# WILKES COLLEGE Bulletin

1953 - 1954



WILKES-BARRE

PENNSYLVANIA

# WILKES COLLEGE Bulletin

1953-1954

Published quarterly by Wilkes College, Wilkes-Barre, Pennsylvania. Entered as second-class matter October 12, 1951, at the post office at Wilkes-Barre, Pennsylvania, under the act of August 24, 1912, as amended by the act of August 4, 1947.

#### Marks of An Educated Man . . .

- 1. He seeks truth, for without truth there can be no understanding, and without understanding the problems that separate us are insoluble.
- 2. He is able to communicate ideas in a manner that assures understanding.
- 3. He has faith in man. He respects differences because he knows how they have come to be. He fears uniformity because it confines both mind and spirit. He is aware of his own limitations and his neighbor's possibilities.
- 4. He possesses vision, for he knows that vision precedes all great attainments. "Where there is no vision, the people perish."
- 5. He cultivates inner resources and spiritual strength, for they enrich his daily living and sustain him in times of crises.
- 6. He has ethical standards by which he lives.
- 7. He is aware of the human struggle for progress and comprehends the forces that have assured or jeopardized this progress. He knows that man's progress requires intellectual vigor, moral courage, and physical stamina.
- 8. He is conscious of his responsibility as a citizen, and participates constructively in the social, economic, and political life of the community.

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The College is in session on the dates in bold face.

#### COLLEGE CALENDAR

#### FALL, 1953

Mon., Sept. 14	.Upperclass registration
Mon., Sept. 14, to	
Wed., Sept. 16	.Freshman orientation
Tues., Sept. 15	.Freshman registration
Thurs., Sept. 17	
Fri., Oct. 23	. Mid-semester grades
	. Final date to remove incompletes
Mon., Nov. 2, to Sat., Nov. 7.	. Registration
Wed., Nov. 25	. Thanksgiving recess begins at noon
	. Thanksgiving recess ends at 8:00 a.m.
	. Christmas recess begins at 5:00 p.m.
	. Christmas recess ends at 8:00 a.m.
Fri., Jan. 15	
Mon., Jan. 18, to	
Wed., Jan. 27	. Examination period

#### SPRING, 1954

Tues., Feb. 2	All-college registration
Thurs., Feb. 4	Classes begin at 8:00 a.m.
Fri., March 19	
	Final date to remove incompletes
Mon., March 22, to	
Sat., March 27	Registration
Thurs., March 25	Careers conference
Tues., April 13	Easter recess begins at 5:00 p.m.
Tues., April 20	Easter recess ends at 8:00 a.m.
Tues., May 25	Classes end
Fri., May 28, to Sat., June 5	Examination period
Sun., June 6	Baccalaureate
Mon., June 7	Commencement

#### SUMMER, 1954

Mon., June 7, to Fri., June 11 Summer-school	registration
Mon., June 14	
Fri., August 6 Summer school	ends

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	Secretary to the Director of Placemen
RUTH KORN	Secretary to the Comptrolle
Rose Mary Turissini	Circulation Assistan
MILDRED GITTINS	
Mrs. James A. Brennan.	Director of Cafeteria
WILLIAM JERVIS	. Superintendent of Buildings and Ground

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# A History of the College

To provide opportunities for education comparable to those offered by other communities of the nation, Bucknell University, in 1933, established a two-year center in Wilkes-Barre and named it Bucknell University Junior College. Prior to that year, Wilkes-Barre and the Wyoming Valley comprised the largest community in Pennsylvania, if not in the United States, lacking a local college.

For several years the Junior College was maintained on an experimental basis while the interest of students in advancing their education and the willingness of citizens to support the new college were determined. By 1938, the response from both groups was known and plans for a permanent college were made.

While these plans were under consideration, Bucknell University adopted a policy in relation to the Junior College that significantly affected its development. In 1938, the University promised the College complete autonomy when its foundations were firmly established but offered to continue its sponsorship as long as such support was of value to the new college. At the same time, the responsibility originally assumed by the Board of Trustees of the University was transferred to a local Board as being more strategically placed to forecast future needs and to integrate the College as a community institution.

Under this agreement, the Junior College advanced rapidly and by successive steps extended its program to include four years of work. In 1946, the University offered extension courses enabling students to finish their junior and senior years in Wilkes-Barre, and the College Trustees expanded the facilities of the College and established an endowment of more than \$500,000. Having satisfied the requirements of the State, the Junior College was chartered as Wilkes College in June, 1947, and thus gained an independent legal status.

Early in World War II, from February, 1943, to June, 1944, a contingent of 250 Air Crew students was stationed at the College with the Sixth College Training Detachment. These cadets were quartered at the Hotel Sterling and received training in classes separate from the regular college classes.

Although the war deterred the growth of the College for a time, the impetus to education resulting from war experiences accelerated its development in the years immediately following the cessation of hostilities.

#### RECORD OF GROWTH

The first classes were held in a rented office building with an enrollment of 155 students, and a majority of the faculty were drawn from the staff of Bucknell University. After an experimental three years, the Administration and local Trustees appealed to leading citizens to enable the College to move from rented quarters into a permanent home. The response was prompt and generous.

Mrs. John Conyngham and Admiral and Mrs. Harold R. Stark were the first donors, and John N. Conyngham Hall and Chase Hall, given in 1937, were dedicated by President Arnaud C. Marts of Bucknell on April 9, 1938. Five hundred residents of the Valley contributed to the funds for adapting these buildings to college use. Mr. and Mrs. Frederick Weckesser added the residence at 78 West Northampton Street to the College property in 1938.

In 1941, Mr. Allan Kirby's gift of the former residence of his parents with spacious grounds adjoining those of Chase Hall provided the College with a real campus and permitted expansion from quarters that were already overcrowded. The new building, named the Kirby Home for Education, was dedicated on December 2, 1941.

Members of the Board of Trustees gave the College three additional buildings during 1945 and 1946, which were subsequently named Isaac Barré Hall, in honor of the English statesman friendly to the cause of the American Revolution; Zebulon Butler Hall, in honor of the American patriot; and Gies Hall, in memory of Paul Gies, former professor of music, who died in 1948. Another adjacent property, Ashley Hall, was deeded to the College in 1946 by the heirs of the Ashley estate, Mrs. Marion A. Ahlborn, Dr. Henry A. Carr, and Mrs. Roccena Wolfe. In 1947, Mr. Andrew J. Sordoni presented the College with the lot at the corner of South Franklin and South streets, and later in the same year a lot on South Franklin Street was purchased as the site of a gymnasium, construction of which was completed in 1950.

In 1949, three additional properties were acquired. Timothy Pickering Hall was purchased by the Board of Trustees in the spring; Sterling Hall was left to the College through a bequest of Colonel Walter C. Sterling; and the President's residence was purchased with funds contributed specifically for that purpose by a friend of the College

To provide adequate housing facilities for out-of-area women students, Mr. Gilbert S. McClintock, chairman of the Board of Trustees, gave his South River Street home to the College in 1951. Now called McClintock Hall, the building, together with the other three College residences, permits the accommodation of approximately one hundred boarding students.

The gracious old Sturdevant house on South Franklin Street was purchased in the summer of 1952. Its rooms have been converted into offices and classrooms for the departments of Education and Psychology.

Generous monetary gifts have enabled the College to adapt these properties to its purposes and to equip them completely. In the fourteen years following the promise of autonomy by the University, College assets have been increased by more than \$2,600,000.

General Information

#### CURRICULA

The College offers courses leading to the Bachelor's degree in liberal arts, biology, chemistry, commerce and finance, and elementary, secondary, business, music, and nursing education, in addition to two years of work in physics and engineering. A student who successfully completes the physics or the engineering program may transfer as a junior to an institution that grants a degree in his field.

#### TERMINAL PROGRAMS

Terminal courses in music, secretarial work, medical secretarial work, laboratory and medical technology, and pre-dental work are open to the student who desires only two years of college.

#### EXTENSION CLASSES

Bucknell University gives extension courses in education on the Wilkes campus. Graduate credit earned in these courses may be applied toward the degree of Master of Science in Education and State certification in guidance and administration. A person desirous of taking the degree of Master of Science in Education at Bucknell University may earn eighteen of the required thirty hours in Wilkes-Barre but must earn the remaining twelve in residence at Lewisburg.

#### ACCREDITMENT

Wilkes College is accredited by the Department of Public Instruction of the State of Pennsylvania, the Middle States Association of Colleges and Secondary Schools, and the University of the State of New York.

An applicant for admission to the College should write to the Director of Admissions to request a personal interview and a set of application forms. Upon completing the forms, he should return them, together with a \$5.00 fee, to the admissions office.

Although it is desirable that the interview with the Director of Admissions or the appropriate Dean should take place at the College, other arrangements may be made in instances in which a trip to Wilkes-Barre would seriously inconvenience the student applying for admission.

Admissions tests will ordinarily be scheduled during the interview. An applicant who has taken the tests given by the College Entrance Examination Board may be excused from the examination administered

Upon receipt of an application, the Director of Admissions will obtain an official transcript from the secondary school or college formerly attended by the applicant. The Committee on Admissions will then consider the full record of the student and will notify him of its action as early as possible.

#### ADVANCED STANDING

A student who wishes to transfer to the College from another institution should follow the regular procedure for admission. He should request the college or university from which he desires to transfer to forward to the College a transcript and a letter of honorable dismissal. After the College has made a tentative evaluation of the record of the student, a faculty adviser will counsel him concerning his new schedule. The transferred credits will be placed on the Wilkes record of the student following a final evaluation at the end of his first term at the

A student who has no credits to transfer but who is equipped to enter advanced courses in college may enroll in such courses upon passing a placement examination. Although he will not receive credit for the courses that he has omitted, he will be spared the necessity of repeating work that he has previously covered outside of college.

Grades will be given to students in the middle and at the end of each term. The mid-term grade is given to show student and faculty the quality of work being done; the final grade indicates the accomplishment of the student in the whole course.

The grading system is as follows:

- A—Excellent
- B-Above average
- C—Average
- D—Below average, but passing
- F—Failure
- Inc-Incomplete work must be made up by a specified date or the grade will automatically become an F.
- WP-Withdrew Passing given to students who, at the time of withdrawal, are passing the course.
- WF—Withdrew Failing given to students who, at the time of withdrawal, are failing the course.

The student's academic standing is determined by the quantity and quality of his work. The quantity is shown by the number of credit hours of work performed during the term. The number of credit hours applicable to each course is printed in italics following the title of the course in the catalogue. The quality of work is shown by the

student's point average, which is determined in the following manner: The letter grades are given numerical values, called point values, as follows: A, 3 points; B, 2 points; C, 1 point; D and F, no points. A student with a certain grade earns the point value of the grade for each credit hour of the course. Thus, if his grade is "A" in a threehour course, he will gain 9 points; if "B" in a four-hour course, he will gain 8 points. His point average will be computed by dividing

GENERAL INFORMATION

the total number of points gained in all his courses by the total number of credit hours. The following sample record will illustrate more fully the method:

ly the method.				
Subject	Credit Hours	Grade in Course	Number of Points	
English	3 3 5	C A B D C	3 9 10 0 4	
Total			26	

Point Average - 26 divided by 18 - 1.4 For advancement from class to class and for graduation, there are minimum requirements as to quantity and quality of work. These requirements are shown in the following table:

## REQUIREMENTS FOR ADVANCEMENT AND GRADUATION

#### FOUR-YEAR COURSES

	OUR-YEAR COURSES		D	
At the End of the	Number of Credit Hours	Points	Average	
Freshman Year	30	15	.5	
Sophomore Year		42	.7	
Junior Year		81	.9	
Senior Year	As specified	d	1.0	
	TWO-YEAR COURSES			
Freshman Year	30	21	.5	
Sophomore Year		60	.7	

Note: This system of credit hours and grades does not apply to courses in physical education. In such courses there will be only two grades, P for passing and F for failure.

The Dean's List published at the end of each term carries the name of every student whose point average is 2.25 or higher.

The distribution of honors at commencement is based upon the record made by the student during his last two years at the College. Requirements for honors are as follows: for cum laude, a point average of 2.35; magna cum laude, 2.60; summa cum laude, 2.80.

#### PROBATION

Any student not attaining the grade necessary to advance him to the next class will be put on probation for one semester. If, at the end

of that period, he has not attained the minimum average for admission to his class, he will be dropped from college.

#### WITHDRAWALS

A student may withdraw from any single course during the first two weeks without penalty. A student who withdraws from one or more courses after the first two weeks but who continues to attend other courses will receive an "F" unless the administrative council, upon recommendation of the Dean and faculty adviser, allows "WP" or

A student who withdraws from college after the first two weeks will receive a "WF" or "WP" for each course he has taken, together with a notation from each instructor explaining the reason for his mark.

#### REQUIREMENTS FOR GRADUATION

A candidate for graduation must meet all course requirements as to both quantity and quality of work and must comply with all regulations of the College.

#### TAKING OF DEGREES

In order to receive his degree or certificate, a candidate must be present at commencement. If circumstances prevent his attendance, he must apply to the appropriate Dean for permission to take the degree or certificate in absentia.

#### COUNSELING

Each student will be assigned a faculty adviser at the beginning of his freshman year and will be expected to confer with this adviser concerning the schedule and other educational problems.

#### REGISTRATION

Every student is expected to register at the beginning of each term on the dates designated for this purpose. Late registrations may be accepted for two weeks following the beginning of classes; thereafter no registrations will be accepted. A student who registers after the registration dates will pay an additional charge of \$5.00.

The maximum registration recommended for each course and covered by the tuition charge of \$240 a semester is indicated in the program of courses. No student may carry an overload without the approval of his adviser and the Dean. Any student taking an overload must have earned at least a "B" average during the preceding term. Each hour of work beyond that listed in the catalogue must be paid for at the hourly rate.

#### ATTENDANCE

Attendance at all classes is expected, and repeated absence is deemed a sufficient cause for failure.

Five consecutive absences from a class place a student on probation. He may be readmitted to the class only by action of the appropriate Dean and the Department Chairman concerned.

Each student is required to attend weekly assemblies during each of his four years. He will, however, be allowed the following number of cuts each year:

Freshman and sophomore year — three cuts.

Junior year — eight cuts.

Senior year — fifteen cuts.

If the student fails to satisfy the requirements for any year it will be necessary for him to make up the excess cuts by increasing his attendance during the following year. All requirements must be satisfied before graduation.

His seat for the assembly will be assigned at registration.

#### FACULTY

Inasmuch as the values to be derived from a college are less dependent upon its material resources than upon the character of its teachers and the quality of their interest in its students, the College has carefully selected its faculty for their training, experience, and personalities. They have studied at such universities, colleges, and professional schools as Bucknell, Chicago, Columbia, Cornell University, Dickinson, Eastman School of Music, Louisiana State University, Minnesota, National Academy of Design, New York, North Carolina, Northwestern, Pennsylvania, Pennsylvania State, Syracuse, Warsaw, Yale, and Zagreb.

A cosmopolitan group, Wilkes teachers have served in schools, colleges, and universities throughout the United States and Europe. They bring to the College a breadth of experience and of vision that enables them to treat their subjects in large perspective and an academic preparation that fits them to provide the intensive training essential to their various fields.

#### LIBRARY

The Kirby Home for Education, the College library, houses approximately 27,000 volumes of expertly selected books and bound periodicals.

Shelved on open stacks to encourage students and faculty members to make full use of them, the books, with the exception of those reserved for reference and as supplementary reading matter for particular courses, may be borrowed for periods of two weeks. Also available to members of the College community are some four hundred current periodicals.

The library is staffed by three professional librarians and a number of student employees. Its light, attractive reading rooms on the first, second, and third floors have a total seating capacity of 178.

#### TRANSFER OF CREDITS

Approximately forty per cent of the graduates of Wilkes have entered graduate or professional schools. It is recommended that the student who wishes to extend his education beyond the Bachelor's degree take the Graduate Record Examination or another appropriate professional examination in his senior year. Such examinations are generally required by graduate and professional schools, and it is best to take them at the end of the college course.

#### TRANSFER OF SUMMER CREDITS

- 1. A student who desires to study at another college during the summer must have his summer schedule approved by the appropriate Dean prior to enrollment in the other college if his summer work is to be credited toward graduation from Wilkes College.
- 2. When credits for the work taken in the summer at another college are requested at Wilkes, it will be necessary for this work to be evaluated. In some cases it may be necessary for a student to take examinations before credit is granted.
- 3. A student from another college who wishes to take summer work at Wilkes must secure the approval of the proper officer of his own institution if he expects to receive credit for such work.

#### EXPENSES

The flat tuition rate adopted by the College enables a student to gain an education in most of the curricula outlined in the catalogue at the rate of \$240.00 a semester for tuition, provided the normal load of semester hours as stated in the catalogue for each semester is not exceeded. An additional charge of \$16.00 will be made for each semester hour in excess of the normal load.

The tuition of \$240.00 includes a charge for maintaining student activities.

#### SCHEDULE OF RATES

Charges per semester for students taking a normal load of semester hours as specified in the catalogue for the particular semester and course selected:

Tuition	#240.00
ree for biology chemistry engineering	\$240.00
Laboratory fee for Secretarial Studies 00, 101, 102, 107	15.00
Chemistry Breakage Dones	
(any balance refunded)  Student Teaching fee	10.00
Tacining 100	20.00

Music—individual instruction:	
Fifteen-week series of half-hour lessons in plane, organ,	35.00
Fifteen-week series of half-hour lessons in violin, viola,	45.00
Fifteen-week series of half-hour lessons in voice with  Mrs. Hawkins	35.00
Fifteen-week series of half-hour lessons in voice with Mr. Isaacs	50.00
Rental of practice room.  Use of diction laboratory.	5.00
at the property of the second	
or cello in groups consisting of not less than three or more than five students.	30.00
Charges for part-time students, students in the Evening School, students in two-year courses, and for semester hours beyond the normal load prescribed in regular courses:	
Semester hour of study	16.00
Laboratory fees (see above)	& 20.00
Student activity fee for any part-time student wishing to participate in activities	16.00
Charges for Summer School (eight weeks)  Semester hour of study	16.00 & 20.00
Dormitory charges per semester:  Board and Room  Bills for board and room in college dormitories are due before the opening of the semester. A deposit of \$50.00 is required to reserve a room.	300.00
Special Charges:  Fee to accompany application for admission  Change of schedule per credit hour.  Special Examination  Transcript (no charge for the first copy).  Late Registration.	5.00

Graduation fee (four-year	students)	15.00
	students)	7.50
Charges are subject to adjust	ant to conform to shancing miss	Lovele

Charges are subject to adjustment to conform to changing price levels.

#### PAYMENTS

Bills for tuition, fees, and incidentals are payable at the beginning of each semester. A \$50.00 payment or 50% of the total, whichever is less, must be paid at the time of registration.

No students may take a mid-term examination until satisfactory arrangements have been made with the Comptroller for the payment of all bills. No student may take a final examination until all financial obligations to the College have been satisfied.

#### WITHDRAWALS AND REFUNDS

Refund of tuition will be made to students who withdraw voluntarily from the College while in good standing under the following conditions:

During the first six weeks of a term, one-half the tuition will be refunded upon request if the withdrawal is made for adequate and satisfactory reasons.

Tuition for unfinished courses will be refunded to all students ordered to active duty under the Selective Service Act or by the Organized Reserve Corps.

Refund of room and board (dormitory charges) will not be made except under special conditions.

No courses may be dropped after the second week, except with approval of the student's faculty adviser and the Dean.

#### Student Welfare

#### CAREERS LIBRARY

The Careers Library has taken its place on the campus because the College recognizes its responsibility for helping a student to launch his career with maximum effectiveness. The library is intended to obviate the one great factor in occupational maladjustment of American youth, namely, scarcity of information. It is an instrument of the consulting service provided not only for seniors but for all classes in the College.

A consultant on careers, maintained by the College, has established and continues to maintain contact with representative industries and professional associations throughout the country. From these primary sources comes first-hand information on careers. Thousands of pages culled from this raw material provide background information, which is under constant revision. Individual attention is given the problems and queries of each student as he seeks to set himself in the right vocational direction.

One section of the library is devoted to scholarships, fellowships, and company training programs. Another has to do with careers from a geographic point of view. Forty house organs, employee magazines, and professional periodicals are included in the collection as are some six hundred catalogues and bulletins from more than five hundred American colleges and universities, in addition to announcements from foreign institutions of learning, especially at the graduate or professional level.

The Careers Consulting Service is not concerned with placement but rather with the way to a career. Long before graduation a student should have availed himself of this service.

#### Counseling

The College considers counseling one of the most effective ways in which to encourage the development of its students. It considers each student's personal, educational, and vocational objectives at the time of his application so that, as far as possible, it can plan its academic program to enable him to realize those objectives.

Upon entering the College, each student participates in a testing program, the purpose of which is to provide all of those who are concerned with his progress with information about his abilities, interests, and aptitudes. He has opportunities throughout his college career to consult with his faculty adviser concerning his scholastic progress or social and personal problems with which he needs help.

The Deans cooperate with faculty advisers in providing students with information and guidance wherever possible, and the College urges students to avail themselves of their services.

The guiding principle of all Wilkes counseling is to encourage the student to discover his own abilities and potentialities and to assist him in making sound, independent decisions.

#### ORIENTATION PROGRAM

The transition from the directed work of the secondary school to the independent and more intensive work of the College occasionally causes difficulty. To assist students in making an early adjustment, several days at the beginning of the term are set aside for discussions with freshmen. This program ranges from individual conferences to lectures on the meaning of a college education.

During this first week, new students take aptitude, interest, foreign language, and English-placement tests. They also discuss their plans and hopes with their faculty advisers and arrange schedules under their guidance. The week also gives the new students an opportunity to become acquainted with one another and to learn about student activities.

Throughout their first term small groups of freshmen meet once a week with representatives of the faculty. They discuss informally, and with as little faculty participation as possible, some of the problems of everyday living and college adjustment. By placing responsibility upon the student for planning and conducting these discussions, the College encourages clear thinking, initiative, poise, and breadth of view.

# COLLEGE CONSULTATION SERVICE

The College Consultation Service offers individual assistance to students with personal problems. Students who desire such help may apply directly to the Consultation Service staff for appointments. Interviews with the specially trained staff are conducted on an entirely confidential

New students or those who are unacquainted with this resource may be referred to the Service by the Dean of Men, the Dean of Women, or any other interested faculty member.

## COMMUNITY PROGRAMS

In addition to its regular classes, the College occasionally offers noncredit programs for groups and organizations desiring specialized training. All such programs are adapted to the needs and desires of the sponsoring groups and emphasis is placed upon practical applications rather than theory.

Some idea of the services that are available may be gained from a statement of services that already have been offered.

During the war, special courses in drafting, mathematics, and engineering were offered to prepare persons for work in defense plants. Currently, a group of underwriters are studying life insurance problems and policies to increase their understanding of the services they sell. Over a period of years, special courses in musical literature have been offered by the Department of Music, and a refresher course has been offered for chiropractors from eastern Pennsylvania to prepare them for the examination given by the State Board of Medical Examiners.

As the College expands its faculty and facilities, it will be able to offer similar courses in economics, selling, and advertising; and it is hoped that technical services in chemistry may be available to small industries requiring laboratory services that cannot be maintained economically in their industrial plants. The Economics Department of Wilkes College is engaged in research projects on a community basis.

#### PLACEMENT OFFICE AND STUDENT EMPLOYMENT

The College, with the financial assistance of the Seligman J. Strauss Lodge of B'nai B'rith, maintains a placement office in Ashley Hall, South River Street. One purpose of the office is to help undergraduates to find part-time employment: more than one-third of the students earn some part of their expenses, and the office has been particularly helpful to this large group. Students desiring such part-time work should communicate with the Director as early in the school year as

Another important service rendered by the Placement Office is that of assisting the graduating student to find permanent employment in a position suitable to his talents and training. Students who desire this service should see the Director early in the senior year. The Office will, moreover, be pleased to extend such assistance to any graduate of the College.

#### CAREERS CONFERENCE

As a further step toward assisting a student to choose a career and to find suitable employment, Wilkes College has instituted the Careers Conference. Through the conference, students are enabled to hear and to question leading industrialists and professional men, each highly successful in his sphere and each representing a well-known enterprise. The speakers address the whole group of students on matters of general interest, such as the following: how to apply for a position; how to conduct oneself in an interview; what a business firm looks for in a candidate for employment; education and the business world. The conference then breaks up into smaller groups to consider matters of specialized interest.

The value of the Conference to the students is that they hear matters of vital importance to them discussed by people who speak with the authority conferred by practical experience and personal distinction.

For dates of meetings of the Careers Conference, see the calendar, page 5.

Accident and sickness insurance. Accident and sickness insurance plans, described in folders mailed to all applicants for admission, are available to every full-time student at the College. Enrollment in one of the plans is recommended but not required.

The accident policy provides reimbursement for expenses arising out of any accident in which the student is involved during the entire college year. Reimbursement is made up to \$500.00 for each accident.

The accident and sickness policy provides additional reimbursement for all expenses attendant upon any illness to which the student becomes subject during the college year. Under this coverage there is reimbursement up to \$200.00 for each illness.

Broad in scope, these plans cover all the student's illnesses and accidents, regardless of how or where they may occur. Benefits under the plan are paid in addition to benefits to which the student is entitled under any personal policy or membership in any hospital association.

The fee for accident and sickness coverage is \$25.00; for accident coverage only, \$5.00 for women and \$10.00 for men. The insurance is underwritten by the Mutual Benefit Health and Accident Association of Omaha and is under the supervision of Howell & Jones, Inc., Wilkes-

Blue Cross. A student of the College may avail himself of Blue Cross hospitalization coverage in the Wilkes College Student Group Plan at the special rate of \$1.15 a month (subject to adjustment). An application for this service may be filed with the Comptroller at the time of

Lockers. The College provides a number of conveniently located lockers for students who wish to safeguard their personal belongings. A student may rent one of the lockers at the rate of \$1.00 a year, one quarter of which will be refunded when he surrenders his key. The fee is payable at registration.

## Student Activities

The scholastic program is supplemented by a representative group of student activities, organized and controlled by the students. They supply values which cannot be realized through academic work alone. Each student is encouraged to participate in at least one activity during

#### STUDENT GOVERNMENT

To provide a co-ordinating agency, to establish social standards, and to assure responsibility, a Student Council, representative of all students, is elected annually. The Council is responsible for planning, supervising, and executing the program of student activities.

#### ASSEMBLY COMMITTEE

Approximately half of the weekly assembly programs given during the academic year are planned and presented by students. The Assembly Committee, to which freshmen are elected each fall to replace members who have been graduated, assists the administration and student organizations in arranging these programs and awards a trophy to the group that presents the best program of the year.

Students of the drama present several one-act plays and two major productions each year. The students are given training in the arts of the theatre: acting, make-up, scenery-building, costuming, and stage lighting. The College Theatre serves as workshop for experimental productions.

#### COLLEGE BAND

The College band, organized for the furtherance of instrumental experience, performs at all athletic events and gives concerts throughout the year.

The College owns instruments which are used by musicians who do not have their own bass horns, drums, etc. A uniform is provided for each member at the beginning of the year. The band library is constantly supplemented by the best martial and concert music.

#### CHORAL CLUB

The College maintains a mixed chorus with membership open to all students who pass an elementary voice test. Previous vocal experience and the ability to read music at sight are important but not required of members. The chorus meets once each week for the study of choral literature covering various periods of music history and presents several programs before the College community and the general public each semester.

The Choral Club is directed by a member of the faculty. It elects its student officers and management.

The Wyoming Valley Philharmonic Orchestra, organized under the aegis of the College in the fall of 1951, presents a series of three symphony concerts annually. Membership in the orchestra is open to talented instrumentalists in the student body.

This small group specializes in the madrigal works of sixteenth- and MADRIGAL SINGERS seventeenth-century European composers. Its Christmas program is one of the most attractive features of the Town & Gown Concert Series at the College.

Amnicola, a yearbook; the Beacon, a newspaper; and Manuscript, PUBLICATIONS a literary magazine, are published by the students. Those interested in writing, photography, art and advertising have an opportunity to join the staffs.

Debating has proved particularly popular with students preparing for the law or interested in public speaking. A number of intercollegiate debates are arranged each year.

Intercollegiate sports schedules are maintained in football, baseball, basketball, soccer, and wrestling. Colleges within the state and in adjacent states are met in these sports. Men may substitute an intercollegiate sport for physical education if they meet departmental requirements.

A program of intramural sports and physical education gives every man an opportunity to participate. Basketball, touch football, volleyball, and bowling are some of the sports available.

The athletic program for women includes dancing, folk and modern; bowling, basketball, and softball.

Special clubs stimulate and satisfy individual interest in academic, professional, and artistic fields. These clubs, developed cooperatively by students and faculty, are kept quite flexible in order that they may be easily adapted to current interests.

# Scholarships and Awards

Scholarships are awarded each year to entering students of outstanding ability and to students of high achievement who require assistance that they may complete their college work.

To retain their scholarships, winners must remain in good scholastic standing, must carry a full schedule of studies, and must conduct themselves in a manner creditable to themselves and to the College.

Scholarships may not be used as an initial payment, but they are accepted for the final balance of each term. A scholarship student who withdraws during the term cancels his scholarship arrangements with the College.

#### Types of Scholarships

Competitive scholarships are offered each year to students from the first quarter of their high school class who make outstanding records on the scholarship examinations given at the College on the last Saturday in April. All participants in this competition must apply for admission to the College prior to the date of the examination.

Leadership scholarships are offered to young men and women who have combined leadership in student activities with high scholastic achievement. Students seeking these scholarships must apply for admission before April 18 and must take the examinations offered by the College on the last Saturday in April.

Music and art scholarships are available to a limited number of students who possess marked aptitude for either music or art.

#### Special Scholarships

Amnicola Scholarships. Each year the editor-in-chief of the yearbook is offered a full-tuition scholarship valued at \$480. Tuition scholarships of \$100 are awarded to the business manager, assistant editor, and picture editor of the publication.

Beacon Scholarships. The editor-in-chief of the College newspaper is awarded an annual full-tuition scholarship worth \$480. The business manager, the news editor, and the feature editor are awarded tuition grants of \$100 each.

William B. Schaeffer Memorial Scholarships. In 1951 a substantial bequest was left to the College by Mr. Schaeffer with the thought that it would be used to advance the interests of the College and the students. By action of the Board of Trustees a considerable portion of the income from this bequest has been set aside for scholarships.

Mr. Andrew J. Sordoni has contributed funds to be used in assisting students of unusual promise and proved ability.

business, secretarial, public service, or teaching career. Young men and women with this cultural background find themselves eligible for opportunities closed to those lacking such training.

Modern industries offer many opportunities to the chemist and chemical engineer. Today, most large industries employ both chemists and chemical engineers. In the smaller industries either may be called upon to do the work of both. The chemist usually works in the laboratories, analyzing, studying, and perfecting procedures and developing new processes, new methods and new uses. He meets the chemical engineer in the pilot plant where together they design and construct, on a small scale, the new manufacturing plant. The duties of the engineer may include design, construction, or operation of the chemical plant. Managers of industrial and chemical plants need technical training, as do salesmen for specialized products, buyers for manufacturing concerns, employees in many fields of government service and other activities. The chemical industries include coke, gas, dyes, gasoline, and other petroleum products; rubber, textiles, explosives, cement, metallurgy, plastics, nylon, paints, ceramics, fertilizers, solvents, leather, drugs, light and heavy chemicals and other substances.

#### ENGINEERING

The first two years of work in chemical, civil, electrical, industrial. and mechanical engineering may be taken at Wilkes College. At the end of the second year, students may transfer their credits to other engineering schools if they make their plans in advance. With slight modification of their program, students may complete the first two years of work in such additional types of engineering as aeronautical, mining and metallurgical, and administrative.

#### JOURNALISM

A number of well-known graduate schools of journalism require a preliminary four-year college course, but aspirants may also follow the old-fashioned method of securing experience on local newspapers and working their way up. Almost any type of college work will be found applicable to the broad demands made upon the newspaper reporter and editor, although English composition is fundamental.

The Bachelor of Arts degree with an English major is the most popular choice of journalism students, but the science and other courses also prove useful, since the newspaper reports all phases of human activity. The increasing interests of the United States in other countries make a knowledge of foreign languages particularly desirable in preparation for responsible positions as foreign correspondents.

Journalism students may gain practical experience by working on the staff of one of the student publications: the Beacon, Amnicola, or

#### LAW

Preparation for the practice of law is based on the fundamental liberal arts: English, history, political science, economics, sociology, natural science, languages, and mathematics. Most law schools do not specify a required major in undergraduate work.

#### LIBRARY WORK

Librarians are generally expected to complete a four-year college course before beginning their specialized library training. Foreign languages, English, science, history, economics, sociology, or education constitute appropriate major fields. Many library schools also require a knowledge of two foreign languages. Proficiency in typewriting is desirable.

#### MUSIC

The aim of the Wilkes music curricula is two-fold: to interest the many in music as an avocation that may lead them to participate actively in musical organizations and to assist the few who have special talents along the road to professional careers as teachers or performers. Although students who concentrate in music may commence their study of applied music at Wilkes, high quality pre-college training is very

The curriculum leading to the degree of Bachelor of Science in Music Education fully equips students to obtain certificates to teach music in the public schools of Pennsylvania. The Bachelor of Arts degree with a major in music represents the fulfillment of the fundamental purpose of the liberal arts program, "an education for living."

#### MEDICINE

Wilkes offers a pre-medical course that is adapted to the requirements of the various medical schools. The latter have, in recent years, restricted their enrollment, and most of them scrutinize closely the qualifications of applicants. Medical aspirants should determine as soon as possible, though consultation with the Deans and their advisers, exactly

The various churches differ widely as to the training required of Prospective ministers. The pre-theological student should learn the requirements of his denomination and its divinity schools. In general, the liberal arts course, with a major or electives in religion and philosophy,

The demand for nurses prepared to assume administrative, supervisory, NURSING and instructional duties has for years far exceeded the supply of trained personnel. In consequence, schools of nursing and hospitals are constantly seeking qualified nurses. To enable persons interested in such a career to obtain the necessary preparation, the College offers a course leading to the degree of Bachelor of Science in Nursing Education. In this five-year program three years of basic nursing education are combined with at least two years of college study. Although the catalogue suggests that the two years of college training follow the undergraduate program in the hospitals, it is possible for students to take the first year of college study, with minor modifications, before entering a school of nursing and to complete the requirements for the degree after obtaining a nursing-school diploma and State registration.

The first two years of work leading to the degree of Bachelor of Science in Physics may be taken at Wilkes College. After that, students may transfer to other colleges to complete their course. The program at Wilkes has been carefully designed to fulfill the requirements of those colleges to which students are likely to transfer.

In the modern world, the application of physics to everyday life is becoming more and more common but is, perhaps, not sufficiently recognized or understood. The tools of communications, electronics, transportation, the motion picture, illumination, engineering, manufacturing, and medicine (to mention but a few of the many activities of modern industrial civilization) are developed and perfected by the application of the fundamental laws of physics.

World Wars I and II stressed the importance of the application of psychology in many diversified fields. Since then the need for graduate work and specialized training has been recognized.

Liberal arts preparation on the undergraduate level, consisting of a sound foundation in psychology, biology, sociology, and related fields, provides an excellent background for work in graduate schools.

Opportunities for the professional psychologist are available in college teaching, clinical work, education, business, and industry.

The demand for trained social workers has grown enormously in recent years. Taxpayers rebel against the wastefulness of haphazard distribution of charity as a matter of political patronage. Governmental agencies, municipal, county, state, and federal, are realizing the necessity for a professional approach to the problems of unemployment,

poverty, and crime. Wilkes offers a pre-social-work program. Sociology, supplemented by work in psychology, biology, and allied fields, provides a valuable background.

#### SPEAKING AND DRAMATICS

The College offers preliminary work in speech. Courses in speech and dramatics and practical experience in debating and play production afford opportunity for development in this field.

A teacher's training depends upon the kind of teaching contemplated. For college and university work the best institutions require advanced degrees; their faculty members ordinarily take graduate work in the field in which they concentrated as undergraduates. Prospective teachers of English, history, sociology, take the Arts degree; students who expect to teach in the schools of science take the Bachelor of Science degree or degrees in such specialized fields as engineering.

Certification for public-school teaching is usually based on the following requirements: the college degree, specialized courses in education, and a measure of specialization in teaching subjects. Wilkes College is authorized by the State Department of Public Instruction to prepare elementary- and secondary-school teachers in most fields of instruction.

#### PART-TIME STUDY

Promotion or advancement is often made possible by additional training. It is sometimes practicable for employed persons to continue their education without giving up their positions. In its desire to be of the widest possible service to Wyoming Valley, Wilkes welcomes part-time and special students. (See Evening Division, page 141.)

Anyone interested in a career not included in this list of the major professions and vocations should consult the Director of Admissions.

# Degree Courses The basic requirements for degree courses are outlined on the following pages. All courses listed are required. Electives may be chosen to satisfy the interests of the students and to meet the requirements for graduation within each major program as conditions may require.

#### BACHELOR OF ARTS

#### PURPOSE

The liberal arts course is primarily concerned with individual development and with the cultivation of an understanding of our civilization and of the men who have created it and lived in it. Its studies are concerned with men and events, thoughts and institutions, art and science. It creates breadth and perspective as opposed to narrow skills.

#### NATURE OF THE PROGRAM

A liberal program must necessarily include a wide range of subjects if it is to cultivate understanding of the thoughts, ideals, and institutions upon which our civilization is based. For the sake of simplicity, these subjects are classified into three divisions in which the student will carry on his explorations and from which he will select his major study.

#### DIVISIONS Social Sciences Humanities Sciences Biology English Economics Education Foreign Languages Chemistry Mathematics History Physics Political Science Music Psychology Philosophy Sociology Religion

#### SELECTION OF A MAJOR

To provide depth of knowledge, some concentration is required. It is desirable that a major be elected as early as possible, and it is essential that it be elected before the beginning of the junior year. Students who expect to take the Bachelor's degree in mathematics or music choose their major when they enter the College. The attention of students wishing to major in psychology is drawn to note 1, page 46.

A major may be taken in any subject listed in the divisions except biology, chemistry, education, and physics. The requirements for each major are specified in the section headed "Description of Courses" in the catalogue.

A major may also be taken in social science. The social-science major requires a total of thirty-six hours in economics, history, political science, and sociology; eighteen hours must be taken in one of these and at least six hours in each of the other three. Social-science courses required in the first two years shall not count toward this major.

Students preparing to teach in the public schools are required to take twenty hours in education to obtain certification. It is therefore impossible for the prospective teacher of social studies to satisfy all of the requirements mentioned above. For that reason, a student preparing to teach social studies in the public schools will receive credit toward the social-science major for all required courses in economics, history, political science, and sociology.

# MINIMUM REQUIREMENTS IN SEMESTER HOURS FOR LIBERAL ARTS MAJORS

#### HUMANITIES

pocial         Free           eences         Sciences         Elective           15         6         24           15         6         45           11         31           15         6         14           14         6         38
L

#### SOCIAL SCIENCES

		,	.0		
Major Subject  Economics  History  Political Science  Sociology  Social Science	24 24 24	Humanities 37 37 37 37 37	Social Sciences 15 15 15 15	Sciences 6 6 6 6	Free Elective 39 39 39 39

#### SCIENCES

Major Subject Psychology	Major 24	Humanities	Social Sciences	Sciences	Free Elective
		37	15	6	: 38

15-17

#### BACHELOR OF ARTS

WILKES COLLEGE

General requirements for all majors other than mathematics and music

#### FRESHMAN YEAR

First Semester			Second Semester		
Title Nu	mber	Cr.	Title Num	ber	Cr.
Biological Science <sup>1</sup> Bio	100	3	CompositionEng	102	3
CompositionEng		3	Fundamentals of Speech Eng		2
Foreign Language <sup>2</sup> 101 of		3	Foreign Language <sup>2</sup> 102 or	104	3
Hist. of W. Civilization Hist	101	3	Hist. of W. Civilization Hist	102	3
Alternates:			Alternates:		
Introduction to MusicMus	100)	2	Introduction to MusicMus	100)	,
Physical SciencePhys	100	)	Physical Science <sup>1</sup> Phys	100	, ,
Phys. Ed. and HygieneP.É.		1	Phys. Ed. and HygieneP.É.	102	1
		-			-
		16			15

#### SOPHOMORE YEAR

		SOPF	OMO	RE YEAR	
	Third Semester			Fourth Semester	
	Title Nun	nber	Cr.	Title Number	Cr.
	World Literature Eng Foreign Language <sup>2</sup>		4	World LiteratureEng 152 Foreign Language <sup>2</sup> 104 or 200	4
	Alternates:			Alternates:	,
	Fundamentals of MathMat. History of ReligionsRel Intro. to Philosphy <sup>3</sup> Phil	101	} 3	Algebra or TrigMath 107-109 Hist. of ReligionsRel 101 Intro. to Philosophy <sup>3</sup> Phil 101	3
4	Alternates:4 Intro, to EconomicsEc	100		Alternates:4 Intro. to EconomicsEc 100)	
	Intro. to Education Ed American Federal Govt P.S. General Psychology Psy	101 101 100	6	Intro. to EducationEd 101 American Federal Govt. P.S. 101 General PsychologyPsy 100	6
1	Intro. to Sociology Soc Elective	100	1	Elective	1
			17		17

#### JUNIOR YEAR

Fifth Semester

Sixth Semester

Major and Electives-30 hours

#### SENIOR YEAR

Seventh Semester

Eighth Semester

Major and Electives-30 hours

Students may substitute a laboratory course in science for Bio. 100 or Phys. 100. Majors in psychology must take one year of a laboratory course in biology, chemistry, or physics in place of Bio. 100.

# BACHELOR OF ARTS

Major in Mathematics

#### FRESHMAN YEAR

Fo	First Seme Title  cological Science composition reign Language gebra and Trig. ys. Ed. and Hygiene	NumberBio 100Eng 101101 or 103	Cr. 3 3 3 5 1	Second Semester  Title  CompositionEng 102 Fundamentals of SpeechEng 131 Foreign Language <sup>1</sup> 102 or 104 Analytic GeometryMath 122 Intro. to MusicMus 100 Phys. Ed. and HygieneP.E. 102	Cr. 3 2 3 4 3 1	
					16	

## SOPHOMORE YEAR

Third Semester  Title  World Literature Foreign Language  Calculus I. In General Physics Physical Education I	Number Eng 151 103 or 200 Math 125	Cr. 4	Fourth Semester   Title   Number   Cr.	
	.E. 103	1 17	Electives	

#### JUNIOR YEAR

Fifth Semester  Title  Num.  Hist. of W. Civilization. Hist Mathematics Elective. General Psychology. Psy Intro. to Economics. Ec Principles of Economics. Ec Intro. to Sociology. Soc	nber 101	Cr. 3 3 3 3	Sixth Semester  Title  Hist. of W. Civilization. Hist 102  Mathematics Elective. Intro. to Philosophy. Phil 101  Amer. Federal Govt. P.S. 101  Electives.	
SociologySoc	100	3	Electives	3

#### SENIOR YEAR

15

Title Seventh Semester	OLIVIO.	R I EAR		
Mathematics Elective <sup>2</sup> .	Cr.	7 11.76	Eighth Semester	
	3	Mathematics	Elective <sup>2</sup>	Cr.
	12	Electives	Elective <sup>2</sup>	3
	15			12
				15

<sup>&</sup>lt;sup>1</sup> The level of the course will depend upon the achievement of the student. <sup>2</sup> Mathematics 101, 102, 115, 118 will not count toward a major.

The level of the course will depend upon the achievement of the student.
 Philosophy is required in either the third or fourth semester.

During the third and fourth semesters, nine hours must be chosen from the alternates with only three hours being allowed for electives. In the event that the scheduling of any of the alternates interferes with the necessary sequence of a major, one or more of the alternates may be delayed, with the approval of the adviser, until the junior year.

First Semester			Num	ber	Cr.
First Semeste.	ber	Cr.	Title Composition Eng	102	3
Title Eng Composition Eng Foreign Language Music Theory Mus	<ul><li>101</li><li>101</li><li>100</li></ul>	3 5 1 3	Composition Foreign Language  Music Theory Applied Music <sup>1</sup> Physical Science Phys. Ed. and Hygiene P.E.	102	1 3

#### SOPHOMORE YEAR

16

00.	Fourth Semester
Third Semester  Title Number Cr.  Foreign Language Mus 103 5 Music Theory 1 Applied Music 1 Electives in Humanities, Soc. Science or Psych P.E. 103 1 Physical Education 16	Title Number Cr.  Foreign Language

#### JUNIOR YEAR

	-		Sixth Semester		
Fifth Semester  Title Num  World Literature Eng Applied Music Music Music History of Music Hist of West. Civ. Hist Fundamentals of Speech Eng Electives in Humanities, Soc. Science or Psych.	151 109 101	4 2 3 3	World Literature Eng Applied Music Mus History of Music Hist. of West. Civ. Hist Electives in Humanities, Soc. Science or Psych.	152 110	4 2 3

#### SENIOR YEAR

		Eighth Semester Numb	109	CI
Seventh Semester  Number  Applied Music¹	5 2	Title  Applied Music¹ Orchestration Mus Counterpoint Mus Electives	216	

<sup>1</sup> Private instruction.

#### BACHELOR OF SCIENCE IN THE NATURAL SCIENCES

DEGREE COURSES

The curricula leading to the degree of Bachelor of Science provide a thorough grounding in the scientific method, supplemented by a study of the humanities and social sciences. The three curricula in science are intended to prepare students for technical work or advanced study.

#### GROUP I—BIOLOGY

Special emphasis upon biology is recommended in preparation for the study of medicine, osteopathy, dentistry, and allied studies; the teaching of biology; industrial and medical technology; and graduate work in biology.

#### GROUP II—CHEMISTRY

This group is for students planning to enter graduate study in chemistry, industrial chemistry, or the teaching of chemistry.

#### GROUP III—PHYSICS

This group is for students interested in research, electronics, advanced study, or industrial physics.

Only the first two years of this course are offered by Wilkes College.

#### LANGUAGE REQUIREMENTS

A reading knowledge of scientific German or of French is required for this degree. The requirement may be satisfied as follows:

- 1. A student prepared in a language may take a reading-knowledge test.
- 2. A student who has taken two years or more of German in high school must complete scientific German; if he has taken two years or more of French, he must complete six hours of intermediate or advanced French.
- 3. Students beginning either language must complete twelve semester hours. Those beginning German must include German 105 in the twelve hours.

# BACHELOR OF SCIENCE IN BIOLOGY

The curriculum leading to the degree of Bachelor of Science in Biology is intended to give a thorough understanding of the scientific method with emphasis on the biological and chemical aspects. The prescribed curriculum includes: requirements established for entrance into the majority of medical, dental, requirements, and medical technologic schools; preparation for industrial biological and bases for specific advanced zoological work in schools of graduate study.

gy; and bases for specific advantage	1.Cton
TIND VEAR	Second Semester Number Cr.
Number Cr. Title	ZoologyBio 102 5
Title Bio 101 5 General	Zoology
Congral Zoology Clam 101 4 Inorgani	Chem 102 6
anoral Indigatile of the same	tative AnalEng 102 3
omposition 107 3 Compos	tative Anal
	d. and HygieneP.E. 102 1
Phys. Ed. and Hygiene P.E. 101 1 Phys. E	d. and 11/8-11
	18
16	AR Fourth Semester
Third Semester SOPHOMORE YE.	AR Fourth Semester
Title Some	41.
Number Cr.	B10 202 T
Title Embry	ic Chem
Comparative Anatomy of the Vertebrates	of West. Civ Hist 102 3 Phys 201 5
the Vertebrates Anal Chem 121 4 Hist.	of West. Civ
Inorganic Quantitative Hist 101 3 Gener	al Physics
Hist. of West. Phys 201 3 11175	Cai 244
General Physics	17
Physical Education 18	-11
	R Sixth Semester
Fifth Semester JUNIOR YEA	Number Cr.
11/10000000	Title
1/4/11/00/	ology
Histology Chem 231 5 Chem	mistry Elective Eng 134 3
Histology Chem 231 5 Cher Organic Chem Eng 151 4 Publ	L'a Capalring
Organic Chem. Eng 151 4 Publ World Literature. 101 or 103 3 Wor	rld Literature
World Literature 101 or 103 Wor Foreign Language 101 or 103 Fore	eign Language <sup>1</sup> 102 or 104
Alternates: Psych 100 2	
Intro. to Sociology Soc 1005	16
18	
- Vr	EAR Eighth Semester
Seventh Semester SENIOR YE	Number
Number Cr.	1410
mi. I	· 1 4
Pacteriology Dia 251 4 Ph	lysiology Bio 292
	minar in Biology Bio 292 minar in Biology 104 or 200
Piology Bio 291	
Seminar in Biology 102 or 200 3 FC	
Seminar in Biology	
Seminar in Biology 103 or 200 3 For Elective Elective	lective

<sup>1</sup> The level of the course will depend upon the achievement and interests of the student.

The Department of Biology also offers courses in the taxonomy of flowering plants (Biology 113) and in entomology (Biology 223), both of which are given in the summer.

## BACHELOR OF SCIENCE IN CHEMISTRY

The chemistry curriculum is planned to provide thorough training in the fundamentals of the science and to contribute to the broad general education of the student.

Graduates in chemistry may enter industry immediately upon graduation

or may continue their studies in graduate school.

To satisfy the requirements for this degree a student must complete a total of one hundred forty credits. These credits must include forty-five in chemistry, thirty-three in physics and mathematics, eighteen to twenty-four in the social sciences and psychology, twenty-four to thirty in the humanities, and the

language requirement.	The same of the sa
First Semester FRESHMA	IN YEAR Second Semester
Title Number Cr.  General Inorganic Chem. Chem 101 4  Engineering Problems. Engi 100 2  Composition. Eng 101 3  Hist. of W. Civilization. Hist 101 3  Algebra and Trig. Math 105 5  Phys. Ed. and Hygiene. P.E. 101 1	Title Number Cr. Inor. Chem. & Qual. Anal. Chem 102 6 Basic Drawing Engi 102 3 Hist. of W. Civilization Hist 102 3 Analytic Geometry Math 122 4 Phys. Ed. and Hygiene P.E. 102 1
Third Semester SOPHOMO	
Title Number Cr. Inor. Quantitative Analysis . Chem 121 4 Composition . Eng 102 3 Differential Calculus . Math 125 4 General Physics . Phys 201 5 Physical Education . P.E. 103 1	Title         Number Cr.           Stoichiometry.         Ch E 206 3           Organic Chemistry         Chem 230 4           Integral Calculus         Math 126 4           General Physics         Phys 202 5           Elective         2           Physical Education         P.E. 104 1
17	19
Fifth Semester JUNIOR	YEAR Sixth Semester
Title Number Cr. Organic Chemistry Chem 231 5 Physical Chemistry Chem 241 4 Elec. Measurements Phys 251 3 Foreign Language 3 Elective 3	Title         Number         Cr.           Inor. Quant. Anal.         Chem 122         5           Physical Chem.         Chem 242         4           Foreign Language         3           Electives         6
	YEAR Eighth Semester
Title Number Cr. Qualitative Organ. Anal. Chem 233 3 History of Chemistry Chem 261 1 Foreign Language 3 Electives 11	Title         Number         Cr.           Chemical Literature         Chem 262         1           Foreign Language         3           Chemistry elective         3           Electives         11           18
visce are to be selected with the	advice and consent of the faculty ad-

viser as follows:

Humanities: Twelve to eighteen credits are to be chosen from the following: English 131, 151, 152; Philosophy 101, 102; Music 100; Religion 101; Mathematics 240.

Social Sciences and Psychology: Eighteen to twenty-four credits are to be chosen from the following: Sociology 100, 107, 205; Political Science 100, 101, 203; Economics 101, 102; History 107, 108; Education 101, 201, 207; Psychology 100

# BACHELOR OF SCIENCE IN PHYSICS

Wilkes College offers the first two years of work leading toward a major in physics or in engineering physics. The need for men with this type of education was greatly emphasized by the many new problems which needed solution tion was greatly emphasized by the many new problems which needed solution during the recent conflict. The curriculum offers a firm grounding in the during the recent conflict. The curriculum cannot be continued profitably. It is a subject to the student for industry, teaching, or research. The course in physics prepares the student for industry, teaching, or research.

#### FRESHMAN YEAR

	FRESH	MAIN I DIA	nd Semester	
First Semester Title General Inorganic Chem. Engineering Problems. Composition. Algebra and Trig. American Government. Phys. Ed. and Hygiene.	Number Cr Chem 101 Engi 100 Eng 101 Math 105 P.S. 100	Title General Inorgania Basic Drawing Composition Amer. Hist. since	Number C c Chem. Chem 104 Engi 102 Eng 102 Eng 108 e 1865 Hist 108 try Math 122 tygiene P.E. 102	4 3 3 3 4 1

#### SOPHOMORE YEAR

		Fourth Semester	
Third Semester  Title  Number  Fundamentals of Speech  Advanced Exposition  Elementary German  Calculus I.  General Physics  Physical Education  P.E. 10	3 5 3 1 3 5 4 1 5	Title Number  Elementary German Ger 1 Calculus II. Math 1 Mechanics I, Statics M.E. 2 Mechanics II, Dynamics Physical Education P.E.	02 3 26 4 211 3 212 3 202 5

# 1 Intermediate or scientific German may be substituted when the student is qualified.

#### BACHELOR OF SCIENCE IN COMMERCE AND FINANCE

The commerce and finance curricula provide training for economic and business activities supplemented by a study of the humanities, sciences, and social sciences. Its objectives are to prepare the student for effective personal, social, and economic life in a competitive society, to aid in the development of an appreciation for cultural pursuits, to broaden the viewpoint, to develop sound thinking and intellectual interests, and to provide technical instruction in preparation for business and professional careers and graduate study.

To insure a well-balanced program faculty advisers assist each student in the choice of his elective studies.

The commerce and finance curricula include four groups of study to meet the individual needs and purposes of the students. These groups are: Group I, Accounting; Group II, Business Administration; Group III, Retail Merchandising; Group IV, Secretarial Studies.

#### GROUP REQUIREMENTS

	Group I	Group II	Group III	Group IV
Subjects	Accounting	Business Administration	Retail Merchandising	Secretarial Studies
	Cr.	Cr.	Cr.	Cr.
Major	30	60 <sup>1</sup>	36	26
Commerce and Finance <sup>2</sup>	39		27	18
Social Sciences	12	15	18	9
Humanities	31	31	28	28
Science	6	6	6	6
Electives	9	15	12	39
Physical Education	n 4	4	4	4
Total	131	131	131	130

<sup>&</sup>lt;sup>1</sup> This figure includes both major courses and other courses offered in the Commerce and Finance Department.

<sup>2</sup> Does not include courses within the major.

#### BACHELOR OF SCIENCE IN COMMERCE AND FINANCE Major in Accounting1

WILKES COLLEGE

## FRESHMAN YEAR<sup>2</sup>

	PRES	SHMA	N I EAR		
First Semester			Second Semester	r	
Title N	umber	Cr.	Title	Number	Cr
Elementary Accounting. Accounting. Survey of Business. B. A. Biological Science. Bio Composition. English Hist. of W. Civilization. His Phys. Ed. and Hygiene. P.E.	1. 100 100 101 101 101	3 3 3 3 1	Principles of Accounting. A Composition. E Hist. of W. Civilization. F Amer. Federal Govt. F Physical Science. F Phys. Ed. and Hygiene. F	ing 102 Hist 102 Phys 100	3 3 3 3 3 1
		16			16
	SOPE	НОМО	RE YEAR		
Third Semester			Fourth Semester	r	
Title N	umber	Cr.	Title	Number	Cr.
Intermediate Accounting. Acc Business Law. B./ Principles of Economics. Ec World Literature. En Fundamentals of Math. Ma Physical Education. P.F.	101 g 151 th 101	3 3 4 3 1	Advanced Accounting. A Business Law E Principles of Economics E World Literature E Fundamentals of Math. M Mathematics of Finance M Physical Education E	3.A. 232 Ec 102 Eng 152 Math 102 Math 115	
		17			17
	Tr		YEAR		-,
Fifth Semester	,		Sixth Semester		
	umber	Cr.	Title	Number	Cr.
Cost Accounting. Ac Business Law. B.A Money and Banking. Ec Applied General Statistics. Ec Fundamentals of Speech. En Intro. to Sociology. Sociology.	A. 233 201 231 g 131	3 3 3 2 3	Advanced Cost Accounting A Accounting Systems A C.P.A. Problems A Business Law E Alternates: Theory of Money E Public Finance E Economic Geography E Economic Statistics E	Acct 220 Acct 242) B.A. 234 Acc 202 Acc 236) Acc 226	3 3 3 3 3
		17			18
	Sı	ENIOR	YEAR		
Seventh Semester			Eighth Semester		
Title N	umber	Cr.	Title	Number	Cr.
Tax Accounting Ac Auditing Principles Ac Bus. Cor. and Reports B Corporation Finance B	ct 231 A. 209	3 3 3	Auditing Practice. A Intro. to Music. M Intro. to Philosophy. P History of Religions. R	Mus 100 hil 101	3 3 6
Free Elective <sup>3</sup>		3	Free Electives <sup>3</sup>		_
	22)		Free Electives <sup>3</sup>		15

# BACHELOR OF SCIENCE IN COMMERCE AND FINANCE Major in Business Administration

Dusiness Administration
FRESHMAN YEAR1
First Semester
Elementary Account Number Cr. Second Semester
Survey of Business Acct 101 3 D.:
Composition. Bio 100 3 Hist of W. C Fing 102 3
Hist. of W. Civilization 101 3 Amer Federation Hist 102 3
Phys. Ed. and Hygiene
Phys. Ed. and Hygiene
Third Samuel Sophomore YEAR
- Semester
D-:
Fundamentals - CC 101 2
World Literature Special Eng 131 2 Winciples of Economics
rundamentala - Cas
Hysical Education Fundamental Co.
Fundamentals of MathMath 102  Fundamentals of MathMath 102  Mathematics of Finance Math 102
IIIIO, to Mini-
Inysical Education
16 104 1
JUNIOR Vr. 17
Fifth Semester JUNIOR YEAR 17
Money and Banking Ec 201 3 Alternation Number Cr. Title
Applied General Statistics. Ec 201 3 Alternates: Number Cr.
Election Sociology 231 3 Theorem
Elective in Social Science.  Soc 100 3  Theory of Money.  Ec 231 3  Theory of Money.  Ec 202  Economic Geography.  Ec 202  C. & F. Elective.  Economic Geography.  Ec 226 3
LCUHOMIC Statistic
Alternates: 232 3
Intro. to PhilosophyPhil 101
Bus Adm - D - C
Bus. Adm. or Ec. Elective <sup>2</sup> Rel 101 3 Free Elective 3
18
Seventh Semant SENIOR YEAR
Free P. and E. P. B. A 200
Bus. Adm. and Ec. Electives.  Number Cr. Title  Bus. Adm. and Ec. Electives  12  Bus. Adm. and Ec. Electives <sup>2</sup> 12  12
12 Free Electives 12
3
1 See note 2, page 54.
2 See page 54.
Page 56. 15

Practical experience in accounting is required for all students during the summer following the junior year or during the senior year.
 It is suggested that all students take Personal Use Typewriting (S.S. 99) during one semester of the freshman year.
 Students intending to sit for the New York State C. P. A. examinations should electrants subjects.

Students who major in business administration will select their electives from the following:

BANKING	AND	FINANCE <sup>1</sup>	
---------	-----	----------------------	--

B	ANKINO III.		Number
Title Credits and Collections Real Estate. Corporation Finance	.B.A. 220 B.A. 225	Lylacia	Ec 202 Ec 236 Math 115

#### ECONOMICS1

			Number
Title Government and Business Labor Problems International Trade Economic Geography Comparative Economic Systems Business Cycles	Ec 223 Ec 225 Ec 226 Ec 229	Title Public Finance Economic History Economic Analysis Consumer Economics Economic Investigation	Ec 241 Ec 245

# MANAGEMENT AND INDUSTRIAL RELATIONS<sup>1</sup>

MANAGE	MENT AND IN	0031102-	Number
Title  Industrial Management Personnel Management Production Management Office Management Sales Management Property Insurance	Number  B.A. 235  B.A. 236  B.A. 237  B.A. 238  B.A. 239	Title Life Insurance Labor Problems	B.A. 241 Ec 223

## MARKETING1

	MAKKE			Number
Title Salesmanship Advertising Transportation Marketing	B.A. 216 B.A. 217	Franch	e	Ec 2

# 1 At least six courses in this group are required of students concentrating in this field.

## BACHELOR OF SCIENCE IN COMMERCE AND FINANCE

#### Major in Retail Merchandising

#### FRESHMAN YEAR<sup>1</sup>

	FRES	SHMA	IN YEAR <sup>1</sup>		
First Semester		Second Semester			
Title Nun	nber	Cr.	Title Nun	aber	Cr.
Elementary Accounting Acct	101	3	Principles of Accounting Acct	102	3
Biological ScienceBio		3	CompositionEng		3
Survey of BusinessB.A.			Hist. of W. CivilizationHist	102	3
CompositionEng	101	3	Physical SciencePhys		
Hist. of W. CivilizationHist	101	3	Amer. Federal GovtP.S.		3
Phys. Ed. and HygieneP.E.	101	1	Phys. Ed. and HygieneP.E.	102	1
		16			16
		7 10			
	SOPE	НОМО	ORE YEAR		
711: 10			r .1 c .		

Sc	OPH	ОМО	RE YEAR		
Third Semester			Fourth Semester		
Title Numb	er	Cr.	Title Nun	aber	Cr.
Business LawB.A.	231	3	Business LawB.A.	232	3
Principles of EconomicsEc	101	3	Principles of EconomicsEc	102	3
World Literature Eng	151	4	World LiteratureEng	152	4
Fundamentals of MathMath	101	3	Fundamentals of MathMath	102	. 3
Principles of Retailing R.M.	101	3	Retail Personnel RelationsR.M.	219	3
Physical Education P.E.	103	1	Physical EducationP.E.	104	1
					-
		17			17

#### IUNIOR YEAR

	Ju	NIOI	YEAR		
Fifth Semester			Sixth Semester		
Title Numbe	er	Cr.	Title Num	ber	Cr.
Applied General Statistics Ec 2 Fundamentals of Speech Eng 1 Color and Design R.M. 2 Retail Adv. & Sales Prom R.M. 2 Retail Selling R.M. 2 Elective in Social Science.	131 201 205	3 2 2 3 3 3	Intro. to Music	101) 101) 210 212	3 3 3 3 3 3 18

#### SENIOR YEAR

SE	NIO	R YEAR	
Seventh Semester		Eighth Semester	
Bus. Cor. and Reports	3	Title Number  Organization & Operation of the Small Store. R.M. 220  Retail Cred. and CollR.M. 222  Recent Trnds. & Developments in Retail. R.M. 224  Free Electives	Cı
	15		1
	Seventh Semester  Title Number  Bus. Cor. and ReportsB.A. 209  Fundamentals of FashionR.M. 217  Retail Buying (I.	Seventh Semester  Title  Number Cr.  Bus. Cor. and Reports	Title Number Cr. Title Number  Bus. Cor. and Reports. B.A. 209 3 Fundamentals of Fashion. R.M. 217 3 Retail Buying (Lab.) R.M. 214 3 Intro. to Sociology. Soc. 100 3 Elec. in Com. & Fin. or Soc. Sc. 3  Title Number  Organization & Operation of the Small Store. R.M. 220 Retail Cred. and Coll. R.M. 222 Recent Trnds. & Developments in Retail. R.M. 224  Free Electives.

<sup>&</sup>lt;sup>1</sup> See note 2, page 54.

# BACHELOR OF SCIENCE IN COMMERCE AND FINANCE

# Major in Secretarial Studies

#### FRESHMAN YEAR

	FRES	HMA	Second Semes	ter	
Title Survey of Business Composition. Hist. or W. Civilization. Fundamentals of Math. Shorthand and Typewriting. Phys. Ed. and Hygiene	Number  B.A. 100  Eng 101  Hist 101  Math 101  S.S. 101	3 3 4	Title Biological Science Composition Hist. of W. Civilization Fundamentals of Math. Shorthand and Typewriting Phys. Ed. and Hygiene.	Number . Bio 100 . Eng 102 . Hist 102 . Math 102 S.S. 102	3 3 3 4

#### SOPHOMORE YEAR

			Fourth Semester		
Third Semester			Num	iber	Cr.
Title Numb	101		Title Principles of Accounting Acct American Government	102 100	3 3
Advanced Exposition. Eng	131	2	Physical ScienceS.S.	110	4 3
Intro. to Music S.S.	109	4	Free Elective P.E. Physical Education P.E.	104	
Advanced Stenography		16			17

#### IUNIOR YEAR

Fifth Semester	No.		Sixth Semester Number	Cr.
Title Num Principles of Economics	2101	3 4	Principles of Economics Ec 102 World Literature Eng 152 Free Electives	3 4 9
Medical Stenography Speech Reporting S.S.		16		16

	Eighth Semester	Cr.
Seventh Semester  Title Num  Bus. Cor. and Reports B.A. Office Proc. & Office Mach S.S. Free Electives	Title Number Office Management	-

#### BACHELOR OF SCIENCE IN EDUCATION

The curricula in education are designed to equip students for teaching in elementary or secondary schools. They seek to combine specialization in education and in teaching subjects with a broad general background in the humanities, the sciences, and the social sciences. To this end a program of general education precedes and parallels basic training in the principles, theory, and philosophy of education and in the techniques and methods of teaching. It is fundamental that the prospective teacher should be intimately acquainted with his chosen subjects of instruction.

The student preparing for elementary school teaching should elect a broad range of academic subjects, emphasizing the sciences, the social studies, and English. The student preparing for secondary school teaching should elect a minimum of twenty-four semester hours in his major field of teaching and a minimum of eighteen hours in at least one additional field. In these elections consideration should be given not only to the interests of the student, but also to the provision of a combination of subjects which will enhance his opportunities for employment. tunities for employment.

The programs of study are planned for certification in Pennsylvania but may be modified if certification is desired in other states. The student should consult the Department of Education regarding certification requirements of a particular state.

#### REQUIREMENTS FOR CERTIFICATION IN PENNSYLVANIA

#### General

The four courses listed below are required of all prospective teachers:

Introduction to Education	3 semester hours
Educational Psychology	3 semester hours
Student Teaching	8 semester hours
United States and Pennsylvania History	

#### Elementary

In addition to the general requirements, a minimum of twenty-two semester hours in elementary education is required to prepare teachers in the following fields of instruction:

English Spelling Reading Writing Arithmetic Geography U. S. and Pa. History Civics	Humane Treatment of Birds and Animals Safety Education Health-Physical Education and Physiology Music Art
--	---

#### Secondary

A minimum of six additional hours of work in secondary education and a minimum of eighteen semester hours in each field of certification are required. The special requirements for certification in different subjects are as follows:

The special requirements for certains  The special requir	
Social Studies	
Sciences  Biological science: botany, 6; zoology, 6; related sci-	

Physical science: chemistry, 6; physics, 6; related sciences, 6

Science

Physical sciences: chemistry, 3 or 6; physics, Biological sciences: botany, 3 or more; zoology, 3 or more

General science: 18 semester hours in any or all sciences

#### BACHELOR OF SCIENCE IN SECONDARY EDUCATION

#### FRESHMAN YEAR

	FRE	SHM	AN I EAR		
First Semester		Second Semester			
Title Nus	mber	Cr.	Title Nun	nber	Cr.
American GovernmentP.S.	100	3	CompositionEng	102	3
Biological Science <sup>1</sup> Bio	100	3	Intro. to PhilosophyPhil.	101	3
CompositionEng	101	3	Physical Science <sup>2</sup> Phys	100	3
Elect. Teaching subjects		6	Elect. Teaching subjects		6
Phys. Ed. and HygieneP.E.	101	1	Phys. Ed. and Hygiene P.E.	102	1
		-			-
		16			16

#### SOPHOMORE YEAR

#### Third Semester Fourth Semester

1 hira semester			L'outin semesier		
Title	umber	Cr.	Title Nu	mber	Cr
Fundamentals of Speech Englintro. to Sociology Sociology World Literature Engliect. Teaching subjects Physical Education P.E.	i. 100 g 151	6	Intro. to Education Ed. World Literature Eng Elect. Teaching subjects General Psychology Psy Physical Education P.E.	100	

#### JUNIOR YEAR

Fifth Semester		Sixth Semester			
Title Nu	mber	Cr.	Title Nun	aber	Cr.
Educational Psychology Ed U.SPa. History to 1865 Hist Elect. Teaching subjects	201	3 9	Advanced ExpositionEng U.S. History since 1865Hist Elect. Teaching subjects	105 108	3 9
		15			15

#### SENIOR YEAR

Seventh Semest	er		Eighth Semester <sup>3</sup>		
Title	Number	Cr.	Title	mber	Cr.
Intro. to Economics Elect. Teaching subjects	Ec 100	3 12	Principles and Methods of Sec. Ed. Ed Sec. School Curriculum Ed Practice Teaching Ed Visual Education Ed	204 205 207 212	3 3 8 3
		15			17

<sup>&</sup>lt;sup>1</sup> Biological Science 100 is not required of students taking a laboratory course in the biological sciences.

biological sciences.

2 Physical Science 100 is not required of students taking a laboratory course in the physical sciences.

3 The courses in education for the second semester of the senior year will be given for five periods a week during the first four and the last four weeks of the semester, leaving seven weeks free for full-time student teaching. For students who must take academic courses, part-time teaching schedules will be arranged.

# BACHELOR OF SCIENCE IN ELEMENTARY EDUCATION

BACHELO		VEAR	
	FRESHMAN	Second Semest	Number Cr.
First Semester  Title  Basic Art.  Biological Science <sup>1</sup> Composition.  History of Western Civ.  Intro. to Music.  Phys. Ed. and Hygiene  P.E.	100 3 101 3 101 3 100 3	Composition. History of Western Civ. Intro. to Philosophy. Physical Science <sup>2</sup> . Intro. to Sociology. Phys. Ed. and Hygiene.	Eng 102 3 Hist 102 3 Phil. 101 3 Phys 100 3 Soc 100 3

# SOPHOMORE YEAR Fourth Semester

	0	Fourth Sentester		
Third Semester	ber Cr. 100 3 100 3 131 2 151 4	Title Num Intro. to Education Ed. World Literature Eng General Psychology Psy Elective Physical Education P.E.	101 3 152 4 100 3 104	3 5 1
Physical Education	16	5		

#### JUNIOR YEAR

	JUN	IOR	Sixth Semester	umber	Cr.
Fifth Semester  Num  Educational Psychology Ed  Teaching of English Ed  U.SPa. History to 1865 Hist  Elective	201 234	3	Title Teaching of Arithmetic Ed U.S. History since 1865 His Child Psychology Psy Elective	232 st 108	3 3 6 —

#### SENIOR YEAR

SENIOR	Fighth Semesici	
Seventh Semester  Title	Title Num Practice Teaching Ed Visual Education Ed. Children's Literature Ed Elementary Curriculum Ed	ber Cr 208 212 235 238

1 Biological Science 100 is not required of students taking a laboratory course in the biological sciences.

2 Physical Sciences.

biological sciences.

2 Physical Science 100 is not required of students taking a laboratory course in the physical sciences.

3 The courses in education for the second semester of the senior year will be given for five periods a week during the first four and the last four weeks of the semester, leaving seven weeks free for full-time student teaching. For students who must take academic seven weeks free for full-time student teaching. For students who must take academic seven weeks free for full-time student teaching.

#### BACHELOR OF SCIENCE IN BUSINESS EDUCATION

DEGREE COURSES

The degree of Bachelor of Science in Business Education is designed to provide a background in general education while it prepares the student for teaching the business subjects in the public secondary schools or for a career in business. The course that is outlined will meet the requirements of the state of Pennsylvania for certification in bookkeeping, shorthand, typing, office practice, economics, commercial law, business English, commercial arithmetic, and in the social studies if both sociology and political science are elected. Students preferring to be certified in salesmanship or retail selling may modify the course through consultation with their advisers.

#### FRESHMAN YEAR

First Semester		Second Semester			
Title Nun	nber	Cr.	Title Nun	nber	Cr.
Survey of BusinessB.A.		3	CompositionEng	102	3
Business MathematicsB.A.	107	3	Hist. of W. Civilization Hist	102	3
Biological ScienceBio	100	3	Intro. to MusicMus.	100)	
CompositionEng	101	3	or		3
Hist. of W. Civilization Hist	101	3	Basic ArtArt	101	
Phys. Ed. and Hygiene P.E.	101	1	Physical SciencePhys	100	3
			Intro. to SociologySoc	100)	
			or	35	3
			American GovernmentP.S.	100	
			Phys. Ed. and Hygiene P.E.		1
		-			-
		16			16

#### SOPHOMORE YEAR

	SOPE	IOMC	RE LEAK		
Third Semester		Fourth Semester			
Title Nun		Cr.	Title Nun	iber	Cr.
Elementary AccountingAcct		3	Principles of AccountingAcct or Elective	102	3
Principles of Economics Econ	101	3	Principles of EconomicsEcon	102	3
U.SPa. History to 1865 Hist	107	3	Intro. to Education Educ		3
General Psychology Dev	100	3	U. S. Hist. since 1865 Hist	108	3
or Elective	101	4	Shorthand and Typewriting S.S. or Elective	102	4
Physical Education P.E.	103	1	Physical Education P.E.	104	1
					-
		17			17

#### JUNIOR YEAR

JUNIOR	CIEAR
Fifth Semester	Sixth Semester
	Title Number Cr.
Intermediate Accounting Acct 111 3  Or Elective Business I am	Advanced AccountingAcct 112 3 or Elective
Business Law B.A. 231 3 Educational Psychology Educ 201 3 English Elective	Business Law B.A. 232 3 Office Management B.A. 238 3
English Elective Eng 151 or 153 4-3 Intermediate Stenography S.S. 109 4	English Elective Eng 152 or 154 4-3
or Elective 109 4	Advanced Stenography S.S. 110 4 or Elective
-	_
17-16	17-16

# SENIOR YEAR

	SEN	IOR	YEAR Eighth Semester Number	Cr.
Seventh Semester  Num.  Bus. Corres. and Reports B.A.  Bus. Education and Methods  of Instruction in S.S Educ  of Instruction in S.S Phil  Intro. to Philosophy	209	3	Prin. of Secondary Educ. Educ 204 Sec. School Curriculum. Educ 205 Practice Teaching Educ 207	3
Office Procedures and Machines S.S.				
Machines		3		16
Elective		16		

Provisional College Certificates will be issued by the Commonwealth of Pennsylvania to graduates of the course in business education. Certification will be offered in business subjects only as the following requirements

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Certificates are valid for teaching only those business subjects which are written on the certificate.

#### BACHELOR OF SCIENCE IN MUSIC EDUCATION

The Bachelor of Science degree with a major in music education is designed for students wishing to teach music in the public schools. Students following the four-year curriculum will have all of the requirements necessary to obtain a teacher certificate in music education in Pennsylvania and in many other states. The curriculum will also enable the student to become a proficient performer through the study of applied music subjects.

#### FRESHMAN YEAR

	FRES	HMA	IN I EAR		
First Semester			Second Semester		
Title Nun.	ber	Cr.	Title Num	iber (	Cr.
Composition Eng Fundamentals of Speech Eng	101	3 2	Composition Eng Physical Science Phys		3
Music Theory	101	5	Music Theory	102	5
Methods or Ed	101	2		102	2
Brass Class and Band Mus Methods Ed App	103		Methods Ed	104)	
Major Instrument Mus Band, Orchestra, Chorus		1 1/2			1/2
Elective		3	Elective	102	3
and many group.		71/2		-	31/9

#### SOPHOMORE YEAR

				7112 2 27111		
Third Semest	ter			Fourth Semester		
Title	Num	ber	Cr.	Title Num	iber	Cr.
World Literature	.Eng	151	4	Intro. to Education Ed	101	3
General Psychology	.Psv	100	3	World Literature Eng	152	4
Music Theory	. Mus	103	5	Music Theory Mus	104	5
Music History	. Mus	109	3	Music HistoryMus		
	App			App		
Major Instrument	Mus		1	Major Instrument Mus		1
Dand, Orchestra Chorus			1/2	Band, Orchestra, Chorus		1/2
Physical Education	.P.E.	103	1	Physical Education P.E.	104	. 1
		1	17½			17½

#### JUNIOR YEAR

	11	UNIOR	I EAR	
Fifth Semester			Sixth Semester	
Title	nber	Cr.	Title Number	Cr.
Educational Psychology Ed U.S. and Pa. Hist. to 1865 Hist	201	1 3	U.S. History since 1865Hist 10	8 3
Woodwind Class Methods Ed	105		Brass Class Methods Ed 100 Mus	6 2
Conducting (Instrumental) Ed	109		Conducting (Choral) Ed 110 Mus	0 2
Violin Class and Methods Ed	111	1 2	Violin Class and Methods Ed 112	2 2
Major Instrument App Band, Orchestra, Chorus Elective	S	1 1/2	Major Instrument	1 ½ 3
		3	Elective Ed	1
		16½		141/2

#### SENIOR YEAR

SI	ENIOR Y	Eighth Semester	Law	Cr.
Instrumentation. Mus Voice Class and Methods. Ed 1 String Instrument Class and Mus	37 3 6 15 2 207 2 113 2 203 4	Title Visual Education	s 114 1s d 204	

# BACHELOR OF SCIENCE IN NURSING EDUCATION

The course in nursing education is designed for the preparation of instruc-The course in nursing education is designed for the preparation of instruc-tors, head nurses, and supervisors of hospitals and schools of nursing. It pre-supposes graduation from an approved school of nursing and State registra-tion. 1 Credits required for the degree are one hundred twenty, of which sixty may be earned in the school of nursing and sixty in the College. The number of credits allowed for the school of nursing program will be determined by an evaluation of the student's record and by results obtained on the Conducte Nurse Qualifying Exemplastics. the Graduate Nurse Qualifying Examination.

First Semester  Number Cr. Title  Biological Science  Eng 101  Scomposition  N.E. 101  Composition  N.E. 101  N.E. 101  Scomposition  N.E. 101  Foundations of Nursing  Psy 100  General Psychology  Soc 100  Sociology  Number Cr. Title  Composition  N.E. 102  Trends in Nursing Ed.  N.E. 103  Ward Administration  Phys 100  Physical Science  Psy 208  Human Behavior		JUNIO	710	Sacond Semes	ster .
	Title Biological Science Composition	Number Cr Bio 100 Eng 101 N.E. 101 Psy 100	Title Compositi Trends in Ward Ad	ministration	Eng 102 N.E. 102 N.E. 105 Phys 100

#### SENIOR YEAR

	SENIO	LILI	Fourth Semester	
			routts son	
Third Semester  Title  Educational Psychology  Ed  Visual Education  English Elective  Methods in Clinical  Teaching  Med. and Surg. Nursing  or Nursing Arts  N.E	201 3 212 3 3 3. 107 3	English E Med. and	al Measurements Ed Ed Ed Clective N Surg. Nursing N N Nursing Arts N	202 214

1 For exception see page 40.

#### BACHELOR OF SCIENCE IN ENGINEERING

DEGREE COURSES

Wilkes College offers the first two years of the engineering curricula. Upon completion of the second year, students making acceptable records may transfer to the junior year of other engineering schools.

In the past, students have transferred to, and successfully completed their work at, such representative colleges as Alabama, Bucknell, Catholic University, Columbia, Drexel, Georgia School of Technology, Lafayette, Lehigh, Massachusetts Institute of Technology, New York University, Pennsylvania State College, Purdue, Stevens Institute, Syracuse, and the University of

The engineer's main purpose is to apply scientific knowledge and discoveries to the uses of civilization. The engineer is obliged to specialize because of the vast range of modern engineering techniques. In selecting his particular field, the student should consider his natural interests. The demands of this profession are exacting, but it should appeal to those genuinely interested in mathematics and the natural sciences and in their application.

The following general distinctions may be made between the various fields: research appeals to the imaginative mind; the more practical person may be interested in development and design; others find satisfaction in the tangible results of construction, operation, and production. Technically trained men are always needed to sell applications and equipment. As his experience broadens and his judgment matures, the engineer qualifies for the higher executive and administrative positions.

During the first year the curricula for all engineering courses are the same with the exception of chemical engineering, in which course students must take two additional hours of chemistry in the second semester. For this reason the student should decide by the middle of the first year between chemical engineering and one of the other branches of engineering. The curricula change further at the beginning of the second year. For this reason the student should decide by then whether he will pursue civil, industrial, electrical, or mechanical engineering.

#### FRESHMAN YEAR

#### (COMMON TO ALL ENGINEERING COURSES)

D:	rst Semester		5 15		
77.	rst Semester		Second Semester		
Composition	Number   Chem 101	3	Title Num  Alternates:  Inor. Chem. & Qual. Anal Chem. General Inorganic Chem Chem. Drawing & Des. Geometry Engi Composition Eng Analytic Geometry Math. American Government P.S. Phys. Ed. and Hygiene P.E.	102) 104) 106 102	Cr. 4-6 3 3 4 3 1
				_	
		18		18	3-20

Chemical engineers will register for Chemistry 102 (six hours). All other engineering students will register for Chemistry 104 (four hours).

#### SENIOR YEAR

	SEN	IOR :	Eighth Semester	
I Competer			Eighth Semester Number	Cr.
Seventh Semester	001	Cr.	Title Visual Education Ed 212 Mus 216	3
Principles of Secondary	204	3	Orchestration Mus Ed 108	2
Principles of Elementary	215	2	Voice Class and Included Mus String Instrument Class and Methods	2
Instrumentation Mus	107	2	and Methods. Observation and Practice Treaching.  App	4
Voice Class and Methods Ed String Instrument Class and Mus Methods Ed Mus Methods	113	2	Mus	1 1/2
Methods Mus Observation and Practice Ed	203	4	Band, Orchestra, Chorus	
Teaching App	us	1		
Major Instrument Mi Band, Orchestra, Chorus		1/2		141/2
pand, Otom		141/2		

# BACHELOR OF SCIENCE IN NURSING EDUCATION

The course in nursing education is designed for the preparation of instruc-tors, head nurses, and supervisors of hospitals and schools of nursing. It pretors, head nurses, and supervisors of hospitals and schools of nursing. It presupposes graduation from an approved school of nursing and State registration. Credits required for the degree are one hundred twenty, of which sixty may be earned in the school of nursing and sixty in the College. The number of credits allowed for the school of nursing program will be deternumber of credits allowed for the school of nursing program will be deternumber of credits allowed for the school of nursing program will be deternumber of credits allowed for the school of nursing program will be deternumber of credits allowed for the school of nursing program will be deternumber of credits allowed for the school of nursing program will be deternumber of credits allowed for the school of nursing and State registrathe Graduate Nurse Qualifying Examination.

#### IUNIOR YEAR

	,	Second Semester	-
Title Biological Science Composition Foundations of Nursing General Psychology Sociology	Number Cr. Bio 100 3 Eng 101 3 N.E. 101 3 Psy 100 3	Title  Composition Eng Trends in Nursing Ed. N.E. Ward Administration Physical Science Psy Human Behavior Psy	100 3

#### SENIOR YEAR

1. Comester

			Fourth Semeste.		65
Third Semester  Title  Educational Psychology Ed Visual Education Ed English Elective  Methods in Clinical Teaching N.E. Med. and Surg. Nursing N.E. or Nursing Arts N.E.	201 212 107 111	3 3 3	Title Num  Educational Measurements Ed Guidance English Elective N.E.  Med. and Surg. Nursing N.E.  or Nursing Arts.	202 214 112	

<sup>1</sup> For exception see page 40.

#### BACHELOR OF SCIENCE IN ENGINEERING

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The following general distinctions may be made between the various fields: research appeals to the imaginative mind; the more practical person may be interested in development and design; others find satisfaction in the tangible results of construction, operation, and production. Technically trained men are always needed to sell applications and equipment. As his experience broadens and his judgment matures, the engineer qualifies for the higher executive and administrative positions.

During the first year the curricula for all engineering courses are the same with the exception of chemical engineering, in which course students must take two additional hours of chemistry in the second semester. For this reason the student should decide by the middle of the first year between chemical engineering and one of the other branches of engineering. The curricula change further at the beginning of the second year. For this reason the student should decide by then whether he will pursue civil, industrial, electrical, or mechanical engineering.

#### FRESHMAN YEAR

#### (COMMON TO ALL ENGINEERING COURSES)

First Semest	er		Second Semester		
Title General Inorganic Chem. Engineering Problems. Engineering Drawing. Composition. Algebra and Trig. Phys. Ed. and Hygiene.	Engi 100 Engi 105 Eng 101	3 3	Title Number Alternates:  Inor. Chem. & Qual. Anal. Chem General Inorganic Chem. Chem Drawing & Des. Geometry . Engi Composition Eng Analytic Geometry . Math American Government . P.S. Phys. Ed. and Hygiene . P.E.	102 104 106 102 122 100	Cr. 4-6
		18		18	-20

Chemical engineers will register for Chemistry 102 (six hours). All other engineering students will register for Chemistry 104 (four hours).

# AERONAUTICAL ENGINEERING

Mechanical engineering is basic to the study of aeronautical engineering. Therefore, the first two years in mechanical engineering prepare the student for the advanced work offered by several universities.

CHEMICAL ENGINEERING

Chemical engineering is concerned with the broad field of chemical industry in which materials undergo a physical or a chemical change. Such materials in which materials undergo a physical or a chemical change. Such materials include paper, textiles, gasoline, other petroleum products, coke, gas, dyes, include paper, textiles, paints, rubber, plastics, ceramics, drugs, heavy chemicals, solvents, and many others. The chemical engineer is one skilled in the icals, solvents, and many others. The chemical engineer may be materials are produced by chemical change. The chemical engineer may be materials are produced by chemical change. The chemical engineer in engaged in research or in the development of a process, for he is expert in engaged in research or in the development of the chemical engineer includes lie all chemical engineering. The equipment of the chemical engineer includes a thorough knowledge of chemistry, physics and mathematics and a sound understanding of such fundamentals of chemical, mechanical, and electrical engineering as will make him a competent development or sales engineer. engineering as will make him a competent development or sales engineer.

engineering as	SOPHOMOR	RE YEAR¹ Fourth Sen	nester
Third Semesta Title Inor. Quant. Analysis. Intro. to Economics. Fundamentals of Speech. Calculus I General Physics. Physical Education.	Number Cr.  Chem 121 4 Ec 100 3 Eng 134 3 Math 125 4 Phys 201 5	Title Stoichiometry Calculus II. Mechanics I, Statics Mechanics II, Dynamics General Physics Physical Education	Ch E 206 3 Math 126 4 M.E. 211 3 M.E. 212 3 Phys 202 5

# CIVIL ENGINEERING

The civil engineer deals with problems in structural, highway, railroad, hydraulic, and sanitary engineering, and also with surveying and geodesy. He specializes in the design, construction and maintenance of bridges, tunnels, specializes in the design, construction and maintenance or bridges, tunnels, and the structural members of buildings. His services are indispensable specializes in the design, construction and maintenance of bridges, tunnels, dams, and the structural members of buildings. His services are indispensable in the design of river, canal, and harbor improvements; in the development and control of water resources; in the treatment and disposal of sewage and industrial waste; and in the location and construction of all transportation facilities. SORMORE YEAR1

facilities.	SOPHOM	ORE LEAK	Fourth Semester Number	Cr.
Third Semeste  Title  Plane Surveying Intro. to Economics Fundamentals of Speech Calculus I General Physics Physical Education	C.E. 103 Ec 100 Eng 134 Math 125 Phys 201	Title Route Surve Calculus II. Mechanics	Number   N	4 3

<sup>1</sup> For freshman year see page 67.

#### ELECTRICAL ENGINEERING

Today nearly every activity of civilized life depends upon electricity. The electrical engineer is trained to design, construct, and operate all electrical generating equipment. He must supervise and control the distribution of electricity for driving the machinery in mills, factories, and mines; for electric railways, chemical processing, heating, lighting, and for all electrical devices

The communications field, including telegraph, telephone, radio, radar, teletype, transmission of print and pictures, offers numerous opportunities. Development of electronic tubes, circuits, and equipment for commercial processes offers opportunities in many fields of endeavor.

#### SOPHOMORE YEAR1

Third Semester	r		Fourth Semester				
Title	Numbe	38	Cr.	Title Numb	87	Cr.	
Plane Surveying	C.E. 1	.03	3	Calculus II Math	126	4	
Intro. to Economics			3	Kinematics	206	4	
Fundamentals of Speech	Eng 1	34	3	Mechanics I, StaticsM.E.	211	3	
Calculus I			4	Mechanics II, DynamicsM.E.	212	3	
General Physics	Phys 2	201	5	General PhysicsPhys	202	5	
Physical Education	P.É. 1	03	1	Physical Education P.É.	104	1	
				TO ACT SEE THE COURT OF THE PARTY OF		-	
			19			20	

#### INDUSTRIAL ENGINEERING

The field of industrial or management engineering has to do with the methods of manufacture and production; the effects thereon of personnel; and design control to meet cost and production requirements. Preparation with a background in science, engineering, economics, business administration, management, and history is necessary. The successful industrial engineer must possess not only technical skill and ability but also economic and humanistic interests, as well as character and personality. He must work with others and enlist their co-operation in the pursuit of a common goal. The industrial engineer deals with people as well as with machines and materials. This curriculum offers the first two years of work for those primarily interested in the administration of technical enterprises.

#### SOPHOMORE YEAR1

	OFIL	ONIC	ALL I LIM				
Third Semester			Fourth Semester				
Title Num	ber	Cr.	Title Num	ber	Cr.		
Elementary Accounting Acct Intro. to Economics Ec Fundamentals of Speech	101	3	Principles of Accounting Acct		3		
* Undam	1(11)	- 5	Calculus IIMath		4		
Calcular + Speech Eng	134	3	Mechanics I, StaticsM.E.	211	3		
		4	Mechanics II, DynamicsM.E.	212	3		
General Physics	201	5	General PhysicsPhys		5		
Physical Education Phys	103	1	Physical Education P.É.	104	1		
		_			-		
		10			10		

<sup>&</sup>lt;sup>1</sup> For freshman year see page 67.

## LABORATORY AND MEDICAL TECHNOLOGY

The following requirements for laboratory technicians or medical technologists are those set forth by the Registry of Medical Technologists of the American Society of Clinical Pathologists. Students who complete this terminal curriculum are eligible to apply for registration.

## REQUIREMENTS

## Biology:

Twelve semester hours, of which ten hours must be in zoology. Additional courses which may be taken to fulfill this requirement are histology, embryology, comparative anatomy, physiology, bacteriology, and hygiene.

Twelve hours of general inorganic chemistry, including laboratory work. Four hours of quantitative analysis, including laboratory work.

#### Electives:

Sufficient to give a minimum of sixty semester hours of college credit. The following courses are recommended, but not required: physics, organic chemistry, bacteriology, histology, embryology, physiology, and comparative anatomy.

#### FRESHMAN YEAR

First Semes	ter	Second Semester			
Title	Number	Cr.	Title	Number	Cr.
General Zoology General Inorganic Chem Composition College Algebra Phys. Ed. and Hygiene	Chem 101 Eng 101 Math 107	5 4 3 3 1 ———————————————————————————————	General Zoology	nem 102 ng 102	6 3

#### SOPHOMORE YEAR

Third Semester	Fourth Semester					
Title Nun	nber	Cr.	Title	Numb		
Bacteriology Bio Physiology Bio Inorganic Quantitative Anal. Chen Physical Education P.E. Elective	251 121	4	Bacteriology Physiology Organic Chem. Physical Education Elective	.Bio 2 .Chem 2 .P.E. 1	130	4

### MUSIC

A two-year course in music is offered for those who wish to extend their musical training without devoting four years to a college program. Ordinarily such a restricted course should be followed by more advanced study and inestablish a sound foundation in the fundamentals of music.

## FRESHMAN YEAR

Composition. Foreign Language Music, Applied. Music, Theory Elective	Number	Cr. 3 3 1 5 3 1	Second Semester   Title   Number	Gr. 3 3 1 3 5 1
		16		16

## SOPHOMORE YEAR

P.E. 103 1 Music, History. Mus 104 Physical Education P.E. 104	Foreign Language <sup>1</sup> Hist. of W. Civilization Music, Applied Music, Theory Music, History Music, History Physical Education  Number  Gr. Title  Foreign Language <sup>1</sup> Number  Foreign Language <sup>1</sup> Number  Foreign Language <sup>1</sup> Number  Hist. of W. Civilization Music, Applied Music, Applied Music, Applied Music, Theory Physical Education Mus 109 Music, History Physical Education  Mus 104  Physical Education  P.E. 103  History Mus 104  Physical Education  Mus 104  Physical Education  P.E. 103
--	--

The level of the course taken by the student will depend upon his achievement.

### PRE-DENTAL

## (Two years)

The following pre-dental curricula are recommended as fulfilling the requirements established by the majority of colleges of dentistry. The three-year curriculum is less condensed and permits a more complete preparation in chemistry and biology.

## FRESHMAN YEAR

First Semester			Second Semester			
Title Num	iber	Cr.	Title Num	ber	Cr.	
General ZoologyBio General Inorganic ChemChem	101 101	5 4	General ZoologyBio Inorganic Chem. and	102	5	
College AlgebraMath		3	Qualitative AnalysisChem	102	6	
CompositionEng		3	CompositionEng		3	
Phys. Ed. and Hygiene P.E.	101	1	Trigonometry Math Phys. Ed. and Hygiene P.E.		3	
		-			-	
		16			18	

### SOPHOMORE YEAR

Third Semester			Fourth Semester		
Title Nun	nber	Cr.	Title Nur.	mber	Cr.
Histology Bio	241	3	HistologyBio	242	3
Inorganic Quantitative Anal Chem	121	4	Organic ChemistryChen	n 230	4
General PhysicsPhys	201	5	General PhysicsPhys	202	5
Alternates:			Alternates:		
World Literature Eng	151	4	World Literature Eng	152	4
Hist. of West. CivHist	101	3	Hist. of West. Civ	102	3
Physical Education P.E.	103	1	Physical EducationP.E.	104	1
		-			-
	16	5-17		1/	5-17

## PRE-DENTAL

## (Three years)

## FRESHMAN YEAR

	First Semester			Second Semester	
College Algeb Composition.	Num.  ogy	101 101 107	5 4 3 3	Title Number  General Zoology Bio 102  Inorganic Chem. and Qualitative Analysis Chem 102  Composition Eng 102  Trigonometry Math 109  Phys. Ed. and Hygiene P.E. 102	6 3
			16		18

## SOPHOMORE YEAR

3	OPF	MOP	ORE YEAR	
Third Semester			Fourth Semester	
Title Num.  Comp. Anatomy of the Vert. Bio Inorg. Quantitative Anal. Chem World Literature Eng Basic Art. Art Physical Education P.E.	201 121 151 101	5 4 4 3	Title Number ( Basic Art. Art 102 Embryology Bio 202 Organic Chemistry Chem 230 World Literature Eng 152 Physical Education P.E. 104	Cr. 3 4 4 4 1
		17	The second secon	16

### JUNIOR YEAR

	. ,	32420	K A LIME		
Fifth Semester			Sixth Sem	ester	
	nber		Title	Number	Cr.
Histology Bio	241	3	Histology	Bio 242	3
Bacteriology Bio	211	5	Dacteriology	Bio 212	5
Organic Chemistry Chem	231	5	Chemistry Elective	Chem	3
General PhysicsPhys	201	5	General Physics	Phys 202	5
		10			-
		18			16

#### SECRETARIAL COURSE

The two-year intensive secretarial program has a threefold purpose: to provide a general education; to develop an understanding of business activities; and to give specialized training for secretarial work.

The required courses in this curriculum may be counted toward the degree Bachelor of Science in Commerce and Finance or toward that of Bachelor of Science in Business Education when students desire to continue their education after completing their secretarial training.

#### FRESHMAN YEAR

First Semester			Second Semester		
Title Nus	nber	Cr.	Title Nun	nber	Cr.
Survey of Business	101 101 101	3 3 4 1	Biological ScienceBio CompositionEng Fundamentals of SpeechEng Hist. of W. CivilizationHist Shorthand and TypewritingS.S.	102 131 102 102	3 2 3 4
		14	Phys. Ed. and HygieneP.E.	102	1 16

#### SOPHOMORE YEAR

Third Semester				Fourth Semester				
	Title	umber	Cr.	Title Nun	zber	Cr.		
	Business Mathematics B.A.	1. 107	3	Intro. to Economics Econ	100	3		
	Business Law	A. 231	3	Advanced StenographyS.S.	110	4		
	Intermediate Stenography S.S.	. 109	4	Secretarial AccountingS.S.	120	3		
	Office Pro. and Machines S.S.	. 205	4	Office ManagementB.A.	238	3		
	Elective		3	Elective		3		
	Physical EducationP.1	E. 103	1	Physical EducationP.E.	104	1		
			10			-		

Students who have had shorthand and typewriting in high school may substitute electives for one or more of the courses in the stenographic skills, provided they demonstrate adequate skill. Placement examinations will be given the first week of the term to determine their levels of attainment.

## MEDICAL STENOGRAPHY

Medical secretaries require special training so that they may have an intelligent understanding of their part in the work of a medical office. To provide the essential background, the secretarial courses are supplemented by biology and laboratory courses in chemistry and physiology. The courses in secretarial accounting and office procedures are adapted to the needs of the students preparing for work in the offices of physicians.

#### FRESHMAN YEAR

First Semester			Second Semester	
Title N  Biological Science Bio Composition En  Business Mathematics B.A Shorthand and Typewriting S.S Phys. Ed. and Hygiene P.E	101 . 107	3 3 4	Title Number  General Inorganic Chem Chem I  Composition Eng 1  Shorthand and Typewriting. S.S. 1  Secretarial Accounting. S.S. 1  Phys. Ed. and Hygiene P.E. 1	01 4 02 3 02 4

## SOPHOMORE YEAR

		A O L.L	OKE I LIK		
Third Semester			Fourth Semester		
Title Physiology. Hist. of W. Civilization. Advanced Stenography. Office Pro. and Machines. Elective. Physical Education.	Hist 101 S.S. 109 S.S. 205	4 3 4 3 3	791. 7	102 3 200 3 238 3	

A candidate for a degree with a major in medical stenography should consult with his adviser before planning his program of study. A student who completes the two-year program and then decides to continue work toward a degree should carefully plan the last two years with his adviser.

Description of Courses

#### ACCOUNTING

Professor Rosenberg, chairman; Instructors Dembert, Richards, Slamon, Werner.

ACCT. 101. ELEMENTARY ACCOUNTING—Three hours THE STAFF
Fundamental theory of debits and credits; problems of classification
and interpretation of financial data; technique of recording; preparation of financial statements. Class, two hours a week; laboratory, four
hours a week.

Acct. 102. Principles of Accounting—Three hours The Staff A continuation of Accounting 101. Principles of partnership and corporation accounting; introduction to departmental, manufacturing, and branch accounting; financial analyses of statements. Class, two hours a week; laboratory, four hours a week.

Prerequisite: Accounting 101.

ACCT. 111. INTERMEDIATE ACCOUNTING—Three hours THE STAFF Intermediate problems involving interpretation and detailed analyses of balance-sheet accounts; analytical processes and miscellaneous statements. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 102.

ACCT. 112. ADVANCED ACCOUNTING—Three hours

The STAFF

An advanced study of partnerships and corporations; consignments and branch accounting; consolidated statements; estate and municipal accounting. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 111.

Acct. 201. Cost Accounting—Three hours

The Staff
Accounting for material, labor, and overhead expenses; methods of apportionment of manufacturing costs; detailed study of job-cost and process-cost methods. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 112 or approval of instructor.

ACCT. 202. ADVANCED COST ACCOUNTING—Three hours THE STAFF Establishing the practical use of cost systems through analytical and comparative statements; detailed study of various cost systems; standard costs; interpretation of data. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 201 or approval of instructor.

Acct. 220. Accounting Systems—Three hours Mr. William A study of the accounting methods of banks utilities building

A study of the accounting methods of banks, utilities, building and loan associations, and other specialized businesses, with special attention given to internal control, ease of recording, and forms.

Prerequisite: Accounting 112, 201.

ACCT. 221. TAX ACCOUNTING—Three hours

Mr. Slamon, Mr. Werner

A study of federal taxes including income, estate, gift, corporate and miscellaneous; correct use of various forms; application of rates. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 112, 202, or approval of instructor.

ACCT. 231. AUDITING PRINCIPLES—Three hours

MR. SLAMON, MR. WERNER

Methods used in verifying, analyzing, and interpreting the records and balance sheet and income accounts; study of the procedures applicable under various circumstances. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 202.

ACCT. 232. AUDITING PRACTICE—Three hours

Mr. SLAMON, Mr. WERNER

Advanced application of auditing principles to actual practice; problems of classification and interpretation of accounts; study of methods of internal control; preparation of reports to clients. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Accounting 231.

ACCT. 242. C.P.A. PROBLEMS—Three hours

MR. WERNER

Review of all phases of accounting through a study of advanced accounting problems as taken from various C. P. A. examinations.

Prerequisite: Accounting 112, 201, 231.

#### ART

Assistant Professor O'Toole, chairman; Instructor Lorusso.

ART 101-102. BASIC ART—Three hours each semester MR. O'TOOLE

Fundamental training in the handling of tools, the acquisition of the skills and knowledge used in the presentation of the graphic image. Principles of drawing, design, composition, color; uses of line and tone, color line and color tone. Studies in line, texture, tone, and color; space division, form, light and shade, light-dark. Class, two hours; studio, two hours.

ART 103-104. APPLIED ART—Three hours each semeseter

MR. O'TOOLE

Review of various applications of art. Realism, abstraction, fantasy; the study of art and art philosophies and their present use in fine art, advertising design and illustration; exercises will be given in the various black and white mediums: pen, pencil, charcoal, crayon, et cetera. Color mediums: pastel, water colors, colored inks, colored pencils, et cetera. Class, two hours; studio, two hours.

Prerequisite: Art 101 and 102 or equivalent.

ART 105-106. INTRODUCTION TO LETTERING

Three hours each semester

Mr. Lorusso

Analysis of basic letter forms. The origin and development of the alphabet. Study of the first three one-stroke alphabets and Gothic. The basic strokes, upper and lower cases. Grouping letters into words. Simple spacing and layout.

Second group of alphabets to include: thick and thin, the scripts, one-stroke Roman and italics. Combining all the one-stroke alphabets in varying weights and sizes.

ART 107-108. LETTERING AND LAYOUT—Three hours each semester Mr. Lorusso

The designed or built-up letter. Basic strokes, upper and lower cases of Gothic, Roman, italic, and script letters. Combining designed lettering with one-stroke lettering in layout. The use of color in lettering and backgrounds.

Prerequisite: Art 105-106.

ART 109. TYPOGRAPHY—Three hours Mr. O'Toole

Complete study of type faces and their design and differences. Designing with type, type ornaments and rules. Relationships of form, structure, size, direction, texture, color and weight. The use of type in advertising, book-jackets, brochures.

Prerequisite: Art 105-106, 107-108, or equivalent, and permission of instructor.

ART 110. HAND LETTERING FOR REPRODUCTION—Three hours

Brush lettering, pen lettering, combining hand lettering with type. The uses of photostats. Use of ruling pen, bow compass, and other mechanical aids. The hand-lettered book-jacket and posters. The paste-up and use of reproduction proofs for line cuts.

Prerequisite: Art 105-106, 107-108, or equivalent, and permission of instructor.

ART 201-202. ILLUSTRATION—Three hours each semester

Mr. O'Toole

Every possible use of illustration will be explored in this course from spot drawings to the illustration of two pages as a unit. Line illustration, line mediums; half-tone illustrations, half-tone mediums; analysis of various types of magazine illustrations; design of two pages facing (double spread). Class, two hours; studio, two hours.

Prerequisite: permission of the instructor.

ART 203-204. ADVANCED ILLUSTRATION—Three hours each semester

Editorial illustration, caricature, decorative drawing, humorous drawing, stylized drawing. The book and book-jacket; poster design. Assignments will be given in each type of illustration and will be prepared from rough to finish by the student. Class, two hours; studio, two hours.

Prerequisite: permission of the instructor.

ART 211-212. ADVERTISING DESIGN—Three hours each semester

The object of this course is to acquaint the student with the methods and processes of designing for reproduction. Various methods of reproduction; line processes, half-tone processes, color separation. Studies in mediums used for line reproduction; studies in mediums used for halftone reproduction; mechanical aids; typography, a complete study of type, type styles and type combinations. Class, two hours; studio, two

Prerequisite: permission of the instructor.

ART 213-214. ADVANCED ADVERTISING DESIGN—Three hours each semester

Advertising and editorial layout; modern layout; the use of photomontage; photographs and textures in advertising; color in backgrounds, type and illustrations. The advanced student will be required to do work that will meet the professional standards required by advertising agencies. Class, two hours; studio, two hours.

Prerequisite: Art 101-102, 103-104, or equivalent.

ART 215-216. FINE ART-Three hours each semester MR. O'Toole

Intensified training in drawing, design and composition. Study of still life, study of the light-dark principle, light and shade; transparencies and opaques, balance, dominance, follow through, contrast, texture study, line, tone and color. Class, two hours; studio, two hours.

Prerequisite: Art 101-102, 103-104, or equivalent.

ART 217-218. ADVANCED FINE ART—Three hours each semester

The complete design, picture structure. The various kinds and uses of perspective. Further study of the painting, design and art movements of the past and present. Advanced studies in various painting mediums. The creation of space, study of two dimensional and three dimensional design. Study of tensions of lines, forms, lights and darks, colors and textures. Class, two hours; studio, two hours.

Prerequisite: Art 101-102, 103-104, or equivalent.

#### **BIOLOGY**

Professor Reif, chairman; Instructor Namisniak; Assistant Evans.

BIO. 100. BIOLOGICAL SCIENCE—Three hours The Staff

Biological Science is a survey course intended for students who take no other courses in biology. It presents the essential general information about plants and animals, explains fundamental laws governing the biological world, and emphasizes their relationship to man. Class, three hours a week.

BIO. 101-102. GENERAL ZOOLOGY—Five hours each semester

IR. REIF

General Zoology surveys the entire animal kingdom, outlines the history of biology, explains the organization of living matter, teaches the structure of representative animals, the methods of their classification, and the basic principles of genetics, embryology, evolution, and ecology. Class, three hours a week; laboratory, four hours a week.

BIO. 113. BOTANICAL TAXONOMY—Five hours MR. REIF

Botanical Taxonomy presents a survey of the great divisions of the plant kingdom with special reference to the seed plants. Class, two hours a week; field work, six hours a week.

BIO. 201. COMPARATIVE ANATOMY OF THE VERTEBRATES—Five hours

Comparative Anatomy includes a study of the general morphological characteristics of selected vertebrates emphasizing the structural and embryological relationships of vertebrates generally. The taxonomy of the Phylum Chordata is stressed. Class, two hours a week; laboratory, six hours a week.

Prerequisite: Biology 102.

BIO. 202. EMBRYOLOGY—Four hours

MR. REIF

Embryology is the study of the early development of animals. Growth is traced from the egg to later stages in the frog, chick, and man. Lab-

oratory work includes the technique of making slides. Class, two hours a week; laboratory, four hours a week.

Prerequisite: Biology 201, or permission of instructor.

Bio. 211-212. Bacteriology—Five hours each semester

MRS. NAMISNIAK

Bacteriology 211 covers generally the morphology and identification of bacteria. Laboratory work includes microscopy, techniques of making media, methods of sterilization, and the culturing of bacteria.

Bacteriology 212 emphasizes medical and industrial processes such as biological prophylaxis and allergy, diseases and disease transmission, viruses, rickettsias, and pathogenic protozoa. Class, two hours a week; laboratory, six hours a week.

Prerequisite: Biology 102.

BIO. 223. ENTOMOLOGY—Five hours

MR REIF

Entomology is the study of insects through the collection and identification of specimens. Life histories of insects are studied as well as their economic relationships, and their significance in industry and medicine. Class, two hours a week; laboratory and field work, six hours a week.

Prerequisite: Biology 101, or permission of instructor.

BIO. 241 AND 242. HISTOLOGY AND ORGANOLOGY—Three hours each semester

MR. REIF

Histology is the study of normal tissues and the arrangement of tissues to form organs and organ systems. Credit is given only upon completion of both semesters work which must be taken in sequence. Class, two hours a week; laboratory, two hours a week.

Prerequisite: through Biology 202, or permission of instructor.

Bio. 251-252. Physiology—Four hours each semester

MRS. NAMISNIAK

Physiology is a study of the functioning of the various cells, tissues, and organs of the animal body. Laboratory work includes experiments involving living forms. Class, two hours a week; laboratory, four hours a week.

Prerequisite: through Biology 242, Chemistry 230, and Physics 202, or permission of instructor.

BIO. 291-292. SEMINAR IN BIOLOGY—One credit each semester

MR. REIF

This seminar is designed as a correlating study of the field of biology for senior students. Each student prepares a paper on a biological topic for presentation to and discussion by the group. Class, one hour a week.

Prerequisite: permission of instructor.

#### BUSINESS ADMINISTRATION

Professor Rosenberg, chairman; Assistant Professor Bedillion; Instructors Brennan, Bunn, C. Casper, R. Casper, Connor, Elliot, Farrar, Jones, Kreder, McDermot, Slamon, Werner, Young.

B.A. 100. Survey of Business<sup>1</sup>—Three hours The Staff

This course is designed as an introduction to the field of business and must be taken by commerce and finance students during the first semester of the freshman year. Emphasis is placed upon examining the various vocational opportunities in modern business and upon studying the necessary educational and other requisites for such jobs. Attempts are made to plan in advance with each student a tentative course program. Each student is required to make an individual study of some vocational objective.

B.A. 107. Business Mathematics—Three hours The Staff

Review of fundamental arithmetic processes; relation of fractions, decimals, and per cent; simple interest; mark-ups, profits and losses; inventory and turnover; depreciation and distribution of overhead; payroll problems including social security and other deductions; sales and property taxes; credit and credit instruments involving interest; bank discounts; compound interest and present value; insurance and annuities; stocks and bonds; graphs and their use in business.

B.A. 114. SALESMANSHIP—Three hours

Mr. Young

The art of selling; the motive behind all buying; creation of interest and desire; presentation of services; meeting objections; types of customers.

Prerequisite: approval of instructor.

B.A. 209. Business Correspondence and Reports—Three hours

Miss Bedillion

Fundamental principles of business writing with emphasis on letters and reports.

Prerequisite: English 102.

B.A. 216. Advertising—Three hours Mr. Bunn, Mr. Jones

A survey of the different departments of advertising work, including copy, art, display, engraving, trade-marks, and media; advertising as a social force.

B.A. 217. TRANSPORTATION—Three hours

MR. ROSENBERG

Problems and policies of railroads, buses, inland waterways, and air and ocean transportation; economic importance of transportation; significance of transportation to society.

Prerequisite: Economics 102.

B.A. 218. CREDITS AND COLLECTIONS—Three hours Mr. ROSENBERG

The fundamentals of credit; investigation, analysis of risks; collection plans and policies. Special attention given to the organization of credit and collection offices.

Prerequisite: Economics 102, Accounting 102.

B.A. 220. REAL ESTATE—Three hours

MR. R. CASPER

The fundamentals of the real estate business, including consideration of titles, mortgages, leases, advertising, sale, purchase, development, and management of real property.

Prerequisite: Economics 102.

B.A. 222. MARKETING—Three hours

MR. ELLIOT

Evolution of the marketing system and functions of marketing, trade structure and organization, and the nature of competition. Principles of distribution, assembling, grading, transportation, finance, and storage. Each student is required to make a special study of the marketing of a selected commodity.

Prerequisite: Economics 102.

B.A. 225. Corporation Finance—Three hours M

A study of the economic principles underlying the capital structure of modern business enterprise. Consideration given to alternate types of business organization, corporate securities, and financial policies involved in promotion, disposition of net earnings, working capital and short-term financing, mergers, expansion, financial readjustments, and reorganization.

Prerequisite: Economics 102.

B.A. 226. INVESTMENTS—Three hours

MR. SLAMON

Consideration of leading types of investments, tests, and investment programs; financial reports of leading companies, forecasting methods and agencies, stock exchanges, brokerage houses, methods of buying and selling securities, fraudulent promotions and their detection. Laboratory work and case studies.

Prerequisite: Business Administration 225.

B.A. 231. Business Law—Contracts—Three hours

MR. C. CASPER

The foundation for all subjects in the field of business law. Examination of the essential elements of a valid contract and the application to

<sup>&</sup>lt;sup>1</sup> Credit for this course will be granted only to students who take it prior to taking Economics 101 and 102.

typical business transactions. These essential elements are: the agreement; the subject matter (what the contract is about); the consideration (that value which is given by each party for his interest in the subject matter); the form (written or oral); the competency of parties; and the genuineness of assent (legal or illegal inducement to agree).

Prerequisite: Economics 102 or approval of instructor.

B.A. 232. Business Law—Sales, Agency, Bailment—Three hours
Mr. C. Casper

A general study of the Law of Sales, the Law of Agency, and the Law of Bailment. Legal problems arising out of the sale of merchandise by manufacturers, distributors and dealers; out of the financing, processing, shipment, and warehousing of merchandise; and out of government regulations thereof.

Prerequisite: Business Administration 231.

B.A. 233. Business Law—Partnerships and Corporations

Three hours Mr. Werner, Mr. Kreder

Principles of law governing partnerships and corporations, in their formation, operation, internal relationships, and dissolution, with particular reference to their dependency upon the law of agency. Legal aspects of the insurance contract with respect to the insured, insurer, and beneficiary, and the interest necessary to create an insurance con-

Prerequisite: Business Administration 231, 232, Accounting 102.

B.A. 234. Business Law—Property—Three hours

MR. WERNER, MR. KREDER

Law of property; the mortgagor-mortgagee relationships; the landlord-tenant relationship; business crimes (crimes against the person, property, business transactions); bankruptcy; and pacts (security of person, property, business relations, and business transactions).

Prerequisite: Business Administration 231, 232, Accounting 102.

B.A. 235. INDUSTRIAL MANAGEMENT—Three hours Mr. Young

A study of the organization and management of industry, with emphasis on the principles developed; problems of the interrelationship of the functions operating in the fields of management, such as production control, personnel, financing, and the forecasting of business conditions, particularly as they relate to industry.

Prerequisite: Business Administration 225.

B.A. 236. Personnel Management—Three hours Mr. Young

Principles and modern practices of personnel management; instruments of control; the training and education of the worker; incentives used and special problems encountered.

Prerequisite: Economics 223 or approval of instructor.

B.A. 237. PRODUCTION MANAGEMENT—Three hours Mr. Young

A study of the production problems that confront executives; developing operational plans; handling production problems; appraisal of relative risks

Prerequisite: Economics 223 or approval of instructor.

B.A. 238. OFFICE MANAGEMENT—Three hours Mr. Young

The organization and management of the office with emphasis on the administration and supervision of office routines; problems of office records and filing; selection of stationery and other office supplies; design and effective use of forms; job analysis, specification, evaluation, and classification; selection and use of machines and specialized equipment; office arrangement and working conditions; employment, training, and compensation of office workers; the measurement of work and setting of standards.

Prerequisite: approval of instructor.

B.A. 239. SALES MANAGEMENT—Three hours Mr. Young

The relation of the sales department to all other departments; types of sales organizations; selection, training, compensation, and management of the sales force; sales research and market analysis; determination of price and brand policies; preparation of sales budgets; costs of distribution.

Prerequisite: Business Administration 114 or equivalent.

B.A. 240. Property Insurance—Three hours Mr. Young

This course is a study of the fundamentals of fire, casualty, and marine insurance.

Prerequisite: Business Administration 232 or approval of instructor.

B.A. 241. LIFE INSURANCE—Three hours Mr. Connor

This course is a study of the principles, practices, and uses of life insurance from the overall viewpoint of the product, cost, market, and industry.

Prerequisite: approval of instructor.

#### CHEMISTRY

Professor Bastress, chairman; Assistant Professor Bone; Instructor Salley.

CHEM. 101. GENERAL INORGANIC CHEMISTRY—Four hours

MR. BASTRESS, MISS BONE, MR. SALLEY

An introduction to the fundamental laws and theories of inorganic chemistry. The chemistry of selected non-metallic elements. Class, three hours a week; laboratory, three hours a week. Breakage deposit required.

CHEM. 102. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS

The reactions of the common metallic elements, the theory and practice of elementary qualitative analysis. Class, four hours a week; laboratory, six hours a week. Breakage deposit required.

Prerequisite: Chemistry 101.

CHEM. 104. GENERAL INORGANIC CHEMISTRY—Four hours Miss Bone

A continuation of Chemistry 101. The chemistry of the metals. Laboratory work includes some qualitative analysis. Will not be accepted as a prerequisite for further chemistry courses. Class, three hours a week; laboratory, three hours a week. Breakage deposit required.

Prerequisite: Chemistry 101.

CHEM. 121. INORGANIC QUANTITATIVE ANALYSIS—Four hours

Theory and practice of typical analyses. Class, two hours a week; laboratory, six hours a week. Breakage deposit required.

Prerequisite: Chemistry 102.

CHEM. 122. INORGANIC QUANTITATIVE ANALYSIS—Five hours MR. SALLEY

A continuation of Chemistry 121. Class, two hours a week; laboratory, nine hours a week. Breakage deposit required.

Prerequisite: Chemistry 121.

MR. BASTRESS CHEM. 230. ORGANIC CHEMISTRY—Four hours An introduction to the chemistry of carbon compounds. The preparation and properties of aliphatic compounds. Class, three hours a week; laboratory, three hours a week. Breakage deposit required.

Prerequisite: Chemistry 121.

MR. BASTRESS CHEM. 231. ORGANIC CHEMISTRY—Five hours A continuation of Chemistry 230, with special attention to cyclic

compounds. Class, three hours a week; laboratory, six hours a week. Breakage deposit required.

Prerequisite: Chemistry 230.

CHEM. 233. QUALITATIVE ORGANIC ANALYSIS—Three hours

A course designed to give practice in the systematic identification of pure organic compounds and mixtures. Class, one hour a week; laboratory, six hours a week. Breakage deposit required.

Prerequisite: Chemistry 231.

CHEM. 234. TOPICS IN ORGANIC CHEMISTRY—Three hours

MR. BASTRESS

Special topics in organic chemistry, including theories of organic reactions. Class, three hours.

Prerequisite: Chemistry 231.

CHEM. 241-242. PHYSICAL CHEMISTRY—Four hours each semester

An introduction to the principles of physical chemistry and the elements of thermodynamics. Class, three hours a week; laboratory, three hours a week. Breakage deposit required.

Prerequisite: Chemistry 121, Mathematics 126, Physics 202.

CHEM. 243. TOPICS IN PHYSICAL CHEMISTRY—Three hours

MR. SALLEY

A study of chemical equilibrium, using the methods of modern thermodynamics. Class, three hours a week. Prerequisite: Chemistry 242.

CHEM. 244. TOPICS IN INORGANIC CHEMISTRY—Three hours

MR. SALLEY

A course designed to introduce the student to the modern theories of inorganic chemistry. Class, three hours.

Prerequisite: Chemistry 121.

CHEM. 251-252. BIOLOGICAL CHEMISTRY—Three hours each semester

The application of chemical and physiochemical principles and methods to chemical constitution, reaction, and products of living matter. Class, two hours a week; laboratory, three hours a week. Breakage de-Posit required.

Prerequisite: Chemistry 121 and 230.

CHEM. 261. HISTORY OF CHEMISTRY—One hour MR. BASTRESS The development of the science in terms of the personalities responsible for the development.

Prerequisite: completion of twenty chemistry credits.

CHEM. 262. CHEMICAL LITERATURE—One hour MR. BASTRESS An orientation course in foreign and domestic chemical literature. Prerequisite: completion of twenty chemistry credits.

#### **ECONOMICS**

Professor Rosenberg, chairman; Instructors Elliot, Farrar, Richards, Young.

Students who major in economics in the Bachelor of Arts course are required to complete twenty-four hours of work in economics beyond Economics 101 and 102. The twenty-four hours in economics which the major must carry should include Economics 202, 232, and 241.

Ec. 100. Introduction to Economics—Three hours The Staff An introductory course in principles of economics designed for students who plan to take only one semester of work in this field. Theoretical aspects of capital value, national income, money and banking, and international trade are included.

Ec. 101. Principles of Economics—Three hours THE STAFF An introductory course which presents basic economic problems and shows how these problems are solved in a free enterprise economy; the effects of the increasing importance of the economic role of government are pointed out. The course provides orientation in the broad field of economics and makes use of the analytical trends by means of which the student can understand the economic problems of his environment.

Ec. 102. Principles of Economics—Three hours THE STAFF This course is a logical sequence to Economics 101. It is based upon a broad macro-economic foundation concentrated on such units as the firm, the industry, and the consumer.

Prerequisite: Economics 101.

Ec. 201. Money and Banking—Three hours MR. ROSENBERG A study of the organization of financial institutions, their operation and influence upon the economy. Consideration is given to commercial and savings banks, investment institutions, and the Federal Reserve System.

Prerequisite: Economics 102.

Ec. 202. Theory of Money—Three hours MR. ROSENBERG

An analysis of the theory of money and credit in relation to contemporary economics; currency and credit problems; governmental regulations; control of foreign exchange, and central banking.

Prerequisite: Economics 201.

MR. ROSENBERG Ec. 204. Consumer Credit—Two hours

This course includes consumer credit in its various aspects. It includes retail credit, sales finance, credit unions, and credit bureau activities.

Prerequisite: approval of instructor.

Ec. 212. Government and Business—Three hours Mr. Farrar

A study of the relationship of government to economic enterprises with special attention to conditions in the United States; the regulatory activities of government agencies; administrative methods, objectives and results of governmental control. Reference is made to monopoly and quasi-monopoly situations, public utilities, trust, transportation, extrac-Prerequisite: Political Science 101, Economics 102.

Ec. 223. Labor Problems—Three hours

An introduction to American labor problems; analyses of major issues in the field of labor. This course deals with employment, wages, hours, history, growth and present position of organized labor, union policies, governmental participation in labor relations, collective bargaining, investigation and arbitration in labor disputes, and social security.

Ec. 225. International Trade—Three hours

Theory and practice of international trade with special reference to contemporary problems and policies. The topics covered include tariffs, quotas, foreign exchange, equilibrium in international payments. A study will be made of geographic, economic, social, and political influences on international trade. Review of current policies and developments in the United States.

Prerequisite: Economics 102.

Ec. 226. Economic Geography—Three hours

A study of the relation of geography to the economic activity of man. This course describes and analyzes the world distribution of resources, industries, and population. It is designed as an introductory course in Prerequisite: Economics 102.

Ec. 227. Economic Geography—North America—Three hours

A study of the economic regions of the North American continent, with special emphasis on the role of the United States in the western Prerequisite: Economics 102.

Ec. 229. Comparative Economic Systems—Three hours Mr. Farrar The institutions of planned economy of the U.S.S.R. and those of the contemporary experiment in evolutionary socialism in Great Britain are studied. Constant objective comparisons are made with institutions which are characteristic of a capitalistic economy. Prerequisite: approval of instructor.

Ec. 230. Business Cycles—Three hours

MR. FARRAR

A historical analysis of major business cycles. Contemporary theories and a critical examination of public policy toward business cycles.

Prerequisite: approval of instructor.

Ec. 231. Applied General Statistics—Three hours

A course in statistical methods and their application to business. A collection and interpretation of statistical data, frequency distribution and measures of central tendency, fitting the normal curve, Chi-square test; test of significance for small samples, analysis of variance. 3 hours lecture; 2 hours laboratory.

Prerequisite: approval of instructor.

Ec. 232. Economic Statistics—Three hours THE STAFF

A continuation of Economics 231. This course will include timeseries analysis, construction of index numbers, methods of correlation analysis, multiple and partial correlation, and test of significance for samples. Lecture, three hours; laboratory, two hours.

Prerequisite: Economics 231.

Ec. 236. Public Finance—Three hours MR. ROSENBERG

Fundamental principles of public finance; government expenditures; revenue; financial policies and administration; taxation; principles of shifting and incidence of taxation; public debts and the budget; fiscal problems of federal, state, and local government; the relation of government finance to the economy.

Prerequisite: Economics 102, Political Science 101.

Ec. 238. Economic History—Three hours Mr. Elliot, Mr. Farrar An advanced course which deals with the origin, growth, and significance of economic institutions, with special emphasis upon those of

Europe and the United States.

Prerequisite: Economics 102.

MR. FARRAR Ec. 241. Economic Analysis—Three hours

This course is designed to give coverage to the theory of value and distribution. The determinants of consumer demand and the principles governing costs and outputs of producers are analyzed with some stress on recent theoretical investigations. The method is abstract and deductive.

Prerequisite: Economics 102.

MR. ELLIOT Ec. 245. Consumer Economics—Three hours

The place of the consumer in the economic system. Theories of consumption; problems of the individual consumer as affected by income,

consumer habits, standard of living, planning and budgeting; a study of the trends of consumption, income disposition, marketing processes of consumption of goods. Each student is required to make a study of the consumption of a selected commodity.

Prerequisite: Economics 102.

Ec. 246. Economic Investigation—Three hours

MR. ELLIOT, MR. FARRAR

Each student conducts an investigation in the field of his major interest and constructs a final report. Class instruction will consist of: (1) the principles of scholarly criticism, (2) compilation and use of bibliographies, and (3) details of good form as to content, table, body, footnotes, and bibliography.

Prerequisite: approval of instructor.

## EDUCATION

Professor Smith, chairman; Assistant Professor Fisher.

ED. 101. INTRODUCTION TO EDUCATION—Three hours

A broad, general introduction to the field of education. A historical and philosophical background of American public education. Study of the educational structure; the teacher, his preparation and qualifications; the pupils, their individual differences and provisions therefor; the materials of instruction; the school plant; the financing of education; the profession of teaching; the participation of the public; contemporary

ED. 201. EDUCATIONAL PSYCHOLOGY—Three hours

Practical application of basic psychological principles; study of human growth and development; the nature and measurement of intelligence; mental hygiene of pupil and teacher; the nature and general principles of learning; the measurement and facilitation of learning; guidance of the individual; effective methods of study; special aspects of learning; the psychology of teaching methods; and simple statistical concepts.

Prerequisite: Psychology 100 and Education 101.

Ed. 202. Educational Measurements for the Secondary School ED. 203. EDUCATIONAL MEASUREMENTS FOR THE ELEMENTARY SCHOOL

A consideration of the characteristics, uses, and interpretations of intelligence and subject-matter tests available for school use; study of methods of treating scores; principles and purposes of measurement; practice in the construction of objective tests; supervised administration, scoring, and interpretation of tests; some aspects of evaluation.

Prerequisite: Education 101, 201.

ED. 204. PRINCIPLES AND METHODS OF SECONDARY EDUCATION—

The historical development of the secondary school; a philosophical background from which are drawn basic principles; other factors in the development of the secondary school; promising practices in the secondary school; methodology in different subjects; motivation; the secondary pupil; guidance and control; records and reports—a survey of secondary school teaching.

Prerequisite: Education 101, 201.

Ed. 205. Secondary Curriculum—Three hours

Developments of recent years in the secondary school curriculum; consideration of college preparation, preparation for life, vocational needs, etc.; planning of classroom activities; extracurricular activities; treatment of individual differences; organization of curriculum units; study methods; tests and marking; a survey of secondary school curriculum and its continuing development.

Prerequisite: Education 101, 201.

ED. 207. STUDENT TEACHING IN THE SECONDARY SCHOOL—Eight hours ED. 208. STUDENT TEACHING IN THE ELEMENTARY SCHOOL—Eight MR. SMITH, MR. FISHER

Students are assigned to the guidance of competent, experienced teachers. They observe several teachers. Gradually they assume classroom responsibility and teach under supervision. They plan lesson units and complete curriculum units. Conferences with the teachers-in-charge and professors-in-charge aid in discussion of principles and problems.

Prerequisite: approval of Department Chairman.

ED. 211. EXTRACURRICULAR ACTIVITIES—Three hours Mr. FISHER

Consideration of the place of extracurricular activities in the education of the child; the organization of extracurricular activities; the tendency to bring them into the school curriculum; their place in the guidance program.

Prerequisite: Education 101, 201.

MR. FISHER ED. 212. VISUAL EDUCATION—Three hours

A study of the materials and techniques of visual education; prin-

ciples and plans for the use of audio-visual or sensory aids; the incorporation of visual instruction in the work for the classroom.

Offered in 1952-53 and alternate years.

Prerequisite: Education 101, 201. ED. 214. GUIDANCE—Three hours

MR. FISHER

A general survey of the principles and problems of guidance, and an introduction to activities and techniques used in a guidance program in the public school. Required for the Pennsylvania guidance teachers' and counselors' certificates.

Prerequisite: Education 101, 201.

ED. 231. THE TEACHING OF READING—Three hours

Analysis of the reading task; consideration of the relationship of maturation to reading; problems and methods in developing reading readiness; methods and techniques of teaching reading; the place of experiences; development of reading interests; types of reading; evaluation of reading growth; remedial procedures in reading.

Prerequisite: Education 101, 201.

ED. 232. THE TEACHING OF ARITHMETIC—Three hours Mr. SMITH Study of the principles and practices of education in the field of elementary arithmetic; methods, aims, and objectives; methods and teaching techniques for developing units of work; attention given to methods of instruction in concepts of quantitative relationships.

Prerequisite: Education 101, 201.

ED. 234. THE TEACHING OF ENGLISH—Three hours MR. FISHER

Study of the principles and practices of education in the field of elementary English; methods, aims, and objectives; methods and techniques for developing units of work; attention given to handwriting, spelling, and the utilization of the library.

Prerequisite: Education 101, 201.

ED. 235. CHILDREN'S LITERATURE AND STORY TELLING Three hours

MR. FISHER

Designed to provide familiarity with classic and modern literature for children of elementary school age. Techniques and practices in story telling will be stressed, and particular emphasis will be placed on the use of dramatization and graphic materials.

Prerequisite: Education 101, 201.

Ed. 236. Teaching the Elementary Social Studies—Three hours

Study of social situations pertinent to elementary school children; relation of school and home activities to the community; the study of methods and techniques designed to stimulate interest and create understanding. Development of units in civics, history, and geography.

Prerequisite: Education 101, 201.

ED. 237. PRINCIPLES OF ELEMENTARY EDUCATION—Three hours

Mr. Smith

The historical development of the elementary school; a philosophical background from which are drawn basic principles of elementary education; other factors in the development of the elementary school; promising practices in the elementary school; methodology and guidance; characteristics of the elementary school child; discipline and control; mental and physical hygiene; records and reports; a survey of principles and techniques in the elementary school.

Prerequisite: Education 101, 201.

Ed. 238. The Curriculum of the Elementary School

Three hours Mr. Smith

The development of the elementary curriculum; its relation to the society that supports it; the emerging elementary curriculum; adjustment to individual needs; relation of objectives to children's needs; content and method; utilizing the arts, music, science, physical education, etc., in the elementary curriculum.

Prerequisite: Education 101, 201.

Ed. 239. TEACHING OF ELEMENTARY SCHOOL SCIENCE—Three hours

Mp. Smith

Basic elements of the sciences suitable for elementary school use; materials for demonstration; methods of presentation; consideration of the integration of science in the elementary curriculum; aims and objectives of science teaching; development of a spirit of inquiry.

ED. 241. ART IN THE ELEMENTARY SCHOOL—Three hours
MR. O'Toole

Study of the principles and practices of education in the field of elementary art; methods, aims, objectives; methods and techniques for developing units of work; basic principles; selection and manipulation of various media; the development of creative expression and appreciation.

ED. 242. MUSIC IN THE ELEMENTARY SCHOOL—Three hours

MR. MORAN

Study of methods for developing appreciation for and enjoyment of music through performance and listening; developing the rhythm band; rote singing; program music for children; discovery of talent; writing and interpretation of scales; training in group leadership in singing.

Additional courses offered in other departments may count toward certification and add to a well-rounded program:

Educational Sociology—See Sociology.

Child Psychology-See Psychology.

Teaching of English in Secondary Schools—See English.

Teaching of Mathematics in Secondary Schools—See Mathematics.

Business Education and Methods of Instruction in Secretarial Studies
—See Secretarial Studies.

#### ENGINEERING

Associate Professor Hall, chairman; Assistant Professor Heltzel; Instructors Thomas and Salley.

ENGI. 100. ENGINEERING PROBLEMS—Two hours THE STAFF

Lectures and discussions to acquaint the student with the aims, purposes and methods of the engineer. An introduction to the proper method of attack upon problems, proper presentation of solutions, both mathematical and graphical. Instruction in the use of the slide rule necessary to problem solution. Graphs. Lecture, one hour; practicum, three hours a week.

ENGI. 102. BASIC DRAWING—Three hours MR. HELTZEL

A basic course covering the elements of projection drawing and descriptive geometry necessary for students of chemistry and physics. It includes lettering, use of instruments, sketching, orthographic and isometric drawing, dimensioning, and the analysis and solution of space problems involving the projection and revolution of points, lines and planes. Intersections and developments. Practicum, seven hours a week.

Engl. 105. Engineering Drawing—Three hours Mr. Heltzei

This and the following course bear the same relation to the engineering profession as the subject of English bears to our daily life. Technical sketching and vertical freehand lettering. Use and care of instruments, orthographic and auxiliary projection drawing with dimensions and sections; isometric drawing; tracings and reproduction processes. Practicum, seven hours a week.

Engi. 106. Engineering Drawing and Descriptive Geometry

Three hours

Mr. Heltzel

Augments Engineering 105. Application of standard conventions to the execution of detail and assembly drawings. Application of the principles of descriptive geometry to the solution of engineering space-problems by the projection and revolution of points, lines, planes and solids. Intersections and developments. Practicum, seven hours a week.

Prerequisite: Engineering 105.

## Chemical Engineering

## CH.E. 206. STOICHIOMETRY—Three hours

MR. SALLEY

A problem course involving the application of basic chemical and physical concepts to the calculation of heat and material balances as they are encountered in the various chemical industrial processes. Fuels and their combustion products, gas producers, furnace and kiln products. Class, three hours a week.

Prerequisite: Chemistry 203; Physics 201.

Co-requisite: Physics 202.

## Civil Engineering

## C.E. 103. PLANE SURVEYING—Three hours

Mr. THOMAS

Lectures, recitations and problems on the theory and practice of plane and topographic surveying. Field exercises, including the adjustment and use of surveying equipment including transit, levels, compass and tape for surveys of area, topography, profile, grading, excavating and the location of details. Interpretation of and mapping from field notes with attendant computations and the balancing of surveys. Emphasis on the application of surveying to engineering work in general. Practicum, seven hours a week.

Prerequisite: Engineering 105, Mathematics 105 or 107 and 109.

## C.E. 104. ROUTE SURVEYING—Four hours

Mr. THOMAS

A study of the engineering and economic problems affecting the location of routes of communication. Lectures, recitations, field work and problems on the theory and use of simple horizontal, compound, reverse, spiral and vertical alignment curves; grades, cross sections, mass diagrams and earth work computations, grade crossing, right-of-way, and drainage problems. Solar observation to determine true bearing and azimuth. Class, two hours a week; practicum, six hours a week.

Prerequisite: C.E. 103.

#### Mechanical Engineering

## M.E. 206. KINEMATICS—Four hours

Mr. Thomas

Analytical and graphical studies of displacement, velocity and acceleration for rigid bodies in plane motion. Study of kinematic pairs and trains involving linkages, pulleys, gears and cams: instant centers, geartooth outlines and their application, epicyclic gear trains. Class, two hours a week; practicum, six hours a week.

Prerequisite: Engineering 106, Mathematics 122, Physics 201.

M.E. 211. MECHANICS 1. STATICS—Three hours

MR. HALL

Study of force systems in equilibrium: catenary; friction; first and second moments of areas, volumes, masses; centroids. Class, three hours a week.

Prerequisite: Physics 201, Mathematics 125.

Co-requisite: Mathematics 126.

M.E. 212. MECHANICS II. DYNAMICS—Three hours

MR. HALL

Laws of motion, rectilinear and curvilinear, for a particle and a rigid body. Work-energy; impulse-momentum. Class, three hours a week. Prerequisite: M.E. 211.

#### **ENGLISH**

Professor Craig, chairman; Associate Professor Davies; Assistant Professors Donnelly, Kruger, and G. Williams; Instructors Groh, Lord, Tyburski, and Wolfe.

Students who major in English are required to complete twenty-four hours of work beyond the prescribed courses of the freshman and sophomore years.

The twenty-four hours which the major must carry in English should be so distributed as to include an advanced course in composition or journalism, three hours of work in linguistics (English 201 or 205) and a minimum of fifteen hours in literature, three of which must be reserved for English 215.

It is strongly recommended that all majors in English take six hours in a foreign language beyond the minimum requirement of twelve hours. All students who wish to take graduate work in the field of English should take at least twenty-four hours in two foreign languages.

Majors who wish to teach in secondary schools are advised to elect English 275. The credit for this course may be counted toward either the major or the satisfaction of requirements for certification in education. In planning his program with his faculty adviser, the student should make an early decision regarding the field in which credit for this course is desired.

All entering freshmen are required to take a placement test in English.

#### Composition

ENG. 99. REMEDIAL ENGLISH—No credit

THE STAFF

A remedial course for students whose work in English is unsatisfactory.

THE STAFF ENG. 101. COMPOSITION—Three hours Principles of exposition; collateral reading; writing of themes.

ENG. 102. COMPOSITION—Three hours THE STAFF Principles of exposition continued; collateral reading; writing of themes; research paper.

Prerequisite: English 101.

THE STAFF ENG. 105. ADVANCED EXPOSITION—Three hours A study of the various expository types. Readings. Intensive practice in the writing of informative articles.

Prerequisite: English 101 and 102. In exceptional cases this requirement may be waived.

ENG. 106. SHORT STORY—Three hours MRS. WILLIAMS A writing course. Training in the selection and use of materials for

the short story.

Prerequisite: English 102.

### Journalism

ENG. 121. JOURNALISTIC WRITING—Three hours MRS. WILLIAMS

A beginner's course in gathering and writing news. Topics include: definition of news, writing leads and building the story, law of libel, news sources; a brief survey of the history of American journalism and the current status of freedom of the press. Editors of local and nearby papers address the class and answer questions.

Students make comparative study of and report on representative papers of U. S., both dailies and country weeklies. There is constant practice in writing, with weekly news assignments.

Prerequisite: English 102.

ENG. 123. PUBLICITY WRITING—Three hours MRS. WILLIAMS

Fundamental techniques of publicity. Recent developments in fields of: public opinion, propaganda, public relations, public opinion polls. Special attention is given to the myriad trade journals and house organs covering the industrial, merchandising, and professional fields. Weekly themes.

Prerequisite: English 102.

ENG. 124. FEATURE WRITING—Three hours

MRS. WILLIAMS

Feature writing for newspapers and magazines. Analysis of the feature field and the magazine market. Finding suitable subjects and their treatment: the interview, the how-to-do-it article, popular biographies and success stories, personal experiences, narratives. Weekly themes. Prerequisite: English 102.

## Language and Literature

Eng. 151. Western World Literature—Four Hours

MISS CRAIG, MR. DAVIES, MR. DONNELLY

Survey of western world literature to the beginning of the eighteenth century; lectures, term papers, quizzes, conferences, collateral reading. Prerequisite: English 102, or substitute in composition.

Eng. 152. Western World Literature—Four hours

MISS CRAIG, MR. DAVIES, MR. DONNELLY

Continuation of survey, bringing the study of literature down to the present time.

Prerequisite: English 151.

ENG. 153. AMERICAN LITERATURE—Three hours MR. KRUGER Survey of American literature from the beginning to the Civil War. Prerequisite: English 102.

Eng. 154. American Literature—Three hours MR. KRUGER Survey of American literature from the Civil War to the present time. Prerequisite: English 102.

Eng. 155 and 156. Contemporary Literature—Three hours each semester Mr. Donnelly, Mrs. Williams, Mr. Kruger

A course designed to familiarize the student with the best books of the twentieth century.

Prerequisite: English 102.

ENG. 201. HISTORY OF THE ENGLISH LANGUAGE—Three hours

MR. DONNELLY

Study of the origins of the English language and of the principal phenomena of later development.

Prerequisite: English 152.

ENG. 205. CHAUCER—Three hours

Study of the linguistic features of late Middle English; reading of some of the Canterbury Tales; written reports on collateral reading.

Prerequisite: English 152.

ENG. 211. EARLY ENGLISH DRAMA—Three hours MR. DAVIES Study of the drama as a literary type and its history from the earliest times to 1642; reading of plays by pre-Elizabethan and Elizabethan dramatists exclusive of Shakespeare.

Prerequisite: English 152.

ENG. 212. LATER ENGLISH DRAMA—Three hours MR. DAVIES Study of the drama in England from 1660 to the end of the Victorian period; reading of representative plays.

Prerequisite: English 152.

Eng. 215. Shakespeare—Three hours Miss Craig Intensive study of selected plays; written reports on others not studied in class.

Prerequisite: English 152.

Eng. 216. Milton—Three hours Miss Craig Study of the poetical works of John Milton; lectures, discussions, written reports.

Prerequisite: English 152.

Eng. 221. Age of Pope—Three hours Miss Craig, Mr. Davies A study of the poetry and non-fictional prose of this period, including the work of leading essayists, biographers, diarists, and letter writers. Prerequisite: English 152.

Eng. 222. Age of Johnson—Three hours Mr. Davies, Miss Craig A study of the poetry and non-fictional prose of 1740-1798, including the work of leading essayists, biographers, diarists, and letter writers. Prerequisite: English 152.

English prose fiction of the sixteenth and seventeenth centuries; rise of the novel to the close of the eighteenth century.

Prerequisite: English 152.

Eng. 238. Later English Novel—Three hours Miss Craig
The major novelists of the nineteenth and early twentieth centuries.
Prerequisite: English 152.

Eng. 241. The Romantic Movement—Three hours

Mr. Davies, Mr. Donnelly

Study of the works of Wordsworth, Coleridge, Scott, and the prose writers contemporary with them.

Prerequisite: English 152.

ENG. 242. THE ROMANTIC MOVEMENT—Three hours

Mr. Davies, Mr. Donnelly

Study of the works of Byron, Shelley, Keats and the prose writers contemporary with them.

Prerequisite: English 152.

Eng. 259. Tennyson and Browning—Three hours Mr. Davies
Study of the poetry of Alfred Tennyson and Robert Browning and its relations to other literature of the nineteenth century.

Prerequisite: English 152.

ENG. 260. VICTORIAN PROSE—Three hours

MR. DAVIES

Study of the influence of movements in science, philosophy, art, religion, and society as reflected in the works of Carlyle, Arnold, Huxley, Newman, and Ruskin.

Prerequisite: English 152.

Eng. 275. Teaching of English in Secondary Schools

Three hours

The Star

Analysis and discussion of those methods of instruction which have been used most effectively in the teaching of English literature and composition. Study of the principal phenomena in the development of the English language and grammar. Intended for juniors and seniors.

Eng. 287. American Drama—Three hours

MR. GROH

The development of our native drama from the colonial period to the present. Representative plays for reading and study. Written reports. Prerequisite: English 152.

#### Steech

ENG. 131. FUNDAMENTALS OF SPEECH—Two hours

MR. KRUGER, MR. GROH

The physical, mental, and social equipment requisite for effective speaking. Classroom projects, which include oral reading, gesture exercise, pantomime, and various extemporaneous speeches, are designed to improve the student's physical behavior on the platform, to train his voice, to develop vocal variety, and to build habits of clear thinking. Critical analysis of speech technique and content, the purpose being to produce not only better speakers but also better critics of speech.

Eng. 132. Extemporaneous Speaking—Two hours Mr. Kruger Continuation of English 131. Projects include speeches for various

occasions, group discussions, and symposiums, with emphasis on the principles of persuasion, types of evidence, and methods of reasoning. Continued critical analysis of speech technique and content; constant practice in speaking and thinking to a definite end.

Prerequisite: English 131.

Eng. 133. Argumentation and Debate—Two hours Mr. Kruger The commoner forms and methods of argumentation, both written and oral, are studied and practiced, with emphasis on briefing and debate; contemporary problems and current debate questions are discussed. Required of all students participating in intercollegiate debate.

Prerequisite: English 131, or consent of the instructor.

Eng. 134. Fundamentals of Speech for Technical Students

Three hours

Mr. Kruger

Similar to English 131, but with an extra hour of work directed to the specific needs of the student.

#### MODERN FOREIGN LANGUAGES

Associate Professor Disque, chairman; Assistant Professor Dworski; Instructor McAniff.

#### French

A major in French consists of twenty-four hours beyond French 102.

FR. 101. ELEMENTARY FRENCH—Three hours THE STAFF Introduction to French grammar; practice in reading, writing, and speaking the language.

FR. 102. ELEMENTARY FRENCH—Three hours

The Staff
Continuation of French 101.

Prerequisite: French 101 or the equivalent.

FR. 103. INTERMEDIATE FRENCH—Three hours

The Staff
Review of grammar; practice in oral and written French; selected reading of modern French prose.

Prerequisite: French 102 or the equivalent.

FR. 104. Intermediate French—Three hours

The Staff
Introduction to French civilization; practice in oral and written
French.

Prerequisite: French 103 or the equivalent.

FR. 105. TECHNICAL FRENCH—Three hours Miss Dworski Intensive practice in translating. A course designed for students who

wish to be able to read material in French in their particular fields of interest.

Prerequisite: French 103 or the equivalent.

Fr. 106. French Conversation—Three hours Miss Dworski Intensive practice in the spoken language, with emphasis on idiomatic usage. Use of records and the mirrophone to acquire fluency in speaking French.

Prerequisite: French 104 or the equivalent.

FR. 107. FRENCH COMPOSITION—Three hours MISS DWORSKI Study of grammar and idiomatic usage in modern French, applied to composition exercises and free composition.

Prerequisite: French 104 or the equivalent.

Fr. 201-202. Survey of French Literature—Three hours each semester Miss Dworski

A survey of the evolution of French literature from the Middle Ages to the present, with stress on general ideas, literary genres, and outstanding writers of each century. Reading of representative selections from different periods of French literature.

Prerequisite: French 104 or the equivalent.

Fr. 203. French Literature of the Seventeenth Century

Three hours Miss Dworski

Study of classicism and the outstanding writers of the seventeenth century.

Prerequisite: French 201-202 or the equivalent.

Fr. 205. French Literature of the Eighteenth Century

Three hours Miss Dworski

Study of the literature and thought in the eighteenth century, with special emphasis on Montesquieu, Diderot, Voltaire, and Rousseau.

Prerequisite: French 201-202 or the equivalent.

FR. 206. FRENCH LITERATURE OF THE NINETEENTH CENTURY

Three hours Miss Dworski Study of Romanticism, Realism, Naturalism, the Parnassian poets,

Study of Romanticism, Realism, Naturalism, the Parnassian poe and Symbolism.

Prerequisite: French 201-202 or the equivalent.

FR. 208. CONTEMPORARY FRENCH DRAMA—Three hours

Miss Dworski

The development of modern drama from the latter half of the nineteenth century to the present.

Prerequisite: French 201-202 or the equivalent.

#### German

A major in German consists of twenty-four hours beyond German 102.

GER. 101. ELEMENTARY GERMAN—Three hours

Introduction to German grammar; practice in reading, writing, and speaking the language.

GER. 102. ELEMENTARY GERMAN—Three hours

Continuation of German 101. Reading of easy prose and poetry.

Some stress on German culture, life, and customs.

Prerequisite: German 101 or equivalent.

GER. 103. INTERMEDIATE GERMAN—Three hours THE STAFF
Emphasis on difficult grammatical construction and idioms. Reading
of prose; practice in speaking and writing German.

Prerequisite: German 102 or equivalent.

GER. 104. INTERMEDIATE GERMAN—Three hours

The STAFF

Continuation of German 103. Rapid reading of German works
representative of German life and history; practice in writing and speaking German.

Prerequisite: German 103 or equivalent.

GER. 105. SCIENTIFIC GERMAN—Three hours

Reading of selections from scientific German.

Prerequisite: German 103 or equivalent.

MR. Disque

GER. 106. GERMAN CONVERSATION—Three hours MR. DISQUE Emphasis laid on speaking, with drill in the colloquial vocabulary. Prerequisite: German 104 or equivalent.

GER. 107. GERMAN COMPOSITION—Three hours Mr. Disque Idiomatic usage in modern German. To develop the ability to write free compositions.

Prerequisite: German 104 or equivalent.

GER. 201-202. SURVEY OF GERMAN LITERATURE

Three hours each semester

A survey of the literature of the important periods from the beginning to 1932.

Prerequisite: German 104 or equivalent.

GER. 203. GOETHE—Three hours

MR. DISQUE

Reading and interpretation of selected works of Goethe. Lectures and individual reports.

Prerequisite: German 201-202 or equivalent.

GER. 204. SCHILLER—Three hours

MR. DISQUE

Poet of German idealism.

Prerequisite: German 201-202 or equivalent.

GER. 205. NINETEENTH CENTURY GERMAN DRAMA—Three hours

MR. DISQUE

The German drama of the nineteenth century from Ludwig Tieck to Gerhart Hauptmann. Lectures and reports on the literary and cultural history of the times.

Prerequisite: German 201-202 or equivalent.

GER. 206. MODERN GERMAN SHORT STORY-Three hours

MR. DISQUI

The modern German short story from naturalism to the present. Individual reports; lectures on the cultural and literary history of the period.

Prerequisite: German 201-202 or equivalent.

#### Spanish

A major in Spanish consists of twenty-four hours beyond Spanish 102.

Sp. 101. Elementary Spanish—Three hours The Staff Introduction to Spanish grammar; practice in reading, writing, and speaking the language.

Sp. 102. Elementary Spanish—Three hours The Staff Continuation of Spanish 101.

Prerequisite: Spanish 101 or equivalent.

Sp. 103. Intermediate Spanish—*Three hours*Review of grammar; practice in oral and written Spanish; selected reading of modern Spanish prose.

Prerequisite: Spanish 102 or equivalent.

Sp. 104. Intermediate Spanish—Three hours

The Staff
Introduction to Spanish civilization; practice in oral and written
Spanish.

Prerequisite: Spanish 103 or equivalent.

Sp. 105. COMMERCIAL SPANISH—Three hours Miss Dworski

The study of Spanish as it pertains to economic relations between the Spanish-speaking countries and the United States. Special emphasis on the writing of business letters.

Prerequisite: Spanish 103 or equivalent.

Sp. 106. Spanish Conversation—Three hours Miss Dworski Intensive practice in the spoken language, with emphasis on idiomatic

usage. Use of records and the mirrophone to acquire fluency in speaking Spanish.

Prerequisite: Spanish 104 or equivalent.

Sp. 107. Spanish Composition—Three hours Miss Dworski Study of grammar and idiomatic usage in modern Spanish, applied to composition exercises and free composition.

Prerequisite: Spanish 104 or equivalent.

Sp. 108. Spanish American Culture—Three hours Miss Dworski The cultural, economic, and political development of the Spanish American countries.

Prerequisite: Spanish 103 or equivalent.

Sp. 201-202. Survey of Spanish Literature

Three hours each semester

MISS DWORSKI

A survey of the evolution of Spanish literature from the Middle Ages to the present, with stress on general ideas, literary genres, and outstanding writers of each century. Reading of representative selections from different periods of Spanish literature.

Prerequisite: Spanish 104 or equivalent.

Sp. 203. The Golden Age of Spanish Literature—Three hours
Miss Dworski

Study of the great authors of the sixteenth and seventeenth centuries, with special emphasis on Cervantes, Lope de Vega, Tirso de Molina, Alarcón, and Calderón.

Prerequisite: Spanish 201-202 or equivalent.

Sp. 204. NINETEENTH CENTURY SPANISH DRAMA—Three hours
Miss Dworski

Study of representative works of nineteenth century Spanish drama. Prerequisite: Spanish 201-202 or equivalent.

Sp. 205. Nineteenth Century Spanish Novel—Three hours
Miss Dworski

The development of the Spanish novel in the nineteenth century. Prerequisite: Spanish 201-202 or equivalent.

#### HISTORY

Professor Thatcher, chairman; Instructors Rock and Kaslas.

A major in history consists of twenty-four hours, of which twelve are in courses numbered 200 or above. Majors in history are required to take History 101, 102, 107, and 108; History 101 and 102, however, may not count toward the twenty-four hours constituting a major.

HIST. 101-102. HISTORY OF WESTERN CIVILIZATION THE STAFF
Three hours each semester

A chronological survey of the civilization of the western world from the earliest times to the present. Emphasis is placed on general trends and on concepts that have influenced the modern world. Due attention is given to the part played by America in world history, especially during the expansion of Europe and in the twentieth century.

Hist. 105. English History to the Elizabethan Period

Three hours

A general course on the development of the English nation. The principal topics are: Britain before the Anglo-Saxons, the Anglo-Saxon period, the Norman Conquest, the development of English common law, the beginnings of parliaments, towns and universities, continental wars, the Tudor dynasty, and the Revival of Learning.

Not offered 1953-54.

Hist. 106. English History from the Reign of Elizabeth Three bours

Traces the growth and expansion of England from a national state to a world empire and later to a mother of commonwealths. The development of the national church, the Puritan revolt, the influences of the American and the French revolutions, the industrial revolution, political and social reform, growth of the cabinet system, and liberalism.

Not offered 1953-54.

Hist. 107. American and Pennsylvania History to 1865

Three hours Mr. Thatcher

A general survey extending from the period of discovery and exploration to the end of the Civil War.

All students will be required to do a certain proportion of their outside reading in the history of Pennsylvania and its relation to the development of the nation.

HIST. 108. AMERICAN HISTORY SINCE 1865—Three hours

MR. THATCHER

A general survey covering the period from 1865 to the present.

HIST. 206. THE UNITED STATES IN THE TWENTIETH CENTURY Three hours MR. THATCHER

An intensive study of the period since the Spanish-American War, emphasizing the emergence of the United States as a world power and the economic and social problems of the present century.

Prerequisite: History 107 and 108.

HIST. 223-224. AMERICAN CONSTITUTIONAL HISTORY

Three hours each semester MR. THATCHER

A study of the origins of the American Constitution and the growth of the American constitutional system with special attention to the role of the Supreme Court.

Prerequisite: History 107, 108, and Political Science 101. Restricted to juniors and seniors. History 223 is a prerequisite for History 224.

HIST. 225. HISTORY OF THE AMERICAN FRONTIER—Three hours

MR. THATCHER

A study of the westward movement in American history. Prerequisite: History 107 and 108.

HIST. 228. HISTORY OF THE FOREIGN POLICY OF THE UNITED STATES Three hours MR. THATCHER

A study of the evolution of the several policies that give direction to the relations of the United States with other nations.

Prerequisite: History 107, 108, and Political Science 101. Restricted to juniors and seniors.

HIST. 234. EAST ASIA IN MODERN TIMES—Three hours

This course deals with the impact of western civilization on the different traditions and institutions of China, Japan, and Southeast Asia, with emphasis on the persistent problems arising out of the contact of civilizations and their possible solutions. (Not offered 1953-54.)

Prerequisite: History 101 and 102.

HIST. 235. SOVIET RUSSIA—Three hours

This course deals with the background and characteristic features of the communist state in Russia. Emphasis is placed on the political, social and economic, religious, and intellectual traditions as they developed through the Kievan, Mongol, Muscovite, and Imperial ages and on the efforts to solve some of the problems arising out of the conflict between these persistent traditions and the increasing influence of western European civilization. (Not offered 1953-54.)

Prerequisite: History 101 and 102.

HIST. 253. THE HISTORY OF EUROPE FROM 1500 TO THE FRENCH REVOLUTION—Three hours

A study of the political, social, economic, and intellectual life of Europe from the time of its expansion in 1500 to the outbreak of the French Revolution.

Prerequisite: History 101 and 102 or consent of instructor.

HIST. 254. THE FRENCH REVOLUTION AND NAPOLEON

A study of the origin, events, and consequences of the French Revolution. The Revolution will be considered as an intellectual and social as well as a political movement in the history of France as a national

Prerequisite: History 101 and 102.

HIST. 255. EUROPE IN THE NINETEENTH CENTURY—Three hours

A study of the political, social, and cultural development of Europe from the Congress of Vienna to World War I. Prerequisite: History 101 and 102.

HIST. 256. EUROPE IN THE TWENTIETH CENTURY—Three hours

Against a background of the internal and international developments of the leading powers, the class will study the origins and results of the

Prerequisite: History 101 and 102.

## MATHEMATICS

Assistant Professor Richards, chairman; Assistant Professor Wasileski; Instructors Morgan and West.

The major in mathematics is outlined on page 47.

MATH. 99. ALGEBRA REVIEW—No credit

THE STAFF

Secondary algebra, extending through simultaneous quadratic equations.

Three hours a week.

MATH. 101. FUNDAMENTALS OF MATHEMATICS—Three hours

A course designed for those who want a general background in mathematical concepts without specialization in techniques. Students taking Mathematics 105, 107, or 109 will not be granted credit for

MATH. 102. FUNDAMENTALS OF MATHEMATICS—Three hours

THE STAFF

A continuation of Mathematics 101.

MATH. 105. COLLEGE ALGEBRA AND TRIGONOMETRY—Five hours

THE STAFF

A combination of Mathematics 107 and 109.

Prerequisite: Mathematics 99 or its equivalent.

MATH. 107. COLLEGE ALGEBRA—Three hours

THE STAFF

Proportion, progressions, inequalities, mathematical induction, binomial theorem, complex numbers, roots of equations, permutations and combinations, probability, determinants, partial fractions.

Prerequisite: Mathematics 99 or its equivalent.

MATH. 109. PLANE TRIGONOMETRY—Three hours THE STAFF

Trigonometric functions, solutions of triangles, trigonometric identities, inverse functions, trigonometric equations.

Prerequisite: Mathematics 99 or its equivalent.

MATH. 115. MATHEMATICS OF FINANCE I—Three hours The STAFF Progressions, binomial theorem, logarithms, simple interest, compound interest, equations of value, annuities, sinking funds, amortization, depreciation, capitalized cost.

Prerequisite: Mathematics 99 or its equivalent.

MATH. 118. INTRODUCTION TO STATISTICS—Three hours THE STAFF

Frequency distributions and their graphical representation, measures of central tendency, dispersion, skewness. kurtosis, correlation, elementary curve fitting, use of tables of areas under normal curve.

Prerequisite: Mathematics 99 or its equivalent.

MATH. 122. ANALYTIC GEOMETRY—Four hours THE STAFF

Study of geometric figures by means of coordinate systems, including the general problem of the equation of a locus, straight lines, circles, conic sections, transformation of coordinates, polar coordinates, parametric equations, families of curves, introduction to solid analytic geometry.

Prerequisite: Mathematics 105, or both Mathematics 107 and Mathematics 109.

MATH. 125. CALCULUS I-Four hours

THE STAFF

Limits, derivatives and differentials, indefinite and definite integrals, differentiation and integration of algebraic functions, applications.

Prerequisite: Mathematics 122.

MATH 126. CALCULUS II—Four hours

THE STAFF

Differentiation and integration of transcendental functions, applications, improper integrals, indeterminate forms, infinite series, partial derivatives, multiple integrals.

Prerequisite: Mathematics 125.

MATH 127. TEACHING OF MATHEMATICS IN SECONDARY SCHOOLS

Three hours

MR. WASILESKI

Building of a program in secondary mathematics, materials of instruction, aids in teaching, maintenance of interest, testing, informal practice in teaching arithmetic, algebra, plane and solid geometry, trigonometry, and logarithms.

Prerequisite: Mathematics 125.

MATH. 208. HISTORY OF MATHEMATICS—Three hours MR. RICHARDS

Beginnings in Babylon and Egypt, the Greeks, the Hindus and Moslems, awakenings in Europe, Fermat and Descartes, Newton's importance in the seventeenth century, the great expansion of the eighteenth century, the strengthening of the foundations in the nineteenth century, the trend to abstraction in this century.

Prerequisite: Mathematics 126.

MATH. 213. HIGHER ALGEBRA—Three hours

MR. WASILESKI

Real and complex numbers, groups, rings, integral domains, fields, matrices, determinants.

Prerequisite: Mathematics 125.

MATH. 216. SOLID ANALYTIC GEOMETRY—Three hours Mr. RICHARDS

Study of space geometry by means of coordinate systems, including lines and planes and the relations between them, systems of planes, parametric equations of a surface, cylinders, surfaces of revolution, spheres, quadric surfaces, reduction of quadric surfaces to canonical forms.

Prerequisite: Mathematics 125.

MATH. 218. MATHEMATICS OF FINANCE II—Three hours

MR. WASILESKI

A priori probability, empirical probability, mortality tables, annuities certain, pure endowment, life annuities, whole life insurance, premiums, premium formulas, reserves, reserve systems, gross premiums.

Prerequisite: Mathematics 115, or permission of instructor.

MATH, 221. ADVANCED EUCLIDEAN GEOMETRY—Three hours

MR. WASILESKI

The notable lines, points, and circles associated with the triangle; circles and systems of circles.

Prerequisite: plane geometry.

MATH. 222. SYNTHETIC PROJECTIVE GEOMETRY—Three hours

Mr. Wasileski

An introduction to projective methods and their application to the point, line, and plane.

Prerequisite: plane geometry.

MATH. 228. STATISTICAL METHODS—Three hours Mr. RICHARDS

Frequency distributions of one variable, moments as statistical constants, discrete frequency distributions, theoretical distributions for testing hypotheses, frequency distributions of more than one variable, random sampling, linear regression and correlation, introduction to multiple and partial correlation.

Prerequisite: Mathematics 126.

MATH. 240. DIFFERENTIAL EQUATIONS—Three hours

The Staff
Solution of ordinary differential equations, applications.

Prerequisite: Mathematics 126.

MATH. 251. ADVANCED CALCULUS I—Three hours Mr. RICHARDS An elaboration of the theory and applications of calculus.

Prerequisite: Mathematics 126.

MATH. 252. ADVANCED CALCULUS II—Three hours Mr. RICHARDS Continuation of Mathematics 251.

Prerequisite: Mathematics 251.

#### MUSIC

Assistant Professor Detroy, chairman; Instructors Balshaw, Clark, Hawkins, Isaacs, Liva, McHenry, and Moran.

Liberal Arts students wishing to major in music will follow the program outlined on page 48. A two-year terminal program is outlined on page 73.

#### APPLIED MUSIC<sup>1</sup>

Individual and group instruction is offered at all levels of difficulty to students in piano, pipe organ, voice, and orchestral and band instruments. A series of fifteen lessons a semester and a practical demonstruments.

stration (examination) before the music faculty are necessary if credit is to be obtained for such study.

Students who are not music majors may receive one credit each semester for voice or instrumental study. No examination is necessary if credit is not desired by the student.

The ability, interest, and progress of students intending to major in music will be evaluated at the end of the sophomore year by the music faculty. Students will be advised before the opening of the following semester if the faculty does not recommend a continuation of the music major.

Mus. 100. Introduction to Music—Three hours

Mr. Detroy, Mr. Moran

An elementary course in the art of enjoying and listening to music. Non-technical, it covers briefly the entire range of music in various forms, styles, and media. Emphasis is placed upon enlarging the musical horizon through the use of a considerable number of illustrations.

Mus. 101-102-103-104. Theory of Music—Five hours each course

Mr. Detroy, Mr. Moran

The study of the theory of music is centered upon three main principles:

- (1) The recognition of intervals and meter through dictation.
- (2) The structure of chords and chord progressions through keyboard harmony.
- (3) The writing of music through exercises in harmonic and contrapuntal technics.

The first two semesters of theory are divided between ear training, two hours; solfeggio, two hours; harmony, one hour. The third and fourth semesters are divided between ear training, one hour; solfeggio, one hour; harmony, three hours.

The concentration of all theory into these four courses is in accordance with the method now employed in many of our leading schools of music

There is no prerequisite for Mus. 101. Students may be admitted to Mus. 102, 103, and 104 by examination.

Mus. 109. History of Music—Three hours Mr. Detroy

A detailed study of the history of music from the beginning of civilization to the seventeenth century.

<sup>&</sup>lt;sup>1</sup> For fees see page 26.

Mus. 110. HISTORY OF Music-Three hours

A continuation of Mus. 109, beginning with J. S. Bach and tracing musical development to the present day. Twentieth century music will be emphasized in the final weeks of study.

MUSIC 111-112, PIANO CLASS 1 AND 2—Two credit hours each semester

Class instruction in secondary piano. The classes will be divided into suitable groups according to proficiency. This course is required for all music education majors who cannot play piano grade 4 or better. No prerequisite.

MUSIC 113-114. PIANO CLASS 3 AND 4—Two credit hours each semester

Class instruction in secondary piano in advance of Music 112. This course is a continuation of the required course for all music education majors who cannot play piano grade 4 or better.

Prerequisite: Music 112.

Mus. 121-122-123-124. BAND—One-half hour each semester

MR. MORAN

MR. DETROY

The band offers the student a varied program for concerts and for various athletic events. Students desiring to participate in the band should consult with the Director.

All instrumental music education majors are required to participate in the band for four years.

Mus. 125-126-127-128. CHORUS—One-half hour each semester

The chorus offers the student a complete range of sacred and secular choral music. Students desiring to participate in the chorus should consult with the Director.

All vocal and piano music education majors are required to participate in the chorus for four years.

MUSIC 131-132-133-134. ORCHESTRA—One-half hour each semester

Participation in the Wyoming Valley Philharmonic Orchestra gives the student experience in the complete range of symphonic literature. Students desiring to participate in the orchestra should consult with the Director.

MUSIC 215. INSTRUMENTATION—Two hours

The instruments of the modern symphonic orchestra, their capabilities MR. DETROY AND MR. MORAN and limitations. The technique of scoring for small instrumental combinations; transposition and clef manipulation.

Prerequisite: Music 102 or the approval of the Chairman of the Department.

MUSIC 216. ORCHESTRA AND BAND ARRANGING—Two hours

MR. DETROY AND MR. MORAN

Scoring for the large orchestra or the modern symphonic band. The student may select his field of concentration. Prerequisite: Music 215.

Mus. 217. Analysis—Two hours

The technique of composition as disclosed by melodic, harmonic, and structural analysis of music in varied styles and from diverse periods. Prerequisite: Music 102 or equivalent as demonstrated by an exam-

Mus. 218. Counterpoint—Three hours

A study of the sixteenth century art of contrapuntal writing as found in the styles of Palestrina, di Lasso, and Ingegneri. Prerequisite: Music 102.

## Music Education

Mus. Ed. 101-102. Clarinet Class and Band Methods—Two credit Methods of teaching and instruction in the clarinet for those in the

public school music course.

No prerequisite.

Mus. Ed. 103-104. Brass Class and Band Methods—Two credit

A course, usually in trumpet, for students not majoring in the brass

No prerequisite.

Mus. Ed. 105. Woodwind Class Methods—Two credit hours per

A class conducted as an introduction to the teaching of such woodwinds as clarinet, oboe, flute, and bassoon, with demonstrations of the class teaching of those instruments. Prerequisite: Mus. Ed. 102.

Mus. Ed. 106. Brass Class Methods—Two credit hours Mr. Moran

A class in brass is conducted as an introduction to the teaching of brass instruments and as demonstration of class teaching of these instruments. The instruments taught include trumpet, French horn, trombone, baritone, and tuba.

Prerequisite Mus. Ed. 104.

Mus. Ed. 107-108. Voice Class and Methods—Two credit hours per

A course in the fundamentals of correct voice production; breathing, breath control, elementary study of vowel forms, and consonants. Elementary songs are used to develop the student's own voice as well as to train him in voice pedagogy.

No prerequisite.

Mus. Ed. 109-110. Conducting and School Music Materials—Twocredit hours per semester

The development of an adequate baton technique and the presentation of various kinds of school music material, stressing particularly elementary and high school instrumental materials the first semester and high school choral materials the second semester.

No prerequisite.

Mus. Ed. 111-112. VIOLIN CLASS AND METHODS—Two credit hours per

A class in elementary violin playing as a practical introduction to the technical problems involved in the playing of stringed instruments.

No prerequisite.

Mus. Ed. 113-114. String Instrument Class Methods—Two credit

A class in the playing of the viola, violoncello, and bass as an introduction to the teaching of these instruments and as a demonstration of class teaching.

Prerequisite: Mus. Ed. 112.

Mus. Ed. 201. Elementary School Music Methods—Two credit

The course involves a general preparation for the teachers of music in the elementary grades. It entails a study of the principles, procedures, and objectives in school music.

No prerequisite.

Mus. Ed. 202. High School Music Methods—Two credit hours

MR. MORAN The course is planned to provide a preparation for teaching the various aspects of music in the high school.

No prerequisite.

Mus. Ed. 203-204. Observation and Practice Teaching—Four credit hours per semester

A course in the observation and practice teaching of vocal or instrumental music in the elementary or high schools.

#### NURSING EDUCATION

Instructor Jessee, chairman.

Enrollment in all of the following courses, with the exceptions of Nursing Education 101 and 102, is limited to graduate nurses.

N.E. 101. FOUNDATIONS OF NURSING—Three hours Miss Jessee A general survey of the history of nursing with emphasis upon the religious, social and educational factors that have stimulated its de-

N.E. 102. TRENDS IN NURSING EDUCATION—Three hours

MISS JESSEE

A discussion of present problems in nursing and trends or patterns that emerge in the efforts to solve these problems.

N.E. 105. WARD ADMINISTRATION—Three hours MISS JESSEE Principles and methods involved in the efficient management of a hospital unit.

N.E. 107. METHODS IN CLINICAL TEACHING—Three hours STAFF Organization of a program and methods of improving the effectiveness of student experience in the clinical areas.

N.E. 111. MEDICAL AND SURGICAL NURSING—Three hours A consideration of the methods of teaching and content of courses in medical and surgical nursing.

N.E. 112. MEDICAL AND SURGICAL NURSING—Three hours STAFF Field experience in supervision and teaching of medical and surgical

MISS JESSEE N.E. 113. NURSING ARTS—Three hours

This course considers the methods of teaching and content of courses in nursing arts or principles of nursing.

N.E. 114. Nursing Arts—Three hours MISS JESSEE

This course provides opportunity for observation and participation in the teaching of nursing arts.

#### PHILOSOPHY

Associate Professor Vujica, chairman; Instructor Schindler.

A major in the combined fields of philosophy and religion consists of twenty-four hours in philosophy and religion. Philosophy 101 and Religion 101 are not accepted for credit toward a major. The courses may be selected from these two fields as desired by the student.

PHIL. 101. INTRODUCTION TO PHILOSOPHY—Three hours The Staff An introduction to the main problems of philosophy. Among the topics to be considered are the nature of the universe; the origin of life; the nature of mind and soul; the freedom of the will; moral, religious, and aesthetic values; the sources and validity of knowledge. The purpose of the course is to acquaint the student with the traditional solution of these problems in order to interest him in serious and reflective thought, to coordinate his knowledge, and to aid him in gaining an intelligent understanding of the world and life.

PHIL. 102. LOGIC—Three hours MR. VUJICA The objective of the course is to familiarize the student with the elementary principles of clear thinking. The use and validity of reasoning,

hypothesis, induction, deduction, and other approaches to knowledge in the field of the natural and social sciences will be presented.

PHIL. 203. INDIVIDUAL AND SOCIAL ETHICS—Three hours

MR. VUIICA A study of the great ethical systems such as hedonism, formalism, utilitarianism and self-realizationism. The application of moral principles to the life of the state, the family and the economic order. The nature of virtue, conscience, moral character and the relationship of

PHIL. 204. PHILOSOPHY OF RELIGION—Three hours MR. VUJICA

ethics to other fields of knowledge are discussed in this course.

The treatment of religious problems in philosophy; the nature, scope and validity of religious knowledge; forms and expressions of religious behavior. The aim of the course is to give the student an understanding of the basic principles of religion and the contribution of religious thought to current interpretations of life.

MR. VUJICA PHIL. 205. AESTHETICS—Three hours

Theories of the essential character of beauty, its purpose and standards; the application of general aesthetic principles to poetry and the fine arts; the comparison of the aesthetic with other types of experience.

PHIL. 211. HISTORY OF ANCIENT AND MEDIEVAL PHILOSOPHY Three hours

The development of philosophical thought from its appearance in Ionia to the Renaissance. The permanent contributions of the Greek thinkers, particularly Plato and Aristotle, to Western culture. Patristic and scholastic philosophy. The culmination of scholasticism in the systems of Thomas Aquinas and Duns Scotus. Jewish and Mohammedan

Prerequisite: Philosophy 101.

PHIL. 212. HISTORY OF MODERN PHILOSOPHY—Three hours

The most important systems of philosophy from the renaissance through the end of the nineteenth century. Seventeenth century rationalism (Descartes, Spinoza, Leibnitz). Eighteenth century empiricism (Locke, Berkeley, Hume). Kant's criticism and Hegel's idealism. Post-Kantian and post-Hegelian philosophies. The impact of modern science on philosophical speculation.

Prerequisite: Philosophy 101.

PHIL. 213. RECENT AND CONTEMPORARY PHILOSOPHY—Three hours

The principal trends in twentieth century philosophies. The con-MR. VUJICA tributions of Bergson, James, Dewey, Croce, Russell, Whitehead, Heidegger, Maritain and other recent and contemporary philosophers to the problems and ideas characteristic of the age.

Prerequisite: Philosophy 101.

## PHYSICAL EDUCATION AND HYGIENE

Instructor Partridge, chairman; Instructor Bubeck.

Because of the importance of health and the possession of a sound body, attention is given to the physical well-being of students as a regular part of the curriculum; mass athletics and some form of sport or exercise for each student are included in the program of physical education. Physical education is required of both men and women during the freshman and sophomore years.

The College men at the beginning of each year are given a medical and a physical examination. The work in physical education includes soccer, football, basketball, baseball, volley ball, and other competitive

The College women also are given a thorough medical and physical examination before entering upon the program of physical education. The work for women consists of such activities as dancing, basketball, and natural gymnastics.

P.E. 101-102. Physical Education and Hygiene<sup>1</sup>

One hour each semester

THE STAFF

This course includes two hours of physical instruction and one hour of class instruction in personal hygiene each week. It is designed to promote physical coordination and good health habits and to encourage participation in activities that will provide relaxation and exercise throughout life. Three hours each week.

P.E. 103-104. PHYSICAL EDUCATION—One hour each semester

THE STAFF

This course is a continuation of Physical Education 101 and 102, without the instruction in personal hygiene.

#### **PHYSICS**

Associate Professor Hall, chairman; Assistant Professor Heltzel; Instructor Thomas.

PHYS. 100. PHYSICAL SCIENCE—Three hours MR. THOMAS

A course for the non-science student to enable him to understand and appreciate the universe in which he lives; the methods, concepts, and vocabulary of physics and applications of some of its outstanding principles to the needs of the individual and the community; and the manner in which the continually expanding frontiers of science affect our future way of life. Lecture demonstration three hours a week.

## PHYS. 119. METEOROLOGY—Three hours

A treatment of the fundamentals of meteorology, such as the earth's atmosphere, composition and movement. Atmospheric conditions accompanying weather changes. Weather predictions, air-mass analysis and the evaluation of weather and climate as related to agriculture, architecture, aviation, public utilities, transportation, business, industry, health, and recreation. Class three hours a week.

PHYS. 201. GENERAL PHYSICS—Five hours MR. HALL AND STAFF

A thorough grounding in the physical laws of nature, meeting requirements for later work in technical courses. Required of all science students and elective for other students. Mechanics, heat, and sound. Instruction by demonstration lecture, recitation and experimental work in the laboratory. Class four hours a week and laboratory three hours

Prerequisite: Mathematics 105; or 107 and 109.

PHYS. 202. GENERAL PHYSICS—Five hours Mr. Hall and Staff Continuation of Physics 201. Electricity, light and modern physics. Class four hours a week and laboratory three hours a week. Prerequisite: Physics 201.

PHYS. 251. ELECTRICAL MEASUREMENTS—Three hours Mr. THOMAS Precision measurement of electrical quantities and their application to the field of chemistry; includes thermal electromotive force, resistance thermometers, photo electromotive force, elementary electronic circuits and their application. Class two hours a week and laboratory three hours

## POLITICAL SCIENCE

Professor Mailey, chairman; Instructors Hibbard, Kaslas, and

A major in political science consists of twenty-four hours. All courses except Political Science 100 and 101 are acceptable toward the major. History 223, 224, and 228, and Economics 212 and 236 are also

P.S. 100. AMERICAN GOVERNMENT—Three hours This course includes a treatment of government in the United States at all levels: national, state, and local.

The course is offered to students in biology, chemistry, physics, and elementary education only. Arts and commerce and finance students may take the course only with the permission of the instructor.

## P.S. 101. AMERICAN FEDERAL GOVERNMENT—Three hours

A study of the national government and the institutions related to it. Particular emphasis is placed on the Constitutional bases of the American system, the processes by which policy is enacted into law, and the methods by which those same policies are administered. The impact of the citizen on the government and of the government on the citizen is repeatedly emphasized.

P.S. 201-202. Constitutional Law—Three hours each semester

A course intended to show the growth of our Constitution by the case study method. The underlying principles of federalism and the changing constitutional position of the states are particularly em-

Prerequisite: Political Science 101.

Class instruction in personal hygiene is required of all students, even those excused by physicians from taking physical education.

P.S. 203. POLITICS AND POLITICAL PARTIES—Three hours Mr. Mailey A course intended to analyze the movements of political parties, elections, and the various methods used to gain control.

Prerequisite: Political Science 101.

P.S. 204. PUBLIC OPINION AND PROPAGANDA—Three hours

A study in the behavior of governance, including the factors which determine attitude, the formation and expression of public opinion, and propaganda as used by pressure groups.

Prerequisite: Political Science 101 and Sociology 100.

MR. HIBBARD P.S. 205. STATE GOVERNMENT—Three hours

A broad, general course covering the structure, powers, and function of state governments in the United States. Special emphasis is placed on the Pennsylvania State Government.

Prerequisite: Political Science 101.

MR. HIBBARD P.S. 206. MUNICIPAL GOVERNMENT—Three hours

A course undertaking the study of the organization, work, and administration of local government. Since the national government has assumed a new significance today, special attention is given to the relationship between local and national government.

Prerequisite: Political Science 101.

MR. MAILEY P.S. 207. Public Administration—Three hours

A study of the organization, activity, problems, and the recruitment policy of the public service.

Prerequisite: Political Science 101.

P.S. 208. LABOR LEGISLATION—Three hours

A course dealing with the role of government in the field of labor relations and with the laws affecting the conditions of employment and employee-employer relations. The course stresses the increasing importance of government in a field heretofore free of any regulation.

Prerequisite: Political Science 101.

MR. MAILEY P.S. 209. SOCIAL LEGISLATION—Three hours

A course dealing with the broad, humanitarian, social legislation of recent years which is generally labeled social insurance: unemployment compensation, workmen's compensation, and social security.

Prerequisite: Political Science 101.

P.S. 221. INTERNATIONAL LAW—Three hours

A study of the development of the body of customs and rules which states have developed to govern their relations, with particular consideration for the responsibility of states for their enforcement.

Prerequisite: Political Science 101.

Desideratum: United States and European history.

P.S. 222. INTERNATIONAL POLITICS—Three hours MR. KASLAS

A broad, general course which aims to present many of the factors that condition the foreign policies of nations.

Prerequisite: Political Science 101.

Desideratum: Some knowledge of history, governments, and geog-

P.S. 223. EUROPEAN GOVERNMENTS—Three hours MR. KASLAS

A study of two European governments representing two diametrically opposed ideologies, the English and the Russian. Since political institutions in the American system are traceable to the English, the first half of the course is devoted to the English government; the second half is a consideration of Russian political institutions. Comparisons between the two are continually made.

Prerequisite: Political Science 101.

#### **PSYCHOLOGY**

Assistant Professor Dominguez, chairman; Instructors Guttman, Kanner, M. Riley, and R. Riley.\*

A major in psychology consists of twenty-four hours. Psychology 100 is not accepted toward a major; Sociology 255 is accepted.

The Department requires that psychology majors take one year of a laboratory science; they may elect biology, chemistry, or physics. Students planning to take graduate work in psychology must study either French or German in order to meet graduate school requirements.

The major in psychology is designed for students who plan to continue the study of psychology on the graduate level, as well as for those whose interests lie in the teaching of psychology in colleges or in the application of the study to such fields as advertising, clinical work, business, education, and industrial personnel work. Students are cautioned that an undergraduate major in psychology does not qualify them for professional psychological work. No student can qualify as a psychologist without advanced graduate study; in a great many fields today, moreover, professional psychologists must hold the degree of Doctor of Philosophy.

<sup>\*</sup>On leave of absence for advanced study.

Students who desire certification by the Pennsylvania Department of Public Instruction as psychological examiners or public school psychologists' should carefully plan their programs under the direction of their faculty advisers to preclude the possibility of omitting necessary courses.

PSY. 100. GENERAL PSYCHOLOGY—Three hours

An introduction to the study of human behavior. The emphasis is on the study of the individual and his reactions to other individuals and to his environment. An attempt is made to equip the student with certain general psychological principles and to encourage the acquisition of a technical vocabulary. Not open to freshmen.

PSY. 201. ADVANCED GENERAL PSYCHOLOGY—Three hours THE STAFF

A more detailed study of some of the topics treated only superficially in the introductory course. More attention is given to such subjects as learning, perception, emotions, etc. Required of prospective majors. (Offered in alternate years.)

Prerequisite: Psychology 100.

Psy. 203-204. Experimental Psychology—Three hours each semester

A lecture and laboratory course designed to familiarize the student with the methods and the results of modern psychological research. The course includes a study of several of the famous experiments in the field of psychology. Also included is practice with the older as well as the more recent methods of experimental research. (Offered in alternate

Prerequisite: Psychology 100.

PSY. 206. APPLIED PSYCHOLOGY—Three hours

THE STAFF

A survey of significant contributions to individual differences. Methods of evaluating and measuring these differences; their significance to the individual, the home, the school, and to vocational and community life.

Prerequisite: Psychology 100.

Psy. 207. CHILD PSYCHOLOGY—Three hours

The course is designed to present a general view of the development and growth of the child. It is concerned primarily with the heredity and native equipment of the child and the manner in which this equipment is modified during childhood. Emotional development, language development, and social relations are considered.

Prerequisite: Psychology 100.

PSY. 208. HUMAN BEHAVIOR-Three hours Miss Dominguez

Human adjustment and maladjustment to life situations with emphasis on motivation, emotional control, personality formation, and the treatment of the lesser personality disorders.

Prerequisite: Psychology 100.

PSY. 212. HISTORY AND DEVELOPMENT OF PSYCHOMETRIC METHODS Three hours THE STAFF

A study of the theory of psychological testing. The principles underlying test selection, standardization, and evaluation are stressed. This course is a prerequisite for the following courses: Psychology 251, 252,

Prerequisite: Psychology 100.

PSY. 251. INDUSTRIAL PSYCHOLOGY—Three hours

An introduction to the industrial application of psychology in the selection, classification, and training of employees; reduction of monotony and fatigue; the maladjusted worker; accident prevention; work conditions; and employee motivation and morale.

Prerequisite: Psychology 212.

PSY. 252. PERSONNEL PSYCHOLOGY—Three hours

An introduction to the study of psychological factors underlying personnel procedures in business, industry, and education. Discussion of case studies in the settlement of personnel problems in the business world. The administration of the personnel program is analyzed from the point of view of the psychological effects it may have on the employee.

Prerequisite: Psychology 251 or permission of instructor.

PSY. 254. SYSTEMATIC PSYCHOLOGY—Three hours THE STAFF

A historical introduction to the conflicting points of view in recent psychology, followed by a study of the theories of such leaders in the field as Watson, Freud, McDougall, Thorndike, and Kohler. (Offered in alternate years. Not offered 1952-1953.)

Prerequisite: Psychology 100 and two other courses in psychology.

Psy. 255-256. CLINICAL PSYCHOLOGY—Three hours each semester

MISS DOMINGUEZ

A detailed study of the administration and interpretation of some of the individual tests. The student is given the opportunity for actual experience in testing in the Wilkes-Barre Public Schools. The interpretation, by the clinical method, of normal and abnormal behavior of children and adults. Historical sketch; outline of method, including

<sup>&</sup>lt;sup>1</sup> See description of Clinical Practicum, page 140.

examinations, classification, prognosis, and remedial measures. (Offered in alternate years.

Prerequisite: Psychology 207 and 212.

Psy. 257. Abnormal Psychology—Three hours Miss Dominguez A general survey of the principal forms of mental abnormalities, with emphasis on causes, symptoms, course, and treatment. (Offered in alter-

nate years.) Prerequisite: Psychology 208.

PSY. 301-302. RESEARCH IN PSYCHOLOGY—Three hours THE STAFF An opportunity to conduct individual research projects under supervision. (Open to psychology majors only.)

Prerequisite: permission of head of department.

## RELIGION

Associate Professor Vujica, chairman; Instructors Friedman and

A major in the combined fields of philosophy and religion consists Schindler. of twenty-four hours. Philosophy 101 and Religion 101 are not accepted for credit toward a major. The courses may be selected from these two fields as desired by the student.

MR. VUJICA REL. 101. HISTORY OF RELIGIONS—Three hours

Nature and origin of religion. Significant founders and leaders of the great historical and living religions. Sacred literatures, beliefs, and rituals. A comparison of the most important features of the great religions. The contributions of religion to the development and preserva-

tion of cultural values. REL. 201. THE LITERATURE OF THE OLD TESTAMENT—Three hours

A study of the religious thought and practices of the early Hebrews. Codes and critical analysis of the earlier writings of the Old Testament. Comparative studies are made of the Douay, King James, and Jewish translations of the Old Testament.

Prerequisite: Religion 101.

REL. 202. THE TEACHINGS OF THE GREAT HEBREW PROPHETS MR. FRIEDMAN

A study of the Prophetic and Wisdom literature. Emphasis is placed upon the Prophetic and Post-Exilic periods of Hebrew history. The gradual rise of moral ideas is investigated. The course is a continuation of Religion 201.

Prerequisite: Religion 101.

REL. 204. THE LITERATURE OF THE NEW TESTAMENT—Three hours MR. VUJICA

A study of the types of literature found in the New Testament. Problems of language and authorship are discussed. The religious teachings of Jesus and the Apostolic Church are studied against the background of their own time and examined in their significance for contemporary life. Prerequisite: Religion 101.

## RETAIL MERCHANDISING

Professor Rosenberg, chairman; Instructors Berg, Bunn, Green, O'Toole, Sternlieb.

R.M. 101. PRINCIPLES OF RETAILING—Three hours Mr. Sternlieb Policies and practices of the various retail institutions; types of retail institutions and types of merchandise handled; store location and layout; sales and service policies; employment, training, and welfare.

R.M. 102. RETAIL STORE ORGANIZATION AND MANAGEMENT Three hours

Basic principles of successful retail store organization; study of the organizational structure of department stores; organization and functions of operating divisions; planned observation in employment, training, receiving, marking, delivery, wrapping, phone, mail order and adjustment departments. Field trips to retail stores.

R.M. 201. COLOR AND DESIGN-Two hours Mr. O'Toole

Ages of civilization and development of industrial age. Periods, style symbols, classicism, modern design. Components of composition; problems of function; proportion, balance, rhythm, color, light, texture. Fundamentals of interior decoration. Color and design in apparel. Studio, four hours each week.

R.M. 205. RETAIL ADVERTISING AND SALES PROMOTION—Three hours MR. BUNN, MR. GREEN

Study of basic principles of retail advertising and sales promotion. Organization and procedure of advertising department in retail stores; types of retail advertising; copy, headline, layout, type, advertising media, display; research.

R.M. 207. RETAIL SELLING—Three hours MR. BUNN

Fundamentals of retail selling; constructive attitude; knowledge of merchandise and the store; knowledge of the customer; selling techniques; building permanent business. Laboratory observation; actual selling.

R.M. 210. ELEMENTS OF MERCHANDISE—Three hours

Merchandise information; fibers and fabrics; history, rise, production, manufacturing process from fiber to finished fabric; textile terminology, trade names. Identification, testing of fibers; care of fabrics; new devel-

Natural, industrial, and synthetic materials; properties, technologies, imitations; plastics, woods, wood construction, leather and leather goods, glass, pottery, china.

## R.M. 212. Purchases and Merchandise Control—Three hours

Importance of purchases; principles and methods; forms of procedure, handling, storing, and warehousing methods; inventories and their control; types and limitation of stock control systems; application of

Prerequisite: approval of instructor.

## R.M. 214. RETAIL BUYING—Three hours

Buying as a career; types of organizations; functional bureaus as aids in buying; determination of what to buy; analysis of customer demand; where to buy; when and how to buy; brands and labeling; trade relations. Laboratory work required.

Prerequisite: approval of instructor.

R.M. 217. FUNDAMENTALS OF FASHION—Three hours THE STAFF Fashion as a social force. How the fashion world works. Fashions in Paris, England, United States. Apparel, millinery, shoes, accessories; fashion shows.

Prerequisite: approval of instructor.

R.M. 219. RETAIL PERSONNEL RELATIONS—Three hours Mr. Bunn Retail personnel policies; job analysis; employment procedure; wage plans and incentives; employee training; employee evaluation; employee stabilization; employee participation; legislation affecting labor problems in retailing.

# R.M. 220. Organization and Operation of the Small Store

Importance of small business; factors in business success; justification of new businesses; financing; location; policies; management; employee relations; sales promotion; turnover; profit; records; small business and the future.

R.M. 222. RETAIL CREDITS AND COLLECTIONS—Two hours THE STAFF

Organization of credit department; charge accounts; passing on application for credit; retail credit bureau; mercantile agencies; salescheck procedure; collection procedure and correspondence; personal financing; contracts; installment credit; legal aspects of retail credit.

#### R.M. 224. RECENT TRENDS AND DEVELOPMENTS IN RETAILING Three hours THE STAFF

Review of fundamentals; trends in retailing; study of developments in cooperation with retail store executives. Laboratory work; reports on trends and developments.

#### SECRETARIAL STUDIES

Professor Rosenberg, chairman; Assistant Professor Bedillion; Instructors Curtis, Davies, Jenkins.

Students majoring in secretarial studies are required to take a sequence of twenty-four credits outside the Department of Secretarial Studies. It is advisable to decide upon this sequence not later than the sophomore year. The remainder of the electives may be divided between commerce and finance and liberal arts courses according to the interests and vocational objectives of each student.

S.S. 99. Personal-Use Typewriting—No Credit

Development of skill in typewriting; development of an understanding of good style and form in typewritten material; application of typing skill to the writing of business letters and term papers. Laboratory fee required. Four hours a week.

S.S. 101-102. SHORTHAND AND TYPEWRITING

Two hours shorthand, two hours typewriting each semester MISS BEDILLION

Development of reading and writing skill in Gregg Shorthand, Simplified; development of skill in typewriting, and ability to apply skill to typical office problems; training in transcription from shorthand notes, during second semester, with emphasis on punctuation and spelling. Laboratory fee required. Eight hours each week. Two hours lecture, six hours laboratory.

S.S. 105. SHORTHAND1—Two hours

MR. JENKINS

Development of reading and writing skill in basic Gregg Shorthand, Simplified, and review of simple English essentials that are necessary in transcription; completion of basic theory. Four hours each week. One hour lecture, three hours laboratory.

<sup>&</sup>lt;sup>1</sup> Credit will be given only to students who have not previously taken Secretarial

S.S. 106. SHORTHAND1—Two hours

MR. JENKINS

Review of Gregg Shorthand, Simplified, with emphasis on fluency and legibility; development of speed and accuracy in the application of shorthand; pre-transcription training; development of desirable traits and work habits. Four hours each week. One hour lecture, three hours laboratory.

Prerequisite: Secretarial Studies 105 or equivalent.

S.S. 107-108. Typewriting<sup>1</sup>—Two hours each semester Mr. Davies

Development of skill in typewriting; application of skill to letter writing, envelopes and cards, tabulation problems, copying from rough draft, manuscript writing; study of form and style; transcription from shorthand notes during second semester. Laboratory fee required. Four hours laboratory each week.

## S.S. 109-110. ADVANCED STENOGRAPHY

Three hours shorthand, one hour typewriting each semester MISS BEDILLION

Review of Gregg Shorthand, Simplified, with emphasis on fluency and legibility; development of speed and accuracy in shorthand, typewriting, and transcription; application of typing skill to letter writing, tabulation, rough drafts, commercial forms; preparation of telegrams, manuscripts and term papers, stencils and Ditto master copies; training in punctuation, spelling, and other English problems; study of correct form and style; development of desirable work habits, attitudes, and traits. Laboratory fee required. Eight hours each week. Two hours lecture, six hours laboratory.

Prerequisite: Secretarial Studies 102.

S.S. 113-114. ADVANCED SHORTHAND<sup>2</sup>—Two hours each semester

Review of Gregg Shorthand, Simplified, with emphasis on fluency and legibility; development of speed and accuracy in the application of shorthand, typewriting, and English; development of desirable work habits and attitudes. One hour lecture, three hours laboratory.

Prerequisite: Secretarial Studies 106.

S.S. 115. ADVANCED TYPEWRITING<sup>2</sup>—Two hours

Development of greater speed and accuracy in typewriting; review of form and style in typewritten material; application of typing skill to letter writing, tabulation, rough drafts, commercial forms; preparation

of telegrams, manuscripts and term papers, stencils and Ditto master copies; transcription from shorthand notes; development of desirable work habits and attitudes. Laboratory fee required. Four hours laboratory each week.

Prerequisite: Secretarial Studies 108.

S.S. 120. SECRETARIAL ACCOUNTING—Three hours

Fundamental principles of accounting and their application to the keeping of books and records in business and professional offices.

S.S. 200. MEDICAL STENOGRAPHY—Three hours Study of accepted procedures in typical medical offices, clinics, and hospitals; application of stenographic skills to medical dictation; transcription of case histories taken from hospital records; specialized dictation in several branches of medicine; practice in filling out forms for insurance companies, for Veterans Administration, and for Workmen's Compensation. Five hours each week. One hour lecture, four hours

Prerequisite: approval of instructor.

S.S. 203. Speech Reporting—Two hours Speed dictation for speech reporting. Four hours each week. MISS BEDILLION

Prerequisite: satisfactory background in English; ability to take dictation at 100 words a minute and to transcribe notes rapidly and accurately. One hour lecture, three hours laboratory.

Prerequisite: approval of instructor.

S.S. 205. OFFICE PROCEDURES AND OFFICE MACHINES—Four hours

Application of skills to integrated office problems; procedures in typical business and professional offices; study of personal and technical requirements for secretaries; understanding and use of various commercial forms; operation and use of office machines and equipment; personal and vocational guidance. Laboratory fee required. Eight hours each week. Two hours lecture, six hours laboratory.

Prerequisite: approval of instructor.

S.S. 243. Business Education and Methods of Intruction in SECRETARIAL STUDIES—Three hours MISS BEDILLION

Principles of business education; business curricula in secondary schools; psychology of skill-building as applied to shorthand and typewriting; techniques of instruction in typewriting and shorthand, standards, tests, and measurement in the secretarial studies; content, objectives, and methods of instruction in office practice.

<sup>1</sup> Credit will be given only to students who have not previously taken Secretarial

<sup>&</sup>lt;sup>2</sup> Credit will be given only to students who have not previously taken Secretarial

#### SOCIOLOGY AND ANTHROPOLOGY

Assistant Professor Symonolewicz, chairman; Instructor Chwalek.

A major in sociology consists of twenty-four hours. Although Sociology 100 is prerequisite to all the courses in sociology, it is not accepted toward a major in sociology. Political Science 204 may be accepted toward the major in sociology.

Students who intend to major in sociology are requested to plan their work in the Department in consultation with the Chairman. A major in sociology should ordinarily include the following four courses: Sociology 255, 265, 278, and 280. With the approval of the Department Chairman, however, other courses may in some instances be substituted.

The courses given by the Department of Sociology and Anthropology are divided into five groups:

#### I Sociological Theory

Soc. 100. Introduction to Sociology—Three hours The Staff

A systematic view of sociology, providing essentials for an intelligent approach to questions about man in society and for specialized study of sociclogical problems.

Soc. 278. ADVANCED GENERAL SOCIOLOGY—Three hours

MR. SYMONOLEWICZ

An analytical study of the structural elements of society in terms of their functional relationship to social organization and social change. The course is designed to enable the student to apply these analytical tools to the relation of society to the person, the analysis of groups, the study of major institutions, and the understanding of social change. Prerequisite: Sociology 100.

Soc. 280. HISTORY OF SOCIOLOGICAL THEORIES—Three hours MR. SYMONOLEWICZ

A historical study of the development of sociology as a science, traced through its principal leaders. The aim of the course is to provide the student majoring in sociology, or in one of the related fields, with a historical background necessary for understanding of the current trends in sociology as well as for clarification of its distinct subject matter, problems, and methods.

Prerequisite: Sociology 278 or permission of the instructor.

II Social Organization

SOC. 200. MARRIAGE AND THE FAMILY—Three hours

MR. SYMONOLEWICZ

The development of marriage and the family in ethnological and historical perspective. Family disorganization and problems of adjustment to modern conditions. Practical aspects of marriage. Factors responsible for marital success or failure.

Prerequisite: Sociology 100 or permission of the instructor.

Soc. 204. Educational Sociology—Three hours Mr. Symonolewicz

A study of the structure and function of formal education as a key institution in our society. Interrelationships between education and other basic institutions—family, church, economics, and government. The pattern of human relations within the school and the relation between the school and community. The interaction of the formal and informal educational agencies. Contemporary educational problems and their sociological backgrounds.

Prerequisite: Sociology 100.

Soc. 208. Sociology of Religion—Three hours Mr. Symonolewicz

Comparative study of religious behavior and institutions. Social factors and conditions underlying religious movements. The evolution of religious groups and types of religious leadership. Religion and other major social institutions. Function and role of the church in society.

Prerequisite: Sociology 100 and Religion 101, or permission of the instructor.

Soc. 212. Sociology of Industry—Three hours

An analysis of the formal and informal social organization of the work plant and of the relationship between modern industrial organization and the community.

Prerequisite: Sociology 100 and Economics 100, or permission of the instructor.

## III Social Change and Social Problems

Soc. 215. URBAN SOCIOLOGY—Three hours MR. SYMONOLEWICZ The development of modern cities; effects of urban life upon social organization and personality patterns; major social problems of the cities.

Prerequisite: Sociology 100.

Soc. 230. Social Problems—Three hours MR. SYMONOLEWICZ A survey of most pressing contemporary social problems and an examination of current theories of social disorganization.

Prerequisite: Sociology 100.

Soc. 235. CRIMINOLOGY—Three hours

Crime and the criminal are considered with reference to individual and environmental factors in crime causation. An analysis of theories of crime and punishment; statistics on crime; police methods; prisons; scientific objectives of the new penology.

Prerequisite: Sociology 230 or Sociology 278, or permission of the instructor.

Soc. 245. FIELDS OF SOCIAL WORK—Three hours

A survey of the main problems of social work and of agencies and methods that have developed to cope with them. The nature and requirements of the different fields of social work.

Prerequisite: Sociology 100 and Psychology 100.

## IV Social Psychology

Soc. 255. Social Psychology—Three hours Mr. Symonolewicz
A general survey of the field of social psychology. Social factors in

human nature; psychology of individual differences; social interaction; collective behavior, psychology of personality; social pathology.

Prerequisite: Sociology 100 and Psychology 100.

Soc. 260. Culture and Personality—Three hours

MR. SYMONOLEWICZ

A comparative study of the development and functioning of human personality in various cultures from the point of view of social psychology and social anthropology.

Prerequisite: Sociology 255.

### V Anthropology

Soc. 265. General Anthropology—Three hours

MR. SYMONOLEWICZ

A general survey of the field of anthropology stressing its cultural aspects. Fossil man and prehistoric cultures; modern races and the problem of their classification; nature, characteristics and elements of culture.

Prerequisite: Sociology 100.

Soc. 270. Peoples of the World—Three hours Mr. Symonolewicz

A rapid survey of the peoples and cultures of the world in their historical relations. Distribution of races, languages, nationalities and cultures and ideological and socio-economic factors responsible for contemporary social unrest in various parts of the world, particularly among the native peoples of Asia and Africa.

Prerequisite: Sociology 100.

#### SAFETY

Instructor Hilbert.

Safety 1. Driver Education and Traffic Safety in the Secondary Schools—Three hours

Driver and pedestrian responsibilities, sound driving practices; society's responsibilities; what makes the automobile go; driver and pedestrian attitudes; city driving; open-road driving; adjusting driving to conditions; road training; bicycle safety; practice driving; practice teaching of driving school patrols; school bus transportation; behind the wheel instruction emphasized.

Safety 2. Material and Methods of Teaching Safety in the Elementary Schools— $Three\ bours$ 

The approach to safety instruction in the elementary schools; integration of safety material with the social studies program; techniques of instruction; consideration of physical arrangements in school buildings and programs from the standpoint of pupil safety; materials which can be obtained or created for safety instruction with young children.

Safety 3. Material and Methods of Teaching Safety in the Secondary Schools—Three hours

Inspection and testing programs in the secondary schools; broadening of techniques of instruction; practical means of developing the safety attitude; a survey of current materials for use in safety programs. The course will feature a study of testing devices and standard practices in their use, and classroom demonstrations.

SAFETY 4. ORGANIZATION AND ADMINISTRATION IN SAFETY EDU-CATION—Three hours

A discussion of the problems, procedures, principles and techniques involved in the organization, administration and supervision of accident prevention programs. Designed for college instructors, school administrators, school safety directors, and others interested in, and responsible for, organizing and conducting school and community safety programs.

SAFETY 5. THE PSYCHOLOGY OF ACCIDENT PREVENTION—Three hours

Treats one of the major approaches to the solution of the safety problem by means of developing better understanding of human nature and methods of dealing with it. It may be assumed that man is interested in his own bodily safety; but it must not be assumed that that interest is always active. Ways will be discussed to arouse and develop the interest that lies dormant; or is covered up by bad habits of attention, emotion and maladjustment to life; or is not sufficient to safeguard the individual because he is of low-grade intelligence, lacks knowledge, or has not been properly trained.

SAFETY 6. VISUAL AND OTHER AIDS IN SAFETY EDUCATION—
Three hours

Discussion and demonstration of practical values in visual and other sensory aids; standards for appraising and their relationship to the curriculum; guiding principles and techniques; minimum equipment and sources; housing and distribution.

#### **PSYCHOLOGY**

(See page 128.)

PSY, 260. CLINICAL PRACTICUM—One to three hours a semester

MISS DOMINGUEZ

Supervision of psychological testing is offered to individuals working toward certification as psychological examiners or school psychologists in the State of Pennsylvania. Forty-five hours of testing is required for one semester hour of credit.

Prerequisite: Psychology 255-256 or equivalent.

## The Evening Division

To meet the needs of ambitious men and women who, while employed, desire the help which may come from college instruction, Wilkes College has organized the Evening Division.

A wide program of courses is offered each semester from which selections may be made according to individual tastes and requirements.

The courses offered by the Evening Division are designed for their special value to the following groups:

- 1. Those employed in business or governmental organizations who desire and need training to fit them for advancement.
- 2. Men and women who wish to prepare themselves by study and training for work in a new field.
- 3. Teachers, nurses and those in other professions who desire additional training in one or more subjects in order to meet the professional requirements demanded of them.
- 4. Business executives who are interested in advanced problems and discussion courses offered in various business fields.
- 5. Those who wish to prepare for the profession of accounting and aspire through the study of accounting courses to qualify for certification by the Commonwealth of Pennsylvania as Certified Public Accountants.
- 6. Individuals wishing to broaden their knowledge or to increase their skill in certain fields for their personal satisfaction and improvement.

All students who register for evening courses are classed as special students. Upon such a student's completion of thirty semester hours, his high school transcript and his record as a special student will be evaluated at his request, and he may then be registered as a degree candidate. No student, however, may expect to count toward an undergraduate degree more than thirty credits earned as a special student.

Students who do not seek a degree are admitted to all classes which they are qualified to take by reason of their maturity, previous education, and experience. Although it is advisable, when possible, for each student registering to have first completed his high school course, the lack of part or all high school training does not debar an applicant from the advantages of the practical training of the College, provided he is qualified to follow special courses of instruction in which he wishes to register.

No student who has been advised to withdraw from the College's day school program for academic failure will be permitted to register for evening school, nor will such student receive credit for subsequent work done in evening school. Any exception to this regulation must be approved by the Deans.

Whenever a student's record of achievement indicates that he is not obtaining sufficient benefit to justify continued study, the College may request that he withdraw from the Evening Division.

## Special Community Lecture Series

As a community college, Wilkes feels obligated to provide opportunities for adults to continue their education. It therefore offers, in the Evening Division, an introductory program in adult education, from which it believes positive good will result.

Community members who register for one of the lecture courses in the series meet one evening a week throughout the ten or fifteen weeks the course is in session. They do not receive regular college credit.

Given each semester, the lectures cost considerably less than the regular undergraduate courses at the College.

The present program includes series in current events and art for business and professional persons.

Further information concerning the program may be secured from the Director of Admissions.

## New Scholarships

Dickson Memorial Scholarships

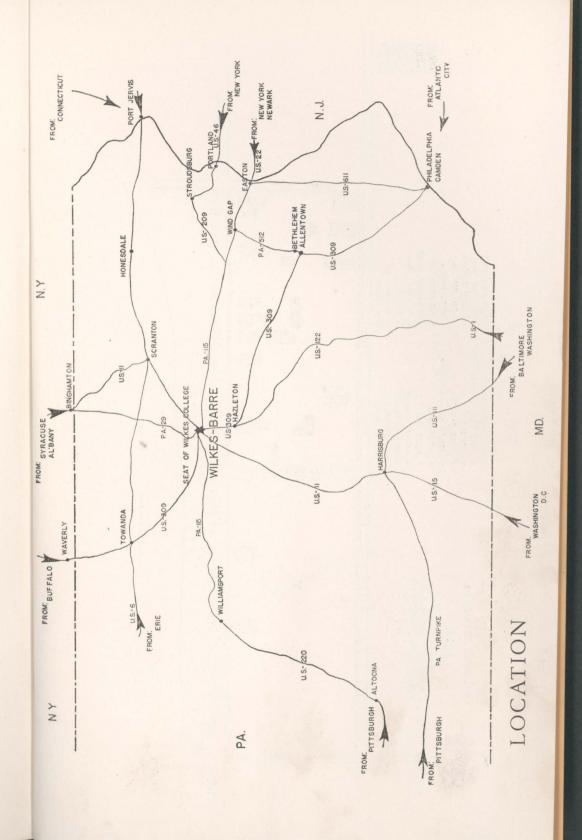
Funds for four scholarships have been given to the College by the Trustees of the Allan H. and Kate P. Dickson Memorial Trust. These half-tuition scholarships will be granted to students of high scholastic achievement and aptitude who have also demonstrated leadership in student affairs during their high school years.

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