prorated on the basis of a twelve credit hour load.

2. *Summer Sessions*

(a) Students will be charged at the rate of \$15 per credit hour in Teacher Education, and \$15 per credit hour in Arts And Sciences; out-of-state students (see item VI for a definition of out-of-state) pay \$25 per credit hour. A minimum fee of \$45 will be charged for Pennsylvania students and \$75 for out-of-state students.

(b) Students registering late shall pay a Late Fee of \$10 which will not be credited to the basic fee charge.

(c) In addition to the above fees, students in the special curriculums will be required to pay a fee to cover the cost of materials, supplies, equipment, and special services used in the laboratories or clinics of the special curriculums.

Business Education Fee — \$2 per three-week session.

Special Education Fee — \$5 per three-week session.

(d) Students enrolled for periods of instruction differing from the schedule pay fees in addition on a pro rata basis of the schedule of fees provided for the regular three-weeks summer session.

III. HOUSING FEES

1. On-campus dormitory rates for students will be \$162 per one-half semester and \$54 for a three-weeks summer session. This includes rooms and meals.

(a) Students expecting to occupy dormitory rooms in September must pay \$162 (one-half of the housing fee for a semester) before August 15. The remainder, \$162, must be paid before November.

(b) For the purpose of meeting the requirements of those students who live off-campus but board at the college, the hous-

ing rates shall be divided as follows: \$8 for room and \$10 for table board.

2. The daily rate for transient meals and lodging is: breakfast — 65¢, lunch — 85¢, dinner — \$1.25, and room — \$1.50.

IV. DAMAGE FEES

Students shall be responsible for damages, breakage, loss, or delayed return of college property.

V. INFIRMARY FEE

After three days in the college infirmary, boarding students shall be charged an additional \$1 for each day in excess of that period.

Day students who may be admitted to the infirmary shall pay board at the rate of \$3 a day, starting with the first day. This charge includes the regular nurse and medical service, but does not include special nurse or special medical services.

VI. FEES FOR OUT-OF-STATE STUDENTS

Students whose legal residence is outside of the State of Pennsylvania are charged at the rate of \$25 per semester hour of credit. A more detailed definition of who is an out-of-state student may be obtained by writing to the college Business Office.

If out-of-state students are enrolled in a special curriculum, they shall not pay the special fees as found in II, 1-a, in addition to the regular fee of \$25 per semester hour of credit, as stated in the preceding paragraph.

VII. DEGREE FEE

A fee of \$5 shall be paid by each candidate for a degree to cover the cost of diploma.

VIII. RECORD OF TRANSCRIPT FEE

One dollar (\$1) shall be charged for the second and each subsequent transcript of records.

IX. DELINQUENT ACCOUNTS

No student shall be enrolled, graduated, or receive a transcript of his record until all previous charges have been paid.

X. FEE FOR LATE REGISTRATION AND/OR COURSE CHANGE

Each student completing registration or requesting a change of course or courses after the date officially set for registration may be

required to pay a late registration or change of registration fee of \$10.

XI. SCHEDULE CHANGE FEE

A \$2 fee for students who, once they have conferred with the scheduling officer and have decided on their schedules, change their class schedules for personal or other considerations.

XII. SPECIAL CLINICAL SERVICES

1. Initial screening — diagnostic evaluation of reading skills which includes selected standardized reading tests, Lavell Hand-Eye Co-Ordination Test, and tele-binocular examination — \$15.
2. Reading Clinic Services twice a week per semester — \$45.
3. Six-week Summer Session (not to exceed one hour daily) — \$45.
4. Parent conference (per session) — \$5.

B. DEPOSITS

(Subject to change without notice)

An Application Fee of \$10, payable to the Commonwealth, shall be made by all applicants; this amount shall be paid when the student requests registration. It is not repayable.

When a student is approved for admission to the college, the following fee must be paid:

1. An Advance Registration Fee of twenty-five dollars (\$25). This fee is payable to the *Commonwealth of Pennsylvania*, and is credited to basic fees. It is not refundable.
2. A Community Activities Fee of fifty dollars (\$50). This fee is payable to *Community Activities*, and represents the Community Activities Fee for the year.

Students who were not in attendance in a prior semester, when readmitted to college, are required to pay the Advance Registration Fee and the Community Activities Fee.

Returning students shall pay a deposit of \$50, payable to Community Activities, in advance of their registration.

If any fees other than the Activities Fees are paid by bank drafts, post office orders, or checks, they must be made out for the exact amount which is being paid, and drawn payable to the order of the Commonwealth of Pennsylvania. All post office orders pay-

ing such fees must be drawn on the Post Office at Harrisburg, Pennsylvania. If the Activities Fee is not paid in cash, a separate order must be drawn payable to *Community Activities*. Post office orders for these fees must be drawn on the Post Office at Bloomsburg.

Any other inquiries relating to fees should be addressed to Mr. Paul G. Martin, Business Manager, Bloomsburg State College, Bloomsburg, Pennsylvania 17815.

NO OTHER FEES OR DEPOSITS, OTHER THAN AS SPECIFIED ABOVE, MAY BE CHARGED BY A STATE COLLEGE.

C. SUMMARY OF EXPENSES

(Subject to Change without Notice)

The cost of one semester for students living at

	<i>Home</i>	<i>College</i>
Basic Fee	\$175	\$175
Housing Fee (Board and Room)	(none)	324
Community Activities Fee	25	25
Books and Supplies (Estimated)	75	75
Total	<u>\$275</u>	<u>\$599</u>

Business students pay \$12 additional.

Special Education students pay \$10 additional.

Out-of-state students pay \$25 per semester hour of credit.

D. REFUND AND REPAYMENT POLICY

I. THE APPLICATION FEE will not be refunded for any reason whatsoever.

II. THE ADVANCE REGISTRATION FEE of \$25 will not be refunded for any reason whatsoever.

III. THE COMMUNITY ACTIVITIES FEE

1. *Repayment policy* — All requests for repayment of the Community Activities Fee must be in writing in the Office of the Comptroller of Community Activities before September 1, if the repayment involves the following college year, or February 1, if only the second semester is involved.

(a) Freshmen and/or New Incoming Students

(1) A repayment of \$50 will be granted to Freshmen or new incoming students who have had the offer of admis-

sion withdrawn by the college, have been inducted into the Armed Forces, or prevented from enrollment because of illness as certified by a physician. This is not an automatic policy and persons so affected must make written application to the Comptroller of Community Activities before September 1.

(2) If a Freshman or other new incoming student decides not to come to Bloomsburg for reasons of his own, he will be granted a repayment of \$25 if he makes written application to the Comptroller of Community Activities before September 1.

(b) Any student who has completed at least one semester at Bloomsburg State College and paid the following year's Community Activities Fee in advance and then decides not to return to Bloomsburg will receive a repayment of the full \$50 if written request is received by September 1, or \$25 for the second semester if written request is received by February 1.

2. *Refund policy* — Students who, once having begun classes in the fall, do not complete the school year:

(a) Any student temporarily suspended, indefinitely suspended, or dismissed for academic failure during the college year will not receive a refund of any portion of the fee for the semester so involved.

(b) If a student voluntarily withdraws from the college before the first nine week period ends, in the first semester, he may receive a refund of \$12.50 for the second nine weeks plus \$25 for the second semester or a total of \$37.50, assuming written application is made to the Comptroller before the end of the first semester.

IV. OTHER FEES will not be repaid except for personal illness or for such other reasons as may be approved by the Board of Trustees (see below).

1. Repayment will not be made to students who are temporarily suspended, indefinitely suspended, dismissed, or who voluntarily withdraw from college for any cause whatsoever.

2. Repayment may be made in the case of personal illness which is certified to by an attending physician or for other such reasons as may be approved by the Board of Trustees for the amount of the

housing and contingent fees paid by the student for that part of the semester which the student does not spend in the college.

E. MISCELLANEOUS EXPENSES

At the time of application new students are furnished with a summary of estimated expenses for the current college year. The payment of all fees is due as directed by the Business Office. The college reserves the right to withhold all information regarding the record of any student who is in arrears in the payment of fees or other charges, including student loans. The college does not offer a time payment plan, and students living in college residence halls are required to pay one half of the semester housing fee before August 15; the remainder must be paid before November 1.

A billing statement of student accounts will be mailed prior to registration each semester. All accounts must be paid as directed by notice which accompanies the billing statement. Failure to comply with this requirement will eliminate a student from registration.

KEYS

Each student secures a room key or locker key for one dollar. This deposit is refunded when the key or lock is returned.

BAGGAGE

Incoming baggage should be clearly marked with the owner's name and "Bloomsburg State College, Bloomsburg, Pennsylvania."

GUESTS

Arrangements for room guests at residence halls must be approved by the Dean of Women or the Dean of Men. The guest rates are as follows: breakfast, \$.65; luncheon, \$.85; dinner, \$1.25; room, \$1.50.

BOOKS AND SUPPLIES

Books and supplies are estimated at \$75 for each semester. Students may secure books and supplies at the College Store. This store is operated on a cash basis.

COLLEGE BANKING

The Community Activities Office, located in Waller Hall, Old Library, is prepared to handle deposits of cash for students in order that they may secure small amounts of money at convenient times.

NOTICE OF WITHDRAWAL

Students leaving the college *must* notify the Office of the Dean of Students and the Office of the Dean of Instruction of their withdrawal. Regular charges will be made until the notice of withdrawal is forwarded to the Business Office by the Dean of Instruction.

PHYSICAL EDUCATION UNIFORMS

Students must wear regulation uniforms for all physical education classes. These are to be purchased in the College Store.

LAUNDRY

The College has discontinued personal laundry service with the exception of bed linens which are supplied by the college. Coin-operated washers and dryers are available in college dormitories and in the community. Commercial laundry service is available in the town of Bloomsburg.

STUDENT RESIDENCE

Students not living at home and not working in homes approved by the college, *must live in the dormitories if rooms are available*. They must not leave dormitory rooms vacant before the end of the semester.

RESIDENCE ON CAMPUS

Each dormitory room is furnished with double-decker or single beds, mattresses and pillows, dressers, a study table, and chairs. Sheets, pillow cases, and white spreads are furnished for the beds.

Students must provide the following equipment:

1. A mattress pad for mattress 36 by 75 inches.
2. A cloth or plastic cover for pillow 21 by 27 inches.
3. Blankets or bed comforters.
4. Towels.
5. Metal wastebasket.
6. Study lamps (approved by college).

RESIDENT STUDENTS LIVING OFF CAMPUS

In situations where dormitory housing may not be available, upon notification from the college, students are required to select off campus rental accommodations from lists of college inspected and approved rooms and apartments in the town of Bloomsburg.

Lists of approved off campus housing may be obtained from either the Dean of Men or the Dean of Women.

Each resident student living off campus is required to enter into a written agreement with his householder or landlord covering the period of proposed tenancy, using Student Housing Agreement forms provided by the college.

F. STUDENT FINANCIAL AID

The Director of Financial Aid is responsible for the administration of the student financial aid program at Bloomsburg State College.

All entering students are advised to file a Parents' Confidential Statement with the College Scholarship Service of Princeton, New Jersey, and to designate the Director of Financial Aid, Bloomsburg State College as the recipient of copies of the Parents' Confidential Statement. These forms may be obtained from high school guidance counselors or from the College Scholarship Service, Box 176, Princeton, New Jersey. A Parents' Confidential Statement is required of all entering students who wish to be considered for financial aid available through the college.

Financial aid opportunities fall into three categories; loans, student employment, and scholarships and grants. For up-to-date information and directions on our various financial aid programs, please consult *Student Financial Aid at Bloomsburg State College*, a brochure available from the Office of the Director of Financial Aid.

PLACEMENT

Until 1966 the term "placement" at Bloomsburg meant teacher placement. With the graduation of students from the Arts and Sciences Program Bloomsburg is also sending graduates into non-teaching fields in ever increasing numbers.

We are very proud of the record which our graduates have made. And the Placement Service has had its job made easier by this record. Many satisfied employers return each year to recruit new graduates. Most of the graduates to date have entered the field of teaching. The following tables indicate the success of the Placement Service.

Table I — How Many Teach?

Year	Education Graduates	Number Available for Teaching	Number Teaching	Percent Teaching
1963	395	381	344	90%
1965	475	450	423	92%
1967	510	474	442	93%

Table II gives an indication of how the average starting salaries for our teachers have changed over the same years referred to in Table I.

Table II — How Much Do They Earn?

Year	Beginning Teachers	Average Starting Salary	Range of Beginning Salaries
1963	344	\$4656	\$3600 - 8400
1965	423	4981	4200 - 5900
1967	405	5320	4500 - 6300

These figures indicate that beginning teachers from Bloomsburg State College are in great demand. The figures available for the Arts and Science graduates reflect comparable success in obtaining gainful employment. In this way Bloomsburg spells success.



STUDENT LIFE

The faculty and administration of Bloomsburg State College are well aware that a college education is more than just the pursuit of academic excellence. Education takes place not only in the classroom, but in all places where students interact. Campus life includes such things as residence hall and dining room experience (where a student can spend more than half of his time) in addition to the opportunity to participate in various social and cultural events in the extra-curricular activities program.

Consequently, a wide variety of activities and services have been developed to afford every student an opportunity to explore and fulfill his individual potential in an atmosphere of congeniality. It is hoped that in them each student will find a place for the expression of his talents so that he may better understand himself and serve his fellow students.

Guided by this hope, the members of the Dean of Students staff focus their attention on the needs of the individual as well as the entire community with the intention of assisting young men and women to more fully develop as they progress toward their various goals.

Although the Dean of Students, the Deans of Men and Women, and their respective staffs are responsible for maintaining an environment which emphasizes integrity and consideration of others, their successes are largely determined by the extent of student participation and cooperation. In the final analysis it is the students who determine the quality of student life and develop the moral fiber of the institution.

HOUSING

Housing assignments are made for men and women through the offices of the Dean of Men and Women respectively. New students receive room assignments based on their date of acceptance at Bloomsburg. All applications or requests for college approved housing must go through the Dean of Men or Women's office. There are no private agents involved in housing.

The college reserves the right to assign rooms and roommates as it deems appropriate. All students housed on campus eat in the College Commons. There are approximately 800 women and 900 men in residence on the campus. Some Freshmen women are housed in college approved residences in the community, all other Freshmen reside on campus.

RESIDENCE HALLS

At Bloomsburg State College a variety of living arrangements are available. Study rooms and "quiet hours" in each residence hall provide an atmosphere for independent study while recreation rooms and television lounges afford opportunities for relaxation and enjoyment.

If residence hall vacancies occur after assignments have been made, commuters will receive preference over off-campus residents in filling them. Commuters may place their names on a priority list in the Dean of Men's or Dean of Women's Office for residence hall housing. As vacancies occur, commuters will be assigned by the respective deans.

It must be understood that these commuter assignments will be temporary and are in effect for only the remainder of the academic year at which time the person assigned to the dormitory room will return to commuter status.

This rule does not apply under extreme emergencies, extenuating circumstances, or during summer sessions.

Each hall is staffed with a Dean or Assistant Dean, a Head Resident and student Resident Advisors. The Head Residents are experienced adults who work with the Deans in overseeing the administration of the hall. Resident Advisors are carefully selected and screened upperclassmen assigned to live with and help counsel small groups of students. They are under the direct supervision of the Dean of Men and Women and play an important role in the establishment of a rapport that contributes to the student's general welfare.

The residence halls have their own governing bodies which are responsible for establishing, implementing and enforcing regulations in conjunction with the Dean of Students staff.

OFF CAMPUS HOUSING

The college utilizes some private residences in the Bloomsburg area in which a limited number of undergraduate students are housed. Each of these residences is approved for student housing by the Pennsylvania Department of Labor and Industry.

Students living in these college approved residences are held responsible to the college in the same manner as other resident students. A member of the Dean of Men and Women's staff supervises and periodically visits these residences.

COLLEGE INFIRMARY

Nurses are on duty 24 hours a day in the college Infirmary. They give first aid, make appointments with area doctors for students, and supply medication for colds, sore throats, and minor ailments. Students, who because of an illness can not remain in their residence halls, may stay in the Infirmary over night.

COUNSELING SERVICES

The Counseling Center offers professional counseling regarding educational, vocational, personal, social, and emotional problems. It is located on the second floor of Waller Hall, room 210, and its services are available at no charge to all regularly enrolled students at Bloomsburg.

Those in need of counseling services are not just the marginal or immature students. Frequently the exceptionally able and conscientious students reap the benefits of professional help from counseling.

The content of counseling interviews is confidential.

For students who exhibit need of psychiatric evaluation and/or therapy, the Counseling Center maintains a consultive service with a psychiatrist. Appointments for this service may be obtained at the Center or through the Dean of Students Office.

COMMUNITY GOVERNMENT ASSOCIATION

The Community Government Association cooperates with the administration in promoting personal and group responsibility in regulating all student affairs.

The College Council, which meets the second and fourth Monday of every month, acts as the executive board of the Community Government Association. The Presidents of the following groups automatically become members of the council: Association of Resident Women; Day Women's Association; Day Men's Association; Men Resident's Association; Senior, Junior, Sophomore, and Freshman Classes; Editor of *The Maroon and Gold*. The College Council administers the affairs of the association and formulates its policies.

ASSOCIATION OF RESIDENT WOMEN

The Association of Resident Women consists of the women living in the three female residence halls on campus, the freshmen in downtown houses, and the senior women in Bloomsburg apartments. Its purpose is one of initiating and carrying on cooperative government among the resident women as well as encouraging high standards of social and academic achievement.

DAY WOMEN'S ASSOCIATION

The Day Women's Association is an organization of commuters not living in the college residence halls or college housing in the town of Bloomsburg. The governing body is the Official Board consisting of a President and Vice-President elected by the entire association, and two representatives from each class. Its purpose is to promote the general welfare of the day women and to cooperate with the other student organizations in matters affecting the general welfare of the institution.

DAY MEN'S ASSOCIATION

The Day Men's Association is an organization of men who commute from their homes to the college. The Governing Board consists of a President, Vice-President, Secretary, and Treasurer. The association carries on a varied program of activities for its own welfare and for the benefit of the college community.

MEN RESIDENT'S ASSOCIATION

The Men Resident's Association is the governing body for resident men students including men living in rented accommodations in the town of Bloomsburg as well as those living in campus residence halls. Its administrative body is composed of a President, Vice-President, Secretary, and Treasurer. By means of this organization, the men cooperate with the administration in fostering personal and group responsibilities.

EXTRA-CURRICULAR ACTIVITIES

All students are required to take part in one extra-curricular activity one semester each year. The extra-curricular activities during the past year included the following:

AMATEUR RADIO CLUB

The Bloomsburg State College Amateur Radio Club is an organization composed of students interested in the art of Amateur Radio Communications. Requirements for admission are an interest in "Ham Radio Communication," a desire to be a "Ham" radio operator, and a satisfactory standing in the college.

AMERICAN CHEMICAL SOCIETY

The American Chemical Society-Student Affiliate (Columbia Chapter) serves to make the student aware of the work of the chemist. It also serves to provide exchange of ideas by joint meetings and to see what is done on other campuses in this organization.

It provides current literature for the student by way of the official weekly organ of the society—*The Journal of Chemical and Engineering News*. Members of this society, upon graduation, are eligible to become members of the Senior Society. This organization also provides the student an opportunity to hear the top chemists in the field at some of their meetings.

ARCHAEOLOGY CLUB

The purpose of the BSC Archaeology Club is to combine the widespread interest in the hobby of collecting the Indian artifacts which abound in the Susquehanna Valley. All students and faculty are eligible for membership, provided they are willing to join the group in carefully conducted digging for scientific purposes.

The Club's main activity is to locate and systematically excavate Indian sites in the Bloomsburg area. Indoor meetings will be held during the winter months so that members may compare collections, discuss techniques, and come in contact with professional and advanced amateur archaeologists from neighboring archaeological societies and museums.

ATHENAEUM CLUB

The purpose of the Athenaeum Club is to provide all interested students with an opportunity to listen to the great musical classics. With regard to the actual selections to be played, ample consideration will be given to requests by members for excerpts that are relevant to their current course work in music.

B CLUB

B Club is the women's recreational organization on campus. The members of B Club plan, organize, and administer all the women's intramural-extramural activities for two purposes:

1. Providing an opportunity for all women students to participate in competitive sports.
2. Fostering activities which contribute to better use of leisure time.

Further information is obtainable in the *Women's Intramural-Extramural Handbook* or in Office 9 of Centennial Gym.

CHESS CLUB

The Chess Club provides students with an opportunity to learn to play chess and to improve their game. Beginners and experienced players are welcome. The Chess Club conducts regulation tournaments. All members are eligible to try out for the Chess Team which competes in the Eastern Pennsylvania College Chess League and a number of weekend tournaments. An important function of the Club is to train students how to run chess tournaments so they can fulfill this need in their own communities at recreation centers and YMCAs.

CIRCLE K

Circle K is a Kiwanis affiliated organization serving the College and Community. The purpose of this organization is to foster a spirit of cooperation among members of the club in serving the College and Community.

Membership is open to all male students in good standing on a first come, first served basis, until the membership capacity of the organization is reached.

CONCERT CHOIR

The Concert Choir is the mixed choral group of the college community. Members must attend rehearsals regularly and participate in all performances to retain membership. The calendar for the year includes concerts, tours, television, and possible recordings.

The Concert Choir also has two subsidiary groups — Madrigal Singers and Men's Glee Club. The Madrigal Singers are selected by the director, but the Men's Glee Club is open to all men interested in singing.

COUNCIL FOR EXCEPTIONAL CHILDREN

The Council for Exceptional Children is an organization whose main function is to improve educational opportunities for exceptional children. It contributes significantly to the professional background of persons who work with them and helps to coordinate various activities for the advancement of the cause.

Membership in the Alpha Chapter of the Council for Exceptional Children on campus is open to any student who is enrolled in the Division of Special Education, and others who are interested in developing their understanding of the problems of children and youth with exceptionalities. Members must attend meetings regularly and participate in the activities of the organization.

DRAMATIC CLUB (*"Bloomsburg Players"*)

This organization provides experience for all students who wish to learn theatre arts. Technical and business skills and a willingness to work as well as act are the only requirements. Casting and crew work are open to the entire student body. The club's activities include four major productions per year as well as workshop plays.

FORENSIC SOCIETY

The purpose of the Forensic Society is to encourage an interest in all types of forensic activities. Intercollegiate competition is promoted in: novice and varsity debate, discussion, oratorical contests, extemporaneous speaking contests, impromptu speaking, after-dinner speaking, oral interpretation festivals, and legislative assemblies. Participation in the speaker's bureau affords an opportunity to speak before local civic and community groups.

GERMAN CLUB

The German Club was established for the purpose of reinforcing student knowledge acquired in the classroom.

Attention is given to increasing appreciation of German cultural aspects. Membership is open to all students taking (or having taken) any course in German.

HARMONETTES

The Harmonettes comprise a group of women with interest in singing and developing musical skills. The musical selections may range from show tunes to the semi-classical.

The Harmonettes participate in the Christmas and Spring programs, assemblies and other special performances.

HUSKI CLUB

The purpose of the Huski Club is to provide an enjoyable activity for members of the faculty and student body. It is to promote leadership, introduce techniques of skiing and to cultivate an interest in the sport.

The requirements for membership include an interest in skiing and other winter sports.

INTERNATIONAL RELATIONS CLUB

The International Relations Club is an organization of students interested in current events and problems in the world today. The purpose of this club is to develop among its members an interest and a greater knowledge and understanding of national and international affairs.

Requirements for membership are regular attendance at meetings and participation in the club's programs.

LE CERCLE FRANCAIS

Le Cercle Francais, organized in 1961, welcomes any student who has a genuine interest in improving his facility in the French language and enlarging his appreciation of all aspects of French culture. Club activities include a French dinner, French films and slides, trips to productions by French theatrical groups, discussion, guest speakers, field trips and tutoring service.

LITERARY & FILM SOCIETY

Formerly the English Club, The Literary and Film Society is in its second year at BSC. It provides a series of more than a dozen acclaimed American and foreign films each year. The Society publishes *The Footnote*, a literary and film review, which is distributed to members at each film showing. Other projects have been discussion groups and poetry readings. Membership is open to all members of the college community.

MAROON AND GOLD BAND

The Maroon and Gold Band provides high quality musical and marching entertainment during the football season through its select marching unit. As a concert ensemble, it presents campus and area concerts of symphonic band repertoire.

Membership is open to those students having instrumental background in the band medium. Personnel is then screened on the basis of band preparation and experience, ability, technical skill and instrumentation needs.

Color Guard and Majorette units complement the Marching Band.

MATHEMATICS CLUB

A new organization, this group aims to stimulate an interest in mathematics beyond the classroom, and to acquaint members with the possibilities of using mathematics in their future careers. All students who have completed a calculus course are eligible for membership.

PHI BETA LAMBDA

Phi Beta Lambda is an organization of students of the Business Education Department. The aims of this club are: to develop qualities of leadership; to promote interest in the organization of commercial clubs in high schools; to train teachers in the organizing of such clubs to encourage scholarship through contests; to serve needs of the Department of Business Education at Bloomsburg State College; to furnish means of gaining contact with other schools and associations; to become conversant with modern business methods and systems; to encourage social contact; and to develop promptness and the ability to accept responsibility. All business students are eligible for this club. NOTE: At least two semesters of membership in good standing are required for admission to Pi Omega Pi, the business fraternity.

PHILOSOPHY CLUB

The Philosophy Club provides a forum for the exchange of ideas in problem areas of concern to all men. Its aim is to encourage critical thinking and reflection with respect to problems in the areas of values, morality, belief and knowledge.

PHYSICS CLUB

"The purpose of the organization shall be the advancement and diffusion of knowledge of the science of physics and its application to human welfare," quoted from the Constitution of the BSC Student Section of the American Institute of physics.

Membership is open to all students who are taking a course in Physics.

SCIENCE CLUB

The Science Club consists of members of the student body who are interested in the biological and physical sciences. The purposes of this organization are to promote a general interest in all fields of science and to create a better understanding of science. Member-

ship requirements consist of regular attendance and participation in the club programs.

At the end of each college year, the club goes on an all-day field trip to a place of scientific interest.

SPANISH CLUB

The Spanish Club has been organized for the purpose of developing the use of conversational Spanish. The club's program is designed to develop the appreciation of such aspects of Spanish culture as art, music, literature, etc. Membership is open to those students with a sincere interest in improving their personal abilities in the Spanish language.

STUDENT PSEA

Organized to acquaint students with different aspects of teaching, the Oscar Bakeless Chapter of the Student PSEA intends to promote professional interests and activities, to foster professional educational standards, and to illuminate some complexities of teacher-student relationships. All students are eligible for membership. This chapter sponsors various projects for the benefit of the general college community.

STUDIO BAND

The Studio Band is a stage band composed of College Community members. Members must attend rehearsals regularly and participate in all performances to retain membership. The calendar for the year includes concert tours, campus performances, television and possible recordings.

VARSITY CLUB

The Varsity Club is composed of men who have won a letter in any authorized intercollegiate sport. All students who have received such an award are eligible for membership. Founded upon a basis of athletic ability, the club's purposes are to advance ideals of sportsmanship and scholarship, to encourage brotherhood and fellowship among men of similar interests, and to promote an interest in intercollegiate athletics and to maintain pleasant athletic relationships with other educational institutions.

VETERANS ASSOCIATION

The purpose of the Veterans Association is to give veterans an opportunity to share fellowship and pursue common interest by acting as a voice for veterans in the college community and keeping veterans informed of their government benefits and responsibility.

PUBLICATIONS

MAROON AND GOLD

Published twice weekly by a student staff, the college paper keeps the student body informed of current college happenings.

OBITER

The *Obiter*, published each year by the college community, contains a review of the activities of the year, with pictures of the campus, students, organizations, fraternities, sports and academic aspects of the college.

OLYMPIAN

Students publish this literary magazine. In this publication contributors will find an outlet for literary expression in the fields of poetry and prose. Unpublished work of nationally-known writers is sometimes included as a special feature.

PILOT

This is an annual handbook, edited jointly by a student editor and the Dean of Students, which informs students about college life at Bloomsburg. It serves as a guide to freshmen and also as an information booklet for upper classmen.

PLACEMENT BROCHURE

An annual publication of the Placement Service, this brochure contains photos of graduating seniors, plus personal data of interest to employing officers.

HONORARY AND PROFESSIONAL FRATERNITIES

Many national honorary and professional fraternities which foster and advance educational ideals through scholarship, social efficiency, and moral development have chapters on the Bloomsburg campus. Among them are: KAPPA DELTA PI (Coeducational Honor Society in Education), PHI SIGMA PI (Professional Education Fraternity for Men), ALPHA PSI OMEGA (Coeducational Dramatic Fraternity), GAMMA THETA UPSILON (Coeducational Geography Fraternity), PHI BETA LAMBDA (Coeducational Business Fraternity), PI KAPPA DELTA (Coeducational Debate Fraternity), PI OMEGA PI (National Business Teacher Education Honor Society), SIGMA ALPHA ETA (Honor Speech and Hearing Fraternity), SIGMA

TAU DELTA (Coeducational English Fraternity), PHI ALPHA THETA (National Honor Society in History), and DELTA PHI ALPHA (Co-educational Honor Society in German).

SOCIAL FRATERNITIES

The Interfraternity Council serves as the governing body of the seven social fraternities on campus. It is composed of representatives from the various social fraternities, and is responsible for rushing and pledging regulations and activities, coordination of programs and events for the various fraternities, and investigation of violations of the rules devised by the IFC and the College. Membership includes the following:

DELTA OMEGA CHI	DELTA PI
PHI SIGMA XI	PI EPSILON CHI
PI KAPPA EPSILON	SIGMA IOTA OMEGA
BETA SIGMA DELTA	

The Inter-Sorority Council is the governing body for all member sororities. The purposes of the Inter-Sorority Council include coordination of rushing and pledging activities, promotion of scholarship, and the enhancement of friendships and social relations between sororities and individual women. Membership includes the following:

CHI SIGMA RHO	DELTA EPSILON BETA
TAU SIGMA PI	THETA GAMMA PHI

SERVICE FRATERNITIES AND SORORITIES

ALPHA PHI OMEGA has as its purpose "to assemble college men in the fellowship of the Scout Oath and Law, to develop Leadership, to promote Friendship, and to provide Service to humanity." Membership is open to all college men regularly enrolled in the institution who have been affiliated with Scouting nationally or in their own country.

LAMBDA ALPHA MU is based on the high ideals of service to the campus, community, and world. The purpose of the sorority is to assemble college women in the spirit of service to humanity. Membership is open to Sophomore and Junior women having at least a 2.0 cumulative average.

OFF CAMPUS STUDENTS

It is expected that resident students living off campus will conduct themselves with the same decorum expected of other resident students and that they will comply with the house rules and regulations of their householders or landlords.

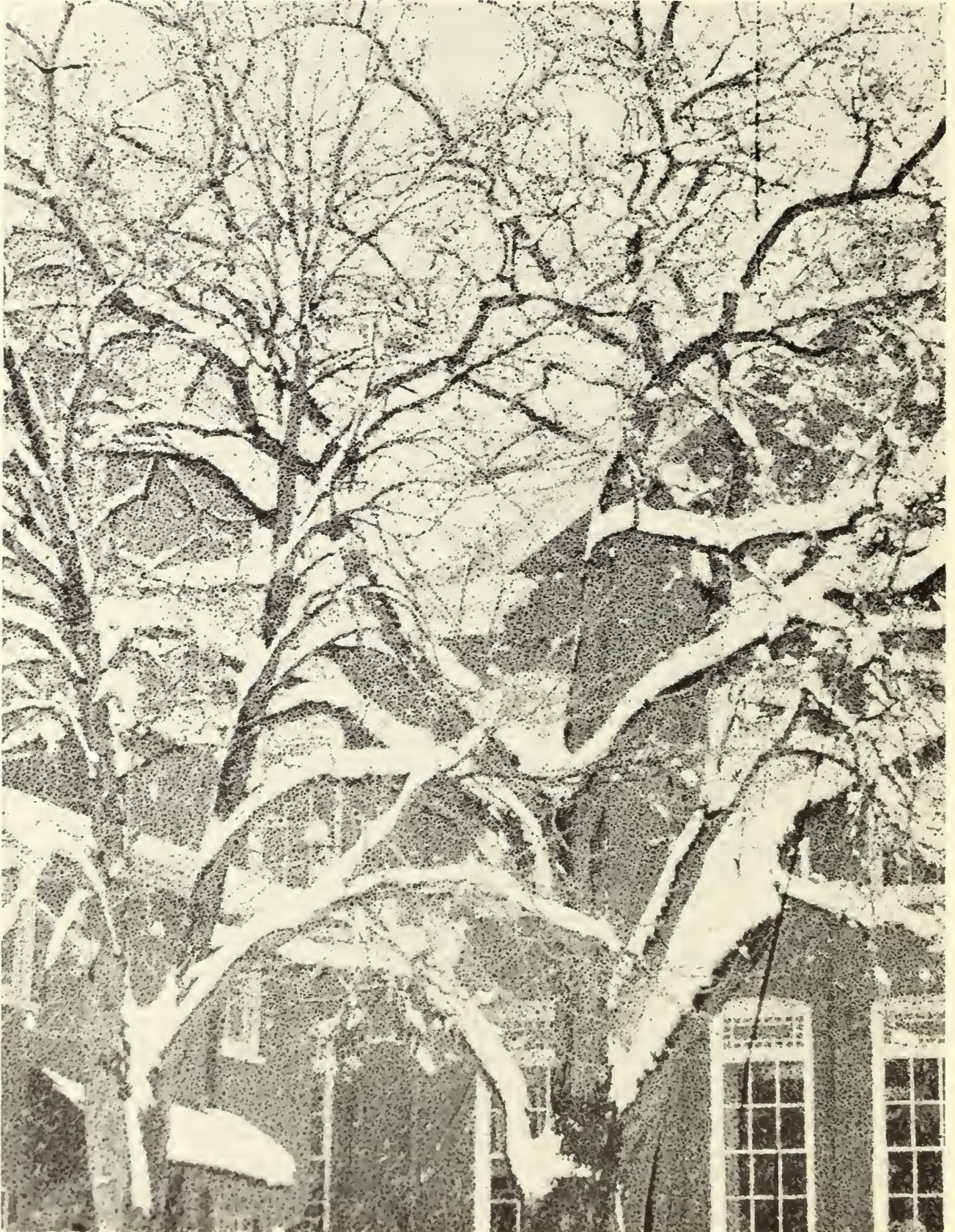
An Assistant Dean of Men and an Assistant Dean of Women supervise the housing of resident students living off campus.

Commuting (Day) Students

Day room facilities are provided for women and men students who do not live on the campus or in off campus rental housing approved for resident students.

The women's day room is located in the lower level of the Curriculum Materials Center in the Benjamin Franklin building. Comfortable lounge furniture provides for rest and relaxation. Locker space and facilities for study are also available.

The men's day rooms are on the basement floor of Science Hall. The spacious lounge has facilities for study, recreation, lunch, and storage.



ACADEMIC REGULATIONS

PRIOR TO THE BEGINNING of each semester, the student prepares a class schedule with the help of a faculty advisor. After this schedule has been approved by the divisional director involved, it will be printed in the Data Processing Center and handed to the student at registration. Any changes in this schedule must be approved by the director of the curriculum in which the student is enrolled. At the end of each semester, members of the faculty record grades on course cards, which become the basis of the permanent record of each student.

CLASS ATTENDANCE

A student is expected to attend punctually every class and laboratory for which he is registered. It is the responsibility of the student to hand to the instructor an absence report form at the first class meeting following the absence.

If the absence report is approved, the student may make up the work he has missed during his absence. However, the effect of absence upon course requirements is determined by the instructor.

Absence report forms may be purchased at the College Store. It is advisable to have absence report blanks on hand.

CHANGE OF SCHEDULE

Adjustments in class schedules may be made during the first ten days of any semester by the Divisional Directors with the approval of the Dean of Instruction. A fee of \$2 will be charged for each individual schedule change.

After the second week, students dropping a course from their schedule will receive an "E" on their permanent record card in the Office of the Dean of Instruction if they are not passing at the time the course is dropped. If passing, the grade of "W" will be given.

Students wishing to drop a course from their schedules must receive written approval of the instructor before presenting the request to the Dean of Instruction. All withdrawals must be approved by the Dean of Instruction. *Students are not permitted to withdraw from a course after nine weeks.*

TRANSFER OF DIVISION OF ENROLLMENT

In order to be eligible for transfer from one division to another, a student should have at least a 2.00 cumulative average (although for freshmen certain justifiable exceptions to this requirement may be made). The first step is for the student to bring a note of parental permission to the Director of the Division in which he is enrolled, which is to be attached to a special form for Approval of Divisional Transfer. On this special form the student must obtain the following signatures: (1) the signature of his current Divisional Director, (2) the signature of the Dean of Students (required only in the case of a student transferring from Business Administration or the Arts and Sciences to Teacher Education), (3) the signature of the Director of the Division to which the student is intending to transfer, (4) the signature of the Dean of Instruction. This form should be filed during the semester immediately preceding that in which the transfer is to take effect.

PROVISION FOR SUPERIOR STUDENTS

A student whose work for a semester averages 3.0 — “B,” or above may petition the Dean of Instruction for approval to schedule course work in addition to that normally scheduled for that semester (16 credit hours).

PROGRESS REPORTS AND RECORDS

For the purpose of reporting the progress of each student, each semester is divided into periods of nine weeks. During each period the instructor hands to the Dean of Instruction a special deficiency report at any time the student is not doing satisfactory work. At the end of twelve weeks a report of “D” or “E” grades is made to the parents of each student.

At the end of the semester final grades are reported, recorded upon the permanent progress card of each student, and filed. The report is then sent to the parents. Any parent not receiving such a report at the end of the semester should notify the Dean of Instruction so that a duplicate may be mailed.

GRADING SYSTEM

The system of grading used in this college and its interpretation is as follows: *A* — very high; *B* — high; *C* — average; *D* — low; *E* — failure involving repetition of the entire course. *W* — a withdrawal, approved by the Dean of Instruction while the student is passing the course. *Incomplete* — work not handed in, or material does not satisfy the instructor's standards or the course requirements.

QUALITY POINT SYSTEM

For each semester hour *A* carries 4 quality points.

For each semester hour *B* carries 3 quality points.

For each semester hour *C* carries 2 quality points.

For each semester hour *D* carries 1 quality point.

For each semester hour *E* carries 0 quality points.

A grade of *W* is not considered in computing quality points.

Incomplete is not considered in computing quality points.

To be graduated, a student must have a quality point average of not less than 2.0.

REMOVAL OF "INCOMPLETES"

Each instructor listing an incomplete at the end of a semester shall file with the Dean of Instruction a detailed statement of the steps to be taken by the student for the removal of such grade.

A printed form (blue) must be secured at the office of the Dean of Instruction to be used when an incomplete has been removed. It is the responsibility of the student to have this form signed by the instructor removing the incomplete, and to present it to the Dean of Instruction for recording.

If the grade "Incomplete" is not removed within one calendar year, the grade automatically becomes an E and the course must be repeated.

PREREQUISITE FOR STUDENT TEACHING

A student is eligible for assignment to student teaching if he has attained a quality point average of 2.0 in not less than 90 credit hours.

RESIDENCE REQUIRED FOR GRADUATION

The minimum period of residence at this college is one year or its equivalent. Former students certified for teaching by having completed two or three years of college work who are candidates

for the Bachelor of Science Degree in Education, must complete at least one half of the remaining work required for the degree in residence at Bloomsburg. Residence credit may be earned in the classes of a regular semester, in summer school, or in Saturday classes for teachers-in-service.

REQUIREMENTS FOR GRADUATION

The conferring of the degree of Bachelor of Science in Education, or any other degree which the Bloomsburg State College is authorized to grant, and the Application for the Pennsylvania Teaching Certificate require the following:

- 1 — Completion of 128 semester hours of credit in a specified undergraduate curriculum, or 30 hours of graduate credit in courses required for the degree of Master of Education.
- 2 — All students must satisfactorily complete a minimum of five semester hours of Physical Education and Health.
- 3 — Emotional stability, as evidenced by active participation in college social and academic activities.
- 4 — Personality traits considered by the college to be adequate for a member of the teaching profession.
- 5 — High moral and ethical standards of conduct.

The college reserves the right to withhold the degree or the application for a certificate to teach in the Commonwealth of Pennsylvania if one or more of these conditions for graduation are not met.

All candidates for degrees are individually responsible for meeting all the requirements for graduation outlined above.

PHYSICAL EDUCATION REQUIREMENTS

All students are required by the College to complete a minimum of five semester hours of health and physical education to receive a degree*. Students should complete HPE 100 and HPE 101 during their first year at Bloomsburg State College.

* Students who have passed the age of thirty should consult with the Chairman of the Department of HPE in planning their physical education program.

Men with at least six months of active military service may enroll in one course in the #200 series and pass the swimming proficiency test (minimum).

All students enrolled in a Physical Education Activity Class must wear non-marking sneakers and regulation uniforms. These uniforms may be purchased in the College Bookstore.

Each student is given a swimming proficiency test. If the test is passed, the student may then elect an advanced section of Aquatics (HPE 151 or 152) or select an additional course from one of the #200 courses. If the test is failed, the student *must* enroll in Aquatics (HPE 150).

All students must elect one semester hour credit from the #200 series of courses. Students may elect two hours from this area if they have passed the swimming proficiency test. These courses may also be selected as elective hours by upper class students. If a student elects more than one course from the #200 series, subsequent courses must contain two *different* activities.

ACADEMIC PROBATION

At the end of each grading period a student who has a quality point average of less than 2.0 will be placed on probation until the next grading period. If at the end of that grading period he has not attained a 2.0 average, he may be given an opportunity to meet with a faculty committee composed of the director of his curricular division and a minimum of three instructors chosen by the divisional director.

The purpose of this kind of meeting is two-fold: (1) to enable the student to determine the cause of his apparent failure, (2) to enable the faculty committee to assess the professional interest and promise of the student, and to determine whether or not the student will be able to profit educationally by remaining in college. The action of any faculty committee is subject to the approval of the Dean of Instruction and the President of the College.

The privilege of meeting with a faculty committee will be extended to a student only one time during his attendance at the college unless extenuating circumstances should warrant a second conference.

CHANGES IN ACADEMIC POLICIES

Several important changes in the academic policies of Bloomsburg State College, which directly affected students who entered the college after September 1968, became effective during the second

semester of the college year 1968-1969. These changes, developed by the Faculty-Student Committee on Academic Affairs during the college year 1967-1968, have been approved by the administration.

One of the new regulations states that a student may not repeat a course in which he has earned a passing grade. Furthermore, during his undergraduate years a student may repeat only four (4) courses in which he has earned a grade of "E" (failing).

In order to provide greater opportunities for new students to achieve a quality point average of 2.0 or better, a freshman will be given two full semesters as well as a summer of study in order to achieve a cumulative quality point average of 2.0 or better by the time they have completed 64 credit hours (the mid-point of the degree program: $\frac{1}{2} \times 128$) in order to be allowed to continue.

A change in the method of computing quality point averages, applicable to students who began their college program in September 1968, has also been approved. Students will now be "charged" for all credits scheduled, including credits for courses repeated; the average will then be computed by dividing *all* credits scheduled into the quality points earned. Students, who were enrolled prior to September, 1968 will have their averages computed in the same manner as in past years.

PLACEMENT TESTS

Every new student entering Bloomsburg State College is required to take a battery of tests covering English, reading, social studies, science, mathematics, and contemporary affairs. The results of the tests are converted into percentiles, both local and national, and are projected on a graph called a profile. These profiles are available through the office of the Dean of Students. Every student is given an opportunity to review his profile with a professional counselor, noting the areas of his strength and weakness. He sees himself in relation to the group of students entering Bloomsburg State College, as well as to the national group of students entering liberal arts colleges and pre-professional schools.

TESTING PROGRAMS

In addition to the Placement Tests, the college may require each freshman to take such tests as the College Deans may advise. Information provided by the tests is issued in counseling students who encounter problems in their academic and social adjustment.

A battery of achievement tests may also be administered to all sophomore students to determine the student's academic progress and to provide information for further guidance. A careful study of each individual student by selected faculty members is recommended before the end of the sophomore year.

The college also administers the Graduate Record Examination to measure the academic achievement of the student, as well as the effectiveness of the instructional program. This battery of tests is given prior to the senior year and the student is responsible for paying the costs of the examination.

All candidates for undergraduate degrees at Bloomsburg State College are required to complete the following Graduate Record Examinations:

GRE APTITUDE TEST
GRE ADVANCED TEST

The Advanced Test shall be completed in the student's area of specialization or in a field related to his specialization.

The tests are administered three times a year during the semester or term in which the student is scheduled to complete his degree requirements. The payment of the examination fee of six (\$6) dollars is the responsibility of the student.

STUDENT TEACHING

AN OVERVIEW

Faculty and administration of Bloomsburg State College consider the student teaching assignment to be the culmination of four years of preprofessional education leading to teacher-certification. For this reason, an entire semester of the academic program for each student is reserved for student teaching. A student teaching assignment requires that the student spend the entire day from Monday through Friday in supervised educational activities in public schools, for the duration of one semester. Student teaching, including Professional Practicum, is offered for twelve semester hours of credit.

In order to orient student teachers more effectively to public school programs, the calendar of schools to which they are assigned is followed. However, the college calendar will determine opening and closing dates for student teaching assignments.

STUDENT TEACHING CENTERS

In meeting its responsibility for providing high quality graduates for the teaching profession, the college carefully selects student teaching centers and cooperating teachers. Students in Elementary, Secondary, and Business Education are assigned to conveniently located schools in the Commonwealth of Pennsylvania. Students in the Division of Special Education are assigned to the White Haven State School and the Selinsgrove State School and Hospital and to the public schools of Lycoming, Schuylkill, Chester, and Montgomery Counties through the offices of the superintendents of those counties. Student teachers are also assigned to the Harrisburg Cleft Palate Clinic.

As greater numbers of students are assigned to student teaching through increased enrollment, other centers will be developed. A student may be assigned to a school district or county for an entire semester, or he may be re-assigned in mid-semester to other school districts or counties.

PROGRAM OF GRADUATE STUDIES

Bloomsburg State College is authorized by the State Board of Education of the Commonwealth of Pennsylvania to offer a program of graduate studies in Biology, Business Education, Elementary Education, English, French, German, History, Reading, Social Studies (including Geography), Spanish, Special Education for the Mentally Retarded, Speech, and Communication Disorders.

Upon completion by a student of the requirements established by the Graduate Council of the college, the Master of Education or the Master of Arts Degree will be conferred. The program of graduate studies leading to the Master of Education Degree has as its primary purpose the increasing of the competency of professional personnel in the field of education, while the Master of Arts Degree is designed as the second step leading toward the traditional doctrine in a selected discipline.

Persons desiring to enroll in graduate courses must file an application for admission and meet the requirements established by the Graduate Council. Students wishing to earn the Master of Education or Master of Arts Degree must, in addition, request admission to candidacy for the degree.

The following fees* are applicable to the program of graduate studies:

Application Fee	\$10	
(Payable at time of application for admission to graduate courses. <i>Not refundable or applicable to graduate tuition.</i>)		
Graduate Tuition Fee	\$20	per sem. hr.
Out of State Fee	\$25	per sem. hr.
Activities Fee (summer term only)	\$ 3	per three-week session
	\$ 6	per six-week session
Graduation and Diploma Fee	\$10	
(Not including rental of cap, gown, and hood)		

Detailed information relating to the program is contained in the Graduate Studies Bulletin. Requests for this bulletin, for application forms, and for additional information concerning the program should be addressed to: Director of Graduate Studies, Bloomsburg State College, Bloomsburg, Pa. 17815.

SUMMER SESSIONS

The summer sessions are designed primarily to enable Pennsylvania teachers to advance professionally and to meet the certification standards approved by the State Board of Education. All of the courses offered will be on a college level, and will be of particular interest to the following:

- (1) Undergraduates qualifying for advanced standing or the removal of conditions.
- (2) Teachers-in-service qualifying for (a) advanced state certification, (b) the degree of Bachelor of Science in Education, and (c) the Permanent College Certificate.
- (3) College graduates qualifying for state certification through courses in education and student teaching.

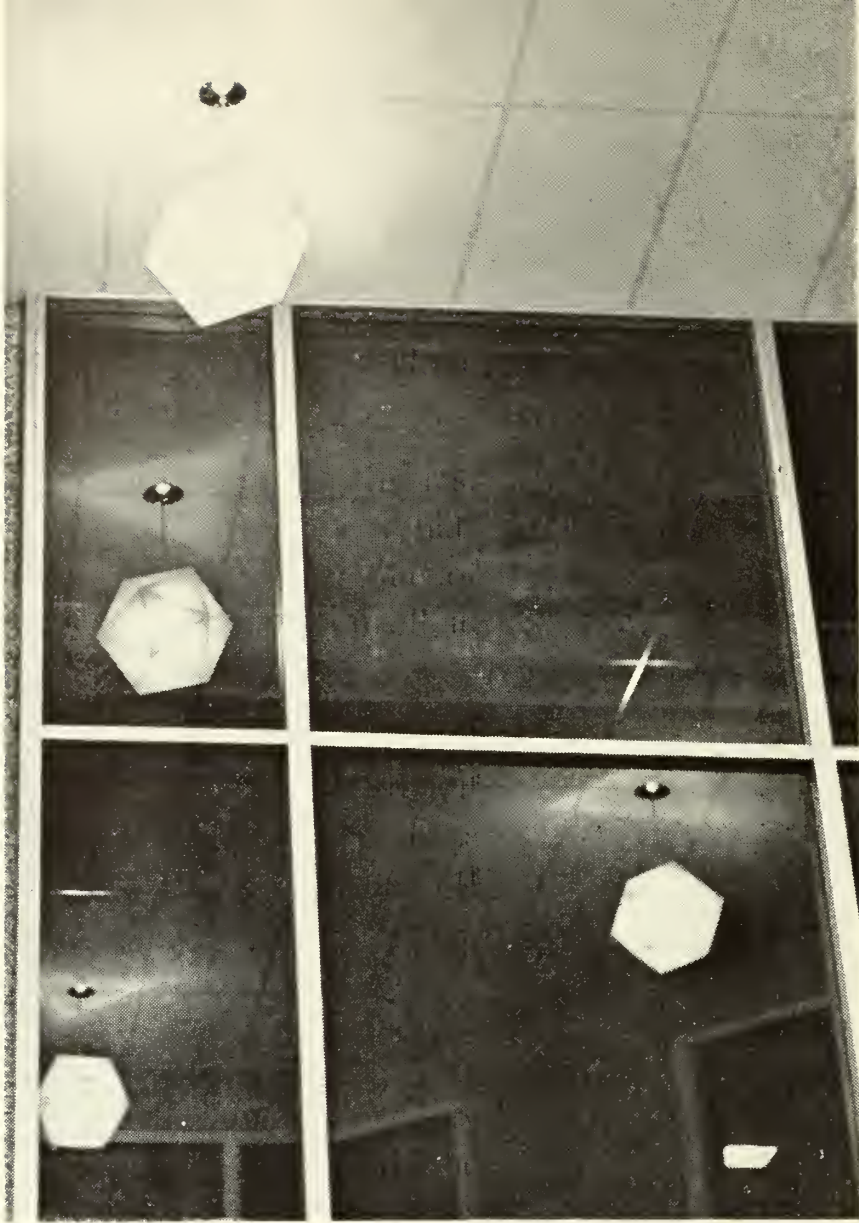
Students attending the summer sessions may schedule as many semester hours as there are weeks in the session.

* All fees are subject to change without notice.

Special opportunities will be provided during the summer sessions for persons certified to teach on the secondary level to work toward certification which will include teaching on the elementary level.

The enrollment in the summer session will be limited to teachers-in-service, presently-enrolled students of the college, and others who have been in attendance at an accredited college. Students from other colleges enrolling at Bloomsburg for the first time should present evidence of having attended another college and a written statement from their college certifying that they are in good academic standing.

A copy of the current summer session bulletin will be sent upon submission of a request addressed to the Registrar of the College.



COURSE DESCRIPTIONS

ART

- Art 101 — *Introduction to Art* 3 cr. hrs.
A consideration of the great works of art, past and present, with an analysis of the structure of art as determined by civilization, communication, and expression.
- Art 301 — *Children's Art* 3 cr. hrs.
An analysis of the art of children with the corresponding ways to stimulate the attitudes of discovery, communication, and invention at the various age levels.
- Art 311 — *American Art History* 3 cr. hrs.
A detailed study of the history of the visual arts in America.
- Art 321 — *European Art History* 3 cr. hrs.
A detailed study of the history of the visual arts on the European continent from the Greek era to the nineteenth century.
- Art 331 — *Oriental Art History* 3 cr. hrs.
A detailed study of the history of the visual arts in Japan, China, India, and the countries of the Near East.
- Art 341 — *History of Modern Art* 3 cr. hrs.
A detailed study of the contemporary movements in art from the nineteenth century to the present.
- Art 397 — *Drawing I* 3 cr. hrs.
The course will consist of a basic analysis and understanding of form, structure and personal expression in drawing.
- Art 398 — *Drawing II* 3 cr. hrs.
The course will emphasize experimentation with various media as well as development in composition and individuality in drawing. Prerequisite: Art 397.

- Art 399 — *Drawing III* 3 cr. hrs.
The course will develop individual creativity and ability in drawing, stressing what will become future personal involvement in art. Prerequisite: Art 398.
- Art 401 — *Painting I* 3 cr. hrs.
Introduction to form and color through studio experience.
- Art 402 — *Painting II* 3 cr. hrs.
Continued sensitive development toward a maturing style in painting. Prerequisite: Art 401.
- Art 403 — *Painting III* 3 cr. hrs.
Advanced work planned for individual needs. Prerequisite: Art 402.
- Art 404 — *Sculpture I* 3 cr. hrs.
Studio exploration of three-dimensional expression.
- Art 405 — *Sculpture II* 3 cr. hrs.
Continued sensitive development toward a maturing style in sculpture. Prerequisite: Art 404.
- Art 405 — *Sculpture III* 3 cr. hrs.
Advanced work planned for individual needs. Prerequisite: Art 405.
- Art 411 — *Ceramics I* 3 cr. hrs.
Introduction to ceramic processes and design.
- Art 412 — *Ceramics II* 3 cr. hrs.
Emphasis upon quality ceramic design, throwing on the wheel, experiments in decorative processes and mixing clays and glazes. Prerequisite: Art 411.
- Art 413 — *Ceramics III* 3 cr. hrs.
Advanced work planned for individual needs.
- Art 450 — *Art Education in the Elementary School* 3 cr. hrs.
Designed to explore the theories and techniques behind the use of art in the elementary school.
- Art 499 — *Visual Aesthetics* 3 cr. hrs.
Directed study of the "silent image" emphasizing artistic concern with environmental relationships.

BIOLOGY

Biol. 103 — *General Biology I* 3 cr. hrs.

Emphasizes major principles and theories in the structure and function of plants and animals at levels of organization and development from molecule to ecosystem. Class discussions and laboratory studies are included.

Biol. 104 — *General Biology II* 3 cr. hrs.

A study of the plant and animal phyla with emphasis on their role to man. An ecological evolutionary development of biology designed to acquaint the non-science student with an appreciation of living organisms. Prerequisite: Biol. 103.

Biol. 210 — *Invertebrate Zoology* 3 cr. hrs.

The principal phyla of invertebrate animals are studied in relation to their anatomy, classification, and their role in the ecosystems in which they participate. A course for biology majors. Prerequisite: Biol. 103.

Biol. 211 — *Vertebrate Zoology* 3 cr. hrs.

The biology of the vertebrate animal with emphasis in morphology, physiology, and development. Evolutionary and ecological aspects of each class will be covered. Laboratory work with living and preserved specimens will familiarize students with representative individuals of the major classes of this important group. Prerequisite: Biol. 103, 210.

Biol. 220 — *General Botany I* 3 cr. hrs.

General consideration of the plant kingdom with emphasis on plant anatomy, physiology, economic botany, and other related areas. Prerequisite: Biol. 103.

Biol. 221 — *General Botany II* 3 cr. hrs.

The plant kingdom showing the phylogenetic development and arrangement of the plants in the taxonomic system. Emphasis is placed upon life cycles of plants representing the various taxonomic levels. Prerequisite: Biol. 220.

Biol. 331 — *General Ecology* 3 cr. hrs.

Principles and concepts pertaining to energy flow succession patterns, limiting factors, habitat studies, and population studies at the species, interspecies, and community level. Prerequisites: Biol. 210, 220.

Biol. 341 — *Genetics* 3 cr. hrs.

The study of inheritance in living things. The practical application of genetic principles in animal breeding, in plant propagation, and in improvement of the human race is emphasized. Stress is placed upon the mathematical and molecular concepts of modern genetics. The course is fundamental for all biological students. Prerequisites: Biol. 103, Biol. 210 or 211, Biol. 220. Math. 116 is suggested but not required.

Biol. 351 — *Molecular Biology* 3 cr. hrs.

The integration of chemical and physical concepts applicable to the functional aspects of biological systems. Emphasized will be the interrelation between molecules and the organism. Prerequisites: Biol. 103, Chem. 111, or consent of the instructor.

Biol. 361 — *Microbiology* 3 cr. hrs.

The metabolism, cultivation, identification, and control of micro-organisms with emphasis on bacteria, viruses, and fungi. Consideration will be given to their distribution in nature and the importance of their beneficial activities as well as harmful effects on man. Prerequisite: Biol. 103 or consent of instructor.

Biol. 371 — *Embryology* 3 cr. hrs.

A study of animal reproduction and development with particular emphasis on the vertebrates. Laboratory work includes the study of the maturation of the germ cells and the early development of the starfish, frog, and the chick. Prerequisites: Biol. 210 or consent of instructor.

Biol. 381 — *Vertebrate Physiology* 3 cr. hrs.

The functions of tissues, organs, and systems and their chemical integration. Emphasis will be on mammalian circulation, respiration, digestion, metabolism, renal function, reproduction, and endocrines. Prerequisites: Biol. 211, Chem. 111, or consent of instructor.

Biol. 411 — *Systematic Entomology* 3 cr. hrs.

A field course covering collection and identification of larval and adult insects. Attention is given to mounting and preparing insects for study. Prerequisites: Biol. 103 and 104 or Biol. 210.

Biol. 413 — *Ornithology* 3 cr. hrs.

The basic biology of birds with emphasis on their ecology and identification in the field. Saturday morning field trips. Prerequisite: one year of biology or consent of the instructor.

Biol. 414 — *Ichthyology* 3 cr. hrs.

Field and laboratory study of the fishes of the streams and rivers of this area including their collection, taxonomy, anatomy, and ecological methods. Prerequisite: Biol. 482. Recommended: Biol. 331.

Biol. 415 — *Biology of the Arthropods* 3 cr. hrs.

A study of the prominent arthropod classes with special emphasis on Insecta. Studies of functions, morphology, histology, embryology, and metamorphosis. Laboratory will stress techniques of dissection, preservation of tissues, and experimentation with live insects. Prerequisites: Biol. 210 and Biol. 416.

Biol. 416 — *Parasitology* 3 cr. hrs.

A study of parasites in relation to human disease. Epidemiology of parasitic diseases; their prevention and treatment. Prerequisites: Biol. 210 or 211.

Biol. 417 — *Field Zoology* 3 cr. hrs.

Animals observed and classified in the field. Emphasis is on the natural history of terrestrial vertebrates. The study of man's effect upon and management of wild vertebrates and their cultural and economic value. Prerequisite: Two years of biology or consent of the instructor.

Biol. 420 — *Plant Physiology* 3 cr. hrs.

The study of how plants function: the processes involved in plant growth and behavior. Prerequisites: Biol. 212, Chem. 111. Recommended: Biol. 421, Chem. 331.

Biol. 421 — *Plant Anatomy* 3 cr. hrs.

The cells, tissues, and structural features of vascular plants are studied with emphasis on origin, development, and function. Fundamental concepts concerning gross, histological, and physiological aspects are correlated in terms of growth, patterns of differentiation, and maturation of plant parts. Two hours of lecture and three hours of laboratory per week. Prerequisite: Biol. 220 or permission of instructor.

Biol. 422 — *Field Botany* 3 cr. hrs.

A study of the Flora found in Columbia County and vicinity. Emphasis is upon identification of plants in the field and on the use of taxonomic keys. A variety of habitats are explored on field trips. Prerequisite: Biol. 220.

Biol. 432 — *Fresh Water Biology* 3 cr. hrs.

An advanced course in the biology of streams, lakes, and ponds and their relationship to the health and welfare of the country. Prerequisites: Biol. 210, 220, or permission of the instructor.

Biol. 433 — *Plant Ecology* 3 cr. hrs.

The study of plants and their interactions with the environment. Emphasis is placed on populations and communities and their respective successions. Practical experience is gained during field trips. Prerequisite: Biol. 331.

Biol. 441 — *Evolution* 3 cr. hrs.

A study of the mechanics of evolution; the nature and behavior of genes, factors affecting gene frequencies, environmental factors, speciation mechanisms, and population analysis. Prerequisite: Biol. 341.

Biol. 443 — *Cytology* 3 cr. hrs.

A study of the structure and function of cytoplasmic and nuclear organelles of cells. Emphasis will be placed upon ultrastructural, biochemical, and cytogenetic aspects. Laboratory studies will include various techniques for cell, chromosome, and tissue preparation. Prerequisite: Biol. 341, Chem. 111. Recommended: Chem. 331.

Biol. 452 — *Radiation Biology* 3 cr. hrs.

The principal effects of ionizing radiation and other types of radiation on living systems. Applications of isotopes in biological research; use of radiation sources and detectors. Prerequisite: Biol. 341, Chem. 332, Math. 116, or consent of instructor.

Biol. 453 — *Physiological Chemistry* 3 cr. hrs.

A study of the life processes with emphasis on chemistry and its relationship to the functional aspects of tissues and systems. Consideration will be given to biologically important compounds and their effects on function.

Biol. 471 — *Histology* 3 cr. hrs.

A study of vertebrate tissues from the various body systems. Laboratory studies will include the use of prepared slides, color photomicrographs, and basic histological techniques. Two hours of lecture and three hours of laboratory per week. Prerequisites: Biol. 103, 211.

Biol. 482 — *Comparative Vertebrate Anatomy* 3 cr. hrs.

A comparative study of the morphology of the vertebrate classes. Laboratory work includes anatomical study of Lamprey, the dogfish shark, and the cat. Prerequisites: Biol. 210 or consent of instructor.

Biol. 492 — *Research Topics in Biology* 1-3 cr. hrs. to be arranged

SUMMER ELECTIVES AT THE MARINE SCIENCE LABORATORY*

MSL 120—Introduction to Oceanography	3 cr. hrs.
MSL 240—Marine Biology	3 cr. hrs.
MSL 245—Marine Ecology	3 cr. hrs.
MSL 260—Field Methods in Oceanography	3 cr. hrs.
MSL 250—Invertebrate Zoology	3 cr. hrs.
MSL 320—Physical Oceanography	3 cr. hrs.
MSL 325—Marine Geology	3 cr. hrs.
MSL 330—Chemical Oceanography	3 cr. hrs.
MSL 420—Marine Micropaleontology	3 cr. hrs.
MSL 425—Marine Geophysics	3 cr. hrs.

* Please check with Dr. Wendelin Frantz or Dr. Donald Rabb for full particulars.

BUSINESS

Bus. 101 — *Introduction to Business Organization and Finance* 3 cr. hrs.

Business activity with attention to types of business organization, managerial controls utilized in business and financing of business enterprises.

Bus. 201 — *Elementary Typewriting I* 2 cr. hrs.

Presentation and mastery of the keyboard and operating parts of the typewriter; stroking techniques and control emphasized; instruction in preparing business letters, manuscripts, carbon copies, envelopes, business forms, and cards; teaching techniques.

Bus. 202 — *Elementary Typewriting II* 2 cr. hrs.

Production techniques; typing letters, envelopes, and cards; multiple carbon work, preparation of manuscripts, tabulation, and legal forms; preparation of stencils and liquid process masters; teaching techniques. Prerequisite: Bus. 201.

Bus. 211 — *Elementary Shorthand I* 3 cr. hrs.

Beginning course in Gregg Shorthand Diamond Jubilee in which theory is presented with dictation woven into an integrated course; fluent reading and writing of familiar and unfamiliar material.

Bus. 212 — *Elementary Shorthand II* 3 cr. hrs.

Development of ability to read shorthand notes; fluency of writing and correctness of outlines stressed; dictation and transcription teaching methods and techniques. Prerequisite: Bus. 211.

Bus. 221 — *Principles of Accounting I* 3 cr. hrs.

Development of the accounting cycle covering both service and merchandising activities of a sole proprietorship; consideration of special journals and special ledgers, accrued and deferred items, and business papers.

Bus. 222 — *Principles of Accounting II* 3 cr. hrs.

Further development of the accounting cycle; recording, summarizing, and interpreting financial data for partnerships and corporations; development of an understanding of the voucher system. Prerequisite: Bus. 221.

Bus. 241 — *Salesmanship* 3 cr. hrs.

Fundamental principles underlying the sales process; consideration of the salesman in relation to his firm, his goods and his customers; a study of the approach, demonstration, and close of individual sales transactions.

Bus. 301 — *Advanced Typewriting* 2 cr. hrs.

Advanced application of typewriting skills. Accuracy, speed, and job techniques; spelling, grammar, and principles of teaching stressed. Coordinated with Advanced Shorthand for those students seeking certification in shorthand. Prerequisite: Bus. 202.

Bus. 311 — *Advanced Shorthand* 3 cr. hrs.

Practice in dictation and transcription of shorthand, with speed and accuracy stressed; grammar, shorthand penmanship, and principles of teaching of shorthand. Prerequisite: Bus. 212.

Bus. 312 — *Secretarial Practice* 3 cr. hrs.

Stenographic and secretarial activities: dictation of type of correspondence; study of problems and procedures encountered in business offices; consideration of office etiquette; supervised secretarial work in school offices. Prerequisite: Bus. 311.

Bus. 321 — *Intermediate Accounting I* 3 cr. hrs.

Preparation and interpretation of principal accounting statements; theoretical discussion of the standards of good accounting practice, with emphasis on current items. Prerequisite: Bus. 222.

Bus. 322 — *Intermediate Accounting II* 3 cr. hrs.

Further discussion of the standards of good accounting practice with emphasis on non-current items; solution and discussion of various contemporary accounting problems; detailed analysis of major financial statements of business organizations. Prerequisite: Bus. 321.

Bus. 323 — *Accounting for Management Decision* 3 cr. hrs.

A study of the management problems of depreciation methods, valuation of good will, hidden balance sheet reserves, inventory evaluation, the price level and historical cost, budget and actual costs, and tax planning. The flows of cost accounting, financial accounting, and tax accounting are considered. The case study approach is used to study concepts, applications, and systems. Prerequisites: Bus. 221 and 222.

Bus. 331 — *Business Law I* 3 cr. hrs.

Legal rights and liabilities; fundamental principles of law applicable to business transactions with specific consideration of law as it pertains to contracts, bailments, personal and real property, and sales; sources of law and the judicial system.

Bus. 332 — *Business Law II* 3 cr. hrs.

Fundamental principles of law as they pertain to guaranty and surety contracts, insurance, principal and agency relationships, employer-employee relationships, bankruptcy proceedings, estates and trusts, and various forms of business organization. Prerequisite: Bus. 331.

Bus. 333 — *Business Correspondence and Reports* 3 cr. hrs.

Review of essentials of grammar; study of the vocabulary of business; preparation of business forms; writing business letters of various types; preparation of personal data sheets; organization and preparation of business reports. Prerequisite: Bus. 202.

Bus. 334 — *Business Mathematics* 3 cr. hrs.

Basic concepts and principles related to fundamental business operations. Credit, insurance, taxes, selling and finance, investments, the interpretation of statistical data; methods of teaching business arithmetic in the secondary school.

Bus. 341 — *Retail Management Concepts* 3 cr. hrs.

Presents a view of retailing as a dynamic sphere of business, characterized by the necessity of adapting its operations to changing demographic characteristics of trade areas. Competitive retail

problems are considered as they arise in the struggle between established and innovational methods. Considerations involved in formulating specific company policies include such factors as location, layout, promotion, service, and personnel. Analyses of actual case situations develop student ability to apply sound principles to current retail management practice. Prerequisite: Econ. 211, Econ. 212, Bus. 342. *Taught in Spring.*

Bus. 342 — *Marketing: Principles and Practices* 3 cr. hrs.

Studies the structure of the business system of distribution of materials and products. Both functional and institutional aspects are covered. Agricultural, industrial, and consumer products sectors of the economy are reviewed. Also studied are the significance of quantitative and qualitative changes in population characteristics. Trade-channel, price, and other marketing policies are taken up to provide a background for the establishment of individual firm decisions. Prerequisite: Econ. 211, Econ. 212.

Bus. 343 — *Business Finance* 3 cr. hrs.

Financial data are analyzed for the solution of managerial problems in finance, security contracts, capital structures, cost of capital, security underwriting and marketing; management of working capital, use of the capital market, dividend policy and asset valuation are studied and discussed. Prerequisite: Bus. 221 and 222.

Bus. 344 — *Management Processes* 3 cr. hrs.

The study of fundamentals of organization and administration. Emphases: planning, direction, coordination and controlling of business activities, structuring of management and supervision.

Bus. 345 — *Personnel Management* 3 cr. hrs.

Policies and current practices in the selection, placement, training-development, evaluation, compensation and motivation of employees at all levels in business firms. Prerequisite: Economics 211 and 212.

Bus. 401 — *Records Management and Office Machines* 3 cr. hrs.

Office dictating and transcribing machines; adding-listing machines; printing, rotary, and key-driven calculators; filing systems, business papers, and office procedures; teaching methods and techniques. Prerequisite: Business Education 202.

Bus. 412 — *Touch Shorthand* 3 cr. hrs.

Dictation and Transcription involving the use of a machine, keyboard shorthand system. Development of limited proficiency in

the use of a touch system and techniques for teaching machine shorthand. Prerequisite: Bus. 301 or consent of the instructor.

Bus. 421 — *Cost Accounting* 3 cr. hrs.

The elements of production costs using the job order system, the process cost system, and the standard cost system; development of the ability to interpret the meaning of cost data. Prerequisite: Bus. 222.

Bus. 422 — *Auditing Theory and Procedure* 3 cr. hrs.

Principles, standards, procedures, and techniques applicable to internal and public auditing; consideration of the audit report and development of working papers for preparation of the report. Prerequisite: Bus. 222.

Bus. 423 — *Federal Tax Accounting* 3 cr. hrs.

Procedures in accounting as dictated by Federal tax laws; study of laws governing the preparation of Federal Income Tax returns for individuals and small businesses. Prerequisite: Bus. 222.

Bus. 424 — *State and Federal Tax Problems* 3 cr. hrs.

Group and individual assignments selected from the following areas of advanced tax accounting: partnerships and corporations, Pennsylvania corporate taxes, estates and trusts, reporting to governmental agencies. Lectures, discussion of issues, intensive practice in the solution of problems. Prerequisite: Bus. 422 and 423.

Bus. 442 — *Advertising Management:*

Organization and Planning 3 cr. hrs.

Surveys the entire field of advertising both as a marketing function and promotional medium. Examines the relationships among the advertisers, agencies, and media. Both printed and broadcast media are explored. Develops the creative approach, strategy, and tactics applicable to the direction of demand by the individual firm; readings and selected exercises for report and discussion are assigned; review of social, ethical, and legal aspects. Prerequisite: Econ. 211, Econ. 212, Bus. 342. *Taught in Fall*

Bus. 443 — *Sales Management* 3 cr. hrs.

Management of the sales of the materials and products from the viewpoint of the individual business enterprise in the United States. Special emphasis is placed upon the market-concept; the role of the sales manager in modern marketing and his line and staff responsibilities; management of sales divisions and territories; organization of the sales force — selection, supervision, compensa-

tion, and motivation. *Demand-pull* rather than *supply-push* is emphasized as a basis for contemporary practices in Sales Management. Prerequisite: Econ. 211, Econ. 212, Bus. 342. *Taught in Fall*

Bus. 444 — *Marketing Management* 3 cr. hrs.

Group and individual marketing research studies. These entail the search of both documented sources and the results of field work. Students are encouraged to follow various fields of interest such as Management, Distribution, Advertising and Marketing Practices for greatest motivation and benefit. Prior approval of research projects by the instructor is required. All class members will participate in oral and written presentations; discussion and evaluation of projects. Prerequisite: Bus. 342 and two of the following: Bus. 341, Bus. 442, Bus. 443; with the consent of the instructor. *Taught in Spring*

Bus. 445 — *Business Report Writing* 3 cr. hrs.

The organization and preparation of reports of the types used in business firms. Techniques of collecting, interpreting, and presenting information useful to management. Prerequisite: junior or senior standing.

Bus. 446 — *Business Policies* 3 cr. hrs.

Sound business principles and policies are studied in relation to daily decision and policy making by the upper level of management. Financial, production, marketing and other functions of business are discussed. Quantitative methods and the techniques contributed by the various subject fields of business and economics are applied to selected case problems. Prerequisite: senior standing, required of all seniors.

Bus. 447 — *Research Studies in Management* 3 cr. hrs.

Identification of a problem, investigation, and preparation of a report on an individual basis. Student selection of a problem relating to some field of Business Administration: accounting, finance, advertising, marketing, general and personnel management. Prerequisite: senior standing and consent of the instructor.

Bus. 448 — *Advanced Cost Accounting* 3 cr. hrs.

The utilization of cost data for planning, control and decision making. The extension of methods and procedures to standard, estimated and distribution cost systems. Prerequisite: Bus. 221, 222 and 421.

Bus. 449 — *CPA Problems* 3 cr. hrs.

The application of procedures for the solving of a cross-section of complex accounting problems, and the discussion of related theory and practice. Emphasis is placed upon advanced financial, cost, governmental, tax and other kinds of accounting problems; the discussion of professional standards, ethics, accounting criteria and other factors. Prerequisite: Bus. 323, 421, 422, 423, or consent of instructor.

Bus. 450 — *Introduction to Data Processing* 3 cr. hrs.

An introduction and basic orientation to the field of business data processing. Content to include information on the history and applications of business equipment used in data processing, how the equipment works, and an understanding of data systems and procedures. The machines that will be used in this course are the key-punch, interpreter, collator, sorter, reproducing punch, and computer.

Bus. 451 — *Introduction to Computers and Programming* 3 cr. hrs.

An introduction to computer training and programming for the computer. The various methods of programming will be included in this course. Students will be required to write, assemble, and test actual programs in the computer. Prerequisite: Bus. 450.

Courses in economics available to business students.

Econ. 211 — *Principles of Economics* 3 cr. hrs.

Econ. 212 — *Principles of Economics* 3 cr. hrs.

Econ. 313 — *Labor Economics* 3 cr. hrs.

Econ. 412 — *Public Finance and Macro-Economics* 3 cr. hrs.

Econ. 413 — *Money and Banking* 3 cr. hrs.

Econ. 423 — *History of Economic Thought* 3 cr. hrs.

CHEMISTRY

Chem. 111 — *General Chemistry I* 4 cr. hrs.

Basic principles of chemistry: emphasis on atomic structure, periodic tables, chemical bonding, the states of matter and chemical calculations; laboratory practice in techniques, methods and solution of chemical problems. 6 hours/week: 3 class, 3 lab.

Chem. 112 — *General Chemistry II* 4 cr. hrs.

A continuation of Chem. 111: study of the elements by periodic groups; introduction to modern inorganic chemistry including coordination compounds; introduction to organic chemistry; laboratory emphasizes qualitative analysis. Prerequisite: Chem. 111 or equivalent. 6 hours/week: 3 class, 3 lab.

Chem. 221 — *Qualitative Inorganic Analysis* 3 cr. hrs.

A study of the systematic identification and separation of the common cations and anions. The theory of ionization, mass action, and chemical equilibrium as it applies to analytical chemistry. Prerequisite: Chem. 112. 7 hour/week: 1 class, 6 lab. Offered in summer sessions only.

Chem. 222 — *Quantitative Analysis* 4 cr. hrs.

The fundamental principles of gravimetric and volumetric analysis, with development of ability in performing quantitative chemical calculations. Prerequisite: Chem. 112. 8 hours/week: 2 class, 6 lab.

Chem. 225 — *Water Analysis* 2 cr. hrs.

The chemical, physical, and biological aspects of water analysis. Laboratory exercises include the examination of water from the entire hydro cycle. Prerequisite: Chem. 112. 4 hours/week: 1 class, 3 lab.

Chem. 331 — *Organic Chemistry I* 4 cr. hrs.

Fundamental principles of organic chemistry. Molecular structure, stereo-chemistry and reactions of hydrocarbons and their derivatives. Reaction mechanisms and syntheses emphasized. Prerequisite: Chem. 112; Secondary Biology majors may enter with only Chem. 111 but Chem. 112 also is recommended. 6 hours/week: 3 class, 3 lab.

Chem. 332 — *Organic Chemistry II* 4 cr. hrs.

A continuation of Chem. 331, with emphasis on reactions of common functional groups, synthesis and mechanism. Modern spectroscopic methods and the interpretation of spectra introduced. Prerequisite: Chem. 331. 6 hours/week: 3 class, 3 lab.

Chem. 351 — *Industrial Chemistry* 3 cr. hrs.

The application of chemistry to modern industry. The operating efficiency, equipment, and methods of attacking new prob-

lems of industry through research. Each student selects a simulated research problem to be developed experimentally and prepares an oral and written report. Prerequisites: Chem. 112, Phys. 112. 3 hours class/week, plus field trips.

Chem. 411 — *Physical Chemistry I* 4 cr. hrs.

The study of the theoretical foundations of chemistry. Gas laws and kinetic theory; first, second, and third laws of thermodynamics; free energy and equilibrium. Laboratory experiments to illustrate the above. Prerequisites: Chem. 222, Phys. 212, Math. 212, or consent of the instructor. 6 hours/week: 3 class, 3 lab.

Chem. 412 — *Physical Chemistry II* 4 cr. hrs.

A continuation of Chem. 411: binary solutions; colligative properties; conductance; electromotive force; reaction kinetics; and possibly crystals. Laboratory experiments to illustrate the above. Prerequisite: Chem. 411. 6 hours/week: 3 class, 3 lab.

Chem. 421 — *Advanced Inorganic Chemistry* 3 cr. hrs.

A course designed to enlarge the student's knowledge of the chemical and physical properties of inorganic substances as related to atomic structure, electronic configuration, and bond energies. Prerequisite: Chem. 222. 3 hours class/week.

Chem. 422 — *Qualitative Organic Analysis* 3 cr. hrs.

A laboratory course in the qualitative analysis of organic compounds. The analysis of carbon compounds accomplished by means of separation and identification. Methods and techniques studied, applications to industry and scientific research emphasized. Prerequisite: Chem. 332. 7 hours/week: 1 class, 6 lab.

Chem. 424 — *Instrumental Analysis* 3 cr. hrs.

This course covers the theory and applications of some of the instrumental methods of analysis currently in use in modern analytical chemistry. Topics include chromatography, spectrophotometry, polarography, electro-analysis, nuclear magnetic resonance, and others. A laboratory-centered course. Prerequisites: Chem. 222 and some contact with physical chemistry, or consent of instructor. 7 hours/week: 1 class, 6 lab.

Chem. 426 — *Inorganic Preparations* 2 cr. hrs.

The preparation and isolation of selected inorganic compounds of an unusual nature employing whatever advanced or specialized

techniques are required — such as high vacuum, inert atmospheres, high temperatures, and non-aqueous conditions. Prerequisite: Chem. 421 completed or concurrent, or consent of the instructor. 6 hours lab/week.

Chem. 433 — *Advanced Organic Chemistry* 3 cr. hrs.

Advanced theory, stereochemistry and utility of organic reactions. Reactive intermediates; carbonium ions, carbanions, and free radicals emphasized. Prerequisite: Chem. 332; Chem. 412 or permission of the instructor. 3 hours class/week.

Chem. 434 — *Organic Synthesis* 3 cr. hrs.

Advanced syntheses of organic compounds; development of technique; use of laboratory instruments; correlation of theory with practice. Prerequisite: Chem. 332. 7 hours/week: 1 class, 6 lab.

Chem. 441 — *Modern Biochemistry* 3 cr. hrs.

Chemistry of proteins, lipids, carbohydrates; intermediary metabolism; introduction to enzyme chemistry. Prerequisite: Chem. 222, Chem. 332; Chem. 412 recommended. 5 hours/week: 2 class, 3 lab.

Chem. 490 — *Chemistry Seminar* 1 cr. hr.

Chem. 491 — *Special Topics* 1 to 3 cr. hrs.

May take the form of a directed laboratory or library oriented investigation on one or more topics of mutual interest to student and instructor. Not intended as a research course but an extension of some topics into a second semester might become so. Registration by consent of the instructor and Department Chairman.

Chem. 492 — *Chemical Research* 3 cr. hrs.

Laboratory investigations of selected problems for advanced students. Registration by consent of the instructor and Department Chairmen.

COMMUNICATION DISORDERS

Com. Dis. 101 — *Clinical Voice and Diction* 1 cr. hr.

Elective course for all students seeking improvement of voice and articulation. Included in the course are generalized instruction in voice production and articulation as well as individualized guidance with personal speech problems.

Com. Dis. 152 — *Voice and Diction* 3 cr. hrs.

The mechanical aspects of speech production are studied and principles of speech therapy are illustrated in relation to the students' own performance in terms of voice quality, pitch, articulation, and time elements. Ear-training and self-improvement of prospective clinicians or teachers are emphasized.

Com. Dis. 251 — *Phonetics* 3 cr. hrs.

The International Phonetic Alphabet is used as a basis for study of the sounds of speech. Students develop competence in reading and transcription of symbols, with a view to practical application in recording defective sounds during articulation testing.

Com. Dis. 252 — *Speech Pathology I* 3 cr. hrs.

The neurophysiological bases of language and speech are studied as fundamental to the understanding of pathologies of language and speech. Norms of communication skills for respective age levels provide background for consideration of social, environmental and constitutional factors, traumatic injuries and disease processes that may interfere with normal communication. Prerequisite: Com. Dis. 251.

Com. Dis. 253 — *Speech Pathology II* 3 cr. hrs.

Evaluative procedures and techniques for identifying communication disorders are outlined. Research findings are explored for the continuing development of the most effective therapeutic measures and means of habilitation and rehabilitation. Prerequisite: Com. Dis. 252.

Com. Dis. 276 — *Introduction to Audiology* 3 cr. hrs.

The causes, evaluation techniques, and rehabilitative procedures for the various types of hearing problems are explored. Related auditory, speech, psychological, and educational factors are discussed. The roles of parent, educator, and specialist in the rehabilitation program are investigated.

Com. Dis. 351 — *Clinical Methods and Practicum* 3 cr. hrs.

Materials and methods applicable to clinical practicum and practice teaching are discussed. Opportunities for observing demonstrations by the staff are provided. Students are required to compose sample lesson plans and evaluation reports. These experiences are culminated with the students doing closely supervised therapy with milder cases of speech and hearing disorders. Prerequisites: Com. Dis. 152, 251, 252, 253, 276.

Com. Dis. 352 — *Clinical Practicum:*

Communication Disorders 3 cr. hrs.

Students continue supervised clinical work and are given increasing responsibility and experience with cases of greater complexity. Prerequisite: Com. Dis. 351.

Com. Dis. 360 — *Psycho-Linguistics* 3 cr. hrs.

Language is studied as a psychological phenomenon. The nature and acquisition of meaning, and the learning of systems are investigated. The influences of verbal and nonverbal antecedent conditions on both verbal and nonverbal learning are discussed. Descriptive models of language mediators in behavior are reviewed. Prerequisites: Com. Dis. 152, 251, 276.

Com. Dis. 361 — *Clinical Problems of*

Communication Disorders 3 cr. hrs.

Practical considerations of day to day problems encountered by the speech clinician in clinical and public school programs are discussed. Areas of interest would include organization and administration, scheduling, evaluative criteria and client management. Pennsylvania School Law and State mandated special service programs are also considered.

Com. Dis. 376 — *Auditory Training and Speech Reading* 3 cr. hrs.

Current teaching methods for educating children and adults with moderate and severe hearing losses are investigated. A comparative analysis is made of prevailing theories and techniques. Prerequisites: Com. Dis. 251, 276.

Com. Dis. 402 — *Clinical Experience and*

Professional Practicum (Student Teaching) 12 cr. hrs.

A full semester program of 30 hours of speech correction per week is provided for each student. Prospective teachers of the speech and hearing handicapped gain experience by working with professional people in the field.

Com. Dis. 452 — *Anatomy of Speech and*

Hearing Mechanisms 3 cr. hrs.

Embryology, anatomy, neurology, and physiology of the larynx and ear are studied. The actual processes involved in human speaking and hearing are explored. A co-operative lecture series is developed for the students by the medical staff at Geisinger Medical Center. Prerequisite: Com. Dis. 351.

Com. Dis. 466 — *Advanced Clinical Practicum*
(*Internship*)

3 cr. hrs.

Clinical experience with more complex disorders is provided. Differential diagnostic and therapeutic procedures for use in cases with cerebral palsy, aphasia, auditory impairments, cleft palate, and stuttering are covered. Case studies and research are utilized. Prerequisites: Com. Dis. 351, 352.

Com. Dis. 467 — *Psychology of Speech and Hearing* 3 cr. hrs.

The developmental aspects of language, normal and abnormal speech, and hearing patterns of individuals are discussed in relation to their personality. Current educational and therapeutic trends and practices are reviewed. Prerequisite: Com. Dis. 351.

Com. Dis. 471 — *Seminar in Speech Pathology* 3 cr. hrs.

Pathological conditions resulting in communication problems are investigated in some detail, and remedial techniques are considered in relation to current research findings. Students are given orientation to various types of clinical settings and to a projection of needs for services. Prerequisites: Com. Dis. 252, 253, 351, 352.

Com. Dis. 472 — *Measurement of Hearing Loss* 3 cr. hrs.

The anatomy and physiology of the hearing mechanisms are studied. Etiology of hearing losses, interpretation of audiometric evaluations and available rehabilitative procedures are discussed. Laboratory experience in the administration of clinical audiometric evaluations is provided. Prerequisites: Com. Dis. 276, 376.

Com. Dis. 475 — *Introduction to Speech Science* 3 cr. hrs.

The physical properties of acoustic signals are considered as factors that affect the nature of production and subsequent reception of speech. Phonetic instrumentation is introduced in relation to the analysis and synthesis of speech. The application of principles of speech science to speech therapy and other areas is discussed. Prerequisites: Com. Dis. 152, 251, 252, 253, 276, 376.

ECONOMICS

Econ. 211 — *Principles of Economics I* 3 cr. hrs.

Microeconomics: Laws of markets. Operation of market system compared with alternative economic systems. Determination of wage, interest, rent, and profit rates. Behavior of com-

petitive and monopolistic economic units compared. Beneficial and detrimental government interferences in a mixed economic system.

Econ. 212 — *Principles of Economics II* 3 cr. hrs.

Macroeconomics: Study of factors determining the level of employment, prices, and gross national product. G.N.P. accounting. Monetary policy and fiscal policy affecting the level of prices, G.N.P. and employment. International trade and finance. Economic development.

(Economics 211 and 212 are prerequisites for all succeeding courses in the department.)

Econ. 246 — *Business and Economics Mathematics* 3 cr. hrs.

Introduction to the basic mathematical tools most frequently employed in intermediate economics and business, e.g. elementary algebra, analytical geometry, functions, differential and integral calculus, mathematics of finance, and linear programming.

Econ. 313 — *Labor Economics* 3 cr. hrs.

The practical questions in our modern industrial organization in the fields of management and labor unions; the economic life of members of the working force. The history of organized labor and the growth of theories in management; current policies in the national and state governments to control industrial relations.

Econ. 333 — *International Economics* 3 cr. hrs.

Pure theory of international trade. Study of the gains from trade, free trade, and protection; balance of payments; foreign exchange; capital movements; the dollar and the international monetary system; international liquidity shortage.

Econ. 346 — *Business and Economics Statistics I* 3 cr. hrs.

Descriptive statistics, averages, dispersion, elementary statistical inference, index numbers, time series and measurement of relationships as applied to business and economic problems.

Econ. 411 — *Intermediate Micro-Economics* 3 cr. hrs.

Theory of how a competitive market system determines the composition of output, allocation of resources, and distribution of incomes. Comparison of theoretical and actual behavior of competitive, monopolistic, and oligopolistic firms.

Econ. 412 — *Public Finance and Macro-Economics* 3 cr. hrs.

Theory of determination of G.N.P., employment, and price level. Federal, state, and local fiscal policy in the light of modern theory; principles of taxation and government spending; management of the national debt.

Econ. 413 — *Money and Banking* 3 cr. hrs.

The historical background and development of monetary practices and principles, the principles of banking, with special attention to commercial banking and credit regulations, and current monetary and banking development.

Econ. 415 — *Business and Government* 3 cr. hrs.

A survey of government policies for maintaining competition, for reducing competition, for substituting regulation in place of competition and for substituting public for private enterprise. The various government policies will be tested in the light of economic theory and historical experience.

Econ. 422 — *Contrasting Economies* 3 cr. hrs.

Theories of capitalism and socialism with special emphasis on Marxian theory. Comparison of theoretical and actual performance of capitalism, socialism, and communism.

Econ. 423 — *History of Economic Thought* 3 cr. hrs.

The different economic theories propounded in the past and their effect on present day thinking about economic, business, and political systems. The surplus value theory, economic planning as a part of government responsibility, relations of family budgets to Engel's Law, government responsibility for employment, and rent control. Prerequisites: For Bus. Ed. Students — Econ. 211, 212. For other students — Hist. 112, 113, and Econ. 211, 212.

Econ. 434 — *Economic Growth of Underdeveloped Areas* 3 cr. hrs.

A study of stagnating economies. Topics include: theories of underdevelopment; operative resistances to economic growth; role of capital, labor, population growth, and technological advance; development planning; trade in a development setting.

Econ. 446 — *Business and Economics Statistics II* 3 cr. hrs.

Sampling and sampling distributions, estimation probability, tests of hypothesis, decision making, regression and correlation analysis, contingency tables, analysis of variance and computer

applications, designs of experiments in selected fields of business and economics.

Soc. 466 — *Research Methods in the Social Sciences* 3 cr. hrs.

For a description of this course see Sociology 466. Liberal arts students concentrating in economics will receive credit for this course. Prerequisite: Psy. 460 and permission of Economics Department.

Econ. 470 — *Senior Seminar* 3 cr. hrs.

Discussion of current literature on economic theory and economic policy. Each student reads one journal article a week on which he writes a report and defends it in the seminar.

EDUCATION

Ed. 202 — *Methods and Materials in*

Elementary School Science

3 cr. hrs.

Emphasis is placed on the major methods and materials used in elementary school science. Includes the environmental experiences of children and new areas where the experiences of children are limited. Prerequisite: Phys. 103 and Bio. 103.

Ed. 301 — *Educational Media*

2 cr. hrs.

A comprehensive study of all communicative media. Opportunity to develop skills in the use of various audio-visual materials in education is provided during the laboratory periods. Prerequisite: Ed. 393 and Psy. 371.

Ed. 311 — *Educational Measurements and Evaluation*

3 cr. hrs.

The principles of testing in the various fields of subject matter. Methods of grading and problems involved, representative standardized tests, and the vocabulary of measurement. Prerequisite: Psy. 371.

Ed. 321 — *Early Childhood Education — Nursery*

3 cr. hrs.

A study of the needs of three, four and five year old children and experiences adapted to what is known about growth needs at these age levels. Emphasis will be placed on "Operation Head Start" as a critical point in the poverty cycle. Activities associated with the fields of health, social services and education which will improve both the child's opportunities and achievements. Prerequisite: Psy. 211.

Ed. 322 — *Early Childhood Education — Kindergarten* 3 cr. hrs.

This course is a study of the physical, mental, emotional, and social levels of the kindergarten age child, paying attention to the environmental factors that foster child growth. It emphasizes the kindergarten program set up to meet the needs of this age child and to provide them with the background of experience they will need for later ventures into reading, arithmetic, science, social studies, music, art, literature, physical education and health. Kindergarten is the happy beginning of a lifetime of learning. Prerequisite: Psy. 211 or Ed. 322.

Ed. 361 — *Problems of Secondary Education*

Including Guidance 3 cr. hrs.

Problems in teaching with particular emphasis upon the first years includes problems of pupil growth and development, curriculum, and counseling. Prerequisite: Ed. 393 and Psy. 371.

Ed. 362 — *Problems of Business Education*

in the Secondary School 3 cr. hrs.

The objectives of secondary business education: guidance, placement, follow-up; administration of the business department; physical layout, equipment, supplies, selection of testbooks; curriculum and its development; tests and measurements; current trends in business education. Prerequisite: Ed. 393 and Psy. 371.

Ed. 371 — *Teaching of Reading in the Elementary Grades* 3 cr. hrs.

Developmental reading from readiness through the entire elementary school curriculum. Principles, problems, techniques, and materials used in the total elementary school program. Prerequisite: Ed. 393 and Psy. 371.

Ed. 372 — *Foundation of Reading Instruction* 3 cr. hrs.

The reading program in the secondary school, including the areas of comprehension speed, study skills, library skills, recreation and enrichment, and method of using information. Development of an elementary or a secondary school reading program required of each student. Prerequisite: Psy. 371.

Ed. 373 — *Diagnostic and Remedial Reading* 3 cr. hrs.

Diagnostic and remedial procedures in the area of reading, emphasizing both standardized and informal techniques. Designed for elementary and/or secondary school teachers. Prerequisite: Ed. 371 and/or Ed. 372 or Ed. 374.

Ed. 374 — *Teaching of Reading in Academic Subjects* 2 cr. hrs.

Developing the understanding and improving techniques for developing reading skills applicable to the secondary school. Emphasis on readiness, comprehension, silent reading, and oral reading through secondary school academic subjects. The course lends itself to English teachers who wish certification in the area of reading.

Ed. 375 — *Reading for the Socially Disadvantaged Child* 3 cr. hrs.

Methods and materials needed for the instruction of the disadvantaged child (K-12). Techniques and theories will be presented as they may be applied to help the socially disadvantaged child function more adequately in the school environment.

Ed. 391 — *Learning and the Learner* 3 cr. hrs.

The psychological foundations of education: a study of individual differences, learning theories as applied to classroom situations, physical and mental growth, personality development and mental hygiene. Systematic observation and participation in the public schools. Prerequisite: Psy. 101 and Soc. 211 or Soc. 224.

Ed. 392 — *Historical and Intellectual Foundations of American Education* 3 cr. hrs.

A study of the development of American education in the perspective of history. The focus is upon the variety of forces—social, political, economic, religious, intellectual — which have shaped the educational system, and emphasis is placed upon a critical examination of primary source materials.

Ed. 393 — *Social Foundations of Education* 3 cr. hrs.

A study of social processes underlying education. Major areas covered include an examination of the current social forces affecting education, the place of school in American culture, the impact of social stratification on education, and role of the teacher in a period of rapid social change. Prerequisite: Psy. 101 and Soc. 211 or Soc. 224.

Ed. 394 — *Education in Urban Society* 3 cr. hrs.

A careful and systematic study of the problems of education in urban setting. An analysis of conditions of life in urban society with special reference to social and economic deprivation as they relate to education. Curriculum problems resulting from social-technological and cultural upheaval. The course is primarily designed for students planning to teach in urban schools.

Ed. 395 — *Curriculum and Instruction in the
Elementary School*

6 cr. hrs.

Curriculum study, methods and practices in the language arts, and social studies. Includes educational media. Prerequisite: Ed. 393 and Ed. 391 or Psy. 371.

Ed. 396 — *Curriculum and Instruction in the
Secondary School*

6 cr. hrs.

A team approach to the preparation of secondary teachers with the combination of broad curricular studies and specific teaching techniques. Within the general curriculum and instruction the focal areas are curricular studies, educational decision-making, instructional skills, testing, planning, and educational media. A program of actual classroom observation is an integral part of this course.

The following methods sections concentrate on the above areas and provide practical experiences and more depth study in their particular disciplines:

Ed. 396 (A) "Teaching of English in the Secondary School"

Ed. 396 (B) "Teaching of Mathematics in the
Secondary School"

Ed. 396 (C) "Teaching of Biological Science in the
Secondary School"

Ed. 396 (D) "Teaching of Physical Science in the
Secondary School"

Ed. 396 (E) "Teaching of Social Studies in the
Secondary School"

Ed. 396 (F) "Teaching of Speech in the Secondary School"

Ed. 396 (G) "Teaching of Geography in the
Secondary School"

Ed. 396 (H) "Teaching of Business Subjects in the
Secondary School"

Ed. 396 (I) "Teaching of French in the Secondary School"

Ed. 396 (J) "Teaching of German in the Secondary School"

Ed. 396 (K) "Teaching of Spanish in the Secondary School"

Prerequisite: Ed. 393 and Ed. 391 or Psy. 371.

Ed. 397 — *Science and Mathematics in the
Elementary School*

3 cr. hrs.

A course designed to provide prospective elementary teachers with the methods, materials, skills, understandings, and attitudes

which will help them to meet the needs of children in the areas of science and mathematics. Emphasis will be placed on the scientific principles of modern mathematics. Prerequisite: Phys. 103 and 104, Biol. 103 and 104, and Math. 231 and 232.

Ed. 398 — *Mathematics for Elementary Teachers* 3 cr. hrs.

Mathematical concepts essential in the teaching of contemporary programs in the elementary school. Prerequisite: Ed. 397.

Ed. 401 — *Student Teaching in the Elementary School* 12 cr. hrs.

Scheduled on full semester basis with a minimum of 30 hours per week. Opportunities for direct participating experience at two grade levels and in as many areas of the elementary curriculum as possible. Association with carefully selected master teachers.

Ed. 402 — *Student Teaching in the Secondary School* 12 cr. hrs.

Scheduled on full semester basis with a minimum of 30 hours per week. Requires the construction or adaptation of a resource unit for use by the student teacher during this period as well as daily planning and guided observation. Students are exposed to actual teaching and other experiences to give them a wide sampling of the activities of the professional teacher.

Ed. 403 — *Student Teaching in Business Subjects*

in the Secondary School 12 cr. hrs.

Supervised educational activities in the secondary school. Students observe and teach in actual classroom situations through the cooperation of business department in various student teaching centers of the College.

Ed. 411 — *Professional Practicum* 2 cr. hrs.

Operated concurrently with Student Teaching and includes orientation to Student Teaching, planning, professional growth in service, placement, school law, and classroom management.

Ed. 421 — *Curriculum Development* 3 cr. hrs.

An examination of current curricular offerings of elementary and secondary schools. Emphasis placed upon philosophical, social, political and technical trends in the community, nation, and the world, and the effect they have upon the role of the teacher and the school in curriculum development.

Ed. 431 — *Independent Study* 3 cr. hrs.
Admission only by consent of Department Chairman.

Ed. 432 — *Social Studies in the Elementary School* 3 cr. hrs.
This course is designed to acquaint students with current objectives, methods and materials in the area of Social Studies, as they are encountered in the elementary school. Consideration will be given to the psychological and sociological needs of children as they are related to the development of a social studies program in the modern school.

Ed. 433 — *Language Arts in the Elementary School* 3 cr. hrs.
This course is intended to introduce students to the broad spectrum of subjects called the language arts. Students are given the opportunity to become familiar with problems, methods, techniques and materials related to instruction in the several branches of this major area of the elementary school curriculum.

Ed. 441 — *Workshop in Education* 3-6 cr. hrs.
A study of selected areas in elementary or secondary education including research by individual students in a special teaching field. Prerequisite: 9 credits in education and teaching experience.

Ed. 451 — *Pupil Personnel Services in the Public School* 3 cr. hrs.
A comprehensive study of the pupil personnel services in the elementary and secondary schools which include the areas of school attendance, school health programs, pupil transportation, psychological services and guidance services.

EDUCATION OF THE DEAF

EOD. 201 — *History, Education and Guidance of the Deaf* 3 cr. hrs.

The history of education of the deaf is reviewed. The place of the deaf in the community from ancient times to the present is studied from social, economic and political viewpoints. Important bibliographic materials from the field are introduced.

EOD. 351 — *Language for the Deaf* 4 cr. hrs.

Principles and techniques of teaching language to the pre-primary and school-age deaf child are studied. The student is introduced to the leading systems of teaching language to the deaf as well as to deaf children with multiple handicaps.

EOD. 352 — *Teaching Speech to the Deaf* 4 cr. hrs.

Normal development of speech is reviewed. Principles and techniques for teaching speech by analytical and synthetic methods are studied. Speech defects common to the hearing impaired are considered in terms of etiology, evaluation and therapy.

EOD. 353 — *Teaching Elementary Subjects to the Deaf* 4 cr. hrs.

Principles and methods of teaching reading to deaf children in the lower and higher grades are studied. Methods of teaching subjects such as arithmetic, social studies and science are considered with emphasis on methodology for use in the intermediate and advanced grades.

EOD. 366 — *Classroom Practicum* 3 cr. hrs.

Students are provided with the opportunity to observe, compose lesson plans and teach supervised lessons in a classroom of deaf children. Prerequisite: Com. Dis. 351, EOD. 201, 351, 352, 353.

EOD. 403 — *Student Teaching* 12 cr. hrs.

Thirty hours per week of supervised student teaching experience with deaf children. Experience is provided by working with professional people assigned to varied environments common to the field. Prerequisite: EOD. 366.

EOD. 461 — *Problems of Education of the Deaf* 3 cr. hrs.

Practical considerations of day to day problems encountered by the teacher in public and private school programs are discussed. Areas of interest would include organization and administration, scheduling problems, classroom management, current trends and research and state regulations and laws.

ENGLISH

Eng. 101 — *English Composition* 3 cr. hrs.

Close study of reading and writing to produce proficiency in both. Frequent themes, intensive study of the principles of rhetoric and grammar.

Eng. 102 — *English Composition* 3 cr. hrs.

A continuation of English 101, with increasing emphasis on effective diction, tone, and style. In addition to regular compositions and book reviews, a term paper is required. Prerequisite: Eng. 101.

Eng. 103 — *English Composition* 3 cr. hrs.

Similar to English 102 but reserved for incoming freshmen who have been exempted from English 101 on the basis of performance on entrance examinations and other criteria. Content and requirements of this course are substantially the same as those for English 102.

Eng. 202 — *Creative Writing* 3 cr. hrs.

At least three original short stories and five original poems receive critical analysis by the instructor and by the class in group discussion. Form, metrics, imagery, and diction are evaluated.

Eng. 203 — *Introduction to Journalism* 3 cr. hrs.

An introduction to journalism through an emphasis on principles and techniques of reporting. Development of journalism, theory and practice of its principles; organizational patterns of news stories, methods of gathering news and writing various types of news stories, fundamentals of editing, relation of news reporting to mass media.*

Eng. 204 — *Feature Writing* 3 cr. hrs.

A study of the methods of writing successful articles for newspapers and magazines. Emphasizes techniques of gathering information and developing various types of feature articles. Study and discussion of published articles.*

Eng. 207 — *Survey of World Literature* 3 cr. hrs.

Acquaints the students with many of the most important literary works of the western world and with significant literary genres and literary movements.

Eng. 208 — *Survey of World Literature* 3 cr. hrs.

A continuation of English 207, generally covering works of more recent date than those in English 207. Considerably more collateral reading.

Eng. 209 — *Literary Genres* 3 cr. hrs.

Designed for English majors and concentrators, replacing General Education requirement of English 207. Emphasizes literary form as a vehicle for expression of ideas.

* Students who take these courses may qualify for the Certificate in Journalism. See note on page 91.

- Eng. 231 — *British Writers* 3 cr. hrs.
 Required second-semester course for English majors. Selections from Chaucer, Spenser, Shakespeare, Bacon, Donne, Milton, Dryden, Swift, Pope, Boswell, and Johnson.
- Eng. 232 — *British Writers* 3 cr. hrs.
 Required third-semester course for English majors. Selections from Wordsworth, Coleridge, Byron, Shelley, Keats, Tennyson, Browning, Arnold, Shaw, Yeats, and Eliot.
- Eng. 249 — *Shakespeare* 3 cr. hrs.
 Required for English majors, to be taken in third or fourth semester. Study of eighteen of Shakespeare's plays with emphasis on Shakespeare as poet and playwright, and attention to conditions of the Elizabethan Theater and to the history of the Shakespearean text.
- Eng. 301 — *Introduction to Mass Communications* 3 cr. hrs.
 The role of mass communications: theories and realities of the freedom of the press; growth of the print media; media of radio, television, and film; mass communications industries and professions; education for mass communication.*
- Eng. 302 — *Advanced Composition* 3 cr. hrs.
 Designed for English majors and concentrators, though other students are admitted. Aims to develop in the student a greater mastery over the elements of effective writing. Attention is given to the problem of evaluating writing.
- Eng. 307 — *Russian Literature in Translation* 3 cr. hrs.
 An introduction to the "golden age" of Russian literature — from Pushkin to Sholokhov. Readings in English of novels, poems, plays, and short stories. Attention given to ideas reflected in the works as well as to the medium through which they are dramatized.
- Eng. 312 — *Ideas in Literature* 3 cr. hrs.
 Examines such recurrent concepts in literature as the conflict between freedom and fate, the place of good and evil in the scheme of things, and the role of the individual in society.

* Students who take these courses may qualify for the Certificate in Journalism. See note on page 91.

Eng. 316 — *Children's Literature* 3 cr. hrs.

Examination and study of literature for children, with emphasis on criteria for selecting literature for the classroom and the library, suggestions for presenting literary works in the elementary classroom, and basic literary concepts.

Eng. 321 — *Short Story* 3 cr. hrs.

An introduction to the French, Russian, English, and American short story, through reading and analysis of representative samples. One original short story and one oral critical analysis of a well-known short story may be required of each student.

Eng. 322 — *Modern Drama* 3 cr. hrs.

Major Continental, English, and American plays from Ibsen to Beckett, with emphasis on contemporary attitudes, themes, and structure as contrasted with those of traditional dramatists.

Eng. 324 — *Modern Novel* 3 cr. hrs.

A study of major modern novelists, exclusive of American and Russian writers, as their work reflects developments in fictional art, particularly in the most dominant modes of realism, naturalism, impressionism, and expressionism. Begins in the turn-of-the-century novel of Conrad and moves through the writings of Mann, Proust, Lawrence, Kafka, Woolf, Joyce, and/or one or two others of the instructor's choice.

*CERTIFICATE IN JOURNALISM

A. *The Certificate*: This form attests to the student's having completed the requirements specified below. It implies introductory preparation of the student for publications activities in teaching or in business.

B. *Requirements*:

1. Satisfactory completion of English 203, 204, and 301.

These courses are given in sequence each fall and spring in a one-and-one-half year cycle. Two of them may be applied to the student's General Education requirements in Humanities and Social Sciences respectively. One of the courses may be counted in an English major's required 12 credits of electives.

2. Completion of at least two years of satisfactory service as a member of the staff of the *Maroon and Gold*, *Obiter*, or *Olympian*.

Eng. 325 — *Poetry* 3 cr. hrs.

Designed to permit student exploration of the genre, under guidance of instructor. The nature of poetry — its aims, how it is created, historical and individual changes and variations in manner and matter.

Eng. 326 — *Modern Poetry* 3 cr. hrs.

An introduction to contemporary poetic movements through study of Emily Dickinson, T. S. Eliot, E. E. Cummings, Robert Lowell, Allen Ginsberg, Thomas Hardy, Gerard Manley Hopkins, W. B. Yeats, W. H. Auden, Dylan Thomas, and other poets.

Eng. 332 — *Blake and Yeats* 3 cr. hrs.

A study of two great poets united by their search for a vision and by having created in this search perhaps the most original and complete mythological systems in English literature.

Eng. 341 — *Early and Middle English Literature* 3 cr. hrs.

A study of *Beowulf* and other Old English works in translation and of medieval chronicles and romances including *Sir Gawain and the Green Knight* and *Le Morte d' Arthur*.

Eng. 342 — *Early English Drama* 3 cr. hrs.

Early native drama, including miracle and mystery plays, morality plays, and interludes. Elizabethan dramatists: Heywood, Marlowe, Kyd, Jonson, Webster, Middleton, and Ford.

Eng. 343 — *Chaucer* 3 cr. hrs.

Study of Chaucer's major poetry, with practice in speaking and reading Middle English and with major emphasis on Chaucer's literary achievement and his humanism.

Eng. 347 — *The Renaissance in England* 3 cr. hrs.

The non-dramatic prose and verse of the period, emphasizing the last quarter of the century. The humanists: Erasmus, More, Castiglione, Elyot, Ascham; Renaissance forms and ideas in Lyly, Sidney, Spenser, Daniel, Drayton, Shakespeare, Marlowe, Chapman. Greene, and others.

Eng. 352 — *17th Century Literature* 3 cr. hrs.

Poetry and prose, beginning with Jonson. The rival traditions of Donne and Jonson in such poets as Herbert, Vaughan, Quarles, Cowley, Herrick, and Marvell. Principal prose writers: Burton, Browne, Taylor, Fuller, Baxter, Bunyan, and Dryden.

- Eng. 354 — *Milton* 3 cr. hrs.
A comprehensive study of the poetry and prose of John Milton.
- Eng. 356 — *Restoration and Later Drama* 3 cr. hrs.
Wycherley, Etherege, Congreve, Farquhar, Dryden, and Otway, with consideration of Molière's influence in Restoration drama. Eighteenth century sentimental comedy and tragedy, and reaction against it in Goldsmith and Sheridan. Trends in 19th century drama.
- Eng. 357 — *18th Century Literature* 3 cr. hrs.
Survey of literature of the Augustan Age in England: Addison and Steele, Swift, Pope, Boswell, and Johnson; forerunners of the Romantic Revival; beginnings of the British novel; the plays of Addison, Steele, Sheridan, and Goldsmith.
- Eng. 358 — *18th Century Novel* 3 cr. hrs.
Emphasizes major novels of Defoe, Richardson, Fielding, Smollett, Sterne, and Austen; traces the development of the English novel from picaresque to realistic.
- Eng. 363 — *19th Century Novel* 3 cr. hrs.
The major British writers of the Victorian Period, with supplementary readings in the works of the great Continental novelists.
- Eng. 364 — *19th Century Literature* 3 cr. hrs.
Covers the major poets such as Wordsworth, Keats, Tennyson, Arnold, as well as major prose writers: Hazlitt, Lamb, DeQuincey, Peacock, Newman, Huxley, Carlyle, and others.
- Eng. 381 — *American Literature* 3 cr. hrs.
Surveys American Literature from its Colonial beginnings through the Civil War, with emphasis on the writers of the American Renaissance.
- Eng. 382 — *American Literature* 3 cr. hrs.
Continues English 381, covering major writers and significant social and literary movements up to the present day.
- Eng. 385 — *The American Novel* 3 cr. hrs.
Studies the development of the novel in America from its beginnings about 1800 to the present. Emphasizes highlights of form, theme, and reflections of American literary and social movements. Some attention to parallel developments in the European novel.

Eng. 386 — *Later American Prose* 3 cr. hrs.

Covers representative writers from the late 19th Century to the present: Veblen, Steffens, Hearn, Mencken, Babbitt, More, Brooks, Lippmann, and others. Stresses political, social, and artistic milieu.

Eng. 401 — *Structure of English* 3 cr. hrs.

A descriptive study of the phonology, morphology, syntax, and graphic formulas of modern American English.

Eng. 402 — *History of the English Language* 3 cr. hrs.

A descriptive study of the causes and effects of phonemic, morphological, syntactic, and semantic change in the English language from the Anglo-Saxon conquest to the present.

Eng. 403 — *Generative-Transformational Grammar* 3 cr. hrs.

Explores the most recent theories of grammatical analysis and pays particular attention to transformational grammar. Prerequisite: Eng. 401, or permission of instructor.

Eng. 405 — *Criticism* 3 cr. hrs.

For advanced students majoring in English. Examines works of major critics: Plato, Aristotle, Longinus, Sidney, Boileau, Coleridge, and others. Applies critical principles to literary texts.

FOREIGN LANGUAGES

FRENCH

Fr. 101 — *Beginning French* 3 cr. hrs.

(for students with no previous study of French)

An organic approach is undertaken which uses well integrated texts and tapes in a student-culture confrontation consisting of authentic French situational conversations and readings, structural analyses, and practice in speaking, understanding, reading, and gradually writing, with weekly laboratory sessions integrated with the program.

Fr. 102 — *Beginning French* 3 cr. hrs.

Continues the development of basic skills in understanding and speaking with increased emphasis upon reading and written assignments through the use of the same tape-articulated text, outside readings, frequent dictations, and thematic compositions.

Fr. 103 — *Intermediate French* 3 cr. hrs.

(for students having two or more years of French background)

Continues the above approach with appropriate review, pattern practice, exercises in inflectional and structural variations, based upon an intermediate college text and appropriate outside readings published for this purpose, with weekly laboratory sessions integrated with the program.

Fr. 104 — *Intermediate French* 3 cr. hrs.

The above process, based upon the same texts is enriched with appropriate works of fiction, including two modern plays and selections from authors of proven stature and, for students who are qualified, outside reports on the shorter works of major French authors.

Fr. 201. — *Advanced Conversation and Grammar* 3 cr. hrs.

While the audio-lingual approach continues to serve in presentation and practice in reviewing the difficulties of the language, the text presents literary selections which are analyzed and discussed and whose models provide standards for imitation and thematic reworking of the grammar points. A current college-level French conversation text is selected for this purpose.

Fr. 202 — *Advanced Conversation and Prose
Composition* 3 cr. hrs.

A second more advanced composition text continues the conversation and composition work begun in French 201, with longer assignments and stressing those grammatical points which still present difficulty to the class.

Fr. 210 — *The Culture and Civilization of France* 3 cr. hrs.

This course is designed to give students a thorough understanding of French geography, government, customs, education, arts, regional idiosyncracies, history, and a vivid sense of the current scene in France. The basic text is enriched with a limited number of outside readings in paperback and perhaps a class trip to see an authentic French play.

Fr. 220 — *Contemporary French Literature* 3 cr. hrs.

This course begins with an anthology of selected literary works published for this purpose, and is enriched with plays and short novels in unabridged form. Except for difficult nuances and useful analogies to English this course is conducted entirely in French.

Fr. 301 — *The Modern French Novel* 3 cr. hrs.

Selected modern French novels are read and discussed by the class. Potential honor students are assigned additional novels for individual reports. Prerequisite: Fr. 202.

Fr. 320 — *The History of French Literature I* 3 cr. hrs.

A survey course, primarily for majors in French, intended to show the development of French genres through the 18th century and to give the student an insight into works to which he should later return. Prerequisite: Fr. 220.

Fr. 321 — *The History of French Literature II* 3 cr. hrs.

Continues the above for the 19th and 20th centuries. Prerequisite: Fr. 320.

Fr. 401 — *Molière and Racine* 3 cr. hrs.

This course shows the development of the seventeenth century theatre from the plays of Jodelle and Corneille, stressing the principal plays of Molière and Racine. Prerequisite: Fr. 320.

Fr. 407 — *Proust and Gide* 3 cr. hrs.

A course based on critical student editions of *A la recherche du temps perdu* of Proust and of the Journals and principal novels of Gide, illustrating the impact of these two masters upon the novelistic genre.

Fr. 409 — *Phonetics, structure and analysis of French* 3 cr. hrs.

Using a handbook based upon the most recent formulations of French linguistics, this course analyzes the language empirically and through themes and compositions.

Fr. 410 — *The History of Ideas in French*
*from R. Descartes to A. Comte** 3 cr. hrs.

This course traces the development of ideas from the *regulae* of Descartes through the contributions of Gassendi, Pascal, Pierre Bayle, the Encyclopedists, Condorcet, Saint-Simon to the positivistic summation of Auguste Comte.

Fr. 415 — *The Genres of Classicism** 3 cr. hrs.

The plastic arts, music, architecture, and the mores of *pre-ciocite* set the tone for literary discussion of *La Princesse de Cleves*, the *Maximes* of *De la Rouchefoucauld*, and typically classical drama and poetry.

* To be taught in a successive year.

Fr. 420 — *Balzac and Flaubert* 3 cr. hrs.

A contrastive study in the French novel, emphasizing the principal works and lives of each author.

Fr. 421 — *Rousseau through Stendhal** 3 cr. hrs.

This course confronts the question of genius in writers who anticipated ideas of a later age and stresses Rousseau's *Emile* and *Confessions*, Diderot's *Neveu de Rameau*, Bayle's *Le Rouge et le noir* and *Chartreuse de Parme*.

Fr. 422 — *The Romantic Spirit in France** 3 cr. hrs.

This course outlines the seventeenth and eighteenth century origins of Romanticism, the contributions of Rousseau and Chateaubriand, the doctrines of Hugo, and the *floruit* of Romanticism in the nineteenth century.

Fr. 430 — *The French Theatre* 3 cr. hrs.

Based upon suitable plays from the medieval period to the theatre of Ionesco and Genet, this course is enriched by lectures and library readings on the history of the theatre and by the assignment of current plays in paperback.

Fr. 431 — *Rabelais, Montaigne, and the Renaissance** 3 cr. hrs.

A course that deals with the principal writings of Rabelais, the essays of Montaigne, and the principal efforts of the *Pleiade*.

Fr. 435 — *The French Enlightenment* 3 cr. hrs.

This course introduces the student to the principal philosophers of the eighteenth century, explains the culmination of their efforts in the Encyclopedia of Diderot, and discusses crucial works of Montesquieu, Voltaire, Diderot, D'Alembert, Condillac, LaMettrie, and Condorcet.

Fr. 440 — *French Poetry* 3 cr. hrs.

A course, chronological in development which is based upon several volumes of the finest French poetry and is open only to majors.

Fr. 499 — *Directed Readings* 3 cr. hrs.

Open only to honor students and advanced majors in French.

* To be taught in a successive year.

SUMMER ELECTIVES

Fr. 104 — *Intermediate French* 3 cr. hrs.

Fr. 201 — *Advanced Conversation and Grammar* 3 cr. hrs.

Fr. 204 — *Seminar in France* 6 cr. hrs.

Six to eight weeks in a French University. This study-practicum permits the student to get native instruction in the native setting. The students are housed in dormitories and attend the summer course for foreign students. Daily and weekend excursions to places of interest are included in the program. Resident evaluators from Bloomsburg accompany the group to assist students and keep records of progress. Two semesters of French are required for participation in this program.

Fr. 210 — *The Culture and Civilization of France* 3 cr. hrs.

Fr. 220 — *The Contemporary Literature of France* 3 cr. hrs.

GERMAN

Ger. 101 — *Beginning German* 3 cr. hrs.

(For students with no previous study of German)

An organic approach is undertaken which uses well integrated texts and tapes in a student-culture confrontation consisting of authentic German situational conversations and readings, structural analyses, and practice in speaking, understanding, reading, and gradually writing, with weekly laboratory sessions integrated with the program.

Ger. 102 — *Beginning German* 3 cr. hrs.

Continues the development of basic skills in understanding and speaking with increased emphasis upon reading and written assignments through the use of the same tape-articulated text, outside readings, frequent dictations, and thematic compositions.

Ger. 103 — *Intermediate German* 3 cr. hrs.

(for students having two or more years of German background.)

Continues the above approach with appropriate review, pattern practice, exercises in inflectional and structural variations, based upon an intermediate college text and appropriate outside readings published for this purpose, with weekly laboratory sessions integrated with the program.

Ger. 104 — *Intermediate German* 3 cr. hrs.

The above process, based upon the same texts is enriched with appropriate works of fiction, including two modern plays and selections from authors of proven stature and, for students who are qualified, outside reports on the shorter works of major German authors.

Ger. 201 — *Advanced Conversation and Grammar* 3 cr. hrs.

While the audio-lingual approach continues to serve in presentation and practice in reviewing the difficulties of the language, the text presents literary selections which are analyzed and discussed and whose models provide standards for imitation and thematic reworking of the grammar points. A current college-level German conversation text is selected for this purpose.

Ger. 202 — *Advanced Conversation and Prose Composition* 3 cr. hrs.

A second more advanced composition text continues the conversation and composition work begun in German 201, with longer assignments (including "Texte zum Nacherzaehlen") and stressing those grammatical points which still present difficulty to the class.

Ger. 210 — *German Culture and Civilization* 3 cr. hrs.

This course is designed to give students a thorough understanding of the geography, government, customs, education, arts, regional idiosyncracies, and history of the German speaking countries as well as to provide the students with a vivid sense of the current scene in these countries.

Ger. 220 — *Contemporary German Literature* 3 cr. hrs.

Reading and analysis of representative dramatic, prose, and poetic works of major German, Swiss, and Austrian authors of the twentieth century. Prerequisite: Ger. 201.

Ger. 301 — *Nineteenth Century German Drama** 3 cr. hrs.

Reading and analysis of representative dramatic works of major German, Swiss, and Austrian authors of the nineteenth century. Prerequisite: Ger. 220.

Ger. 302 — *Nineteenth Century Prose and Poetry* 3 cr. hrs.

Reading and analysis of representative prose and poetic works of the major German, Swiss, and Austrian authors of the nineteenth century. Prerequisite: Ger. 220.

* To be taught in a successive year.

- Ger. 320 — *History of German Literature I* 3 cr. hrs.
 Readings and discussions of representative works from the following periods: Old High German, Middle High German, Renaissance, Reformation, Baroque, and Enlightenment. Prerequisite: Ger. 220.
- Ger. 321 — *History of German Literature II* 3 cr. hrs.
 A continuation of German 320. A survey of German literature from the Enlightenment to the present. Readings and discussions of selected works representative of each period and movement. Prerequisite: Ger. 320.
- Ger. 401 — *Enlightenment and Storm and Stress* 3 cr. hrs.
 A study of the major lyric, dramatic, and prose works of Lessing, Goethe, Schiller and other important writers of these two periods. Prerequisite: Ger. 321.
- Ger. 402 — *Classicism and Romanticism* 3 cr. hrs.
 A study of the major lyric, dramatic, and prose works of Goethe, Schiller, Novalis, Tieck, and other important German Classicists and Romanticists. Prerequisite: Ger. 321.
- Ger. 409 — *Conversation, Structure, and Analysis of German* 3 cr. hrs.
 Using a handbook based upon the most recent formulations of German linguistics, this course analyzes the language empirically and through conversations and compositions. Prerequisite: senior German major or minor.
- Ger. 420 — *German Poetry** 3 cr. hrs.
 An introduction to the major trends and characteristics of German poetry from its beginnings to the present. Prerequisite: 9 credits in German literature.
- Ger. 421 — *The Radio Play* 3 cr. hrs.
 A study of this genre in Germany, Switzerland, and Austria from its beginnings to the present. Prerequisite: 9 credits in German literature.
- Ger. 499 — *German Honors Course** 3 cr. hrs.
 Individual readings and conferences on a special topic designated by the instructor. Prerequisite: permission of instructor and department chairman. Open only to German majors and minors.

* To be taught in a successive year.

SUMMER ELECTIVES

Ger. 103 — *Intermediate German* 3 cr. hrs.

Ger. 104 — *Intermediate German* 3 cr. hrs.

Ger. 202 — "*Texte zum Nacherzaehlen*" and *Composition* 3 cr. hrs.

RUSSIAN

Ru. 101 — *Elementary Russian (For students with no previous study of Russian)* 3 cr. hrs.

An audio-lingual approach toward the rapid development of acceptable pronunciation, vocabulary accumulation in a textual frame of reference. Understanding and speaking are stressed, but students learn to read and write the cyrillic alphabet.

Ru. 102 — *Elementary Russian* 3 cr. hrs.

Continuation of the development of the basic skills of understanding, speaking, reading, and writing. Reading is stressed somewhat more to develop the faculty in recognizing whole phrases toward more rapid reading. Pronunciation is perfected.

Ru. 103 — *Intermediate Russian (For students with two or more years in Russian study, or the completion of 102)* 3 cr. hrs.

Maximum class use of the spoken language is designed to bring about good comprehension and speech. A text on Soviet *modus vivendi* is read outside class and discussed in class in the Russian language.

Ru. 104 — *Intermediate Russian* 3 cr. hrs.

A cultural reader and selected fiction stories are completed during this semester. Students should begin to comprehend the spoken language without translating and are expected to be able to begin conversing in Russian on simple themes.

Ru. 210 — *Excerpts From Russian Literature* 3 cr. hrs.

Selections from well known Russian writers from Pushkin to Pasternak will be read and discussed in class in Russian.

Ru. 211 — *Excerpts From Science and Technology* 3 cr. hrs.

Selections from Russian scientific works dealing with physics, chemistry, biology, cosmonautics, and others will be read and discussed in class in Russian.

SPANISH

Span. 101 — *Beginning Spanish (For students with no previous study of Spanish)* 3 cr. hrs.

An audio-lingual approach toward the rapid development in speaking, understanding, reading, and gradually writing, with weekly laboratory sessions integrated with the program.

Span. 102 — *Beginning Spanish* 3 cr. hrs.

Continuation of the development of basic skills of understanding, reading, writing, with an increase in the amount of reading, writing, dictations, and thematic compositions.

Span. 103 — *Intermediate Spanish (For students with two or more years of Spanish background)* 3 cr. hrs.

Continue the above approaches with appropriate review. Outside reading is introduced in an expanding mastery of speech, comprehension, writing, and literary appreciation.

Span. 104 — *Intermediate Spanish* 3 cr. hrs.

Continue the above approaches. Cultural reading, plays and short novels leading to a good mastery of the language at the end of the course. Prerequisite: Span. 103.

Span. 201 — *Grammar and Composition* 3 cr. hrs.

The audio-lingual approach will continue in presentations and practice in reviewing the difficulty of the language. Written compositions stress correct writing forms, and grammatical structures. Prerequisite: Span. 104 or equivalent.

Span. 202 — *Conversation* 3 cr. hrs.

A more advanced composition text continues the conversation work begun in the previous course (201), with longer assignments in written Spanish, developing longer conversations and free compositions. Prerequisite: Span. 201.

Span. 210 — *Culture and Civilization of Spain* 3 cr. hrs.

Designed to give students a thorough understanding of the soul of Spain through geography, government, customs, education, fine arts, and history. Current events are viewed through magazines and newspapers; and perhaps a class trip to see an authentic Spanish play.

Span. 301 — *Literature of Spain* 3 cr. hrs.

A general study of literature of Spain, primarily for Spanish majors, intended to give incentives towards more appreciation of literary work from "la época primitiva", to the "literatura contemporanea."

Span. 302 — *Literature of Spanish-America* 3 cr. hrs.

Selections of Spanish-American literature from Columbus to the present time.

Span. 304 — Siglo de Oro — *Part One* 3 cr. hrs.

The theatre of the golden century: Lope de Vega, Tirso de Molina, and Calderon de la Barca.

Span. 305 — Siglo de Oro — *Part Two* 3 cr. hrs.

Cervantes, *Don Quijote de la Mancha*. Prerequisite: Span. 304.

Span. 411 — *The Poetry of Spain* 3 cr. hrs.

This course, chronological in development and based upon several volumes of the finest Spanish poetry, is open only to majors.

Span. 414 — *Spanish Literature of the XIV and XV Centuries* 3 cr. hrs.

This course will concentrate on the XIV Century: El Infante Don Juan Manuel and el desarrollo de la prosa, "El Arcipreste de Hita", and Rimado de Palacio.

For the XV Century: the humanismo, la poesia, el Cancionero de Baena, el Marqués de Santillana, Juan de Mena, and Jorge Manrique's "Coplas."

Span. 499 — *Directed Readings* 3 cr. hrs.

SUMMER ELECTIVES

Span. 104 — *Intermediate Spanish* 3 cr. hrs.

Span. 201 — *Grammar and Composition* 3 cr. hrs.

Span. 204 — *Seminar in Spain* 6 cr. hrs.

Eight weeks in Spain at the University of Madrid. This study-practicum permits the student to get native instruction in the native setting. The students are housed in dormitories and attend the summer course for foreign students. Daily and weekend excursions to places of interest are included in the program. An evaluator from Bloomsburg accompanies the group to assist students and keep records of progress.

GEOGRAPHY AND EARTH SCIENCE

- Geog. 101 — *World Physical Geography* 3 cr. hrs.
 Considers earth-sun relationships, land masses, oceans, landforms, weather and climate, and natural resources as elements and controls related to the adjustments man makes to his environments.
- Geog. 102 — *World Cultural Geography* 3 cr. hrs.
 A course designed to show the close relationship that exists between man, land, culture, and economic activities.
- Geog. 121 — *Economic Geography* 3 cr. hrs.
 The economic regions of the world together with their relationship to current world economic problems.
- Geog. 223 — *Geography of Anglo-America* 3 cr. hrs.
 The physical setting, present inhabitants, occupations, resources, present use of resources, and future outlook for Anglo-America.
- Geog. 224 — *Geographic Influences in American History* 3 cr. hrs.
 The relationship between the historical movements in the United States and the natural environment as a stage on which the action is portrayed. Prerequisite: Hist. 218.
- Geog. 225 — *Weather and Climate* 3 cr. hrs.
 The interrelationships between the elements of weather and climate. The functional application of these basic elements is elaborated upon through a study of climatic realms.
- Geog. 233 — *Geography of Europe* 3 cr. hrs.
 Europe's physical characteristics, topography, transportation systems, resources, population, and trade.
- Geog. 243 — *Geography of Asia* 3 cr. hrs.
 The physical characteristics of Asia and its social, cultural, and economic aspects.
- Geog. 244 — *Geography of Latin America* 3 cr. hrs.
 A regional study of South America, Central America and the islands of the Caribbean Sea. The human and physical factors of the geographic environment.
- Geog. 245 — *Geography of Africa* 3 cr. hrs.
 The physical geographic elements (climate, soils, natural vegetation, minerals, physiography and water) as they relate to agriculture, grazing, mining, manufacturing, transportation, communication, and political boundaries for all of Africa.

Geog. 246 — *Geography of the Soviet Realm* 3 cr. hrs.

The physical and human geography of the Soviet Union is studied along with some emphasis upon the relationship between that country and the so-called "satellite" nations.

Geog. 323 — *Political Geography* 3 cr. hrs.

This course includes an analysis of the factors — physical, human, and economic — which influence the changing pattern of the political map of the world.

Geog. 353 — *Physiography* 3 cr. hrs.

The study of the dynamic, tectonic, and gradational forces, which, in conjunction with climatic and biologic forces, have shaped the earth into its present form and are constantly refashioning and modifying it.

Geog. 354 — *Cartography* 3 cr. hrs.

The use, construction, and interpretation of maps, models, globes, charts, and geographic diagrams are presented.

E. S. 355 — *Meteorology* 3 cr. hrs.

A study of the atmosphere and the laws and underlying principles of atmospheric changes.

Geog. 356 — *Climatology* 3 cr. hrs.

Climate, (temperature, moisture, pressure and winds, air masses and storms) and the distribution of varied climates over the earth. Prerequisite: E.S. 355.

E. S. 357 — *Physical Geology* 3 cr. hrs.

The landscape in relation to the structure of the earth's crust. The agencies continually at work changing the earth's forms, the classification and interpretation of rocks, and the evolution of life.

Geog. 358 — *Conservation of Natural Resources* 3 cr. hrs.

The extreme importance to our economy and to our very lives of this nation's vital resources. Conservation of soils, forests, grasslands, waters, minerals, the air, and human resources.

E. S. 359 — *Oceanography* 3 cr. hrs.

An introduction to the geologic, chemical, and physical aspects of the ocean basins. Emphasis will be on ocean basin structure, topographic features, wave motion, current circulation, and methods of investigation.

E. S. 361 — *Historical Geology* 3 cr. hrs.

Chronology of earth history as interpreted from rocks and fossils. Maps, slides, specimens, films, field trips, and correlative reading supplement lectures. Prerequisite: Biol. 103-104 or E.S. 357.

Geog. 363 — *Urban Geography* 3 cr. hrs.

This course is designed to provide a conceptual and methodological framework in which to view the process of urbanization.

E. S. 365 — *Geomorphology* 3 cr. hrs.

The study of major land features and the processes that help to form them with particular emphasis on their relationship to the underlying geologic formations and structures. Laboratory and field trips included.

E. S. 367 — *Rocks and Minerals* 3 cr. hrs.

A study of the common minerals and rocks, their origins, occurrences, associations, and identifying characteristics.

E. S. 368 — *Stratigraphy and Sedimentation* 3 cr. hrs.

The processes and agents which form, transport, and deposit sediments and the geologic interpretation of the resulting rocks.

E. S. 369 — *Structural Geology* 3 cr. hrs.

An analysis of rock deformation based upon the principles of rock mechanics and utilizing data from field investigations.

E. S. 451 — *Field Techniques in Earth and Space Science* 3-6 cr. hrs.

Intensive field training in the use of equipment and techniques in the areas of geology, astronomy, meteorology, and cartography. Permission of the instructor required to enroll.

E. S. 453 — *Astronomy* 3 cr. hrs.

The solar system, its physical characteristics and motions, the interesting phenomena of our galactic system, and those of extragalactic space, together with the study of constellations. Prerequisite: Math. 101 or Math. 111.

Geog. 492 — *Geography Seminar* 3 cr. hrs.

Student pursues in depth such areas as the geographic literature, techniques, and the practical application of Geography. (A minimum of 21 credit hours in Geography must be completed before a student schedules this course).

SUMMER ELECTIVES AT THE MARINE SCIENCE LABORATORY*

MSL 120—Introduction to Oceanography	3 cr. hrs.
MSL 240—Marine Biology	3 cr. hrs.
MSL 245—Marine Ecology	3 cr. hrs.
MSL 260—Field Methods in Oceanography	3 cr. hrs.
MSL 250—Invertebrate Zoology	3 cr. hrs.
MSL 320—Physical Oceanography	3 cr. hrs.
MSL 325—Marine Geology	3 cr. hrs.
MSL 330—Chemical Oceanography	3 cr. hrs.
MSL 420—Marine Micropaleontology	3 cr. hrs.
MSL 425—Marine Geophysics	3 cr. hrs.

* Please check with Dr. Wendelin Frantz or Dr. Donald Rabb for full particulars.

HEALTH AND PHYSICAL EDUCATION

HPE 100 — *Personal and Community Health* 2 cr. hrs.

Provides basic concepts and understandings concerning personal and community health. The course is structured around a weekly mass lecture followed by a one-hour weekly meeting in small groups for discussion.

HPE 101 — *Physical Fitness Education* 1 cr. hr.
(*separate for men and women*)

Men . . . Theory and practice in one team sport (either soccer or speedball), tumbling, gymnastic apparatus, and a physical fitness test given to determine the fitness level of each student.

Women . . . This course consists of one team sport (either field hockey or volleyball), a physical fitness test to determine the fitness level of each student, concentrated work to improve this level, and a post-test to measure the improvement.

HPE 150 — *Aquatics (co-educational)* 1 cr. hr.

The swimming program is divided into two parts. In Part I, the student is taught the proper method of adjusting to the water, rhythmic breathing, floating, finning, treading water, surface diving, a standing front dive, and the nine basic swimming strokes. Part II emphasizes water safety and provides the opportunity for Senior Lifesaving. Aquatic games are also included in the program.

HPE 151 — *Advanced Aquatics (co-educational)* 1 cr. hr.

A review of swimming strokes, lifesaving techniques, and an opportunity to qualify for Red Cross Water Safety Instructor certification. In addition, emphasis will be placed on pool management, basic scuba, competitive and synchronized swimming.

HPE 152 — *Survival Swimming (co-educational)* 1 cr. hr.

Instruction and practice in techniques of personal survival. Skills taught include rhythmic breathing, swimming strokes necessary for survival, drownproofing float, and an emphasis on building personal endurance and confidence under adverse conditions. Water safety is emphasized and an opportunity is provided for the acquisition of Senior Lifesaving Certificates.

The following courses are intended to develop knowledge, skill, and appreciation of the activity being taught. Primary emphasis has been placed on those activities possessing "Lifetime" recreational values.

HPE 201 — *Archery and Badminton (Co-ed)* 1 cr. hr.

HPE 202 — *Archery and Bowling (Co-ed)* 1 cr. hr.

HPE 203 — *Archery and Golf (Co-ed)* 1 cr. hr.

HPE 204 — *Archery and Square Dance (Co-ed)* 1 cr. hr.

HPE 205 — *Badminton and Bowling (Co-ed)* 1 cr. hr.

HPE 206 — *Badminton and Golf (Co-ed)* 1 cr. hr.

HPE 207 — *Badminton and Square Dance (Co-ed)* 1 cr. hr.

HPE 208 — *Bowling and Golf (Co-ed)* 1 cr. hr.

HPE 209 — *Bowling and Square Dance (Co-ed)* 1 cr. hr.

HPE 210 — *Golf and Square Dance (Co-ed)* 1 cr. hr.

HPE 211 — *Bowling And Billiards (Co-ed; fee required)* 1 cr. hr.

HPE 212 — *Billiards And Square Dance (Co-ed; fee required)*
1 cr. hr.

HPE 222 — *Dancing (Co-ed)* 1 cr. hr.

Area of Interest students in Elementary School Health and Physical Education must complete the following courses: HPE 301, 302, 303, 320, 321, 331, 410, 411, and 412.

Secondary Majors securing the "Coaching Concentration" within the Department of Health and Physical Education must complete the following courses: HPE 242, 409, and select six credit hours from courses numbered 251 — 258 (one team sport, one individual sport, and one elective).

HPE 242 — *Physiological and Medical Aspects of Athletic Coaching* 3 cr. hrs.

A study of basic anatomical and physiological factors affecting movement, endurance, strength, and conditioning in sports. Included is a thorough investigation of medical concepts such as protective equipment, training, care of injuries, safety problems, and medical research relating to athletics.

HPE 251 — *Techniques of Coaching Baseball* 2 cr. hrs.

Development of individual skills and techniques of teaching and coaching baseball.

HPE 252 — *Techniques of Coaching Basketball* 2 cr. hrs.

Analysis of techniques and development of personal skills in basketball.

HPE 253 — *Techniques of Coaching Football* 2 cr. hrs.

Advanced instruction and practice in offensive and defensive fundamentals for each position; organizational methods and coaching principles.

HPE 256 — *Techniques of Coaching Cross Country,
Track, and Field* 2 cr. hrs.

Advanced instruction and practice; rules and officiating techniques; organizational methods for conducting meets, tournaments, and clinics; coaching principles.

HPE 257 — *Techniques of Coaching Wrestling and Golf* 2 cr. hrs.

Advanced instruction and practice; rules and officiating techniques; organizational methods for conducting meets, tournaments, and clinics; coaching principles.

HPE 258 — *Techniques of Coaching
Swimming and Tennis* 2 cr. hrs.

Strategy, techniques, and theory for interscholastic competition in swimming and tennis.

HPE 262 — *Women's Extramural Program* 2 cr. hrs.

Provides knowledge and practice in application of coaching and officiating techniques for women's team sports.

HPE 301 — *Basic Activities I
Elementary Physical Education* 1 cr. hr.

This course consists of instruction and participation in elementary school rhythms, dance, and movement exploration. It will include classroom and laboratory work.

HPE 302 — *Basic Activities II
Elementary Physical Education* 1 cr. hr.

Instruction and practice in elementary school conditioning exercises; stunts and tumbling; games of low organization including running, circle tag, and classroom games; relays; and games for special occasions. Includes both classroom and laboratory work.

HPE 303 — *Basic Activities III**Elementary Physical Education*

1 cr. hr.

Instruction and practice in ball-type activities (elementary), lead-up games to team sports, simple team games, team sports, skill testing, and physical fitness testing. Includes classroom and laboratory work.

HPE 311 — *Methods and Materials in Elementary School**Health and Physical Education*

3 cr. hrs.

This course provides principles and procedures to meet the needs and interests of elementary age children in the area of health and physical education. The program includes basic philosophy and objectives of health and physical education; basic motor skills necessary for participation in elementary school physical education; and opportunities to develop enrichment in the area of health education. Laboratory experience is included. Not open to HPE Area of Concentration students.

HPE 320 — *Health and Safety in the Elementary School* 2 cr. hrs.

Provides students with health knowledge and training in the areas of elementary school environment and health appraisal, techniques for teaching elementary school health, the elementary school health program, and safety education in the elementary school.

HPE 321 — *First Aid and Safety*

2-3 cr. hrs.

This course is designed for the elementary-secondary teacher who needs training in first aid and safety. Students will be given preparation and practice in the recognition and treatment of common first aid emergencies, and will be given an understanding of the role of safety in modern society. Red Cross Standard Advanced and Instructor certification may be obtained.

HPE 331 — *Recreational Education*

2-3 cr. hrs.

A discussion of and practice in recreation activities used in school and playground situations. Emphasis is placed on recreation planning, techniques of leadership, and worthy use of leisure time.

HPE 333 — *School Camping and Outdoor Education* 3 cr. hrs.

The course is designed to acquaint students with the scope of organized camping and the acquisition of and practice in the basic skills required of teachers involved in camping and outdoor education training. Field experiences are included.

HPE 400 — *Seminar in Elementary School Health and Physical Education* 3-6 cr. hrs.

Primarily designed for the in-service teacher who wishes to acquire the latest knowledge and techniques in health and physical education at the elementary school level. Not open to Area of Concentration students.

HPE 409 — *Principles and Problems of Secondary School Athletics* 3 cr. hrs.

A study of coaching techniques necessary to plan and promote athletic programs. The course includes history, organization, and administration, business procedures, public relations, and formulation of policy.

HPE 410 — *The Planning and Administration of Elementary School Health and Physical Education* 3 cr. hrs.

A study of the philosophy, objectives, values, and techniques necessary to plan and evaluate a sound program in health and physical education for the elementary school.

HPE 411 — *Adapted Physical Education* 3 cr. hrs.

A study of the handicapped child and techniques used in recognizing and meeting his problems. Emphasis is placed on the kinesiological analysis of human motion and body mechanics as applied to programming physical education activities for the atypical.

HPE 412 — *The Teaching of Health and Physical Education in the Elementary Grades* 3 cr. hrs.

Methods, materials, and practice in teaching health and physical education for primary, intermediate, and upper grades. Area of Concentration and in-service teachers only.

HPE 420 — *Techniques in Health and Physical Education for Special Education Teachers* 3 cr. hrs.

A course to develop sound principles and procedures for meeting the physical, emotional, and social needs of the mentally retarded in health and physical education.

HISTORY

Hist. 111 — *World History to 1500* 3 cr. hrs.

Surveys development of man and his culture throughout the world from earliest times to 1500. All the great civilizations are studied, with emphasis upon the interaction of Western Europe with other cultural systems.

Hist. 112 — *World History 1500 to 1815* 3 cr. hrs.

Survey of political, social, economic, and cultural forces in the Western and non-Western world, with emphasis on the interaction of major cultural systems from 1500 to 1815.

Hist. 113 — *World History since 1815* 3 cr. hrs.

Survey of political, social, economic, and cultural forces at work since post-Napoleonic period. Emphasis upon increasing importance of non-Western world in the development of the modern world.

Hist. 218 — *United States and Pennsylvania Survey* 3 cr. hrs.

Major and usually recurring political, social, and economic problems are emphasized.

Hist. 312 — *Classical World* 3 cr. hrs.

Study of the ancient world from the ancient Near East to the fall of the Roman Empire in the West, with an intensive emphasis upon Greece, Rome, the rise of Christianity, and their influence on Western European civilization. Prerequisite: 6 cr. hrs. of history.

Hist. 314 — *Medieval Europe* 3 cr. hrs.

Study of the peoples and countries which emerged following the fall of the Roman Empire in the West; a critical analysis of feudalism and manorialism, the development of Western institutions, and of the church and temporal authorities to the late 14th century. Prerequisite: 6 cr. hrs. of history.

Hist. 318 — *England to 1688* 3 cr. hrs.

Political, economic, social, and cultural life in England to the Glorious Revolution, especially the growth and evolution of English institutions and the emergence of England as a world power. Prerequisite: 6 cr. hrs. of history.

Hist. 319 — *England since 1688* 3 cr. hrs.

Political, social, economic, and cultural development in England from the Glorious Revolution to the present with emphasis upon the development of democracy, the Industrial Revolutions, and the growth and decline of the British Empire. Prerequisite: 6 cr. hrs. of history.

Hist. 322 — *Renaissance and Reformation Eras* 3 cr. hrs.

Political, social, economic, literary, artistic, and intellectual developments from ca. 1300 in Italy and including the spread of the Renaissance throughout Europe; also a critical study of the Protest-

ant and Catholic reformations in relation to the political, economic, social, and cultural developments in Western Europe in the 16th and 17th centuries. Prerequisite: 6 cr. hrs. of history.

Hist. 324 — *The Age of Absolutism, 1600-1789* 3 cr. hrs.

Rise of the modern nation states, the growth of absolutist power in Eastern and Western Europe, and the colonial wars between the major Western powers. Prerequisite: 6 cr. hrs. of history.

Hist. 326 — *Revolution, Liberalism and Nationalism, 1789-1914* 3 cr. hrs.

Causes and effects of the French Revolution and the Napoleonic Wars; the conflict of restoration with the rising tides of nationalism and liberalism; the unification of Germany and Italy; the diplomatic crises leading to World War I. Prerequisite: 6 cr. hrs. of history.

Hist. 332 — *Europe since 1914* 3 cr. hrs.

Analysis of major political, social, economic, and military aspects of European history from World War I to the present. Emphasis upon the problems faced by the present-day world. Prerequisite: 6 cr. hrs. of history.

Hist. 348 — *Contemporary Europe Culture Tour* 6 cr. hrs.

Professionally guided study tour of Western Europe, usually scheduled each summer. Research paper required.

Hist. 352 — *Latin America since 1820* 3 cr. hrs.

After brief summary of course and results of the revolutionary era, attention is devoted to the economic, social, and political development of individual nations. Prerequisite: 6 cr. hrs. of history.

Hist. 354 — *The Modern Far East* 3 cr. hrs.

Survey of Eastern Asiatic civilizations with emphasis upon cultural change and political response in consequence of European expansion and the spread of nationalism. Prerequisite: 6 cr. hrs. of history.

Hist. 356 — *Russia to 1917* 3 cr. hrs.

Survey of Russia from the beginning of the Russian State in the ninth century through the Kievan, Muscovite, and Imperial periods to the Bolshevik Revolution of 1917. Emphasis placed on geographical, political, socio-economic, and cultural factors which contribute most to an understanding of present-day Russia. Prerequisite: 6 cr. hrs. of history.

Hist. 358 — *Modern Africa* 3 cr. hrs.

Surveys the transformation of the societies of Sub-Sahara Africa from colonialism to national independence. Prerequisite: 6 cr. hrs. of history.

Hist. 362 — *The Near and Middle East since 1800* 3 cr. hrs.

Beginning with the gradual dismemberment of the Ottoman Empire and the extension of European interests in the nineteenth century, surveys the West's continuing involvement in the area and the rise of nationalism. Prerequisite: 6 cr. hrs. of history.

Hist. 372 — *Colonial Period of America to 1783* 3 cr. hrs.

European colonization in the New World with attention to the establishment and development of England's thirteen colonies and emphasis upon the problems which produced conflict between the colonies and the British Empire resulting in the American Revolution. Prerequisite: 6 cr. hrs. of history.

Hist. 374 — *Early National Period of the United States* 3 cr. hrs.

Major periods — Confederation, Federalist, and Jeffersonian administrations, War of 1812, Era of Good Feelings — analyzed as to their contributions to the establishment of the United States from 1783 to 1828. Prerequisite: 6 cr. hrs. of history.

Hist. 376 — *American Expansion and Disunion,
1828-1865* 3 cr. hrs.

Study of Jacksonian Democracy, Manifest Destiny, and the Mexican War; the issue of slavery and expansion, and the Civil War. Prerequisite: 6 cr. hrs. of history.

Hist. 378 — *Emergence of Industrial America, 1865-1898* 3 cr. hrs.

Study of economic, social, cultural, and political problems inherent in the transformation of the United States from an agrarian nation into a modern industrial world power. Prerequisite: 6 cr. hrs. of history.

Hist. 382 — *Early Twentieth Century
United States, 1898-1932* 3 cr. hrs.

Survey of domestic and international issues concerning the United States from the Spanish-American War to the Great Depression, with analysis of the Progressive Era and its contributions, the role of the United States as a world power, World War I and the

League of Nations, expansion of the American economy, and the tensions of the 1920's. Prerequisite: 6 cr. hrs. of history.

Hist. 384 — *Contemporary United States, 1932 to the Present* 3 cr. hrs.

Study of the Great Depression with its ramifications on American life, entry into World War II, problems of the cold war, and domestic issues from the Truman Presidency to the present. Varying interpretations of the era examined to understand conflicting views of the present. Prerequisite: 6 cr. hrs. of history.

Hist. 388 — *Pennsylvania* 3 cr. hrs.

Examines in depth major contributions of Pennsylvania to national life and contrasts significant movements on the state level with those on the national. Prerequisite: 6 cr. hrs. of history.

Hist. 391 — *Diplomatic History of the United States to 1898* 3 cr. hrs.

A critical analysis of United States foreign relations from the Colonial period to the 1898 war with Spain, with emphasis upon the development of, the role of public opinion in, and the peculiar conditions in America which have profoundly influenced fundamental foreign policies. Prerequisite: 6 cr. hrs. of history.

Hist. 392 — *Diplomatic History of the United States since 1898* 3 cr. hrs.

A critical analysis of United States foreign relations from the war with Spain in 1898 to the present. To the study of factors considered in History 391 is added an emphasis on the increasing involvement of the nation in world affairs in its transition to the status of a great world power. Prerequisite: 6 cr. hrs. of history.

Hist. 396 — *Selected Political and Constitutional Problems* 3 cr. hrs.

A topical approach to various political and constitutional problems of American life. Selected problems or periods, and their causes and effects, will be intensively studied. Prerequisite: 6 cr. hrs. of history.

Hist. 399 — *Bibliography and Research* 3 cr. hrs.

A review of basic historical bibliography and exercises in location and use accompany a careful analysis of the problems and tools of historical research and a practical application of research methods. Prerequisite: 9 cr. hrs. of history or consent of instructor.

Hist. 412 — *Central Eastern Europe since 1815* 3 cr. hrs.

Survey of the political and cultural development of the nations of Europe which lie between Germany and Italy on the west and Russia on the east since their emergence as independent nation-states in the nineteenth and twentieth centuries. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 421 — *Diplomatic History of Europe from 1815 to 1919* 3 cr. hrs.

Analytical study of foreign policies and relations of the European nations from the Congress of Vienna to the First World War. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 422 — *Diplomatic History of Europe since 1919* 3 cr. hrs.

Analytical study of foreign policies and relations of the Great Powers during the Interwar Years — League of Nations, war debts and reparations, disarmament, causes of World War II — the diplomacy of the Second World War, and the origins and evolution of the cold war. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 428 — *Intellectual History of Europe since the Enlightenment* 3 cr. hrs.

Changes in currents of thought during the period are related to political, economic, and social developments. Special attention given to various interpretations of major intellectual movements. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 452 — *Soviet Russia* 3 cr. hrs.

Critical analysis of the political, social, economic, and cultural evolution of the Soviet Union, and a study of Soviet foreign policy and international relations. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 454 — *China and Japan in the Twentieth Century* 3 cr. hrs.

A survey of the political, social, and economic problems in the rise of these nations to international power. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

* Graduate credit can be received only by making application and being admitted to graduate standing, and registering through the Office of Graduate Studies.

Hist. 456 — *Selected Problems in Africa and the Near and Middle East* 3 cr. hrs.

Intensive study of critical social, political, and economic problems of the contemporary peoples and nations in these regions. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 471 — *Industrial History of the United States* 3 cr. hrs.

Survey of industrial growth of the United States in relation to political, social, and cultural institutions with special attention to the development of resources, technology, transportation, consumer products, and modern industrial problems. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 472 — *History of Labor in the United States* 3 cr. hrs.

Surveys the problems of labor from the colonial period to the present, with emphasis upon the development of unions and their role in national life. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 481 — *United States Social, Cultural, and Intellectual History to 1860* 3 cr. hrs.

Studies impact of English institutions, the development of a distinct American society, and the divergence of the cultures of the North and the South with emphasis upon Puritanism, the Enlightenment, and Transcendentalism. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

Hist. 482 — *United States Social, Cultural, and Intellectual History since 1860* 3 cr. hrs.

Modern American social and cultural institutions and major contemporary systems of thought are analyzed. Prerequisite: 9 cr. hrs. of history. Offered for undergraduate or graduate credit.*

MATHEMATICS

Math. 101 — *Fundamentals of Mathematics* 3 cr. hrs.

This course is designed to convey an appreciation of a selection of mathematical applications in modern civilization while increasing the student's competence in coping with mathematical situations of everyday living.

* Graduate credit can be received only by making application and being admitted to graduate standing, and registering through the Office of Graduate Studies.

Math. 110 — *Pre-Calculus* 4 cr. hrs.

This course is a preparatory one for those students who do not meet the requirements to begin the calculus sequence. It is a study of elementary algebraic functions and relations, exponential and logarithmic functions, circular functions and inverse functions.

Math. 111 — *College Algebra* 3 cr. hrs.

Designed to strengthen and increase the concepts developed in secondary school algebra. Emphasis is placed on the study of functions, matrices, and determinants.

Math. 112 — *Trigonometry* 3 cr. hrs.

Designed to have the student become proficient in the use of trigonometric functions. Also includes complex numbers and vectors. Prerequisite: Math. 111.

Math. 116 — *Introductory Statistics* 3 cr. hrs.

This course aims to develop the ability to read, interpret, and construct tables of statistical data; to compute values for the various statistical measures; and to apply the basic skills of statistics to the biological sciences. Biological sciences majors only. Prerequisite: Math. 111.

Math. 211 — *Calculus I* 4 cr. hrs.

A critical study of the cartesian plane, functions, limits and continuity; the derivative, differentials and applications; and anti-derivatives.

Math. 212 — *Calculus II* 4 cr. hrs.

A critical study of the definite integral and application; conic sections; differentiation of elementary transcendental functions; the indefinite integral and techniques of integration. Prerequisite: Math. 211.

Math. 221 — *Statistics* 3 cr. hrs.

Descriptive and inferential statistics with emphasis on probabilistic distribution. Both discrete and continuous probability density functions are discussed. Practical training in the calculation of various statistical measures and the use of automatic calculators is obtained in the laboratory. Prerequisite: Sophomore standing.

Math. 222 — *College Geometry* 3 cr. hrs.

Elementary geometry from an advanced standpoint. Incidence geometry in planes and space, geometric inequalities, properties of

the triangle, the quadrilateral, the circle and sphere. Prerequisite: Math. 112.

Math. 231 — *Theory of Arithmetic* 3 cr. hrs.

The use of language in mathematics, sets and relations; the four elementary operations in counting numbers, integers, and different number bases; and elementary theory of numbers. Elementary education majors only.

Math. 232 — *Algebraic and Geometric Structures* 3 cr. hrs.

Clock arithmetic and modulo systems; rational numbers, decimals, and irrational numbers; measurement of line segments, triangles, circles, area, and volume. Prerequisite: Math. 231.

Math. 241 — *Introduction to Computer Programming* 1 cr. hr.

An introduction to computer programming using the Fortran Language with examples chosen from the natural and physical sciences.

Math. 246 — *Field Work in Mathematics* 3 cr. hrs.

Mathematics takes on new interest when it is applicable to life situations. Instruments used in the field are the slide rule, angle mirror, hysometer, and clinometer, plane table, vernier, transit, and scale drawing. Prerequisite: Math. 112.

Math. 311 — *Intermediate Calculus* 4 cr. hrs.

A critical study of polar coordinates, parametric equations, vectors in the plane and space, improper integrals; partial differentiation and multiple integration. Prerequisite: Math. 212.

Math. 312 — *Differential Equations* 3 cr. hrs.

A study of elementary ordinary differential equations; infinite series and power series, and La Place transforms. Prerequisite: Math. 311.

Math. 321 — *Introduction to Modern Algebra* 3 cr. hrs.

Modern algebra and its concepts and terminology. Subjects discussed include sets, rings, fields, groups, relations, and functions. Prerequisite: Math. 212.

Math. 322 — *Linear Algebra* 3 cr. hrs.

A study of vectors and n-dimensional vector space; determinants, matrices, linear transformations, quadratic forms, and applications in 3-space. Prerequisite: Math. 321.

Math. 331 — *Algebra for Secondary School Teachers* 3 cr. hrs.

This course will discuss some of the topics of elementary algebra from an advanced viewpoint. Consideration will be given to topics of contemporary school mathematics programs. Prerequisite: Ed. 352.

Math. 332 — *Modern Geometry* 3 cr. hrs.

Euclidean and various non-Euclidean geometrics and their development from postulate systems. Prerequisite: Math. 222.

Math. 411 — *Advanced Calculus* 3 cr. hrs.

A systematic and modern approach to the differential and integral calculus of functions and transformations. Prerequisite: Math. 311.

Math. 412 — *Complex Variables* 3 cr. hrs.

A rigorous presentation of theory through the differential and integral calculus of analytic functions, residues, and conformal transformations, with applications. Prerequisite: Math. 311.

Math. 421 — *Introduction to Topology* 3 cr. hrs.

An introduction to the fundamentals of general topology. Topics included are elementary set theory, topological spaces, mappings, compactness, product and metric spaces, nets and convergence. Prerequisite: Math. 311.

Math. 422 — *Introduction to Group Theory* 3 cr. hrs.

An introduction to the fundamentals of group theory. Topics included are groups and related systems, normal subgroups and homomorphisms, Abelian groups, permutation groups, automorphisms, and free groups. Prerequisite: Math. 321.

Math. 431 — *Number Theory* 3 cr. hrs.

An introduction to the theory of numbers. Topics included are Euclidean algorithm, congruences, continued fractions, Gaussian integers, and Diophantine equations. Prerequisite: Math. 321.

Math. 432 — *Elementary Numerical Analysis* 3 cr. hrs.

A computer-oriented analysis of algorithms of numerical analysis. Topics discussed include non-linear equations, interpolation and approximation, differentiation and integration, matrices, and differential equations. Prerequisite: Math. 311.

MUSIC

Music 101 — *Introduction to Music* 3 cr. hrs.

An introduction to music listening to develop an understanding of music and the various media through which it is expressed. Selected masterpieces, composers, musical forms, and styles considered.

APPLIED MUSIC

One half hour private lesson per week ... 1 cr. hr.

Music 171 — *First Semester Applied Music* (Course title will be name of instrument. Those currently offered will be voice, piano, organ, trumpet, French horn, trombone, tuba, flute, clarinet, oboe, bassoon.)

Music 172 — *Second Semester Applied Music* (Course title will be name of one of the above instruments.)

Music 173 — *Third Semester Applied Music* (Course title will be name of one of the above instruments.)

Each student will be expected to practice five hours a week. Practice rooms will be assigned according to a schedule set up by the department. The number of students who may study will be limited by the college facilities available and the teaching faculty. Therefore, approval must be given by the department chairman before a student may be admitted to an applied music course.

At the end of each semester, the student is expected to meet minimum requirements in sight-reading, technique, and general musicianship as determined by examinations before the applied music faculty.

Music 221 — *History of Music* 3 cr. hrs.

Music from Bach to the present day with emphasis upon active listening and the development of a musical vocabulary.

Music 231 — *Ear Training and Sight Singing* 3 cr. hrs.

Recognition of melodic, rhythmic, and harmonic patterns. Dictation of melodic and harmonic intervals.

Music 232 — *Harmony I* 3 cr. hrs.

A study of music theory including tonic, subdominant, and dominant harmonies leading to altered chords and modulation. Keyboard experiences will be included.

Music 233 — *Harmony II* 3 cr. hrs.

A continuation of Harmony I including the study of the supertonic, submediant, and mediant harmonies. In addition to keyboard experiences and the development of rhythmic vocabulary and harmonic dictation, selected compositions will be analyzed. Prerequisite: Harmony I.

Music 241 — *Class Piano* 3 cr. hrs.

Group piano instruction for the beginner. Emphasis on creating and playing accompaniments for songs, and on sight reading.

Music 251 — *Concepts for Music Listening* 3 cr. hrs.

Examination of styles, techniques, and mediums. Comparisons of musical objectives and philosophies of schools, eras, and individual composers. Development of critical attitudes and listening techniques. Prerequisite: Music 101.

Music 311 — *Music Activities in the Elementary School* 3 cr. hrs.

A course designed to provide the prospective elementary teachers with the skills, understanding, and attitudes which will help them to function effectively in the area of music as it is related to the self-contained classroom. Emphasis is placed on personal music development, an understanding of the basic musical content, the developmental growth process in music, desirable musical experiences for children, and effective organization of these experiences.

Music 322 — *Music of the Romantic Era* 3 cr. hrs.

A study of nineteenth century European music.

Music 323 — *Twentieth Century Music* 3 cr. hrs.

Trends and development of contemporary music, with emphasis on selected representative works.

Music 324 — *American Music* 3 cr. hrs.

A study of the works of selected American composers with reference to characteristics indigenous to American music.

Music 341 — *Choral Techniques* 3 cr. hrs.

Class voice instruction with emphasis on the development of techniques and abilities necessary for participation in choral groups. Principal attention will be given to tone production, proper breathing, and appropriate literature.

Music 412 — *Literature and Materials of Music* 3 cr. hrs.

Designed primarily for elementary majors who have an area of interest in music. Provides a broad knowledge of the music program content in the elementary grades. Review basic texts, recordings, filmstrips, films, sources of literature, and materials. Develops a repertoire of songs, rhythmic activities, and other musical information representing a core foundation for the elementary music curriculum. Prerequisite: Music 311.

Music 461 — *Directed Study* 3 cr. hrs.

Individual study under the direction of a member of the music department faculty which may extend areas normally covered in specialized music courses. Pre-student teaching classroom experience may also be included.

NURSING

NED. 301 — *Public School Nursing I* 3 cr. hrs.

Public school nursing, as a branch of public health nursing, is considered in this course. The historical background, various fields of responsibility, and the problems and limitations of the profession are discussed along with new techniques of handling public school health problems.

NED. 303 — *Public School Nursing II* 3 cr. hrs.

A study of physical, emotional, and social problems affecting the health of the school child and the methods that may be employed by home, school, and community in helping to solve health problems with emphasis on the nurse as co-ordinator in the use of local, state, and federal resources.

NED. 304 — *Public Health Nursing I* 3 cr. hrs.

Historical background, fundamental principles, organizational framework, problems of community participation, and trends in public health nursing.

NED. 305 — *Nutrition* 3 cr. hrs.

A review of basic principles of nutrition with relation to economic factors and cultural food patterns with special emphasis on the nutritional needs of the school-age child.

NED. 306 — *Family Case Work* 3 cr. hrs.

An overview of social welfare and interviewing principles for school nurses. Case histories and interviewing situations are select-

ed for critical discussion to acquaint the student with application of case work methods in school nursing practice.

NED. 309 — *Community Health I* 3 cr. hrs.

A study of the various facets of community health including historical background, environmental concern, and methods of control. Reference will be made to contemporary and future problems dealing with radiation, air-water pollution, and space.

NED. 310 — *Modern Communicable Diseases* 3 cr. hrs.

A study of current practices and the role of the school nurse in communicable disease prevention and control with emphasis on the relationships between physical, socio-economic, and biologic environment.

PHYSICS

Phys. 101 — *Basic Physical Science* 3 cr. hrs.

An introduction to physics, chemistry, and astronomy. Topics include elementary mechanics, energy, the solar system, electricity and magnetism, sound, light, atomic structure, radioactivity, heat and kinetic theory, the periodic table and chemical properties, simple chemical reactions. Laboratory to illustrate some of the above topics. This course is designed for students other than science majors in the Secondary program, and for those in Business Education and Special Education. 4 hours/week: 2 class, 2 lab.

Phys. 103 — *Principles of Physical Science I* 3 cr. hrs.

A two-term laboratory "discovery" type of course in the physical sciences designed for non-science majors, especially for students in the elementary teaching program. Emphasis on the physics and chemistry of the solid state with a constant attempt to correlate observed properties of matter with theoretical models of its structure. First term topics include the behavior of waves and of light, crystals, kinetic theory, forces, and motion. Enrollment limited to students in the elementary program. 4 hours/week: 2 class, 2 lab.

Phys. 104 — *Principles of Physical Science II* 3 cr. hrs.

A continuation of Phys. 103. Second term topics include energy, forces inside matter, electrons in motion, atomic structure, ionic crystals, molecules, and covalently bonded solids. Prerequisite: Phys. 103. 4 hours/week: 2 class, 2 lab.

Phys. 111 — *Introductory Physics I* 4 cr. hrs.

A non-calculus approach to the basic principles of mechanics, the physics of fluids, and heat and thermodynamics. This course is designed to meet the requirements of students in the General Science and Biology programs and for students in Liberal Arts not majoring in Physics or Chemistry. 6 hours/week: 3 class, 3 lab.

Phys. 112 — *Introductory Physics II* 4 cr. hrs.

A continuation of Phys. 111. Includes the basic principles of sound, geometrical and physical optics, and electricity and magnetism. Prerequisite: Phys. 111 or equivalent. 6 hours/week: 3 class, 3 lab.

Phys. 211 — *General Physics I* 4 cr. hrs.

A treatment, using calculus, of the principles of mechanics, the physics of fluids, and heat and thermodynamics. This course is designed for majors in Physics and in Chemistry. Prerequisite: Math. 212 completed or concurrent. 6 hours/week: 3 class, 3 lab.

Phys. 212 — *General Physics II* 4 cr. hrs.

A continuation of Phys. 211. Includes the principles of sound, geometrical and physical optics, and electricity and magnetism. Prerequisites: Phys. 211, and Math. 212 completed. 6 hours/week: 3 class, 3 lab.

Phys. 225 — *Demonstrations in the Physical Sciences* 3 cr. hrs.

Designed to give the science student or in-service teacher practical experience for conducting demonstration experiments in physics, chemistry, general science, and earth science. The course will emphasize the use of materials, apparatus, and films characteristic of the new program in science such as PSSC Physics, CHEM Study, Earth Science Curriculum Project, and the Physical Science Program. Prerequisites: Physics 112, Chemistry 112, or their equivalent. 4 hours/week: 2 class, 2 lab.

Phys. 310 — *Introduction to Atomic Physics* 4 cr. hrs.

An introduction to the fundamentals of atomic structure: the electron, Bohr's theory of the hydrogen atom, X-rays, the photoelectric effect, and other fundamental processes; radioactivity, including natural and artificial transmutation, and an elementary treatment of fission and fusion. Prerequisite: Phys. 212 or Phys. 112 and approval of Instructor; Math. 212. 6 hours/week: 3 class, 3 lab.

Phys. 311 — *Mechanics* 3 cr. hrs.

A course in intermediate mechanics treating statistics and dynamics of particles and extended bodies, motions of bodies by conservative and dissipative forces, energy relations, impulse and momentum, rotation of a rigid body, angular momentum, and elasticity. Prerequisites: Phys. 212 or Phys. 112 and approval of Instructor; Math. 311 or concurrent. 3 hours class/week.

Phys. 314 — *Electricity and Magnetism* 4 cr. hrs.

An intermediate-level study of the electric field, potential, dielectric properties, capacitance, and direct and alternating currents. The study of magnetism includes magnetic fields, electromagnetic induction, and magnetic properties of matter. A brief introduction to electromagnetic waves is included. Prerequisites: Phys. 212 or Phys. 112 and approval of Instructor; Math. 311. 6 hours/week: 3 class, 3 lab.

Phys. 315 — *Electronics* 4 cr. hrs.

The application and theory of semiconductors and vacuum tubes with special emphasis on circuitry. Transistor and electron tube characteristics are determined and studied for use in amplifiers, oscillators, and computers. Prerequisites: Phys. 112 or Phys. 212, Math. 212. 6 hours/week: 3 class, 3 lab.

Phys. 412 — *Optics* 3 cr. hrs.

Brief review of geometric optics; extended treatment of topics in physical optics including diffraction, interference, polarization, and spectra. Prerequisite: Phys. 212 or Phys. 112 and approval of Instructor; Math. 212. 3 hours class/week.

Phys. 420 — *Vibrations and Waves* 3 cr. hrs.

An intermediate-level treatment of simple harmonic, damped, and forced oscillations. The study of waves includes the propagation of waves in three dimensions with analysis of reflection, transmission, and refraction for various boundary conditions. Electromagnetic, acoustical, fluid, and mechanical applications are included. Fundamental to much of advanced physics. Prerequisites: Phys. 311, Math. 311. 3 hours class/week.

Phys. 421 — *Solid State Physics* 3 cr. hrs.

An introduction to the physical properties of matter in the solid state. Basic quantum concepts, crystal structure, electrons in metals, electrical conductivity, semiconductors, band theory, the p-n junc-

tion. Dielectric and magnetic properties of matter. Prerequisites: Phys. 314, Math. 312. 3 hours class/week.

Phys. 422 — *Thermodynamics* 3 cr. hrs.

An introduction to the concepts and principles of classical thermodynamics. The first and second laws. Entropy. Thermodynamics of simple systems. Physics of very low temperatures. Prerequisites: Phys. 212, Math. 311. 3 hours class/week.

Phys. 480 — *History of Physical Science* 3 cr. hrs.

An historical account of the development of physical science, particularly physics and chemistry, from the time of Copernicus to the present. The great personalities of science, their ideas, and the effect their contributions made to man's understanding of the physical world will be studied. Intended for the prospective teacher of the physical sciences. Prerequisite: near completion of a major in physics or chemistry, or consent of Instructor.

Phys. 490 — *Physics Seminar* 1 cr. hr.

POLITICAL SCIENCE

Pol. Sci. 211 — *United States Government* 3 cr. hrs.

A study of American national government with emphasis on basic concepts, structure, powers, procedures, and problems.

Pol. Sci. 212 — *Elements of Political Science* 3 cr. hrs.

Emphasis on a mix of empirical and normative theory in order to furnish a conceptual framework as an introduction to the discipline.

(Either Pol. Sci. 211 or 212 is a prerequisite for all succeeding courses in the department.)

Pol. Sci. 313 — *State and Local Government* 3 cr. hrs.

A comparison of the states' structural institutions, together with an examination of the functions and problems of state, municipal, and special governmental units.

Pol. Sci. 314 — *Political Parties and Elections* 3 cr. hrs.

The structures and functions of political organizations, minor parties, campaign financing, theories of voting and voting behavior, and the history of the development of the American two-party system.

Pol. Sci. 316 — *Public Opinion and Propaganda* 3 cr. hrs.

Various methods and techniques for analyzing, measuring, and processing public opinion are explored, with opportunity allowed for some practical experience. Components such as pressure groups and content analysis tests for propaganda are included.

Pol. Sci. 323 — *Comparative European Governments* 3 cr. hrs.

Principles of comparative analysis; social and economic interests; role of ideology; political interest groups, parties and electoral systems; the evolution, structure, organization, and operation of the governments of Great Britain, France, the U. S. S. R., and the German Federal Republic.

Pol. Sci. 324 — *International Relations* 3 cr. hrs.

Political theory of the state, sovereignty, and government, and a detailed examination of their component parts. The sources of national power, the results of national power, in the form of disputes, conflicts, and wars, or alliances, balances of power, and settlements of international law in international courts.

Pol. Sci. 352 — *Public Administration* 3 cr. hrs.

The useful contributions made by organizational theory to the problems of decision-making functions and coordination of program budgeting and personnel are considered.

Pol. Sci. 424 — *Politics and Institutions of Latin America* 3 cr. hrs.

An examination of organizational forms, functions, and operations of selected countries of Latin America. Emphasis on indigenous institutions.

Pol. Sci. 425 — *Politics and Institutions of Africa and the Middle East* 3 cr. hrs.

An examination of the history, structure, functions, and problems of selected countries of Africa and the Middle East.

Pol. Sci. 426 — *Politics and Institutions of the Far East* 3 cr. hrs.

An examination of the history, structure, functions, and problems of selected countries of the Far East, including China, Japan, and India.

Pol. Sci. 433 — *History of Political Thought* 3 cr. hrs.

Important political theorists of the past and their proposals with reference to their validity at the time, and their application and acceptance today. Liberty, authority, democracy, individualism, nationalism, and internationalism. Prerequisite: Hist. 112, 113.

Pol. Sci. 451 — *Constitutional Law* 3 cr. hrs.

A study of the history, organization, and functions of the Supreme Court including a case study approach of the Court's interpretations of the commerce and taxing powers, state-federal relationships, and civil rights.

Psy. 460 — *Basic Statistical Method* 3 cr. hrs.

For a description of this course see Psychology 460 under Psychology course descriptions. Liberal arts students concentrating in political science will receive credit for this course. Prerequisite: permission of Political Science Department.

Soc. 466 — *Research Methods in the Social Sciences* 3 cr. hrs.

For a description of this course see Sociology 466. Liberal arts students concentrating in political science will receive credit for this course. Prerequisites: Psy. 460 and permission of Political Science Department.

Pol. Sci. 470 — *Senior Seminar* 3 cr. hrs.

Individual research projects determined in consultation between student and instructor. Prerequisites: 15 hours of political science including Pol. Sci. 433, Psy. 460, Soc. 466, and permission of the department.

PHILOSOPHY

Phil. 211 — *Introduction to Philosophy* 3 cr. hrs.

An attempt to develop systematically a number of general topics which the sciences, in their attempts to specialize, do not encompass. Some of these are forms of argument, kind of knowledge, nature of reality, individual and social values, and standards of conduct.

Phil. 301 — *Ethics* 3 cr. hrs.

Analysis of the criteria for choosing between alternatives; the relation of means and ends; individual and social interests; conflict of interests and community of interests, justification and genesis of values, ethical relativism.

Phil. 302 — *Logic* 3 cr. hrs.

A study of the laws of systematic thinking. Included is an examination of logical forms of argumentation, the syllogism, and the methodology of the deductive sciences.

Phil. 303 — *Philosophy of Science* 3 cr. hrs.

Analysis of the logic of inquiry in the natural and social sciences: the nature of scientific explanation, problems of causality, measurement, prediction, and verification.

Phil. 306 — *Philosophy of Religion* 3 cr. hrs.

A critical analysis of religious faith. Particular attention is given to the nature of religion, evidence supporting religious belief, and problems and challenges to religion. Prerequisite: Phil. 211.

Phil. 309 — *World Religions* 3 cr. hrs.

A study of the beliefs and practices of living religions. Includes Hinduism, Buddhism, Confucianism, Taoism, Shinto, Judaism, Christianity and Islam.

Phil. 314 — *Existentialism and Contemporary Philosophy* 3 cr. hrs.

A study of significant trends in contemporary Western philosophy; major emphasis on Existentialism. The writings of Freud, Kierkegaard, Nietzsche, Sartre, Camus and Ayer will be examined. Prerequisite: Phil. 211.

PSYCHOLOGY

Psy. 101 — *General Psychology* 3 cr. hrs.

Develops an understanding of how people behave and why they behave as they do. Heredity and environment, the nature and function of perception, emotions and thought, the forces that bring about various kinds of behavior, and the problems of personal adjustment.

Psy. 102 — *Advanced General Psychology* 3 cr. hrs.

Designed to provide students with a more intensive and detailed understanding of psychological processes which are covered at an elementary level in Psychology 101. Topics to be covered include human development, learning, memory, perception, motivation, emotion, and personality theory. The methods and systems of psychology, both historical and current, will also be explored. Prerequisite: Psy. 101.

Psy. 211 — *Child Growth and Development*

(*Child Psychology*)

3 cr. hrs.

The principles of human development which have most significance for understanding and working with children in elementary school classrooms and activities. Prerequisite: Psy. 101.

Psy. 321 — *Tests and Measures* 3 cr. hrs.

Critique of testing in the elementary and secondary schools, construction and appraisal of the various instruments of measurement. Practice in evaluating and selecting tests, in administering and scoring them, and in the analysis and presentation of test results. Attention given to remedial measures for the improvement of instruction and teacher-made tests. Prerequisite: Psy. 101.

Psy. 331 — *Mental Hygiene and Problems of Adjustment* 3 cr. hrs.

A discussion of the processes necessary for the development of a healthy mental state. Practical applications of principles of good mental hygiene demonstrated. Field trips to nearby mental institutions. Prerequisite: Psy. 101.

Psy. 351 — *Social Psychology* 3 cr. hrs.

A study of the behavior of individuals and groups in society. It deals with the psychological forces within individuals and emanating from the social environment that causes people to behave as they do. Prerequisite: Psy. 101.

Psy. 371 — *Educational Psychology* 3 cr. hrs.

A first course in providing for the applications of psychology to the learning situation. Deals with the learner, that which is to be learned, and the learning processes. Consideration of development, adjustment, motivation, individual differences, social adaptations, and abilities of learners. Deals with normal processes and disabilities in subject areas. Prerequisite: Psy. 101.

Psy. 401 — *Foundations of Contemporary Psychology* 3 cr. hrs.

Designed to provide basic background for those students who will have psychology as a major or as a minor field. An examination of historical backgrounds and schools of thought in psychology. Careful examination of methods of investigation and their implications for the various systems of psychology. Particular regard to the contributions of the various fields of psychology for education. Prerequisite: Psy. 101.

Psy. 406 — *Psychology Seminar* 3 cr. hrs.

Designed for students who have adequate ability and background for the carrying out and reporting of independent research in the field of psychology. In a three-hour session the researcher will present his paper for the judgments and discussion of the enrollees and the instructor. Topics are assigned by the instructor and should be arranged well in advance of the beginning of the

course. Each semester will have another area of psychology as the main theme for the researcher. Prerequisite: Permission of the instructor.

Psy. 416 — *Adolescent Psychology* 3 cr. hrs.

The physical, social, and psychological attributes of youth from age eleven to mid-teens and their adjustment in a dynamic society. (Formerly Psy. 411) Prerequisite: Psy. 211 or 371.

Psy. 421 — *Individual Mental Tests* 3 cr. hrs.

The nature of intelligence is studied and ways of measuring it considered. Emphasis is placed on understanding the uses of, and interpretations of results of, commonly used individual intelligence scales: Binet, Wechsler, various picture-vocabulary and performance tests.

Psy. 431 — *Abnormal Psychology* 3 cr. hrs.

Mental abnormalities including symptoms, diagnosis, and treatment. Problem cases and characteristics of handicapped and sub-normal children. Prerequisite: Psy. 101.

Psy. 436 — *The Study of Personality* 3 cr. hrs.

The nature and organization of personality and the dynamic forces that shape the individual. Personality types, conscious and unconscious processes, individual differences, abnormal trends, and ways of measuring personality characteristics. Prerequisite: Psy. 101.

Psy. 451 — *Psychology for Business and Industry* 3 cr. hrs.

Services of the psychologist to business and industry. Included are job analysis, motion studies, selection of new employees, transfers, promotions and terminations, training, problem employees, rating, morale, and research. Prerequisite: Psy. 101.

Psy. 456 — *Psychology of Motivation* 3 cr. hrs.

An investigation of the basic dynamics of human behavior. A consideration of the concepts, principles, and empirical findings concerning those basic factors which underlie human motivation. Attention is paid to both innate and acquired behavior bases. Prerequisite: Psy. 101.

Psy. 460 — *Basic Statistical Method* 3 cr. hrs.

Methods of collecting, tabulating, and treating data; measures of central tendency, deviation, correlation, and graphic representation; descriptive statistics. Hypothesis testing, chi-square and

variance techniques will be treated. Provision for practical exercises in computation from, and interpretations of, various measures.

Psy. 461 — *Experimental Psychology* 3 cr. hrs.

An introduction to the methodology of experimental research. Students delve into the theory of experimental research, experimental design, individual study, and critical analysis of complete research. Prerequisite: Psy. 101.

Psy. 462 — *Advanced Experimental Psychology* 3 cr. hrs.

A continuation and an extension of Psychology 461. The student evaluates reports of experiments and research. There is an involvement in more advanced procedures and techniques of experimental design and practice. Prerequisite: Psy. 461.

Psy. 466 — *Research Projects in Psychology* 3 cr. hrs.

A problem of special interest selected and followed by each student under the immediate supervision of the instructor. Prerequisites: Recommendation of the advisor and permission of the department chairman.

SOCIOLOGY

Soc. 211 — *Principles of Sociology* 3 cr. hrs.

The basic characteristics of group behavior, the organization of society and culture, individual and community adjustments, in the light of their origin, development, form, and functions.

Soc. 218 — *Religion in American Society* 3 cr. hrs.

Analysis of the relationship between religion and American social institutions and society. Prerequisite: Soc. 211.

Anthro. 224 — *Cultural Anthropology* 3 cr. hrs.

Man's biocultural development and cultural achievement. The function of elements and configurations of material and non-material culture in meeting human needs. Cultural processes and the role of culture in personality formation.

Soc. 233 — *Introduction to Social Work and the Welfare Services* 3 cr. hrs.

An examination of the modern welfare services, followed by the study of some of the methods by which social workers help to solve a host of problems which range from adoption and care for the aged to marital counseling, parole supervision, and community organization.

Soc. 313 — *Contemporary Social Problems* 3 cr. hrs.

Urgent social problems and proposals offered for their solution. Topics include social change, personal maladjustment, social disorganization, mobility, delinquency, racial and economic tensions, and special problems of youth, families, and aging. Prerequisite: Soc. 211.

Soc. 315 — *Racial and National Minority Groups* 3 cr. hrs.

An analysis of racial and minority relations involving racial, national, and religious minorities in the United States. Emphasis will be placed on the present system of minority relations with efforts being made toward possible adjustments. Prerequisite: Soc. 211.

Soc. 316 — *Urban Sociology* 3 cr. hrs.

Analysis of origin and growth of the city in the U. S. Emphasis on ecological changes taking place as well as the dynamic patterns of interaction on the contemporary scene. Prerequisite: Soc. 211.

Anthro. 320 — *Contemporary World Cultures* 3 cr. hrs.

Comparative analysis of selected non-European societies in contrasting cultural and natural areas. Stresses on the natural and social environment, national character, world view, and literary, artistic, and musical expression.

Anthro. 326 — *North American Ethnography and Archaeology* 3 cr. hrs.

Survey of the cultural types and language distributions of the North American Indian through prehistoric and early historic periods. Includes Indians and archaeology of Pennsylvania. Prerequisite: Anthro. 224.

Soc. 331 — *Marriage and Family* 3 cr. hrs.

Cultural traditions of the marriage and the family and the new problems in social behavior these institutions face in a changing society. Prerequisite: Soc. 211.

Soc. 332 — *Personality in Culture and Society* 3 cr. hrs.

Examination of cultural influences on the development of personality; analysis of personality differences in various cultures. Presentation of explanatory hypotheses.

Soc. 334 — *Social Casework* 3 cr. hrs.

A detailed study of representative cases in the field of social work; techniques of investigation and criteria for appraisal.

Soc. 336 — *Child Welfare* 3 cr. hrs.

A historical and comprehensive study of the principal child welfare services. The course is directed toward developing a knowledge about, and an understanding of, society's responsibility in meeting the varied needs of children.

Soc. 341 — *Criminology* 3 cr. hrs.

Scientific study of crime. Theories of causes of crime, including physical type, differential association, psychiatric, etc. Volume, scope, and trends in crime; police, administration of justice, rehabilitation theory and practice. Prerequisite: Soc. 211.

Anthro. 410 — *Primitive Arts* 3 cr. hrs.

Graphic arts, literature, music, and the dance of ancient and non-European cultures throughout the world. Slides, films, specimens and recordings will be used. Prerequisite: Anthro. 224.

Anthro. 415 — *Primitive Religion* 3 cr. hrs.

A critical examination of religion and magic in primitive society. Leading anthropological theories of the forms and functions of religion in human life are studied. Prerequisite: Anthro. 224.

Anthro. 429 — *Field Archaeology* 3 cr. hrs.

Field investigation of various aboriginal cultures which have occupied the valley of the North Branch of the Susquehanna River since the glacial age. Emphasis on excavation of sites in this area, preceded by orientation to stratigraphic and recording techniques. Prerequisite: Soc. 224 or 323.

Anthro. 430 — *Projects in Field Archaeology* 3 cr. hrs.

Intensive study of problems encountered in archaeological research on the prehistoric creatures of the Susquehanna Valley, as revealed by excavation and comparative study of finds.

Soc. 442 — *Juvenile Delinquency* 3 cr. hrs.

Examination of social pressures operative upon children in American society which lead to deviant behavior. Factors leading to formation of delinquent personality. Methods of treatment and prevention, juvenile courts, clinics and correctional institutions will be considered. Prerequisite: Soc. 211.

Anthro. 450 — *Socialization of the Child in
Primitive Society*

3 cr. hrs.

Life experience and adjustment of the individual through infancy, middle childhood and youth. Contrasting methods of introducing children to adult economic, social and religious activities. Prerequisite: Anthro. 224.

Psy. 460 — *Basic Statistical Method*

3 cr. hrs.

For a description of this course see Psychology 460. Liberal arts students will receive credit for this course. Prerequisite: Permission of Sociology Department.

Soc. 462 — *Sociological Theory*

3 cr. hrs.

Survey of the development of sociological theory from Comte and Spencer. Comparison of modern schools of thought, including mechanistic, geographical, analytical, functional, and neo-positivistic. Prerequisites: 12 hours of sociology or permission of instructor.

Soc. 466 — *Research Methods in the Social Sciences*

3 cr. hrs.

Methods and techniques in social science research. Preparation of research projects, questionnaires, sampling, interviews, etc. Introduction to methods for analysis and interpretation of data. Liberal arts students concentrating in sociology will receive credit for the course. Prerequisite: 12 hours of sociology including Psy. 460.

Soc. 470 — *Senior Seminar*

3 cr. hrs.

Individual research projects and reports within selected areas of sociological interest, such as the family, criminology, social stratification, and ethnic minorities. Prerequisites: 18 hours of sociology including Soc. 462 and 466, Psy. 460, and permission of the department.

SPECIAL EDUCATION

Spec. Ed. 201 — *Education of Exceptional Children*

3 cr. hrs.

The educational problems of exceptional children: gifted, mentally retarded, speech and hearing impaired, neurologically impaired, physically handicapped, and emotionally maladjusted. The history and philosophy of special education, programs for exceptional children.

Spec. Ed. 352 — *Experience with Emotionally Disturbed* 1-3 cr. hrs.

Experience working individually with emotionally disturbed children in a state hospital or a clinic setting. Prerequisite: Permission of instructor.

Spec. Ed. 354 — *Experience with Learning Disabilities* 1-3 cr. hrs.

Experience working individually with children whose learning disabilities present special educational problems. Prerequisite: Permission of instructor.

Spec. Ed. 450 — *Behavior Disorders* 3 cr. hrs.

Psychological development of behavior and its effect on the child's school performance. The effect of the school on the child is also discussed as are intervention approaches in educating emotionally disturbed children. Prerequisites: Psy. 101 and 371.

Spec. Ed. 451 — *Speech Improvement for the Classroom* 3 cr. hrs.

Open to students of all curriculums and in-service classroom teachers; an introduction is given to language and speech problems commonly found among school children. Practical methods and attitudes for improvement of communication in the classroom setting are outlined. (Required in Tch. M.R. curriculum).

Spec. Ed. 455 — *Learning Disabilities* 3 cr. hrs.

A study of the characteristics and symptoms of specific learning disorders. Students are introduced to diagnostic and educational procedures used with learning disorders. Emphasis is on perceptual and conceptual factors in the development of language. Prerequisites: Psy. 101 and 371.

SPEECH

Speech 103 — *Introduction to Speech* 3 cr. hrs.

The study and practice of skills in oral communication. Emphasis is on sound organization and effective language, with awareness of different speech patterns, and audience adaptation. The course includes theory and practice in the requirements for effective speaking and interpretation of literature and group discussion.

Speech 105 — *Communication Theory and Rhetoric* 3 cr. hrs.

Open to all students; required of speech majors. The course treats both the principles of classical rhetoric and the contemporary theories in communication. A survey of behavioral science, semantics, and the philosophy of language.

Speech 206 — *Oral Interpretation of Literature* 3 cr. hrs.

A study of the intellectual and emotional meanings used in the presentation of poetry and prose. Practice in the skills required for the successful reading aloud of these meanings to a group of listeners.

Speech 208 — *Introduction to Theatre Arts* 3 cr. hrs.

A survey of the arts of the theatre: directing, play production, theatre history, stage design, and acting. The student is given a broad general background in theatre.

Speech 211 — *Theatre Production* 3 cr. hrs.

A study of the physical aspects of producing a play: scene design, costuming, make-up properties, stage management, and business procedures. The student is thus equipped with the basic skills for the technical work of production. Crew work is assigned.

Speech 218 — *Discussion* 3 cr. hrs.

A study of the principles and processes of group discussion in policy making situations and interpersonal relations. Practical problems in leadership and participation are provided.

Speech 231 — *Introduction to Radio and Television* 3 cr. hrs.

A survey of communication practices and techniques in the media of radio and television. The student is given practice in these techniques, and is provided with a background of their dynamics in relation to modern society.

Speech 241 — *Voice and Diction* 3 cr. hrs.

A study of the vocal organs and their function. Designed for students who wish to improve their vocal quality and who have no voice defects.

Speech 307 — *Business and Professional Speech* 3 cr. hrs.

A study and practice of speech as applied in business and professional careers. Analysis of employer-employee situations, and management-labor relations.

Speech 311 — *Scene Design* 3 cr. hrs.

A study of the techniques of design and execution of stage settings with the integration of lighting, costume, and makeup. A survey of the historical development of scene design and staging. Prerequisite: consent of the instructor.

Speech 312 — *Fundamentals of Acting* 3 cr. hrs.

An introduction to the theories and techniques of acting. A study of the development of the character physically, emotionally, and intellectually. Individual and group exercises.

Speech 318 — *Creative Dramatics* 3 cr. hrs.

A study of the background and methods of creative dramatics for the teacher. The techniques of psycho-drama, socio-drama, therapeutic drama, etc. are studied and analyzed. Dramatics as an improvisational form of theatre is emphasized.

Speech 319 — *Children's Theatre* 3 cr. hrs.

A survey of dramatic literature for children and an investigation into the theories and techniques of theatre for children. Creative dramatics is introduced. Lab hours required.

Speech 321 — *Argumentation* 3 cr. hrs.

The basic principles of argument, with practice in debate. The fundamentals of logic are provided. Stress is on the techniques of effective thinking and speaking on controversial issues.

Speech 325 — *Extempore Speech* 3 cr. hrs.

An advanced public speaking course. Theories of, and exercises in, the four types of speaking. Major emphasis is on the composition and delivery of the extemporaneous speech.

Speech 411 — *Directing* 3 cr. hrs.

A comprehensive study of staging a play, from the selection of a script up to the opening performance. Each student directs and participates in classroom projects. Lab hours required.

Speech 414 — *Costuming for Stage* 3 cr. hrs.

Costuming for the theatre through application of historical developments and elements of design to the requirements of the theatre. Lab hours required.

Speech 415 — *History of the Theatre* 3 cr. hrs.

Study of the major periods of theatrical history from the viewpoint of play and the production. A survey of the theatre from the beginnings in Greece to 1860, with consideration given to the influences of Asiatic and African cultures.

Speech 416 — *Modern Theatre* 3 cr. hrs.

Developments in modern theatre practice and philosophy from Wagner and Appia to the present day. World theatre since Ibsen is studied, with particular attention to the contemporary American theatre scene.

Speech 421 — *Persuasion* 3 cr. hrs.

Analysis of problems of human motivation as encountered in audience situations. A study and practice of both the ethical, and scientific approach, by the speaker. Methods of applying a knowledge of the basis and tools of persuasion presented in detail.

Speech 490 — *Speech Seminar: Theatre* 3 cr. hrs.

A survey of the field of speech, with special emphasis on dramatic art. Purpose is to broaden the student's knowledge in his special field of learning by research and investigative papers and projects.

Speech 492 — *Speech Seminar: Public Address* 3 cr. hrs.

A survey of the field of speech, with special emphasis on public address. Purpose is as in Speech 490.

SUMMER THEATRE PROGRAM

The summer of 1968 marked the second year of the Speech Department Summer Theatre Program. Continuing the precedent set the previous summer, professional actors joined the Bloomsburg students and adults from the local area, in the two major productions. Mercedes McCambridge appeared in "The Glass Menagerie," and Lilia Skala in "I Remember Mama."

The 1968 Summer Theatre Program included, for the first time, graduate courses in Speech. In this way the entire program was considerably strengthened, from both the acting and the technical point of view.

Participation in the summer program is open also to those wishing to study for cultural purposes, and who may not desire to pursue a degree.

TEACHING OF THE MENTALLY RETARDED

Tch. MR. 201 — *Introduction to Mental Retardation* 3 cr. hrs.

Overview of behavioral and learning characteristics of the mentally retarded. Etiology of mental retardation with special consideration of medical and environmental aspects of the development of the mentally retarded. Observations of special classes and field trips to institutions to give students understanding of various levels of mental retardation and types of programs for them.

Tch. MR. 303 — *Crafts for All Levels of Mentally Retarded* 4 cr. hrs.

Laboratory experiences with craft activities for use with all levels of the mentally retarded. Use of tools and exploration of various media. Analysis of the crafts experiences for development of techniques and curricular emphases and correlation with the total program for the mentally retarded.

Tch. MR. 351 — *Special Class Methods: Primary and Intermediate Levels* 3 cr. hrs.

A specialized course dealing with organization of instruction for trainable and educable mentally retarded. Major emphasis will be on curriculum, methods and materials for primary and intermediate levels, with observation of special classes and construction of units and teaching materials.

Tch. MR. 352 — *Special Class Methods: Secondary Levels* 3 cr. hrs.

A student-centered workshop approach in analysis of methods, research, and philosophies currently in use in the teaching of the mentally retarded. Practice in the use of various teaching aids and machines related to student projects in secondary special classes for the mentally retarded.

Tch. MR. 361 — *Seminar in Teaching the Mentally Retarded* 3 cr. hrs.

Everyday practical problems of teaching special classes for the mentally retarded are considered. Organization and administration of classes, coordination with various personnel serving the students, integration and curriculum problems, facilities, equipment and materials will be discussed. Pennsylvania State School Law and State mandated special services will be presented. Teacher competence and problems pertinent to student teaching will be explored.

Tch. MR. 375 — *Individual Project* 1-3 cr. hrs.

Project planned according to interests and needs of the individual student, in any of the following suggested areas: library research, curriculum study, work with individual children, internship in special aspects of educational programs. (Open to seniors only with staff approval).

Tch. MR. 400 — *Workshop in Problems and Methods in Special Education* 3 or 6 cr. hrs.

Investigations are made of recent developments in the education of the educable mentally retarded. The impact of these trends on methods and techniques of teaching special classes are emphasized. Topics will vary according to interest and needs of students.

Tch. MR. 401 — *Student Teaching, M.R.* 12 cr. hrs.

Thirty hours per week of supervised student teaching experience under the direction of the professional staff in cooperation with local and state school divisions.

Tch. MR. 432 — *Language Arts for Special Classes* 3 cr. hrs.

A student-centered workshop approach in analysis of methods, research and philosophies currently in use in the teaching of the language arts to special classes. Practice in the use of various teaching aids and machines related to student projects in language arts applicable to individual needs of children in special classes.



CURRICULUMS

CURRICULUMS IN TEACHER EDUCATION

The overall goal of teacher education is to prepare teachers to contribute to the improvement of society in a three-fold manner — as active citizens, as educational leaders in their communities, and as guides who help children and youth become informed, active citizens.

The courses programmed in each of the teacher-education curriculums offered at Bloomsburg State College are designed to develop citizen teachers through a well-organized sequence of courses in the area of general education, professional education, and specialization.

GENERAL EDUCATION

The underlying philosophy and objectives of the general education sequence in the teacher education programs were developed cooperatively with a committee of the Middle States Association of Secondary Schools and Colleges.

In general, these objectives include the cultivation of democratic ideals, a sound code of ethical and moral values, a sense of civic responsibility, the capability of personal and social adjustment, and individual self-realization. More specifically, this phase of the academic program is intended to develop such qualities as the following: (1) skill in communication; (2) familiarity with general methods of fact finding; (3) comprehension of basic scientific principles and their application; (4) knowledge of our cultural heritage and its relevance to current social issues; (5) discrimination in the arts; (6) appreciation for diverse intellectual endeavors and their relationship to one's own field of interest; (7) physical and mental well-being.

PROFESSIONAL EDUCATION

The general objectives of the professional education sequence, cooperatively developed by the faculty, are basically the same for all teacher-education curriculums and can be briefly stated: to alert college students to the needs of youth and society and to the principles of learning applicable to the meeting of these needs. An understanding of the dynamics of mental hygiene pertaining to youth and community is stressed.

This sequence, which includes student teaching, proposes to prepare students for service in the communities and schools by stressing similarities and contrasts in philosophy, facilities, and pupils among various school systems and social settings. Modern methods of dealing with learners and with the problems encountered in professional employment are made part of the prospective teacher's professional preparation.

ACADEMIC SPECIALIZATION

The teacher-education programs at Bloomsburg are based on the concept that academic field specialization is basic to achieving professional as well as individual and social goals.

The academic fields which pertain to the humanities, science, the arts, mathematics, history and other social sciences, are central in the experiences which provide competence in fields of specialization, which the student will use in teaching children and youth. The prospective teacher as an individual and citizen needs understanding of the academic fields because teaching requires accurate knowledge of relevant facts and values, and skills of reflective thinking, creativity, and analysis.

The areas of specialization make a two-fold contribution to the work of the teacher. First, they provide much of the content with which children and youth will deal as the teacher guides their general education. Second, the prospective teacher, through concentration or specialization in the academic field, gains that depth of understanding and insight into one or more areas of knowledge which is basic to helping the child with the special interest or abilities to work more intensively on a problem.

DIVISION OF ELEMENTARY EDUCATION

Students in the Elementary Education Division are given a wide and versatile background of academic and cultural learnings. They must be prepared to work in all of the subject areas of the cur-

riculum with a generation of alert and precocious boys and girls. They must be sensitive to the problems which children encounter in their growth and development and how those problems affect their learning. Instruction in program planning and budgeting of the school day is provided to the end that the students will know how to provide for individual differences.

Students in this curriculum are required to choose their electives from a sequence of courses* which will give them real depth in one academic subject. This "Area of Concentration" will help equip them to serve as resource persons or team leaders for the schools in which they teach.

THE FOUR-YEAR ELEMENTARY CURRICULUM

Provisional College Certificates issued on the basis of the four-year elementary curriculum are valid for Kindergarten and Grades One to Six inclusive as well as for Grades Seven and Eight under the old 8-4 system.

(For administrative reasons the sequence of courses is subject to change. The first number after each course refers to clock hours, while the second indicates the credit hours.)

FIRST SEMESTER			SECOND SEMESTER		
	Hours			Hours	
	CL	CR		CL	CR
Art 101—Introduction to Art	3	3	Biol. 104—General Biology II	5	3
Biol. 103—General Biology I	5	3	Eng. 102—English Composition	3	3
Eng. 101—English Composition	3	3	Geog. 102—World Cultural Geography ..	3	3
Geog. 101—World Physical Geography ..	3	3	Music 101—Introduction to Music	3	3
Hist. 218—U. S. and Pa. Survey	3	3	H.P.E. 150—Aquatics	2	1
H.P.E. 101—Physical Fitness Ed.	2	1	Area of Concentration Elective	3	3
	19	16		19	16
THIRD SEMESTER			FOURTH SEMESTER		
Eng. 207—Survey of World Literature	3	3	Econ. 211—Principles of Economics	3	3
H.P.E. 100—Personal and Com. Health	2	2	Hist. 111—World History to 1500	3	3
Phil. 211—Introduction to Philosophy	3	3	Phys. 104—Physical Science for Elementary Teachers	4	3
H.P.E.—Elective	2	1	Soc. 224—Cultural Anthropology, or Soc. 211—Principles of Sociology	3	3
Phys. 103—Physical Science for Elementary Teachers	4	3	Speech 103—Introduction to Speech	3	3
Psy. 101—General Psychology	3	3	Area of Concentration Elective	3	3
Area of Concentration Elective	3	3		19	18
	20	18		19	18
FIFTH SEMESTER			SIXTH SEMESTER		
Ed. 393—Social Foundations of Education	3	3	Ed. 372—Foundation of Reading Instruction	3	3
Math. 231—Theory of Arithmetic	3	3	Math. 232—Algebraic and Geometric Structures	3	3
Pol. Sci 211—U. S. Government	3	3	Psy. 211—Child Growth and Development	3	3
Psy. 371—Educational Psychology	3	3	English Elective	3	3
Area of Concentration Elective	3	3	Area of Concentration Elective	3	3
	15	15	Specialization Elective	3	3
	17	15		18	18
SEVENTH SEMESTER			EIGHTH SEMESTER		
Ed. 395—Curriculum and Instruction in the Elementary School	8	6	Ed. 401—Student Teaching, including Professional Practicum	30	12
Ed. 397—Science and Mathematics in the Elementary School	3	3		30	12
Specialization Elective	3	3			
Specialization Elective	3	3			
	17	15			

* Art, Biology, English, French, Speech, Geography, German, Health and Physical Education, History, Mathematics, Music, Physical Science, Psychology, Social Studies, Spanish.

AREAS OF ACADEMIC CONCENTRATION

Each elementary education student shall be required to take from 18 to 24 semester hours of work in one of the following areas of academic concentration, 15 of which may be considered as part of general education. Academic Areas Offered:

Art	History
Biology	Mathematics
English	Music
French*	Physical Science
General Speech	Psychology
Geography and Earth Science	Spanish*
German*	Social Sciences
Health and Physical Education**	

DIVISION OF SECONDARY EDUCATION

Programs of studies in Secondary Education have been designed to give students the academic, cultural, and professional background necessary to make them competent teachers in their respective fields. The General Education requirements provide the prospective teacher with a broad basis in the Arts and Sciences, while Professional Education, including student teaching, stresses the needs of youth and society.

The majors offered in Secondary Education have the dual objective of (1) giving the student a background of sufficient breadth and depth to enable him to be a confident and knowledgeable teacher in his particular area of preparation, and (2), where not incompatible with the above, to provide in his chosen field a basis for the pursuit of graduate study in the indicated academic discipline or a related general field.

(For administrative reasons the sequence of courses is subject to change. The first number after each course refers to clock hours, while the second indicates the credit hours. Minimum number of credit hours for graduation is 128.)

* Those students who select an area of concentration in a foreign language, having no required general education credits to apply, might conceivably have to take more than 128 hours for graduation. For instance, they must take at least six credit hours of foreign language literature courses.

**Elementary education majors who wish to secure an Area of Concentration in elementary school health and physical education must complete these courses: HPE 301, 302, 303, 320, 321, 331, 410, 411, and 412. The 300 series courses in the Area of Concentration must be taken before the 400 series courses.

TYPICAL PROGRAM — Secondary Education

FIRST SEMESTER			SECOND SEMESTER		
	Hours			Hours	
	CL	CR		CL	CR
Eng. 101—English Composition	3	3	Eng. 102—English Composition	3	3
Speech 103—Introduction to Speech	3	3	Hist. 112—World History 1500 to 1815	3	3
Biol. 103—General Biology I	5	3	Geog. 101—World Phys. Geog.	3	3
Art 101—Intro. to Art or Music 101—Intro. to Music	3	3	H.P.E. 101—Physical Fitness Ed.	2	1
Math. 101—Fundamentals of Math.	3	3	Gen. Ed.—Humanities elective	3	3
H.P.E. 100—Personal and Com. Health	2	2	Electives	3	3
	<u>19</u>	<u>17</u>		<u>17</u>	<u>16</u>
THIRD SEMESTER			FOURTH SEMESTER		
Eng. 207—Survey of World Lit.	3	3	Hist. 218—U. S. and Pa. Survey	3	3
Hist. 113—World History since 1815	3	3	Psy. 101—Gen. Psychology	3	3
Phys. 101—Basic Physical Science	4	3	Soc. 211 or Soc. 224—Principles of Sociology or Cultural Anthropology	3	3
Gen. Ed.—Math. or Science	3	3	H.P.E. 150—Aquatics	2	1
Electives	6	6	Electives	6	6
	<u>19</u>	<u>18</u>		<u>17</u>	<u>16</u>
FIFTH SEMESTER			SIXTH SEMESTER		
Psy. 371—Educational Psychology	4	3	Ed. 396—Curriculum and Instruction in the Secondary School	8	6
Ed. 393—Social Found. of Ed.	3	3	Pol. Sci. 211—U. S. Government	3	3
H.P.E.—Elective	2	1	Electives	6	6
Electives	9	9		<u>17</u>	<u>15</u>
	<u>18</u>	<u>16</u>			
SEVENTH SEMESTER			EIGHTH SEMESTER		
Econ. 211 or 212—Prin. of Economics	3	3	Ed. 402—Student Teaching in the Secondary School (Including Professional Practicum)	30	12
Phil. 211—Intro. to Philosophy	3	3		<u>30</u>	<u>12</u>
Electives	12	12	Total Credit Hours		128
	<u>18</u>	<u>18</u>			

The program listed above illustrates a typical application of the three broad areas of learning into which the prospective high school teacher's education at Bloomsburg is divided. They are as follows:

I. GENERAL EDUCATION (62 Credits)

A. Humanities	CR
Art or Music Appreciation	3
English Composition	6
World Literature	3
Philosophy	3
Speech	3
Humanities elective	3
Total	<u>21</u>
B. Social Sciences	
World History	6
Hist. of United States and Pennsylvania	3
United States Government	3
World Physical Geography	3
General Psychology	3
Economics	3
*Sociology or Cultural Anthropology	3
	<u>24</u>

* Comprehensive Social Studies majors take both courses.

C. Natural Sciences	CR
General Biology	3
Physical Science	3
Mathematics	3
Science elective (Biology, Mathematics, Earth Science)	3
Total	12
D. Health and Physical Education*	
Personal and Community Health	2
Physical Education (Fitness, Aquatics, Recreation)	3
Total	5
Total General Education	62
II. PROFESSIONAL EDUCATION (24 Credits)	
A. Foundations	
1. Educational Psychology	
(Psychological Foundations of Education —	
including observation and participation)	3
2. Social Foundations of Education	
(Including observation and participation)	3
B. Curriculum and Instruction in the Secondary School	6
C. Student Teaching in Secondary School	
(Including Professional Practicum)	12
Total Professional Education	24
III. SPECIALIZATION (42 Credits)	
This block of credits is allocated for study in breadth and depth devoted to the student's major teaching field.	
Total Specialization	42
MINIMUM TOTAL FOR GRADUATION	128

* The following sequence of 12 semester hours may be used as free electives to provide understandings and skills necessary to coach high school athletics. This block of work does not lead to certification as a Health and Physical Education Teacher.

REQUIRED COURSES (6 CRS.)

HPE 242 *Physiological & Medical Aspects of Athletic Coaching*
HPE 409 *Principles & Problems of Secondary School Athletics*

ELECTIVES (6 CRS.)

One course in team sports
One course in individual sports
One additional course in either team or individual sports

TEAM SPORT SERIES

HPE 251—*Techniques of Coaching Baseball*
HPE 252—*Techniques of Coaching Basketball*
HPE 253—*Techniques of Coaching Football*

INDIVIDUAL SPORT SERIES

HPE 256—*Techniques of Coaching Cross Country, Track and Field*
HPE 257—*Techniques of Coaching Wrestling and Golf*
HPE 258—*Techniques of Coaching Swimming and Tennis*

ENGLISH — 30 Credit Hours

REQUIRED COURSES (18 CRS.)

	CL	CR
*Eng. 209—Literary Genres	3	3
Eng. 231—British Writers	3	3
Eng. 232—British Writers	3	3
Eng. 249—Shakespeare	3	3
Eng. 302—Advanced Composition	3	3
Eng. 381—American Literature, or Eng. 382—American Literature	3	3
Eng. 401—Structure of English, or Eng. 402—History of the English Language	3	3

ELECTIVE COURSES (Minimum of 12 CRS.)

	CL	CR
<i>Group A—Survey and Period Courses</i>		
Eng. 307—Russian Literature in Translation	3	3
Eng. 341—Early and Middle English Literature	3	3
Eng. 343—Chaucer	3	3
Eng. 347—The Renaissance in England	3	3
Eng. 352—Seventeenth Century Literature	3	3
Eng. 354—Milton	3	3
Eng. 357—Eighteenth Century Literature	3	3
Eng. 364—Nineteenth Century Literature	3	3
Eng. 381—American Literature	3	3
Eng. 382—American Literature	3	3
Eng. 402—History of the English Language	3	3
<i>Group B—Literary Forms Courses</i>		
Eng. 209—Literary Genres	3	3
Eng. 321—Short Story	3	3
Eng. 322—Modern Drama	3	3
Eng. 324—Modern Novel	3	3
Eng. 325—Poetry	3	3
Eng. 326—Modern Poetry	3	3
Eng. 342—Early English Drama	3	3
Eng. 356—Restoration and Later Drama	3	3
Eng. 358—Eighteenth Century Novel	3	3
Eng. 363—Nineteenth Century Novel	3	3
Eng. 385—The American Novel	3	3
Eng. 386—Later American Prose	3	3
<i>Group C—Composition and Miscellaneous Courses</i>		
Eng. 202—Creative Writing	3	3
Eng. 302—Advanced Composition	3	3
Eng. 312—Ideas in Literature	3	3
Eng. 332—Blake and Yeats	3	3
Eng. 403—Generative—Transformational Grammar	3	3
Eng. 405—Criticism	3	3

*Eng. 209 replaces Eng. 207 as General Education requirement for English majors.

Group D—Speech, Drama, and Journalism Courses

Speech 206—Oral Interpretation	3	3
Speech 208—Introduction to Theatre Arts	3	3
Speech 211—Theatre Production	3	3
Speech 231—Introduction to Radio and Television	3	3
Speech 241—Voice and Diction	3	3
Speech 312—Fundamentals of Acting	3	3
Speech 321—Argumentation	3	3
Speech 411—Directing	3	3
Speech 414—Costuming for the Stage	3	3
Speech 415—History of the Theatre	3	3
Speech 416—Modern Theatre	3	3
Eng. 203—Fundamentals of News Reporting	3	3
Eng. 204—Feature Writing	3	3
Eng. 301—Introduction to Mass Communication	3	3

(No more than one course in Group D will be counted as an English elective.)

Group E—Developmental Reading

	CL	CR
Ed. 372—Foundation of Reading Instruction	3	3
Ed. 373—Diagnostic and Remedial Reading	3	3

NOTE: These two courses meet the state requirements for certification in Developmental Reading for the public schools, but are not counted as English electives.

English majors may substitute 111 for Hist. 112 or 113 in general.

SUMMARY

	CR
General Education	62
Professional Education	24
Specialization	30
Electives	12
Total	128

FRENCH — 30 Credit Hours

REQUIRED COURSES (6 CRS.)

	CL	CR
Fr. 101—Beginning French	4	3
Fr. 102—Beginning French	4	3
Fr. 103—Intermediate French	4	3
Fr. 104—Intermediate French	4	3

ELECTIVE COURSES (24 CRS.)

Fr. 201—Advanced Conversation and Grammar	3	3
Fr. 202—Advanced Conversation and Prose Composition	3	3
Fr. 210—Culture and Civilization of France	3	3
Fr. 220—Contemporary Literature of France	3	3
Fr. 301—Modern French Novel	3	3
Fr. 320—The History of French Literature I	3	3

Fr. 321—The History of French Literature II	3	3
Fr. 401—Moliere and Racine	3	3
Fr. 407— <i>Proust et Gide</i>	3	3
Fr. 409—Phonetics	1	1
Fr. 420— <i>Balzac et Flaubert</i>	3	3
Fr. 430—French Theater	3	3
Fr. 435—The French Enlightenment	3	3
Fr. 440—French Poetry	3	3
Fr. 449—Directed Readings	3	3

SUMMER ELECTIVES (9 CRS.)

Fr. 104—Intermediate French	3	3
Fr. 204—Seminar in France	6	6
Fr. 210—The Culture And Civilization of France	3	3
Fr. 220—The Contemporary Literature of France	3	3
Fr. 201—Advanced Conversation and Grammar	3	3

Students desiring certification to teach will be required to pass a proficiency examination, and complete four courses in French literature including the survey course.

All secondary majors in French must have 12 credit hours in French literature.

	SUMMARY	CR
General Education		62
Professional Education		24
Specialization Education		30
Electives		12
Total		<hr/> 128

GERMAN — 30 Credit Hours

	REQUIRED COURSES (6 CRS.)	CL	CR
Ger. 101—Beginning German		4	3
Ger. 102—Beginning German		4	3
Ger. 103—Intermediate German		4	3
Ger. 104—Intermediate German		4	3

ELECTIVE COURSES (24 CRS.)

Ger. 201—Advanced Conversation and Grammar	3	3
Ger. 202—Advanced Conversation and Composition	3	3
Ger. 210—Culture and Civilization	3	3
Ger. 220—Contemporary German Literature	3	3
Ger. 302—Nineteenth Century Prose and Poetry	3	3
Ger. 320—History of German Literature I	3	3
Ger. 321—History of German Literature II	3	3
Ger. 401—Enlightenment	3	3
Ger. 402—Classicism-Romanticism	3	3
Ger. 409—Conversation, Structure, Analysis	3	3
Ger. 421—The Radio Play	3	3

SUMMER ELECTIVES (9 CRS.)

Ger. 103—Intermediate German	3	3
Ger. 104—Intermediate German	3	3
Ger. 202— <i>Texte zum Nacherzaehlen</i> and Composition	3	3

Students desiring certification to teach will be required to pass a proficiency examination, and complete four courses in German Literature including the survey course.

SUMMARY		CR
General Education	62	
Professional Education	24	
Specialization	30	
Electives	12	
Total		128

SPANISH — 30 Credit Hours

REQUIRED COURSES (6 CRS.)		CL	CR
Span. 101—Beginning Spanish	4	3	
Span. 102—Beginning Spanish	4	3	
Span. 103—Intermediate Spanish	4	3	
Span. 104—Intermediate Spanish	4	3	

ELECTIVE COURSES (24 CRS.)		CL	CR
Span. 201—Grammar and Composition	3	3	
Span. 202—Conversation	3	3	
Span. 210—Culture and Civilization of Spain	3	3	
Span. 301—Literature of Spain	3	3	
Span. 302—Literature of Spanish-America	3	3	
Span. 304— <i>Siglo de Oro</i> — Part One	3	3	
Span. 305— <i>Siglo de Oro</i> — Part Two	3	3	
Span. 411—Spanish Poetry	3	3	
Span. 414—Early Spanish Literature	3	3	
Span. 499—Directed Readings	3	3	

SUMMER ELECTIVES (9 CRS.)

Span. 104—Intermediate Spanish	3	3
Span. 201—Grammar and Composition	3	3
Span. 204—Seminar in Spain	6	6

Students desiring certification to teach will be required to pass a proficiency examination.

All secondary majors in Spanish must have 12 credit hours in Spanish literature.

SUMMARY		CR
General Education	62	
Professional Education	24	
Specialization	30	
Electives	12	
Total		128

SPEECH — 33 Credit Hours

REQUIRED COURSES (18 CRS.)		CL	CR
Speech 105—Communication Theory and Rhetoric	3	3	
Speech 208—Introduction to Theatre Arts	3	3	
Speech 218—Discussion	3	3	
Speech 241—Voice and Diction	3	3	
Speech 321—Argumentation	3	3	
Sp. Ed. 251—Speech Problems	3	3	

ELECTIVE COURSES

(Minimum of 12 credits, from Groups A and B — Speech)

Group A—Public Address (Maximum of 9 credits)		CL	CR
Speech 206—Oral Interpretation of Literature	3	3	
Speech 231—Introduction to Radio and Television	3	3	
Speech 307—Business and Professional Speech	3	3	
Speech 325—Extempore Speech	3	3	
Speech 421—Persuasion	3	3	
Speech 492—Speech Seminar (Public Address)	3	3	
Group B—Theatre (Maximum of 9 credits)		CL	CR
Speech 211—Theatre Production	3	3	
Speech 311—Scene Design	3	3	
Speech 318—Creative Dramatics	3	3	
Speech 319—Children's Theatre	3	3	
Speech 411—Directing	3	3	
Speech 412—Fundamentals of Acting	3	3	
Speech 414—Costuming for the Stage	3	3	
Speech 415—History of the Theatre	3	3	
Speech 416—Modern Theatre	3	3	
Speech 490—Speech Seminar (Theatre)	3	3	
Group C—Communication Disorders			
(A maximum of 3 credits may be counted from Group C toward a General Speech major)			
Com. Dis. 152—Voice and Diction	3	3	
Com. Dis. 251—Phonetics*	3	3	
Com. Dis. 252—Speech Pathology	3	3	
Com. Dis. 276—Hearing Problems	3	3	
Com. Dis. 360—Psycho-Linguistics	3	3	
Group D—English			
(A maximum of 3 credits may be counted from Group D toward a General Speech major)			
English 249—Shakespeare	3	3	
English 322—Modern Drama	3	3	
English 342—Early English Drama	3	3	
English 356—Restoration and Later Drama	3	3	
English 401—Structure of English	3	3	
English 402—History of the English Language	3	3	
English 405—Criticism	3	3	

* Speech 241 may be substituted as a prerequisite by Speech Majors.

SUMMARY		CR
General Education		62
Professional Education		24
Specialization		33
Electives		9
		128
Total		128

GENERAL SCIENCE — 54 Credit Hours

Graduates of this program will be qualified to teach science through grade 9.

Since students electing this program will satisfy the science requirements of the General Education program within the confines of the courses listed below, they should not take Phys. 101—Basic Physical Science, nor Math. 101 — Fundamentals of Mathematics.

REQUIRED COURSES (43 CRS.)

	CL	CR
<i>Biological Sciences</i> (12)		
Biol. 103—General Biology I	5	3
Biol. 210—Invertebrate Zoology	5	3
Biol. 211—Vertebrate Zoology	5	3
Biol. 220—General Botany I	5	3
<i>Physical Sciences</i> (16)		
Chem. 111—General Chemistry I	6	4
Chem. 112—General Chemistry II	6	4
Phys. 111—Introductory Physics I	6	4
Phys. 112—Introductory Physics II	6	4
<i>Earth Sciences</i> (9)		
Geog. 355—Meteorology	3	3
Geog. 357—Physical Geology	4	3
Geog. 453—Astronomy	3	3
<i>Mathematics</i> (6)		
Math. 111—College Algebra	3	3
Math. 112—Trigonometry	3	3

ELECTIVE COURSES (11 CRS.)

<i>Biological Sciences</i>		
Biol. 221—General Botany II	5	3
Biol. 331—General Ecology	5	3
Biol. 361—Microbiology	5	3
Biol. 371—Embryology	5	3
Biol. 381—Vertebrate Physiology	5	3
Biol. 413—Ornithology	5	3
Biol. 417—Field Zoology	5	3
Biol. 422—Field Botany	5	3
Biol. 432—Fresh Water Biology	5	3
Biol. 441—Evolution	5	3

Earth Sciences

Geog. 353—Physiography	3	3
Geog. 354—Cartography	4	3
Geog. 356—Climatology	3	3
Geog. 358—Conservation of Natural Resources	3	3
Geog. 359—Oceanography	3	3
Geog. 361—Historical Geology	3	3
Geog. 365—Geomorphology	4	3

Physical Sciences

Chem. 221—Qualitative Inorganic Analysis	7	3
Chem. 222—Quantitative Analysis	8	4
Chem. 225—Water Analysis	4	2
Chem. 331—Organic Chemistry I	6	4
Chem. 332—Organic Chemistry II	6	4
Chem. 351—Industrial Chemistry	3	3
Phys. 225—Demonstrations in the Physical Sciences	4	3

- NOTES: (1) Four elective courses will be needed to give a minimum of 11 credits. They may be all from one field, or they may be distributed among them.
- (2) Some of the above courses are given only in the Summer Sessions; consult the catalog descriptions.
- (3) Students in this program may take either Ed. 353 — Teaching of Biological Science, or Ed. 354 — Teaching of Physical Science to fulfill the Professional Education requirement in this area.

	SUMMARY	CR
General Education		62
Professional Education		24
Science Specialization		42*
Total		<u>128</u>

BIOLOGICAL SCIENCE — 44 Credit Hours

Biological Science majors are not required to take Phys. 101 — Basic Physical Science, H.P.E. 101 — Physical Fitness, and Math. 101 — Fundamentals of Mathematics. All five required biology courses should be taken by the end of the sophomore year. Both of the required mathematics courses and at least two of the required chemistry courses should also be taken by the end of the sophomore year. Recommended and elective courses in the biological sciences would then be taken during the junior and senior years.

REQUIRED COURSES (20)

<i>Biology</i> (15)	CL	CR
**Biol. 103—General Biology I	5	3
Biol. 210—Invertebrate Zoology	5	3
Biol. 211—Vertebrate Zoology	5	3
Biol. 220—General Botany I	5	3
Biol. 221—General Botany II	5	3

* Plus the 12 credits from the General Education requirements in science.

**Courses denoted by double asterisk are needed to meet the General Education requirements and do not count toward the 44 credits needed in the Biological Science area of specialization.

Chemistry (12)

**Chem. 111—General Chemistry I	6	4
Chem. 331—Organic Chemistry I	6	4
Chem. 332—Organic Chemistry II	6	4

Mathematics (6)

**Math. 111—College Algebra	3	3
**Math. 116—Introductory Statistics	3	3

Although Phys. 111 — Introductory Physics I *is not* required of all biology majors, it is highly recommended. Those students who anticipate doing graduate work in biology should have a minimum of one and preferably two physics courses. Physics could be scheduled during the junior or senior year. Credits earned in physics will increase a student's graduation total in excess of the 128 credits normally required.

Required Core of Biological Science Courses (12) CL CR

Select any *four* of the following *six* courses.

Biol. 331—General Ecology	5	3
Biol. 341—Genetics	5	3
Biol. 351—Molecular Biology	5	3
Biol. 361—Microbiology	5	3
Biol. 371—Embryology	5	3
Biol. 381—Vertebrate Physiology	5	3

ELECTIVES (12 or 9 if physics was taken)

Of these twelve (12) credits, six (6) must be taken in field-type courses. Biology majors should expect to attend summer school at least once during their undergraduate program in order to obtain field courses which are ordinarily offered during the summer.

Field Courses

Biol. 411—Systematic Entomology	5	3
Biol. 413—Ornithology	5	3
Biol. 414—Ichthyology	5	3
Biol. 417—Field Zoology	5	3
Biol. 422—Field Botany	5	3
Biol. 432—Fresh Water Biology	5	3

Laboratory-Type Courses

Biol. 415—Biology of Arthropods	5	3
Biol. 416—Parasitology	5	3
Biol. 420—Plant Physiology	5	3
Biol. 421—Plant Anatomy	5	3
Biol. 433—Plant Ecology	5	3
Biol. 441—Evolution	5	3

**Courses denoted by double asterisk are needed to meet the General Education requirements and do not count toward the 44 credits needed in the Biological Science area of specialization.

Biol. 443—Cytology	5	3
Biol. 452—Radiation Biology	5	3
Biol. 453—Physiological Chemistry	5	3
Biol. 471—Histology	5	3
Biol. 482—Comparative Vertebrate Anatomy	5	3
Biol. 492—Research Topics in Biology	5	2
Biol. 492—Research Topics in Biology	7	3

	SUMMARY	CR
General Education		60
Professional Education		24
Specialization		44
Total		<u>128</u>

The 128 credit hours represent a minimum requirement for graduation in Secondary Education with a major in Biological Sciences. All biology majors should plan, if possible, to take additional elective courses in the Biological Sciences in order to obtain a broad spectrum of courses within the discipline of biology. Students planning graduate study in biology should *expect* to take courses beyond the minimum established for graduation.

CHEMISTRY — 52 Credit Hours

Since students majoring in Chemistry will adequately satisfy the science requirements of General Education within the requirements of the Chemistry program, they should not take Phys. 101 — Basic Physical Science, Math. 101 — Fundamentals of Mathematics, nor Biol. 103 — General Biology I.

<i>Chemistry</i> (28)	CR
Chem. 111, 112—General Chemistry I and II	8
Chem. 222—Quantitative Analysis	4
Chem. 331, 332—Organic Chemistry I and II	8
Chem. 411, 412—Physical Chemistry I and II	8
<i>Physics</i> (12)	
Phys. 211, 212—General Physics I and II	8
Phys. 310—Introduction to Atomic Physics	4
<i>Mathematics</i> (12)*	
Math. 211, 212—Calculus I and II	8
Math. 311—Intermediate Calculus	4

	SUMMARY	CR
General Education		62
Professional Education		24
Specialization		40
Free elective		<u>2</u>
Total		128

PHYSICS — 48 Credit Hours

Since students majoring in Physics will adequately satisfy the science requirements of General Education within the requirements of the Physics program, they should not take Phys. 101 — Basic Physical Science, Math. 101 — Fundamentals of Mathematics, nor Biol. 103 — General Biology I.

REQUIRED COURSES (42 CRS.)

	CR
<i>Physics</i> (19)	
Phys. 211, 212—General Physics I and II	8
Phys. 310—Introduction to Atomic Physics	4
Phys. 311—Mechanics	3
Phys. 314—Electricity and Magnetism	4
<i>Chemistry</i> (8)	
Chem. 111, 112—General Chemistry I and II	8
<i>Mathematics</i> (15)*	
Math. 211, 212—Calculus I and II	8
Math. 311—Intermediate Calculus	4
Math. 312—Differential Equations	3

ELECTIVE COURSES (at least 6 Credits)

	CR
Phys. 315—Electronics	4
Phys. 412—Optics	3
Phys. 420—Vibrations and Waves	3
Phys. 421—Solid State Physics	3
Phys. 422—Thermodynamics	3
Phys. 490—Physics Seminar	1

SUMMARY

General Education	62
Professional Education	24
Specialization	36
Free electives	6
Total	128

MATHEMATICS — 33 Credit Hours

It is strongly recommended that two of the science requirements of General Education be satisfied with Physics 211 and 212.

	CL	CR
Math. 110—Pre-Calculus	4	4
(Does not apply to credits for mathematics major.)		

REQUIRED (21 CRS.)

Math. 211—Calculus I	4	4
Math. 212—Calculus II	4	4
Math. 221—Statistics	4	3
Math. 222—College Geometry	3	3
Math. 311—Intermediate Calculus	4	4
Math. 321—Introduction to Modern Algebra	3	3

* Pre-Calculus, Math. 110 (4 credits), may also be required of insufficiently prepared students.

ELECTIVES (Choose 4)

Math. 241—Introduction to Computer Programming	1	1
Math. 312—Differential Equations	3	3
Math. 322—Linear Algebra	3	3
Math. 331—Algebra for Secondary School Teachers	3	3
Math. 332—Modern Geometry	3	3
Math. 411—Advanced Calculus	3	3
Math. 412—Complex Variables	3	3
Math. 421—Introduction to Topology	3	3
Math. 422—Introduction to Group Theory	3	3
Math. 431—Number Theory	3	3
Math. 432—Elementary Numerical Analysis	3	3

SUMMARY

General Education	62*
Professional Education	24
Specialization	29
Electives	13
Total	128

* Count Math. 211 — Calculus I (4 c.h.) as General Education.

EARTH AND SPACE SCIENCE — 39 Credit Hours

Earth and Space Science majors are not required to take Math. 101 — Fundamentals of Mathematics or Phys. 101 — Basic Physical Science.

REQUIRED COURSES (39 CRS.)

	CL	CR
<i>Mathematics</i> (6)		
Math. 111—College Algebra	3	3
Math. 112—Trigonometry	3	3
<i>Physics</i> (8)		
Phys. 111—Introductory Physics I	6	4
Phys. 112—Introductory Physics II	6	4
<i>Chemistry</i> (4)		
Chem. 111—General Chemistry I	6	4
<i>Earth Science</i> (21)*		
Geog. 354—Cartography	4	3
E. S. 355—Meteorology	4	3
Geog. 356—Climatology	3	3
E. S. 357—Physical Geology	4	3
E. S. 359—Oceanography	3	3
E. S. 361—Historical Geology	3	3
E. S. 365—Geomorphology	4	3
E. S. 451—Field Techniques in Earth and Space Science	3	3-6
E. S. 453—Astronomy	3	3

Student must complete 7 of the listed 9 courses. At least 1 lab course must be included.

* Count Math. 111—College Algebra and Phys. 111—Introductory Physics I as General Education.

SUMMARY		CR
General Education		62
Professional Education		24
Specialization		33
Electives		9
		<hr/>
Total		128

GEOGRAPHY and EARTH and SPACE SCIENCE — 45 Credit Hours

Geography and Earth and Space Science majors are *not* required to take Math. 101 — Fundamentals of Mathematics and Phys. 101 — Basic Physical Science.

REQUIRED COURSES (33 CRS.)

<i>Mathematics</i> (6)	CL	CR
Math. 111—College Algebra	3	3
Math. 112—Trigonometry	3	3
<i>Physics</i> (8)		
Phys. 111—Introductory Physics I	6	4
Phys. 112—Introductory Physics II	6	4
<i>Chemistry</i> (4)		
Chem. 111—General Chemistry I	6	4
<i>Earth Science</i> (15)*	CL	CR
Geog. 354—Cartography	4	3
E. S. 355—Meteorology	4	3
Geog. 356—Climatology	3	3
E. S. 357—Physical Geology	4	3
E. S. 359—Oceanography	3	3
E. S. 361—Historical Geology	3	3
E. S. 365—Geomorphology	3	3
Geog. 451—Field Techniques in Earth and Space Science	3	3
Geog. 453—Astronomy	3	3

ELECTIVE COURSES (12 CRS.)

Geog. 121—Economic Geography	3	3
Geog. 223—Geography of Anglo-America	3	3
Geog. 233—Geography of Europe	3	3
Geog. 243—Geography of Asia	3	3
Geog. 244—Geography of Latin America	3	3
Geog. 245—Geography of Africa	3	3
Geog. 246—Geography of the Soviet Realm	3	3
Geog. 323—Political Geography	3	3
Geog. 358—Conservation of Natural Resources	3	3
Geog. 363—Urban Geography	3	3

* At least 1 lab course must be included.

SUMMARY		CR
General Education		62
Professional Education		24
Specialization		33
Electives		9
Total		128

GEOGRAPHY and EARTH SCIENCE — 30 Credit Hours

REQUIRED COURSES (12 CRS.)

<i>Basic Geography</i> (12)	CL	CR
Geog. 102—World Cultural Geography	3	3
Geog. 353—Physiography	3	3
Geog. 355—Meteorology	4	3
Geog. 492—Geography Seminar	3	3

RESTRICTED ELECTIVES—

At least one course must be chosen from each of Groups 1, 2, and 3.

GROUP 1. *Earth Science*

Geog. 354—Cartography	4	3
Geog. 356—Climatology	3	3
E.S. 357—Physical Geology	4	3
E.E. 359—Oceanography	3	3
E.S. 361—Historical Geology	3	3
E.S. 365—Geomorphology	4	3
Geog. 451—Field Techniques in Earth and Space Science	3	3
Geog. 453—Astronomy	3	3

GROUP 2. *Human Geography*

Geog. 121—Economic Geography	3	3
Geog. 224—Geographic Influences in American History	3	3
Geog. 323—Political Geography	3	3
Geog. 358—Conservation of Natural Resources	3	3
Geog. 363—Urban Geography	3	3

GROUP 3. *Regional Studies*

Geog. 223—Geography of Anglo-America	3	3
Geog. 233—Geography of Europe	3	3
Geog. 243—Geography of Asia	3	3
Geog. 244—Geography of Latin America	3	3
Geog. 245—Geography of Africa	3	3
Geog. 246—Geography of the Soviet Realm	3	3

SUMMARY		CR
General Education		62
Professional Education		24
Specialization		33
Electives		9
Total		128

COMPREHENSIVE SOCIAL SCIENCES

BASIC SPECIALIZATION REQUIREMENTS (9 credit hours plus area requirements as indicated)

	CR
Elements of Political Science	3
Economic and Cultural Geography	3
Principles of Economics II	3
	9

The above requirements must be supplemented with more intensive work in one of the three major areas of emphasis indicated below.

1. SOCIAL PROBLEMS EMPHASIS

Within the social problems emphasis, the student must select one of the specialized curricula described. Coupled with the above requirements, this will permit certification in Comprehensive Social Sciences and the SINGLE subject indicated.

a. ECONOMICS—21 Credit Hours

(1) *Required Courses* (9 CRS.) CR

Pol. Sci.	323—Comparative European Governments OR	
Soc.	313—Contemporary Social Problems	3
Econ.	314—Money and Banking	3
Econ.	422—Comparative Economic Systems	3

(2) *Elective Courses* (12 CRS.) CR

Econ.	313—Labor Economics	3
Econ.	333—International Economics	3
Econ.	411—Intermediate Micro-Economics	3
Econ.	412—Public Finance and Macro-Economics	3
Econ.	422—Contrasting Economies	3
Econ.	423—History of Economic Thought	3
Econ.	434—Economic Growth of Underdeveloped Areas	3
Econ.	470—Senior Seminar	3

b. SOCIOLOGY—21 Credit Hours

(1) *Required Courses* (12 CRS.)

Pol. Sci.	323—Comparative European Governments OR	
Pol. Sci.	324—International Relations	3
Soc.	327—Selected Contemporary Cultures OR	
Soc.	332—Personality in Culture and Society	3
Soc.	315—Racial and National Minority Groups	3
Soc.	313—Contemporary Social Problems	3

(2) *Elective Courses* (9 CRS.)

Soc.	462—Sociological Theory	3
Soc.	325—Comparative Non-Literate Cultures	3
Soc.	326—Indians of North and South America	3

Soc.	233—Social Work and the Welfare Services	3
Soc.	331—Marriage and the Family	3
Soc.	316—Urban Sociology	3
Soc.	341—Criminology	3
Soc.	233—Introduction to Social Work	3
Soc.	334—Social Casework	3
Soc.	327—Selected Contemporary Cultures	3
Soc.	224—Cultural Anthropology	3

c. POLITICAL SCIENCE—21 Credit Hours

(1) *Required Courses* (9 CRS.)

Hist.	392—Diplomatic History of the U. S. Since 1898 OR	
Soc.	313—Contemporary Social Problems OR	
Econ.	422—Comparative Economic Systems	3
Pol. Sci.	324—International Relations OR	
Pol. Sci.	323—Comparative European Governments	
	(If both courses are desired, one may be counted in place of a political science elective)	3
Pol. Sci.	433—History of Political Thought	3

(2) *Elective Courses* (12 CRS.)

Pol. Sci.	313—State and Local Government	3
Pol. Sci.	314—Political Parties and Elections	3
Pol. Sci.	316—Public Opinion and Propaganda	3
Pol. Sci.	352—Public Administration	3
Pol. Sci.	433—History of Political Thought	3
Pol. Sci.	426—Politics and Institutions of the Far East	3

d. HISTORY-GOVERNMENT—21 Credit Hours

(1) *Required Courses* (15 CRS.)

(Minimum of one course from *each* of the groups below.)

Group (a): European History CR

Hist.	318—England to 1688	3
Hist.	319—England since 1688	3
Hist.	324—The Age of Absolutism, 1600-1789	3
Hist.	326—Revolution, Liberalism and Nationalism, 1789-1914	3
Hist.	332—Europe since 1914	3
Hist.	421—Diplomatic History of Europe, 1815-1919	3
Hist.	422—Diplomatic History of Europe since 1919	3
Hist.	412—Central Eastern Europe since 1815	3

Group (b): Non-Western World History

Hist.	352—Latin America since 1820	3
Hist.	354—Modern Far East	3
Hist.	356—Russia to 1917	3
Hist.	452—Soviet Russia	3
Hist.	358—Modern Africa	3
Hist.	362—The Near and Middle East since 1800	3

Group (c): United States History

Hist.	374—Early National Period	3
Hist.	376—Expansion and Disunion, 1828-1865	3
Hist.	378—The Emergence of Industrial America, 1865-1898	3
Hist.	382—Early Twentieth Century, 1898-1932	3
Hist.	391—Diplomatic History of the U. S. to 1898	3
Hist.	392—Diplomatic History of the U. S. since 1898	3
Hist.	396—Selected Political and Constitutional Problems	3
Hist.	384—Contemporary United States, 1932 to the Present	3

Group (d): National Politics

Pol. Sci.	313—State and Local Government	3
Pol. Sci.	314—Political Parties and Elections	3

Group (e): International Politics

Pol. Sci.	324—International Relations	3
Pol. Sci.	323—Comparative European Governments	3

(2) *Elective Courses* (6 CRS.)

Two courses to be selected by the student from
History and/or Political Science

6

e. GEOGRAPHY—21 Credit Hours

(1) *Required Courses* (18 CRS.)

(Minimum of one course from *each* of the groups below.)

Group (a): Earth Science

CR

Geog.	353—Physiography	3
	or	
E. S.	365—Geomorphology	3

Group (b): Human Geography

Geog.	121—Economic Geography	3
Geog.	358—Conservation of National Resources	3
Geog.	224—Geographic Influences in American History	3
Geog.	323—Political Geography	3
Geog.	363—Urban Geography	3

Group (c): Regional Studies

Geog.	223—Geography of Anglo-America	3
Geog.	244—Geography of Latin America	3
Geog.	233—Geography of Europe	3
Geog.	243—Geography of Asia	3
Geog.	245—Geography of Africa	3
Geog.	246—Geography of the Soviet Realm	3

(2) *Elective Courses* (3 CRS.)

(One course from *one* of the five groups below.)

Group (a): Economics

Econ.	313—Labor Economics	3
Econ.	411—Intermediate Micro-Economics	3
Econ.	422—Comparative Economic Systems	3

Group (b): Sociology

Soc.	315—Racial and National Minority Groups	3
Soc.	316—Urban Sociology	3
Soc.	313—Contemporary Social Problems	3

Group (c): Political Science

Pol. Sci.	313—State and Local Government	3
Pol. Sci.	324—International Relations	3
Pol. Sci.	323—Comparative European Governments	3

Group (d): History

Hist.	332—Europe since 1914	3
Hist.	352—Latin America since 1820	3
Hist.	354—The Modern Far East	3
Hist.	358—Modern Africa	3
Hist.	384—Contemporary U. S., 1932 to the Present	3
Hist.	378—Emergence of Industrial America, 1765-1898	3
Hist.	452—Soviet Russia	3

Group (e): Philosophy

Phil.	302—Logic	3
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2. HISTORICAL EMPHASIS—18 Credit Hours

This program, coupled with the General Education requirements, will permit certification in Comprehensive Social Sciences with a concentration in history.

(1) *Required Courses* (12 CRS.)

(Minimum of one course from *each* of the groups below.)

Group (a): Ancient to Early Modern Era

Hist.	318—England to 1688	3
Hist.	312—The Classical World	3
Hist.	314—Medieval Europe	3
Hist.	322—The Renaissance and Reformation	3
Hist.	324—The Age of Absolutism, 1600-1789	3
Hist.	372—Colonial United States to 1783	3

Group (b): Modern Europe

Hist.	319—England since 1688	3
Hist.	326—Revolution, Liberalism and Nationalism, 1789-1914	3
Hist.	332—Europe since 1914	3
Hist.	421—Diplomatic History of Europe, 1815-1919	3
Hist.	348—Contemporary Europe Culture Tour	6
Hist.	422—Diplomatic History of Europe since 1919	3
Hist.	428—Intellectual History of Europe since the Enlightenment	3

Group (c): The Non-Western World

Hist.	352—Latin America since 1820	3
Hist.	354—The Modern Far East	3
Hist.	356—Russia to 1917	3
Hist.	358—Modern Africa	3
Hist.	362—Near and Middle East since 1800	3
Hist.	454—China and Japan in the 20th Century	3
Hist.	456—Problems in Africa, Near and Middle East	3
Hist.	452—Soviet Russia	3

Group (d): United States

Hist.	374—Early National Period	3
Hist.	376—Expansion and Disunion, 1828-1865	3
Hist.	378—Emergence of Industrial America, 1865-1898	3
Hist.	382—Early Twentieth Century, 1898-1932	3
Hist.	384—Contemporary U. S., 1932 to the Present	3
Hist.	388—History of Pennsylvania	3
Hist.	391—Diplomatic History of the U. S. to 1898	3
Hist.	392—Diplomatic History of the U. S. since 1898	3
Hist.	396—Selected Political and Constitutional Problems	3

(2) *Elective Courses (6 CRS.)*(One course from *two* of the five groups below.)*Group (a): Economics*

Econ.	313—Labor Economics	3
Econ.	314—Money and Banking	3
Econ.	411—Intermediate Micro-Economics	3
Econ.	412—Public Finance and Macro-Economics	3
Econ.	422—Comparative Economic Systems	3

Group (b): Sociology

Soc.	315—Racial and National Minority Groups	3
Soc.	316—Urban Sociology	3
Soc.	313—Contemporary Social Problems	3

Group (c): Political Science

Pol. Sci.	313—State and Local Government	3
	Constitutional Law	3
Pol. Sci.	352—Public Administration	3
Pol. Sci.	324—International Relations	3
Pol. Sci.	323—Comparative Governments	3

Group (d): Geography

Geog.	224—Geographic Influences in U. S. History	3
Geog.	323—Political Geography	3

Group (e): Philosophy

Phil.	303—Philosophy of Science	3
Phil.	306—Philosophy of Religion	3

CR

3. CULTURAL EMPHASIS—18 Credit Hours

This program, coupled with the General Education requirements, will permit certification in Comprehensive Social Sciences with broad orientation in a specific geographic area.

(1) *Required Courses* (15 CRS.)

Soc.	327—Selected Contemporary Cultures	3
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The other twelve credits in the required courses are to be completed by selecting ONE of the following four sequences.

Group (a): Latin America

Geog.	244—Geography of Latin America	3
Hist.	352—Latin America since 1820	3
Econ.	434—Economic Growth of Underdeveloped Areas	3
Pol. Sci.	424—Politics and Institutions of Latin America	3

Group (b): Europe

Geog.	233—Geography of Europe	3
Hist.	332—Europe since 1914	3
Econ.	422—Contrasting Economies	3
Pol. Sci.	323—Comparative European Governments	3

Group (c): Far East

Geog.	243—Geography of Asia	3
Hist.	354—Modern Far East	3
Econ.	434—Economic Growth of Underdeveloped Areas	3
Pol. Sci.	426—Politics and Institutions of the Far East	3

Group (d): Africa

Geog.	245—Geography of Africa	3
Hist.	358—Modern Africa	3
Econ.	434—Economic Growth of Underdeveloped Areas	3
Pol. Sci.	425—Politics and Institutions of the Middle East and Africa	3

(2) *Elective Courses* (3 CRS.)

One course from any one of the above outside the selected sequence.

HISTORY — 24 Credit Hours

REQUIRED COURSE (3 CRS.)

	CL	CR
Hist. 399—Bibliography and Research	3	3

ELECTIVE COURSES (15 CRS. FROM ONE GROUP)

I.

Group A—European Survey

Hist. 312—Classical World	3	3
Hist. 314—Medieval Europe	3	3
Hist. 318—England to 1688	3	3
Hist. 319—England since 1688	3	3
Hist. 322—Renaissance and Reformation Eras	3	3
Hist. 324—The Age of Absolutism, 1600-1789	3	3

	CL	CR
Hist. 326—Revolution, Liberalism and Nationalism, 1789-1914	3	3
Hist. 332—Europe since 1914	3	3
<i>Group B—Recent Europe</i>		
Hist. 319—England since 1688	3	3
Hist. 326—Revolution, Liberalism and Nationalism, 1789-1914	3	3
Hist. 332—Europe since 1914	3	3
Hist. 412—Central Eastern Europe since 1815	3	3
Hist. 421—Diplomatic History of Europe, 1815-1919	3	3
Hist. 422—Diplomatic History of Europe since 1919	3	3
Hist. 428—Intellectual History of Europe since the Enlightenment	3	3
Hist. 452—Soviet Russia	3	3
II.		
<i>Group A—Recent Non-Western World</i>		
Hist. 352—Latin America since 1820	3	3
Hist. 354—The Modern Far East	3	3
Hist. 356—Russia to 1917	3	3
Hist. 358—Modern Africa	3	3
Hist. 362—The Near and Middle East since 1800	3	3
Hist. 452—Soviet Russia	3	3
Hist. 454—China and Japan in the Twentieth Century	3	3
Hist. 456—Problems in Africa and the Near and Middle East	3	3
<i>Group B—The Contemporary World</i>		
Hist. 332—Europe since 1914	3	3
Hist. 384—Contemporary United States, 1932 to Present	3	3
Hist. 392—Diplomatic History of the U. S. since 1898	3	3
Hist. 412—Central Eastern Europe since 1815	3	3
Hist. 422—Diplomatic History of Europe since 1919	3	3
Hist. 452—Soviet Russia	3	3
Hist. 454—China and Japan in the Twentieth Century	3	3
Hist. 456—Problems in Africa and the Near and Middle East	3	3
III.		
<i>Group A—United States Survey</i>		
Hist. 372—Colonial Period of America, to 1783	3	3
Hist. 374—Early National Period of the United States	3	3
Hist. 376—American Expansion and Disunion, 1828-1865	3	3
Hist. 378—Emergence of Industrial America, 1865-1898	3	3
Hist. 382—Early Twentieth Century United States, 1898-1932	3	3
Hist. 384—Contemporary United States, 1932 to Present	3	3
Hist. 388—Pennsylvania	3	3
<i>Group B—United States Topics and Problems</i>		
Hist. 391—Diplomatic History of the United States to 1898	3	3
Hist. 392—Diplomatic History of the U. S. since 1898	3	3
Hist. 396—Selected Political and Constitutional Problems	3	3
Hist. 471—Industrial History of the United States	3	3
Hist. 472—History of Labor in the United States	3	3
Hist. 481—United States Social, Cultural and Intellectual History to 1860	3	3

CL CR

Hist. 482—United States Social, Cultural and Intellectual History since 1860	3	3
Additional 6 credits to be selected from outside of group of concentration.		

ELECTIVES (18 CRS.)

Single-subject (6 CRS.)

From ONE of the disciplines of:

- Economics
- Geography
- Political Science
- Sociology
- A single Foreign Language¹
- Humanities²

¹ Students electing Foreign Language must complete 12 credits unless exception is approved by the Department of History.

² Among the courses fulfilling the Humanities block are:

Art	311—American Art History	3	3
Art	321—European Art History	3	3
Art	331—Oriental Art History	3	3
Eng.	231—British Writers	3	3
Eng.	232—British Writers	3	3
Eng.	307—Russian Literature in Translation	3	3
Eng.	381—American Literature	3	3
Eng.	382—American Literature	3	3
Eng.	385—The American Novel	3	3
Eng.	386—Later American Prose	3	3
Speech	415—History of the Theatre	3	3
Music	221—History of Music	3	3
Music	324—American Music	3	3
Music	322—Music of the Romantic Era	3	3
Music	323—Twentieth Century Music	3	3
Phil.	303—Philosophy of Science	3	3
Phil.	306—Philosophy of Religion	3	3

General (12 CRS.)

Except for history majors who pursue a foreign language and who will usually complete only 6 credits of general electives, majors will complete 12 credits in courses approved by their Department of History advisor.

SUMMARY

	CR
General Education	62
Professional Education	24
Specialization	24
Electives	18
	—
Total	128

DIVISION OF ARTS AND SCIENCES

OBJECTIVES

The universally recognized goals of liberal education are those which relate to the maturation of the individual in knowledge and wisdom. In terms of the customary three-fold division of knowledge — Humanities, Social Sciences, Natural Sciences — a more detailed description of the goals might be as follows: (1) to cultivate a sensitive, appreciative, and judicious attitude towards the various media of creative expression as communicative of man's ideas, aspirations, and needs, (2) to develop an awareness of our social heritage, the relevance of social, political, and economic factors to human behavior, and the relationship between the past and the present, (3) to provide a basic understanding of critical and analytical methods of investigation into the nature of the universe and of the application of scientific discovery to modern life.

In addition to cultivating the "whole" individual, the Arts and Sciences Program is intended to offer an opportunity for exploration of a single field in some depth, not only as a means to possible further education at the graduate level, but also for the value inherent in terminal experience of the complexities of any one discipline.

Hence, the Bachelor of Arts curriculum at Bloomsburg, leading to the A. B. degree, offers both exposure in breadth and penetration in depth, proceeding from the assumption that among the many vital consequences of a more enlightened individual is a more stable and tolerant society.

AN OVERVIEW

The Arts and Sciences program at Bloomsburg State College consists of four parts, which may be briefly outlined as follows:

I. General Education	66 - 70 Credit Hours
II. Core Studies in the Social Sciences, the Humanities or the Natural Sciences	14 - 18 Credit Hours
III. Additional studies in the Core or Major Area	24 Credit Hours
IV. Electives	16 - 24 Credit Hours

Total Required for the A. B. Degree	128 Credit Hours
----------------------------------------------	------------------

THE GENERAL EDUCATION REQUIREMENT

The General Education requirement is essential to any curriculum in the Arts and Sciences. Its purpose is to prepare all students, whatever their field of concentration or their vocational intentions, for adult life as men and women living private lives; as members of their local communities; and as citizens of the Commonwealth, of the nation and of the world. The General Education requirement for students enrolled in Arts and Sciences is similar to that for students enrolled in the various divisions leading to the degree in professional education. Thus it is possible for students to "cross over" from one program to another within the first two years with a minimum of difficulty. In order to achieve the purposes of General Education, the following 66-70 hour requirement has been established:

	<i>Credit Hours</i>
Science (Biology, Chemistry, Physics, or Earth Science)	6-8
Art or Music	3
Literature	6
Philosophy	3
History of Civilization	6
Political Science 211 or 212	3
Psychology	3
Social Science (Any two of the following: Econ. 211, Econ. 212, Soc. 211, other Soc., Anthro. 224, Anthro. 323)	6
English Composition	6
Introduction to Speech	3
Mathematics 111, 112, or 211, 212	6-8
Foreign Language (Fr., Ger., Span., or Rus. 103-104)	6
World Geography	3
Personal Health	2
Physical Education I, II, III, IV	4

66-70 Cr. Hrs.

THE CORE REQUIREMENT

The beginning of specialization or study of material in depth in the Arts and Sciences Program occurs with the student's choice of one of three broad areas of concentration: Humanities, Social Sciences, or Natural Science and Mathematics. Following is the Core Requirement for each area.

I. Humanities Core	<i>Credit Hours</i>
English 249—Shakespeare	3
Any additional semester of English Literature	3
Philosophy 307—Ethics or Philosophy 302—Logic	3

Speech 208—Introduction to Theatre Arts or Speech 321—Argumentation	3
Any semester of Art History	3
Any semester of Music History	3
	—
Total	18

II. Social Science Core

The general intent of the Social Science Core is to require the completion of two semesters of study in the areas of geography, psychology, political science, economics, and sociology, plus one semester in anthropology. A portion of this program is fulfilled by the Social Science courses in General Education. (As regards history, two courses are already required in General Education.) The Social Science Core consists of the following:

1. The four courses below which have not been taken to complete the General Education requirement. Political Science 211, Political Science 212 Economics 211, Economics 212 Sociology 211, one additional semester of sociology Anthropology 224 (or 323)	12
2. An additional semester of geography and an additional semester of psychology	6
	—
Total	18

III. Natural Science and Mathematics Core

1. Math. 211 and 212 — Calculus I and II	8
2. A full year of a science that is (a) outside of, yet relevant to, the major and (b) in addition to and in a field separate from the year of science taken in fulfillment of the General Education Requirement. Possible selections: Biology, Chemistry, Physics, Earth Science	6-8
	—
Total	14-16

THE MAJOR-AREA REQUIREMENT

Above and beyond the General Education and Core Requirements a minimum of 24 credit hours must be amassed in one of the three general areas of concentration (Humanities, Social Science, Natural Sciences and Mathematics) or preferably in a specific discipline within one of these areas.

For the achievement of this Major-Area Requirement, specific courses or course sequences are prescribed by some departments:

1. Biology¹

Nine semesters basic:

- Biol. 103—General Biology I
- Biol. 210—Invertebrate Zoology
- Biol. 211—Vertebrate Zoology
- Biol. 220—General Botany I
- Biol. 221—General Botany II
- PLUS any four of the following:
- Biol. 331—Ecology
- Biol. 341—Genetics
- Biol. 351—Molecular Biology
- Biol. 361—Microbiology
- Biol. 371—Embryology
- Biol. 381—Vertebrate Physiology

Additional courses, according to advisement:

i. Field Courses

- Biol. 411—Entomology
- Biol. 413—Ornithology
- Biol. 414—Ichthyology
- Biol. 417—Field Zoology
- Biol. 422—Field Botany
- Biol. 432—Fresh Water Biology

ii. Laboratory Courses

- Biol. 416—Parasitology
- Biol. 420—Plant Physiology
- Biol. 421—Plant Anatomy
- Biol. 441—Evolution
- Biol. 452—Radiation Biology
- Biol. 453—Biological Chemistry
- Biol. 471—Histology
- Biol. 482—Comparative Vertebrate Anatomy

2. Business-Economics (combination)

- Bus. Ed. 221, 222—Principles of Accounting²
- Bus. Ed. 321, 322—Intermediate Accounting
- Econ. 211, 212—Principles of Economics
- Bus. Ed. 101—Intro. to Business Organization and Finance
- Bus. Ed. 331—Business Law
- Econ. 413—Money and Banking

3. English

- Eng. 231, 232—British Writers
- Eng. 401—Structure of English
- OR Eng. 402—History of the English Language

¹ Biology majors are expected to take the following auxiliary courses: Chem. 111 and 112, Chem. 331 and 332, Phys. 111 and 112, and Math. 211 and 212.

² Normally begun in the sophomore year.

4. Geography³
 - A. Geography (Not necessarily in sequence)
 - Geog. 225—Weather and Climate
 - Geog. 223—Geography of Anglo-America
 - Geog. 323—Political Geography
 - Geog. 354—Cartography
 - Geog. 363—Urban Geography
 - E. S. 365—Geomorphology
 - Geog. 492—Seminar in Geography
 - Choice of regional course in Geography
 - B. Earth Science (not necessarily in sequence)
 - E. S. 357—Physical Geology
 - E. S. 361—Historical Geology
 - E. S. 355—Meteorology
 - E. S. 365—Geomorphology
 - E. S. 453—Astronomy
 - E. S. 359—Oceanography
 - E. S. 451—Field Techniques in Earth and Space Science
 - Geog. 495—Seminar in Earth Science
 - C. Meteorology (not necessarily in sequence)
 - E. S. 355—Meteorology
 - Geog. 356—Climatology
 - E. S. 359—Oceanography
 - E. S. 365—Geomorphology
 - E. S. 453—Astronomy
 - Geog. 493—Seminar in Meteorology
 - Theoretical Mechanics
 - Integral Calculus
5. History
 - Hist. 399—Bibliography and Research
6. Mathematics
 - Math. 110—Pre-Calculus (remedial only)
 - Math. 211—Calculus I
 - Math. 212—Calculus II
 - Math. 221—Statistics
 - Math. 311—Intermediate Calculus
 - Math. 321—Modern Algebra
 - PLUS any five of the following:
 - Math. 241—Introduction to Computer Programming (1 cr. hr. only)
 - Math. 312—Differential Equations
 - Math. 322—Linear Algebra
 - Math. 332—Modern Geometry
 - Math. 411—Advanced Calculus
 - Math. 412—Complex Variables
 - Math. 421—Topology
 - Math. 422—Group Theory
 - Math. 431—Number Theory
 - Math. 432—Numerical Analysis

³ Required for any of the three majors in Geography are a course in Statistics and a course in Computing.

7. Physical Sciences

A. Chemistry¹

- Chem. 111, 112—General Chemistry I and II
- Chem. 222—Quantitative Analysis
- Chem. 331, 332—Organic Chemistry I and II
- Chem. 411, 412—Physical Chemistry I and II
- Chem. 421—Advanced Inorganic Chemistry
- Chem. 424—Instrumental Analysis
- PLUS at least one of the following:
- Chem. 422—Qualitative Organic Analysis
- Chem. 490—Chemistry Seminar
- Chem. 491—Special Topics
- Chem. 492—Chemical Research

B. Physics²

- Phys. 211, 212—General Physics I and II
- Phys. 310—Introduction to Atomic Physics
- Phys. 311—Mechanics
- Phys. 314—Electricity and Magnetism
- PLUS at least 12 cr. hrs. drawn from the following:
- Phys. 315—Electronics (4 cr. hrs.)
- Phys. 412—Optics (3 cr. hrs.)
- Phys. 420—Vibrations and Waves (3 cr. hrs.)
- Phys. 421—Solid State Physics (3 cr. hrs.)
- Phys. 422—Thermodynamics (3 cr. hrs.)
- Phys. 490—Physics Seminar (1 cr. hr.)

8. Psychology

- Psy. 101—General Psychology³
- Psy. 211—Child Growth and Development (Child Psychology)
OR Psy. 416—Adolescent Psychology
- Psy. 321—Tests and Measures
- Psy. 331—Mental Hygiene and Problems of Adjustment
OR Psy. 431—Abnormal Psychology
- Psy. 351—Social Psychology
OR Psy. 451—Psychology for Business and Industry
- Psy. 406—Psychology Seminar⁴
- Psy. 460—Basic Statistical Method
- Psy. 461—Experimental Psychology
- Additional courses which may be chosen:
- Psy. 102—Advanced General Psychology
- Psy. 401—Foundation of Contemporary Psychology

1 Chemistry majors are expected to take the following auxiliary courses: Phys. 211, 212, 310 and Math. 211, 212, 311, 312.

2 Physics majors are expected to take the following auxiliary courses: Chem. 111, 112 (these two to be taken in the freshman year) and Math. 211, 212, 311, 312.

3 Usually taken during the freshman year in fulfillment of the General Education Requirement. Also recommended for Psychology majors during the freshman year are: Biol. 103, 104 and Math. 111, 112.

4 Prior approval of the instructor is required.

- Psy. 436—The Study of Personality
- Psy. 456—Psychology of Motivation
- Psy. 462—Advanced Experimental Psychology
- Psy. 466—Research Projects in Psychology¹

9. Social Sciences

A. Comprehensive Major

Any six semesters of work in the Social Sciences beyond the General Education and Core Requirements

B. Economics

International Economics
 Intermediate Micro Economics
 Public Finance and Macro Economics
 Money and Banking
 Business and Economics Statistics I
 Business and Economics Statistics II
 Seminar in Economics¹

C. Political Science

Six semesters of work beyond Pol. Sci. 211 and 212, to be determined in consultation with an appropriate faculty advisor.

D. Sociology

Six semesters of work beyond Soc. 211 and the core semester of sociology, to be determined in consultation with an appropriate faculty advisor.

10. Speech

Basic

Speech 206—Oral Interpretation
 Speech 241—Voice and Diction
 Speech 325—Extempore Speech
 Speech 412—Fundamentals of Acting

A. Further Sequence for Public Address

Speech 231—Introduction to Radio and Television
 Speech 307—Business and Professional Speech
 Speech 418—Discussion
 Speech 421—Persuasion
 Speech 492—Seminar

B. Further Sequence for Theatre Studies

Speech 211—Theatre Production
 Speech 311—Scene Design
 Speech 318—Creative Dramatics
 Speech 319—Children's Theatre
 Speech 411—Play Direction
 Speech 414—Costuming for the Stage
 Speech 415—History of the Theatre
 Speech 416—Modern Theatre
 Speech 490—Speech Seminar

¹ Prior approval of the instructor is required.

ELECTIVES

For the elective portion of the curriculum, which makes up the balance of the 128 credit hours required for graduation, students may take almost any courses offered by the college, with the logical exception of those in Professional Education, Physical Education, certain Business Education skills, etc. Approximately 16 to 24 credit hours are normally allowed for electives (courses of the student's own choice).

NOTE ON PRE-PROFESSIONAL PROGRAMS: Students intending to transfer ultimately to a college of medicine, veterinary medicine, dentistry, pharmacy, law, engineering, theology, etc. should write immediately for the catalog and/or admission requirements of that particular college and, with the aid of the Director of Arts and Sciences at Bloomsburg State College, plan their undergraduate programs accordingly.

SCHEDULING

For assistance in planning a course of study that becomes progressively concentrated, two suggested schedule guides are given below, one for students concentrating in either the Social Sciences or the Humanities, the other for students concentrating in Mathematics or the Natural Sciences. The difference between the two schedules results from the fact that the latter areas are more rigorously sequential. Hence, students concentrating in Mathematics or the Natural Sciences would be apt to take two years each of mathematics and science during the first two years of college, deferring certain General Education Requirements until the sophomore and junior years, while students concentrating in the Social Sciences or the Humanities would be apt to take only one year each of mathematics and science during the first two years of college, thus fulfilling their General Education Requirements earlier and experiencing somewhat greater emphasis upon Major-Area Requirements and Electives during the last two years. These two schedules are to be considered only as guides in planning the A. B. program; they may be departed from, with the consent of the student's advisor and as scheduling difficulties arise.

It is apparent that an average of 16 hours of credit per semester should be maintained in order for a student to graduate within the usual 8 semesters ($8 \times 16 = 128$). However, students are advised not to assume course loads that are too heavy for them to manage creditably and to bear in mind that a full-time student may carry as few as 12 credit hours.

SUGGESTED SCHEDULE FOR AREAS OF THE SOCIAL SCIENCES AND HUMANITIES

FIRST YEAR

FIRST SEMESTER	Cr. Hrs.	SECOND SEMESTER	Cr. Hrs.
English 101	3	English 102	3
Speech 103	3	Geography 101	3
Science	3-4	Science	3-4
History 211	3	History 212	3
Foreign Language	3	Foreign Language	3
H.P.E. 101—Physical Fitness Education	1	H.P.E. 150—Aquatics	1
	16-17		16-17

SECOND YEAR

English 207	3	English 208	3
Mathematics	3	Mathematics	3
Social Science	3	Social Science	3
H.P.E. 100—Personal & Community Health	2	Political Science 211	3
Art or Music	3	Psychology	3
Major-Area or Elective	0-3	Major-Area or Elective	0-3
H.P.E.—Elective	1	H.P.E.—Elective	1
	15-18		16-19

THIRD YEAR

Humanities or Social Science Core	3-6	Philosophy	3
Major-Area and/or Electives	12	Humanities or Social Science Core	3-6
	15-18	Major-Area and/or Electives	9
Average	15-18	Average	15-18

FOURTH YEAR

Humanities or Social Science Core	3-6	Humanities or Social Science Core	3-6
Major-Area and/or Electives	12	Major-Area and/or Electives	12
	15-18		15-18
Average	15-18	Average	15-18

Required for graduation: 128 Semester Hours.

SUGGESTED SCHEDULE FOR AREA OF THE NATURAL SCIENCES (SCIENCE AND MATHEMATICS)

FIRST YEAR

FIRST SEMESTER	Cr. Hrs.	SECOND SEMESTER	Cr. Hrs.
English 101	3	English 102	3
Speech 103	3	Geography	3
Science	3-4	Science	3-4
Mathematics	4	Mathematics	4
Foreign Language	3	Foreign Language	3
	16-17		16-17

SECOND YEAR

History 211	3	History 212	3
Art or Music	3	Psychology	3
2nd Year Science	3-4	2nd Year Science	3-4
2nd Year Mathematics	3	2nd Year Mathematics	3
H.P.E. 100—Personal & Community Health	2	Political Science 211	3
H.P.E. 101—Physical Fitness Education	1	H.P.E. 150—Aquatics	1
	15-16		16-17

THIRD YEAR

	Cr. Hrs.		Cr. Hrs.
Social Science	3	Social Science	3
English 207	3	English 208	3
Science Core	3-4	Science Core	3-4
Major Area and/or Electives	6-8	Major Area and/or Electives	6-8
H.P.E.—Elective	1	H.P.E.—Elective	1
	<hr/>		<hr/>
	16-19		16-19

FOURTH YEAR

Philosophy	3	Major Area and/or Electives	15-17
Major Area and/or Electives	12-14		
	<hr/>	Average	15-17
Average	15-17		

Required for graduation: 128 Semester Hours.

DIVISION OF BUSINESS**THE FOUR YEAR BUSINESS
ADMINISTRATION CURRICULUMS**

The purpose of the Business Administration program is to prepare students for successful careers in business that will be personally satisfying and socially useful.

Students enrolled in the Business Administration curriculums take courses during their first two years that are, for the most part, identical to those required of all students enrolled in the Arts and Sciences programs. After the first two years, emphasis is placed on courses in Business Administration; at this time Business Administration majors will also have the option of specializing in some area of their choice — in either business or one of the arts and sciences. Students thus may satisfy their own personal interests in business as well as receive a substantial general education.

Graduates of the program may receive a Bachelor of Science degree (or a Bachelor of Arts degree by completing the foreign language requirement).

Specifically, the program of studies in Business Administration is designed:

1. To provide essential knowledge of the social and physical world in which we live.
2. To cultivate skills, attitudes, understandings, and knowledges, which can be applied to the world of business.
3. To develop personality and characteristics in the students which are required by business.
4. To understand the organization and management of our industrial society.

5. To develop the ability to think rationally and to apply this kind of thinking to complex business problems.
6. To develop the skills and techniques which will aid students in their efforts to become business managers or administrators.

Upon satisfactory completion of the basic year of the curriculum, students must choose one of the sequences (General Business, Accounting, or Economics) shown on the following pages. **STUDENTS NEED NOT HAVE HAD BUSINESS TRAINING IN HIGH SCHOOL** to complete the various business sequences.

Present or prospective transfer students from Junior Colleges should consult Paragraph I (A, B, C, and D) of the "Criteria For Business Administration," January 1968 with respect to college course offerings for the school years 1968-71.

Transfer students from junior colleges or community colleges will be required to complete the following courses in their designated curriculum:

- Bus. 323—Accounting for Management Decision and other subsequent accounting courses as prescribed
- Bus. 450—Introduction to Electronic Data Processing or Bus. 451 — Introduction to Programming

All requirements for General Education, Core, Specialized, and Electives as shown for each curriculum.

GENERAL EDUCATION (all sequences)

Business Administration

Science	6-8
Art or Music	3
Literature	6
Psychology	3
Social Sciences:	
Economics	6
Political Science	3
English Composition	6
Speech	3
Mathematics (111 and higher level)	6
World History	6
Geography	3
Health	2
Physical Education	3
Philosophy, Advanced Speech, Sociology, or Foreign Language ...	6

<i>CORE</i> (all sequences)		<i>Credits</i>
Bus. 101—Introduction to Business	3	
Bus. 221 and 222—Principles of Accounting I, II	6	
Bus. 323—Accounting for Management Decision	3	
Bus. 331—Business Law I	3	
Bus. 342—Marketing Principles and Practices	3	
Bus. 343—Business Finance	3	
Bus. 344—Management Processes	3	
Econ. 346—Business and Economics Statistics	3	
Econ. 413—Money and Banking	3	
Bus. 446—Business Policies	3	33
<hr/>		
TOTAL GENERAL AND CORE		95-97

Subject to change for administrative reasons without notice.

ACCOUNTING SEQUENCE

Business Administration

SPECIALIZED REQUIREMENTS

Bus. 321 and 322—Intermediate Accounting I, II	6	
Bus. 421—Cost Accounting	3	
Bus. 422—Auditing Theory and Procedures	3	
Bus. 423—State and Federal Tax Accounting	3	15
<hr/>		

*ELECTIVES***

Bus. 332—Business Law II	3	
Bus. 341—Retail Management Concepts	3	
Bus. 345—Personnel Management	3	
Bus. 424—Tax Problems	3	
Bus. 430—Advanced Statistics	3	
Bus. 445—Report Writing for Management	3	
Bus. 447—Research Studies in Management	3	
Bus. 448—Advanced Cost Accounting	3	
Bus. 449—CPA Problems	3	
Bus. 450 and 451—Data Processing	6	18
<hr/>		

The student must complete the following courses:

General Education	62-64
Core	33
Specialized Requirements	15
Electives	18
Typewriting or proficiency	0
<hr/>	

Subject to change for administrative reasons, without notice.

** 30 credits offered
18 credits needed

FIRST SEMESTER	Credits	SECOND SEMESTER	Credits
Eng. 101—Eng. Comp. I	3	Eng. 102—Eng. Comp. II	3
Geog. 101—World Phys. Geog.	3	Art 101/Music 101	3
Math. 111—Algebra	3	Mathematics	3
Hist. 111—World History	3	Bus. 222—Acctg. Principles II	3
H.P.E. 101—Phys. Fitness	1	Hist. 112—World History	3
*Bus. 221—Acctg. Principles I	3	H.P.E. 150—Aquatics	1
	16		16
THIRD SEMESTER	Credits	FOURTH SEMESTER	Credits
Eng. 207—World Lit. I	3	Eng. 208—World Lit. II	3
Econ. 211—Prin. of Economics I	3	Speech 103—Intro. to Speech	3
H.P.E. 100—Personal and Com. Health	2	Econ. 212—Prin. of Economics II	3
Psy. 101—Gen. Psychology	3	Bus. 323—Acctg. for Mgmt. Dec.	3
Bus. 421—Cost Accounting	3	Bus. 322—Inter. Accounting II	3
Bus. 321—Inter. Accounting I	3	H.P.E.—Elective	1
	17		16
FIFTH SEMESTER	Credits	SIXTH SEMESTER	Credits
Econ. 314—Money & Banking	3	Bus. 343—Business Finance	3
Bus. 331—Bus. Law I	3	Bus. 344—Management Processes	3
Bus. 441—Prin. Marketing	3	Science Elective	3
Bus. 423—Fed./State Taxes	3	Bus. 450—Intro. to E.D.P.	3
Science Elective	3	Bus. 346—Statistics	3
Phil. 211/Soc. 211	3		
	18		15
SEVENTH SEMESTER	Credits	EIGHTH SEMESTER	Credits
Bus. 422—Auditing	3	Bus. 446—Bus. Policies	3
Pol. Sci. 212/211—Government	3	Electives	12
Speech 307—Bus. and Prof Speech	3		
Electives	6		
	15		15

GENERAL BUSINESS ADMINISTRATION SEQUENCES ELECTIVE REQUIREMENTS

	<i>Credits</i>
General Education	62-64
Core	33
Electives in Business Administration (Accounting or Economics as approved by advisor)	33

128

A student must complete 33 elective credits which can include one additional course in Accounting and one additional course in Economics. The remaining courses would be selected from those listed under Electives — Business Administration.

Students should also refer to Core courses and General Education.

ELECTIVES — BUSINESS ADMINISTRATION

Data Processing	6
Business Law II	3
Advanced Statistics	3
Business Report Writing	3
Personnel Administration	3

* Students with an accounting objective should enroll in Bus. 221 in the first semester and omit Introduction to Business.

	<i>Credits</i>
Transportation	3
Advertising Management: Organization and Planning	3
Marketing Research Studies	3
Research Studies in Management	3
Retail Management Concepts	3
Sales Management	3

ELECTIVES — ECONOMICS

International Economics	3
Public Finance	3

ELECTIVES — ACCOUNTING

State and Federal Tax	3
Advanced Cost Accounting	3
Cost Accounting	3
Tax Problems	3

FIRST SEMESTER	Credits	SECOND SEMESTER	Credits
Eng. 101—Composition I	3	Eng. 102—Composition II	3
*Geog. 101—World Phys. Geog.	3	Art 101/Music 101	3
Math. 111—Algebra	3	Mathematics	3
Bus. 101—Intro. to Business	3	Speech 103—Introduction to Speech	3
Hist. 111—World History	3	Psy. 101—General Psychology	3
H.P.E. 101—Fitness	1	H.P.E. 150—Aquatics	1
	—		—
	16		16
THIRD SEMESTER	Credits	FOURTH SEMESTER	Credits
Bus. 221—Accounting Principles I	3	Bus. 222—Accounting Principles II	3
Econ. 211—Principles of Economics	3	Econ. 212—Principles of Economics	3
Eng. 207—World Lit. I	3	**Eng. 208—World Lit. II or Humanities Elective	3
H.P.E. 100—Personal and Com. Health	2	Bus. 346—Statistics	3
Hist. 112—World History	3	H.P.E.—Elective	1
Biol. 103 or Physical Science	3	Science Elective	3
	—		—
	17		16
FIFTH SEMESTER	Credits	SIXTH SEMESTER	Credits
Bus. 323—Acctg. for Mgt. Decisions	3	Bus. 344—Management Processes	3
Bus. 331—Business Law I	3	Bus. 342—Marketing Principles	3
Bus. 343—Business Finance	3	Econ. 413—Money & Banking	3
Bus. 450—Intro. to Data Processing	3	Electives	6
Bus. 345—Personnel Management	3		—
	—		15
	15		
SEVENTH SEMESTER	Credits	EIGHTH SEMESTER	Credits
Bus. 446—Business Policies	3	Bus. 447—Research Studies in Management	3
Bus. 445—Report Writing	3	Electives— Business Administration, Acctg. or Economics	12
Pol. Sci. 211 or 212	3		—
Electives	6		15
	—		—
	15		15

ECONOMICS SEQUENCES

Business Administration

General Education	62
Core	33
Specialized Economics Courses	15
Electives — Business Administration	18

* Alternate Economic Geography

** Humanities Electives: Philosophy, Professional Speech or Literature.

SPECIALIZED REQUIREMENTS

The student must complete the following courses	Credits
Econ. 411—Intermediate Micro Economics	3
Econ. 412—Intermediate Macro Economics	3
Econ. 423—History of Economic Thought	3
Econ. 422—Contrasting Economies	3
Econ. 313—Labor Economics	3
	15

ELECTIVES — BUSINESS ADMINISTRATION

Business Law II	3
Personnel Management	3
Cost Accounting	3
Federal and State Taxes	3
Advanced Statistics	3
Report Writing	3
Research Studies	3
Introduction to Electronic Data Processing	3
Introduction to Computers	3
	18
TOTAL, SPECIALIZED AND ELECTIVES	33
ADD GENERAL AND CORE	95

Subject to change for administrative reasons without notice.

FIRST SEMESTER	Credits	SECOND SEMESTER	Credits
Eng. 101—Composition I	3	Eng. 102—Composition II	3
*Geog. 101—World Phys. Geog.	3	Art 101/Music 101	3
Math. 111—Algebra	3	Mathematics	3
Hist. 111—World History	3	Speech 103—Introduction to Speech	3
H.P.E. 101—Fitness	1	Psy. 101—General Psychology	3
Bus. 101—Intro. to Business	3	H.P.E. 150—Aquatics	1
	16		16
THIRD SEMESTER	Credits	FOURTH SEMESTER	Credits
Bus. 221—Accounting Principles I	3	Bus. 222—Accounting Principles II	3
Econ. 211—Principles of Economics	3	Econ. 212—Principles of Economics	3
Eng. 207—World Lit. I	3	**Eng. 208—World Lit.	3
H.P.E. 100—Personal and Com. Health	2	Bus. 346—Statistics	3
Hist. 112—World History	3	H.P.E.—Elective	1
Biol 103	3	Physics	3
	17		16
FIFTH SEMESTER	Credits	SIXTH SEMESTER	Credits
Bus. 323—Acctg. for Mgt. Decision	3	Bus. 344—Management Processes	3
Bus. 331—Business Law I	3	Bus. 342—Marketing Principles	3
Bus. 343—Business Finance	3	Pol. Sci. 211 or 212	3
Bus. 450—Intro. to Data Processing	3	Econ. 314—Money & Banking	3
Econ. 423—Hist. Econ. Thought	3	Econ. 313—Industrial Relations	3
***Phil. 211—Introduction to Philosophy	—		—
	18		15

* 18 credits needed

**Alternate Economic Geography

For Humanities Requirement, 12 credits are required, two Philosophy Courses, one Literature Course, plus Art or Music will satisfy the requirements.

Note: Students must complete 15 semester hour credits in the following courses to satisfy the Specialized Requirements in Economics: Econ. 411—Intermediate Micro Economics, 3; Econ. 412—Public Finance and Macro Economics, 3; Econ. 423—History of Economic Thought, 3; Econ. 422—Comparative Economic Systems, 3; Econ. 313—Industrial Relations, 3.

***Phil — Introduction, Logic or Ethics

SEVENTH SEMESTER	Credits	EIGHTH SEMESTER	Credits
Econ. 411—Inter. Micro Econ.	3	Bus. 447—Research Studies in Management	3
Bus. 446—Business Policies	3	Electives	9
Bus. 445—Report Writing	3	Econ. 422—Comp. Econ. Systems	3
Electives	6		—
	15		15

THE FOUR YEAR BUSINESS EDUCATION CURRICULUMS

The State Department of Public Instruction has designated the Bloomsburg State College as one of the institutions in which secondary business teachers of the Commonwealth may be educated. The primary purpose of the program of the Division of Business Education is to prepare teachers for the junior and senior high schools of Pennsylvania.

Upon completion of the Business Education Curriculum, the Bachelor of Science Degree is conferred and application may be made to the State Department of Public Instruction for a teaching certificate. The courses included in the curriculum qualify graduates to secure certification to teach business subjects in any junior or senior high school in Pennsylvania.

ENTRANCE REQUIREMENTS

The Business Education Curriculum has proved so popular since it was first introduced in 1930 that only a limited number of selected students are admitted. All prospective students who plan to select this curriculum should apply to the Director of Admissions early in the year preceding the year in which they expect to enroll in the college. Only those high school students whose records indicate the ability to complete the curriculum satisfactorily are accepted. *This does not mean that students applying for admission must have had business courses in high school or business college. Many students who have had no previous business training successfully complete the Business Education Curriculum.*

As this curriculum is of college grade, advanced standing is not granted for work completed in secondary schools, business colleges, or non-accredited business schools.

ADVANCED STANDING

Applicants for admission to the Business Education Curriculum who have earned credit at other colleges or universities should submit a transcript of this credit when applying for admission. Advanced standing will be granted for courses completed at other institutions of college grade when, in the judgment of the Dean of Instruction, such courses are equivalent to subjects prescribed in the Business Education Curriculum.

If a tentative evaluation of courses completed at other colleges or universities is desired, a transcript showing the names of the courses, the grades, and the credit hours earned should be sent to the Director of the Division of Business Education. A tentative evaluation can be requested prior to making application for admission to the college.

The specific objectives of the Business Education program are:

1. To contribute to the development of a broader understanding of the culture of our society.
2. To develop an appreciation of the contributions business teachers can make to the total educational program of the school.
3. To prepare students for certification to teach or supervise the teaching of business subjects.
4. To develop vocational competency in the skill subjects and in accounting.
5. To provide sufficient basic business education to insure competency and to develop interest in the teaching of basic business subjects.
6. To provide training and experience in methods and techniques of teaching business subjects.

Upon satisfactory completion of the basic year of the curriculum, students must choose one of the sequences (General, Secretarial, or Accounting) shown on the following pages. **STUDENTS NEED NOT HAVE HAD BUSINESS TRAINING IN HIGH SCHOOL** to complete the business sequences.

For administrative reasons the sequence of courses is subject to change. The first number after each course refers to clock hours, while the second indicates the number of credit hours.

All Business Education program students must complete 128 credits of courses distributed approximately equally between General Education and Business Education.

Prior to the end of the junior year students must receive clearance from the Student Teaching Committee — Business Education for admission to student teaching in public secondary schools.

For the Provisional Certificate to teach Business Education in a public high school in Pennsylvania, candidates must complete the Accounting, the General, or the Secretarial Sequence (or their equivalents) at Bloomsburg State College. These sequences incorporate courses in general, professional, and Business Education required under the regulations published by the Department of Public Instruction.

The following high school teaching areas and the college credits for specific courses for these areas follow: Bookkeeping, 12 credits of accounting courses; Business English, 15 credits in English, including Business Correspondence; Business Mathematics, 15 credits in accounting and business mathematics; Retail Selling, 9 credits in Salesmanship (Bus. 241), Marketing (Bus. 342) and Retailing (Bus. 341); Shorthand, 9 credits; Typewriting, 6 credits. Students must complete all of the courses prescribed on a particular sequence to qualify for a certificate.

FIRST YEAR (all sequences)

FIRST SEMESTER			SECOND SEMESTER		
Hours			Hours		
CL	CR		CL	CR	
Eng. 101—English Composition	3	3	Eng. 102—English Composition	3	3
Math. 101—Fundamentals of Mathematics	3	3	Phys. 101—Physical Science	4	3
Geog. 101—World Physical Geography ..	3	3	Art 101—Intro. to Art or		
Speech 103—Introduction to Speech	3	3	Music 101—Intro. to Music	3	3
H. P. E. 101—Physical Fitness Education	2	1	H. P. E. 100—Personal and Community		
Phil. 211—Intro. to Philosophy	3	3	Health	2	2
	---	---	H. P. E. 150—Aquatics	2	1
	17	16	Bus. 101—Introduction to Business		
			Organization and Finance	3	3
			Bus. 221—Principles of Accounting I	4	3
				---	---
				21	18

GENERAL SEQUENCE

SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Hours			Hours		
CL	CR		CL	CR	
Eng. 207 or 208—Survey of World Lit.	3	3	Hist. 218 or Hist. 111	3	3
Biol. 103—General Biology I	5	3	Bus. 202—Elementary Typewriting II	4	2
H. P. E.—Elective	2	1	Bus. 212—Elementary Shorthand II	4	3
Bus. 201—Elementary Typewriting I	4	2	Bus. 321—Intermediate Accounting I	3	3
Bus. 211—Elementary Shorthand I	4	3	Natural Science or Math. elective	3	3
Bus. 222—Principles of Accounting II	4	3	Humanities elective	3	3
	---	---		---	---
	22	15		20	17

THIRD YEAR

	Hours			Hours	
	CL	CR		CL	CR
Psy. 101—General Psychology	3	3	Psy. 371—Educational Psychology	3	3
Econ. 211—Principles of Economics	3	3	Econ. 212—Principles of Economics	3	3
Bus. 301—Advanced Typewriting	4	2	Bus. 332—Business Law II	3	3
Bus. 311—Advanced Shorthand	4	3	Bus. 334—Business Mathematics or		
Bus. 322—Intermediate Accounting II	3	3	Bus. 333—Business Corres. and Reports	3	3
Bus. 331—Business Law I	3	3	Ed. 393—Social Foundations of Education	3	3
	—	—	Soc. 211—Principles of Sociology or		
	20	17	Soc. 323—Intro. to Anthropology	3	3
				—	—
				18	18

FOURTH YEAR

	Hours			Hours	
	CL	CR		CL	CR
Econ. 423—Hist. of Economic Thought	3	3	Ed. 403—Student Teaching in Business		
Pol. Sci. 211—U. S. Government	3	3	Subjects in the Secondary School		
Bus. 401—Clerical Practice and			(Including Professional Practicum) ...	30	12
Office Machines	5	3		—	—
Ed. 396—Curriculum and Instruction in				30	12
Secondary School	8	6			
(Including A-V Education)					
	—	—			
	19	15			

ACCOUNTING SEQUENCE

SECOND YEAR

	Hours			Hours	
	CL	CR		CL	CR
Eng. 207 or 208—Survey of World Lit.	3	3	Hist. 218 or Hist. 111	3	3
Biol. 103—General Biology I	5	3	Bus. 202—Elementary Typewriting II	4	2
H. P. E.—Elective	2	1	Bus. 321—Intermediate Accounting I	3	3
Bus. 201—Elementary Typewriting I	4	2	Business elective	3	3
Bus. 222—Principles of Accounting II	4	3	Natural Science or Math. elective	3	3
Business elective	3	3	Humanities elective	3	3
	—	—		—	—
	21	15		19	17

THIRD YEAR

	Hours			Hours	
	CL	CR		CL	CR
Psy. 101—General Psychology	3	3	Psy. 371—Educational Psychology	3	3
Econ. 211—Principles of Economics	3	3	Econ. 212—Principles of Economics	3	3
Bus. 301—Advanced Typewriting	4	2	Bus. 332—Business Law II	3	3
Bus. 322—Intermediate Accounting II	3	3	Accounting elective	3	3
Bus. 331—Business Law I	3	3	Ed. 393—Social Foundations of Education	3	3
Bus. 334—Advanced Mathematics			Soc. 211—Principles of Sociology or		
(Business Mathematics)	3	3	Soc. 323—Intro. to Anthropology	3	3
	—	—		—	—
	19	17		18	18

FOURTH YEAR

FIRST SEMESTER

	Hours	
	CL	CR
Econ. 423—History of Econ. Thought	3	3
Pol. Sci. 211—U. S. Government	3	3
Bus. 401—Clerical Practice and		
Office Machines	5	3
Ed. 396—Curriculum and Instruction in		
Secondary School	8	6
(Including A-V Education)		
	—	—
	19	15

SECOND SEMESTER

	Hours	
	CL	CR
Ed. 403—Student Teaching in Business		
Subjects in the Secondary School		
(Including Professional Practicum) ...	30	12
	—	—
	30	12

SECRETARIAL SEQUENCE

SECOND YEAR

	Hours			Hours	
	CL	CR		CL	CR
Eng. 207 or 208—Survey of World Lit. I	3	3	Humanities Elective	3	3
Biol. 103—General Biology I	5	3	Hist. 218 or Hist. 111	3	3
H. P. E.—Elective	2	1	Bus. 202—Elementary Typewriting II	4	2
Bus. 201—Elementary Typewriting I	4	2	Bus. 212—Elementary Shorthand II	4	3
Bus. 211—Elementary Shorthand I	4	3	Bus. 333—Business Corres. and Reports	3	3
Business elective	3	3	Natural Science or Math. elective	3	3
	<u>21</u>	<u>15</u>		<u>20</u>	<u>17</u>

THIRD YEAR

	Hours			Hours	
	CL	CR		CL	CR
Psy. 101—General Psychology	3	3	Econ. 212—Principles of Economics	3	3
Econ. 211—Principles of Economics I	3	3	Bus. 312—Secretarial Practice	5	3
Bus. 301—Advanced Typewriting	4	2	Bus. 332—Business Law II	3	3
Bus. 311—Advanced Shorthand	4	3	Psy. 371—Educational Psychology	3	3
Bus. 331—Business Law I	3	3	Ed. 393—Social Foundations of Ed.	3	3
Business elective	3	3	Soc. 211—Principles of Sociology or Soc. 323—Intro. to Anthropology	3	3
	<u>20</u>	<u>17</u>		<u>20</u>	<u>18</u>

FOURTH YEAR

	Hours			Hours	
	CL	CR		CL	CR
Econ. 423—Hist. of Economic Thought	3	3	Ed. 403—Student Teaching in Business Subjects in the Secondary School (Including Professional Practicum)	30	12
Pol. Sci. 211—U. S. Government	3	3		<u>30</u>	<u>12</u>
Bus. 401—Clerical Practice and Office Machines	5	3		30	12
Ed. 396—Curriculum and Instruction in Secondary School (Including A-V Education)	8	6			
	<u>19</u>	<u>15</u>			

DIVISION OF SPECIAL EDUCATION

PURPOSE

This Division of Bloomsburg State College has been designated by the State Department of Public Instruction to prepare people in Training of the Mentally Retarded and in Communication Disorders and has been tentatively approved to prepare people in the area of Education of the Deaf. The Bachelor of Science in Education degree is conferred on students who satisfactorily complete any of the approved Special Education curriculums. Certification in the designated major is granted upon completion of the program and approval of the faculty.

EQUIPMENT

The Special Education Center is located in Navy Hall. Students majoring in Communication Disorders have access to: a hearing suite which is equipped with pure-tone and speech audiometers, a Bekesy audiometer, a psycho-galvanometer; a Voice Science Lab which is equipped with a speech sonograph, single and dual track tape recorders, disc-record cutting machines and sound analysis equipment; phonographs, auditory training units, desk and individual model hearing aids, language masters, and library materials in Communication Disorders for use in Clinical Practicum.

Instructional aids for the Teaching of the Mentally Retarded include SRA Reading Laboratories, tachistoscope, a primer typewriter, a collection of curriculum and workshop materials, and library materials concerning all areas of mental retardation.

CLINICAL PRACTICE AND STUDENT TEACHING

Students enrolled in the Teaching of the Mentally Retarded program have the opportunity of participating in the work with the mentally retarded in carefully supervised and graded special classes. After completion of the course work, students participate in full-time student teaching programs in two separate settings for the duration of nine weeks each.

Those enrolled in Communication Disorders acquire their initial clinical experience while they are still on campus. Upon completion of course work and clinical practice on campus, these students are placed for two different experiences, each lasting nine weeks, which gives them the opportunity to work full time with a qualified speech correctionist in a school or clinic setting.

Student teachers in Special Education are assigned to the White Haven State School, the Selinsgrove State School and Hospital, and to the public schools of Chester, Columbia, Cumberland, Lancaster, Lycoming, Montgomery, Montour, Northampton and Northumberland Counties through the offices of the superintendents of those counties.

As greater numbers of students are assigned to student teaching through increased enrollment, other centers will be developed. A student may be assigned to a school district or county for an entire semester, or he may be re-assigned in mid-semester to other school districts or counties.

COMMUNICATION DISORDERS CURRICULUM

(Subject to change for administrative reasons)

SPEECH PATHOLOGY SEQUENCE

The objectives of the curriculum are to prepare state certified speech correctionists, to provide opportunity for students to meet the requirements of ASHA for Certificate of Clinical Competence in Speech Pathology, and to extend the competence of speech clinicians so that they can adequately work with public school and clinic problems.

FIRST SEMESTER			SECOND SEMESTER		
	Hours			Hours	
	CL	CR		CL	CR
Eng. 101—English Composition	3	3	Eng. 102—English Composition	3	3
Speech 103—Introduction to Speech	3	3	Com. Dis. 152—Voice and Diction	3	3
Biol. 103—General Biology I	4	3	Art 101—Introduction to Art	3	3
Geog. 101—World Physical Geography	3	3	(Elect one)	3	3
(Elect one)	3	3	Hist. 111—World Hist. to 1500		
Math. 101—Fundamentals of Math.			Hist. 112—World Hist. 1500-1815		
Math. 111—College Algebra			Hist. 113—World Hist. since 1815		
H.P.E. 101—Physical Fitness Ed.	2	1	H.P.E. 150—Aquatics	2	1
	---	---	Com. Dis. 251—Phonetics	3	3
	18	16		---	---
				17	16
THIRD SEMESTER			FOURTH SEMESTER		
H.P.E. 100—Personal and Community Health	2	2	Music 101—Intro. to Music	3	3
Spec. Ed. 201—Education of Exceptional Children	3	3	Psy. 211—Child Growth and Development	3	3
H.P.E.—Elective	2	1	Psy. 371—Ed. Psychology	3	3
Phys. 101—Basic Phys. Science	4	3	Com. Dis. 253—Speech Pathology II	3	3
Com. Dis. 276—Intro. to Audiology	3	3	Eng. 207 or 208—Survey of World Lit.	3	3
Com. Dis. 252—Sp. Path. I	3	3	Com. Dis. 376—Aud. Training & Sp. Reading	3	3
Psy. 101—General Psychology	3	3		---	---
	---	---		18	18
	20	18			
FIFTH SEMESTER			SIXTH SEMESTER		
(Elect one)	3	3	Com. Dis. 467—Psy. of Sp. & Hrng.	3	3
Soc. 211—Prin. of Sociology			Hist. 218—U. S. and Pa. Survey	3	3
Soc. 224—Cultural Anthropology			Ed. 393—Social Foundation of Ed.	3	3
Psy. 321—Tests and Measures	3	3	Com. Dis. 352—Clinical Practicum: Communication Disorders	6	3
Phil. 211—Intro. to Philosophy	3	3	(Elective) Foreign Language	3	3
Com. Dis. 351—Clinical Methods and Practicum	6	3		---	---
(Elect one)	3	3		18	15
Psy. 331—Mental Hygiene					
Psy. 416—Adolescent Psychology					
	---	---			
	18	15			
SEVENTH SEMESTER			EIGHTH SEMESTER		
(Elect one)	3	3	*Com. Dis. 402—Clinical Experience	30	12
Eng. 401—Structure of English				---	---
Com. Dis. 360—Psycho-Linguistics				30	12
Com. Dis. 452—Anatomy of Speech and Hearing Mechanisms	3	3			
(Two Electives from: Com. Dis.; Foreign Language or Reading)	6	6	Total	128	crs.
Pol. Sci. 211—U. S. Gov't.	3	3			
Com. Dis. 361—Clinical Problems of Communication Disorders	3	3			
	---	---			
	18	18			

(Com. Dis. 466, 471, 472 and 475 are recommended for course selections beyond the required.)

* Student teaching equivalent.

CURRICULUM FOR EDUCATION OF THE DEAF

(subject to change for administrative reasons)

The objectives of this sequence are to prepare state certified teachers of the deaf to provide opportunity for students to meet the requirements of certification of the Conference of Executives of American Schools for the Deaf, and to extend the competency of teachers of the deaf.

FIRST SEMESTER			SECOND SEMESTER		
	Hours			Hours	
	CL	CR		CL	CR
Eng. 101—English Composition	3	3	Eng. 102—English Composition	3	3
Speech 101—Fund. of Speech	3	3	Com. Dis. 152—Voice & Diction	3	3
Biol. 103—General Biology I	5	3	Art — Elective	3	3
Geog. 101—World Physical Geog.	3	3	History — Elective	3	3
(Elect one)	3	3	Com. Dis. 251—Phonetics	3	3
Math. 101—Fund. of Math.			HPE 150—Aquatics	2	1
Math. 111—College Algebra				---	---
HPE 101—Physical Fitness Ed.	2	1		17	16
	---	---			
	19	16			
THIRD SEMESTER			FOURTH SEMESTER		
Spec. Ed. 201—Ed. of Ex. Chn.	3	3	Music — Elective	3	3
Phys. 101—Basic Physical Science	4	3	Psy. 211—Child Growth & Develop.	3	3
Psy. 101—General Psychology	3	3	Psy. 371—Educational Psychology	3	3
Com. Dis. 252—Sp. Path. I	3	3	Eng. — Literature Elective	3	3
Com. Dis. 276—Intro. to Aud.	3	3	Com. Dis. 376—Aud. Trng. & Sp. Reading	3	3
HPE 100—Personal & Community Health	2	2	EOD 201—History, Ed. & Guidance of the Deaf	3	3
HPE—Recreation Elective	2	1		---	---
	---	---		18	18
	20	18			
FIFTH SEMESTER			SIXTH SEMESTER		
Soc.—Elective	3	3	Ed. 393—Soc. Foundations of Education	3	3
Phil. 211—Intro. to Philosophy	3	3	Pol. Sci. 211—U. S. Government	3	3
Psy. 321—Tests & Measures	3	3	EOD 352—Tchng. Sp. to the Deaf	4	4
Com. Dis. 351—Clinical Methods and Practicum	6	3	EOD 353—Tchng. Ele. Subj. to the Deaf	6	4
EOD 351—Language for the Deaf	4	4	(Elect one)	3	3
	---	---	Advanced Science		
	19	16	Advanced Math. or Statistics		
				---	---
				19	17
SEVENTH SEMESTER			EIGHTH SEMESTER		
Com. Dis. 452—Anatomy	3	3	EOD 403—Student Teaching	30	12
Spec. Ed. 455—Learning Disabilities	3	3			
EOD 366—Classroom Practicum	6	3			
EOD 461—Problems of EOD	3	3			
Elective	3	3			
	---	---			
	18	15			

CURRICULUM FOR TEACHERS OF THE MENTALLY RETARDED

(Subject to change for administrative reasons)

The objectives of this curriculum are to prepare State certified teachers in the area of mental retardation and extend competency in teaching of the mentally retarded.

FIRST SEMESTER			SECOND SEMESTER		
	Hours			Hours	
	CL	CR		CL	CR
Eng. 101—English Composition	3	3	Eng. 102—English Composition	3	3
Speech 103—Introduction to Speech	3	3	Phys. 101—Physical Science	4	3
Biol. 103—General Biology I	4	3	(Elect one)	3	3
Geog. 101—World Physical Geography	3	3	Art 101—Introduction to Art		
(Elect one)	3	3	Music 101—Introduction to Music		
Math. 101—Fundamentals of Math.			Psy. 101—General Psychology	3	3
Math. 231—Theory of Arithmetic			(Elect one)	3	3
H.P.E. 101—Physical Fitness Ed.	2	1	Hist. 111—World History to 1500		
	18	16	Hist. 112—World History 1500-1815		
			Hist. 113—World Hist. 1815 to present		
			H.P.E. 150—Aquatics	2	1
				18	16
THIRD SEMESTER			FOURTH SEMESTER		
Eng. 207 or 208—Survey of World Lit. ..	3	3	Pol. Sci. 211—U. S. Government	3	3
Hist. 218—U.S. and Pa. Survey	3	3	Music 311—Music Activities in the		
(Elect one)	3	3	Elementary School	3	3
Soc. 211—Principles of Sociology			Tch. MR 201—Introduction to		
Soc. 224—Cultural Anthropology			Mentally Retarded	3	3
Spec. Ed. 201—Education of			(Elective) in Humanities	3	3
Exceptional Children	3	3	Psy. 211—Child Growth and Development	3	3
Phil. 211—Introduction to Philosophy	3	3	(Elective) in Social Sciences	3	3
H.P.E. 100—Personal & Community				18	18
Health	2	2			
	17	17			
FIFTH SEMESTER			SIXTH SEMESTER		
H.P.E.—Elective	2	1	Ed. 393—Social Foundations		
Tch. MR 303—Crafts for all Levels			of Ed.	3	3
of Mentally Retarded	8	4	Psy. 321—Tests and Measures	3	3
Psy. 371—Educational Psychology	3	3	Ed. 397—Science and Math in the		
Ed. 371—Teaching of Reading in			Elementary School	3	3
the Elementary Grades	3	3	Tch. MR 352—Special Class		
(Elective) Science or Math	3	3	Methods: Secondary Levels	3	3
Tch. MR 351—Special Class			Eng. 316—Children's Literature	3	3
Methods: Primary and				15	15
Intermediate Levels	3	3			
	22	17			
SEVENTH SEMESTER			EIGHTH SEMESTER		
Spec. Ed. 451—Speech Improvement			Tch. MR 401—Student Teaching		
for the Classroom	3	3	and Professional Practicum	30	12
(Elect one)	3	3		30	12
Psy. 416—Adolescent Psychology					
Psy. 331—Mental Hygiene			Total	128	crs.
Tch. MR 361—Seminar in Teaching					
the Mentally Retarded	3	3			
H.P.E. 420—Techniques in Health					
and P.E. for Spec. Ed. Teachers	3	3			
Tch. MR 432—Language Arts					
for Special Classes	3	3			
(Elective) Prof. area	2	2			
	17	17			

SPECIAL DEGREE PROGRAMS

THE TWO-YEAR DEGREE PROGRAMS

The Bloomsburg State College has been approved to offer a two-year program to Dental Hygienists and School Nurses who are able to meet the conditions set forth in the following paragraphs:

DEGREE CURRICULUM FOR DENTAL HYGIENISTS

(Subject to change without notice)

The degree of Bachelor of Science in Education will be conferred upon dental hygienists meeting the following requirements:

1. The possession of a valid license to practice dental hygiene in the Commonwealth of Pennsylvania issued by the State Dental Council and Examining Board and the Department of Public Instruction. "The professional education requirements for dental hygiene are the satisfactory completion of an approved dental hygienist course of instruction of two years of not less than thirty-two weeks and not less than thirty hours each week or its equivalent in and graduation from a dental hygiene school approved by the State Dental Council and Examining Board."
2. The satisfactory completion in addition thereto of 70 credit hours of professional and general education courses distributed as follows:

A. Professional Education	Credit Hours
Ed. 393—Social Foundations of Education	3
Psy. 101—General Psychology	3
Psy. 371—Educational Psychology	3
Ed. 301—Audio Visual Education	2
Total	11
B. General Education	
1. English and Speech	
16	
Eng. 101—English Composition	3
Speech 103—Introduction to Speech	3
Eng. 102—English Composition	3
Any speech elective	3
Eng. 207—Survey of World Literature I	3
Eng. 208—Survey of World Literature II	3
2. Fine Arts	
6	
Art 101—Introduction to Art	3
Music 101—Introduction to Music	3

3. Geography	6	
Geog. 101—World Physical Geography		3
Geog. 102—World Cultural Geography		3
4. Social Studies	18	
Pol. Sci. 211—United States Government		3
Econ. 211—Principles of Economics I		3
Hist. 111—World History to 1500		3
Hist. 112—World History, 1500-1815 or Hist. 113—World History, since 1815		3
Hist. 218—History of U. S. and Pa.		3
Soc. 211—Principles of Sociology		3
Total		46
C. Electives		13
Grand Total		70

In each category above, credit will be given for equivalent courses pursued in the two year dental hygiene curriculum. In such cases students must increase their electives by the number of credit hours earned previously.

In the case of dental hygienists who had less than two years of specialized training on the basis of which they were licensed to practice dental hygiene, proportional credit will be given. Such persons must pursue additional general education courses in college to make up the deficiency.

Electives may be chosen with the approval of the Dean of Instruction from any field or curriculum offered at the college in which the student is enrolled.

APPLICATION FOR ADMISSION

A dental hygienist who desires to enroll in the Degree Curriculum for Dental Hygienists should write for application blanks and information to the Director of Admissions, Bloomsburg State College, Bloomsburg, Pennsylvania 17815.

RESIDENCE REQUIREMENTS

The last 30 hours of credits must be earned at Bloomsburg State College. Resident credits may be earned in day, evening, and summer classes which are offered on campus or approved by the college administration.

DEGREE CURRICULUM FOR PUBLIC SCHOOL NURSES

Effective September 1, 1961

(Subject to change without notice)

The degree of Bachelor of Science in Education will be conferred upon registered nurses who meet the following requirements:

1. The satisfactory completion of a three-year curriculum in an approved school of nursing and registration by the State Board of Examiners for the Registration of Nurses of Pennsylvania.
2. All persons admitted to this degree program will be required to satisfactorily complete 60 credit hours of additional preparation distributed as follows:

A. Courses Related to Public Nursing:	Credits
NED. 301—Public School Nursing I	3
NED. 303—Public School Nursing II	3
NED. 304—Public Health Nursing	3
NED. 305—Nutrition	3
NED. 306—Family Case Work	3
	15
B. General Education:	
Eng. 101 or 102—English Composition	3
Eng. 207 or 208—Survey of World Literature	3
Hist. 111—World History to 1500 OR	
Hist. 112—World History, 1500-1815 OR	
Hist. 113—World History since 1815	3
Hist. 218—History of U. S. and Pa. Survey	3
Pol. Sci. 211—U. S. Government	3
Soc. 211—Principles of Sociology	3
Biol. 103—General Biology	3
Psy. 101—General Psychology	3
Psy. 331—Mental Hygiene	3
	27
C. Professional Education:	
Ed. 393—Social Foundations of Education	3
Psy. 371—Educational Psychology	3
Psy. 211—Child Growth and Development	3
Ed. 451—Pupil Personnel Services In The Public Schools	3
	12
D. Electives:	
Music 101—Introduction to Music	3
Art 101—Introduction to Art	3
Math. 101—Fundamentals of Mathematics	3
Speech 103—Introduction to Speech	3
	6
Total	60

In the case of nurses with less than three years preparation for registration, such persons will pursue additional courses to meet the requirements for the degree.

APPLICATION FOR ADMISSION

A registered nurse who desires to enroll in the Degree Curriculum for Public School Nurses should write for application blanks and information to the Director of Admissions, Bloomsburg State College, Bloomsburg, Pennsylvania 17815.

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The last 30 hours of credits must be earned at Bloomsburg State College to qualify for graduation. Resident credits may be earned in day, evening, and summer classes which are offered on campus or approved by the college administration.

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Lock Haven State College, B.S.; West Chester State College, M.A.
- DONALD D. RABB *Biology*
Bloomsburg State College, B.S.; Bucknell University, M.S.; Colorado University, Pennsylvania State University, Ed.D.; Graduate Study, Syracuse University, University of Colorado, Duke University, North Carolina State University.
- FRANCIS J. RADICE *Business*
Bloomsburg State College, B.S.; Pennsylvania State University, M.Ed.; Graduate Study, Bucknell University; Pennsylvania State University, Ed.D.
- EUGENE RAPPAPORT *Art*
Brandeis University, B.A.; Indiana University, M.F.A.

- EMORY W. RARIG, JR. *Business*
 Bloomsburg State College, B.S.; Teachers College — Columbia University, M.A., Ed.D.
- MARGARET READ-LAUER *English*
 University of Michigan, A.B.; Indiana University, M.A.; Graduate Study, Indiana University.
- GWENDOLYN REAMS *Catalog Librarian*
 University of Alabama, A.B.; George Peabody College, M.A.; Graduate Study, University of North Carolina, University of Alabama, Syracuse University.
- CHARLES R. REARDIN *Mathematics*
 Duke University, A.B.; Montclair State College, M.A.; Graduate Study, Paterson (N. J.) State College, Tulane University.
- ROBERT R. REEDER *Social Sciences*
 Pennsylvania State University, B.A., M.S.; Indiana University, University of Colorado, M.A.
- HERBERT H. REICHARD *Physics*
 Pennsylvania State University, B.S., M.S.; University of Michigan, M.A.; Graduate Study, Lehigh University, Harvard University, Pennsylvania State University, Temple University, Rutgers University.
- JAMES T. REIFER *Mental Retardation*
 Shippensburg State College, B.S.; Pennsylvania State University, M.Ed.
- DAVID P. REIN *English*
 Drew University, B.A.; Brown University, M.A.; Montclair State College, University of Michigan, M.A.
- EMILY A. REUWSAAT *Mental Retardation*
 Iowa State College, A.B., M.A.; University of Nebraska, Ed.D.
- STANLEY A. RHODES *Biological Sciences*
 University of Virginia, B.S., M.A.; Graduate Study, Duke University, Williams College, Colorado State University.
- ALVA W. RICE *English*
 Madison College, B.S.; George Washington University, Indiana University, M.A.; Graduate Study, University of Kentucky, University of Oslo, University of London.
- ROBERT D. RICHEY *Speech*
 Ohio State University, A.B., M.A.
- JORDAN RICHMAN *English*
 Brooklyn College, B.A.; New York University, M.A.; Graduate Study, University of New Mexico.
- KENNETH A. ROBERTS *Elementary Education*
 Bloomsburg State College, B.S.; Bucknell University, M.S.; Graduate Study, Pennsylvania State University, Bucknell University.

- PERCIVAL R. ROBERTS, III *Art*
University of Delaware, B.A.; Haystack Mountain School, University of Delaware, M.A.; Graduate Study, Illinois State University; L'Libre Universite Asie, Honorary Litt.D.
- ROBERT P. ROSS *Economics*
Wesleyan University, Washington University, B.A., M.A.; Graduate Study, Vanderbilt University, University of Connecticut.
- WILLIAM C. ROTH *English*
Syracuse University, A.B.; University of Pennsylvania, M.A.; Graduate Study, University of Missouri.
- JACQUELINE B. RUBE *Foreign Languages*
University of Wisconsin, B.A.; Universite d'Aix-Marseille, University of Wisconsin, M.A.
- SUSAN RUSINKO *English*
Wheaton College, B.A.; Pennsylvania State University, M.A.; Graduate Study, University of Minnesota, Columbia University.
- ROBERT G. SAGAR *Biological Sciences*
Ohio State University, B.S., M.S.; Graduate Study, Ohio State University.
- TEJBHAN S. SAINI *Economics*
Government College, B.A.; Punjam University, M.A.; Duke University, D.F.; Graduate Study, New School for Social Research.
- MERRITT WILLIAM SANDERS *Psychology*
Drew University, A.B., B.D.; New York University, Ph.D.
- MARTIN A. SATZ *Psychology*
University of Minnesota, B.A., M.A.; University of Washington, Ph.D.; Public School Psychologist.
- RICHARD C. SAVAGE *English*
University of North Carolina, B.A.; Columbia University, M.A.; Graduate Study, University of Edinburgh, Scotland, Bucknell University.
- JOHN A. SAWYER *Foreign Languages*
University of Minnesota, B.A., M.A.; Graduate Study, State University of New York.
- TOBIAS F. SCARPINO *Physics*
Kutztown State College, B.S.; Bucknell University, M.S.; Graduate Study, Princeton University, Pennsylvania State University, Bucknell University.
- BERNARD J. SCHNECK *Sociology*
University of Scranton, A.B.; West Virginia University, A.M.; Graduate Study, Ohio State University.
- SEYMOUR SCHWIMMER *Philosophy*
City College of New York, B.S.S.; Teachers College, Columbia University, M.A.; Graduate Study, Columbia University, New York University.
- JOHN S. SCRIMGEOUR, Jr. *Director of Financial Aid*
Bloomsburg State College, B.S.; Pennsylvania State University, M.Ed.

- GILBERT R. W. SELDERS *Education*
 Pennsylvania State University, B.A., M.Ed., Ed.D.
- REX E. SELK *Chemistry*
 Knox University, A.B.; State University of Iowa, M.S.; Graduate Study, University of West Virginia, State University of Iowa, Ohio University, Emory University.
- RALPH W. SELL *History*
 Muhlenburg College, B.A.; Lutheran Theological Seminary, College of Chinese Studies, American Lutheran Mission, Hartford Seminary Foundation, Ph.D.; Postdoctoral Study, Harvard University, Union Theological Seminary, Columbia University.
- JOHN J. SERFF *History*
 Shippensburg State College, B.S.; Pennsylvania State University, M.Ed., Ph.D.
- CECIL C. SERONSY *English*
 University of Virginia, B.A.; Harvard University, M.A., Ph.D.
- LOUISE SERONSY *Psychology*
 Fort Hays Kansas State, B.S.; George Peabody College, B.A.; Purdue University, Ph.D.
- THEODORE SHANOSKI *History*
 East Stroudsburg State College, B.S.; Ohio University, M.A.; Graduate Study, Temple University.
- MRS. RUTH D. SMEAL *Circulation Librarian*
 Bloomsburg State College, B.S.; Marywood College, M.S.L.S.; Graduate Study, Pennsylvania State University.
- RICHARD M. SMITH *Communication Disorders*
 Edinboro State College, B.S.; Temple University, M.A.
- ERIC W. SMITHNER *Foreign Languages*
 Muskingum College, A.B.; University of Cincinnati, University De Grenoble, Middlebury French School, New York University, M.A.; New York University, Ph.D.
- ROBERT R. SOLENBERGER *Anthropology*
 University of Pennsylvania, A.B., M.A.; Graduate Study, University of Pennsylvania.
- JAMES R. SPERRY *History*
 Bridgewater College, B.A.; University of Arizona, M.A., Ph.D.
- MARGARET C. SPONSELLER *Education*
 Indiana State College, B.S.; Pennsylvania State University, M.Ed., Ed.D.
- JANET STAMM *English*
 Mount Holyoke College, A.B.; University of Pennsylvania, M.A., Ph.D.
- WILLIAM B. STERLING *Geography*
 Plattsburgh (N. Y.) State Normal School, Diploma; University of Buffalo, B.S.; Syracuse University, M.S.; Flight Instructor's Rating. Designated Flight Examiner No. 3499 (C. A. A.); United Air Lines Pilot School, Cheyenne, Wyoming; Pennsylvania State University, Ed.D.

- GEORGE G. STRADTMAN, Sr. *Mathematics*
Millersville State College, B.S.; Temple University, Ed.M.; Graduate
Study, Pennsylvania State University, Temple University, Union College.
- GERALD H. STRAUSS *English*
University of Pennsylvania, A.B.; Columbia University, M.A.; Graduate
Study, University of Missouri, University of Pennsylvania.
- THOMAS G. STURGEON *English*
Westminster College, A.B.; Harvard University, M.A., Ph.D.
- DAVID A. SUPERDOCK *Physics*
Bloomsburg State College, B.S.; Pennsylvania State University, M.Ed.;
Graduate Study, Bucknell University.
- ANTHONY J. SYLVESTER *History*
Newark College of Rutgers University, A.B.; Rutgers University, M.A.;
Graduate Study, University of Chicago.
- WILBERT A. TAEBEL *Chemistry*
Elmhurst College, B.S.; University of Illinois, M.S., Ph.D.
- CHARLES D. THOMAS *Director of Counseling Services*
University of Michigan, B.A., M.A.; Graduate Study, University of
Michigan.
- JERRY R. THOMAS *Health and Physical Education*
Furman University, B.A.; University of Alabama, M.A., Ed.S.; Gradu-
ate Study, University of Alabama.
- LOUIS F. THOMPSON *English*
Columbia College, A.B.; Lehigh University, M.A., Ph.D.
- MARY A. TOLAN *Assistant Dean of Women*
State University of New York at Geneseo, B.S.; State University of
New York at Albany, M.S.
- ALFRED E. TONOLO *Foreign Languages*
Littorio College, B.A.; Ca'Foscary University, Wilkes College, Scranton
University, Colgate University, M.A.; Madrid University, Ph.D.
- JUNE L. TRUDNAK *Mathematics*
Bloomsburg State College, B.S.; Bucknell University, M.S.; Graduate
Study, Bucknell University.
- HENRY C. TURBERVILLE, Jr. *Health and Physical Education*
University of Alabama, B.S., M.A.
- GEORGE A. TURNER *History*
Eastern Illinois University, B.S., M.S.; Graduate Study, Indiana Uni-
versity.
- DONALD A. VANNAN *Elementary Education*
Millersville State College, B.S.; Pennsylvania State University, M.Ed.,
Ed.D.
- JOSEPH P. VAUGHAN *Biological Sciences*
Colorado A and M, University of Maine, B.S.; Bowdoin College, City
College of New York, University of Maine, Pennsylvania State Univer-
sity, M.Ed.; Graduate Study, Pennsylvania State University.

- EARL W. VOSS *Health and Physical Education*
West Chester State College, B.S.; Temple University, M.Ed.; Graduate Study, Temple University.
- CONSTANCE C. WARD *Art*
University of Mexico, Montclair State College, A.B.; Cranbrook Academy of Art, M.F.A.
- E. PAUL WAGNER *Psychology*
Pennsylvania State University, B.S., M.Ed., Ed.D.; Public School Psychologist.
- J. CALVIN WALKER *Psychology*
Muskingum College, B.A.; University of Hartford, Temple University, Ed.M.; Graduate Study, Temple University.
- JOHN L. WALKER *Director of Admissions*
Westminster College, B.B.A., M.S.; Graduate Study, University of Pittsburgh.
- STEPHEN C. WALLACE *Music*
Mansfield State College, B.S.; University of Michigan, M.S.
- R. EDWARD WARDEN *Elementary Education*
Millersville State College, B.S.; West Chester State College, Villanova University, M.A.; Graduate Study, West Chester State College, Temple University.
- ROBERT DANIEL WARREN *History*
Appalachian State Teachers College, B.S.; Georgetown University, M.A., Ph.D.
- LYNN A. WATSON *Elementary Education*
Shippensburg State College, B.S.; Pennsylvania State University, M.Ed.
- JAMES B. WATTS *Director of Library Services*
Birmingham-Southern, A.B.; George Peabody College, M.A.; Graduate Study, University of Illinois.
- MARGARET S. WEBBER *Mental Retardation*
Bridgewater State College, Newark State College, Oneonta State University of New York, B.S.; Glassboro State College, Temple University, M.S.
- RICHARD P. WETTSTONE *Assistant Dean of Men*
Pennsylvania State University, B.S., M.Ed.; Graduate Study, Florida State University.
- NORMAN E. WHITE *Chemistry*
Wittenberg University, A.B.; University of Pennsylvania, M.S., Ph.D.
- CHRISTINE T. WHITMER *Foreign Languages*
Ball State University, B.A.; Pennsylvania State University, M.A.; Graduate Study, Middlebury College.
- JAMES R. WHITMER *History*
Ball State Teachers College, B.A.; M.A.; Graduate Study, Ball State Teachers College.

- ALICE R. WICKENS *Communication Disorders*
Morningside College, A.B.; Northwestern University, University of
Chicago, A.M., Ph.D.
- MRS. ELIZABETH B. WILLIAMS *Assistant Dean of Women*
Slippery Rock State College, B.S.; Pennsylvania State University, M.Ed.;
Graduate Study, Syracuse University.
- KENNETH T. WILSON, Jr. *Art*
Edinboro State College, B.S.; Pennsylvania State University, M.A.;
Graduate Study, Pennsylvania State University.
- RICHARD O. WOLFE *Education*
Bloomsburg State College, B.S.; Rutgers University, M.Ed.; Graduate
Study, University of Pennsylvania.
- MARY E. WRAY *Health and Physical Education*
Lake Erie College, A.B.; Pennsylvania State University, M.S.; Graduate
Study, University of Pittsburgh, Pennsylvania State University.
- STEPHEN G. WUKOVITZ *Physical Sciences*
Polytechnic Institute of Brooklyn, Montclair State College, B.A., M.A.
- JANICE M. YOUSE *Speech*
Temple University, B.S., M.A.

FACULTY EMERITI

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Benjamin Franklin School
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Friends and Alumni of Bloomsburg State College who wish to contribute real property or money bequests to the institution should contact the Office of the President and/or make provisions in the following forms.

FORM OF WILL (REAL PROPERTY)

I give and devise to the Bloomsburg State College, Bloomsburg, Pennsylvania, the following real estate (here give the description of the Real Estate). This devise is to be administered by the Board of Trustees of the Bloomsburg State College, Bloomsburg, Pennsylvania, under the laws of the Commonwealth of Pennsylvania.

FORM OF WILL (MONEY BEQUEST)

I give the bequest to the Bloomsburg State College, Bloomsburg, Pennsylvania, the sum of \$, to be paid by my executors, months after my decease, to the Board of Trustees of the Bloomsburg State College, Bloomsburg, Pennsylvania, to be administered under the laws of the Commonwealth of Pennsylvania.

