

WILKES COLLEGE *Bulletin*

1964-1965



Wilkes College Library

WILKES-BARRE, PENNSYLVANIA

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1964-1965

FALL AND SPRING
SEMESTERS—1964-65

Vol. XIII

College Calendar

SUMMER SESSION—1964

Wednesday, June 10 to Friday, June 12—*Registration*
 Monday, June 15—*Classes begin*
 Friday, August 7—*Summer School ends*

FALL SEMESTER—1964

Monday, September 14 to Friday, September 18
Orientation for Freshmen
 Tuesday, September 15—1 to 4 p.m.—*Registration for Freshmen*
 Thursday, September 17—1 to 4 p.m.
Registration for Upperclassmen
 Monday, September 21—*Classes begin at 8 a.m.*
 Saturday, October 10—*Parents' Day*
 Saturday, October 17—*Homecoming, Wilkes vs. Ursinus*
 Monday, October 19—*Student Teaching begins*
 Saturday, October 31—*Final date to remove incompletes*
 Wednesday, October 28—*Mid-semester reports*
 Monday, November 2 to Friday, November 6
Registration for Seniors, Juniors, and Engineering students
 Monday, November 9 to Friday, November 13
Registration for Sophomores
 Monday, November 16 to Friday, November 20
Registration for Freshmen
 Tuesday, November 24—*Thanksgiving recess begins at 5 p.m.*
 Monday, November 30—*Thanksgiving recess ends at 8 a.m.*
 Wednesday, December 9—*Student Teaching ends*
 Saturday, December 19—*Christmas recess begins at noon*
 Monday, January 4, 1965—*Christmas recess ends at 8 a.m.*
 Saturday, January 16—*Classes end*
 Monday, January 18 to Wednesday, January 27
Examination period

SPRING SEMESTER—1965

Thursday, January 28—*All-College Registration*
 Monday, February 1—*Classes begin at 8 a.m.*
 Monday, March 1—*Student Teaching begins*
 Saturday, March 13—*Final date to remove incompletes*
 Wednesday, March 17—*Mid-semester reports*
 Monday, March 22 to Friday, March 26
Registration for Juniors and Engineering students
 Monday, March 29 to Friday, April 2
Registration for Sophomores

College Calendar

Monday, April 5 to Friday, April 9—*Registration for Freshmen*
 Tuesday, April 13—*Easter recess begins at 5 p.m.*
 Wednesday, April 20—*Easter recess ends at 8 a.m.*
 Friday, April 23—*Student Teaching ends*
 Saturday, May 22—*Classes end*
 Monday, May 24 to Wednesday, June 2—*Examination period*
 Sunday, June 6—*Baccalaureate*
 Monday, June 7—*Commencement*

SUMMER SESSION—1965

Wednesday, June 9 to Friday, June 11—*Registration*
 Monday, June 14—*Classes begin*
 Friday, August 6—*Summer school ends*

Evening School

FALL SEMESTER—1964

Thursday, September 17, Friday, September 18, and Monday, September 21, from noon until 8 p.m.; Saturday, September 19 from 9 a.m. to noon—*Registration*
 Monday, September 21—*Classes begin at 6 p.m.*
 Saturday, October 31—*Final date to remove incompletes*
 Wednesday, October 28—*Mid-semester reports*
 Tuesday, November 24—*Thanksgiving recess begins 10 p.m.*
 Monday, November 30—*Thanksgiving recess ends at 6 p.m.*
 Thursday, December 17—*Christmas recess begins at 10 p.m.*
 Monday, January 4, 1965—*Christmas recess ends at 6 p.m.*
 Thursday, January 14—*Classes end at 10 p.m.*
 Monday, January 18 to Thursday, January 21
Examination period

SPRING SEMESTER—1965

Thursday, January 28, Friday, January 29, and Monday, February 1, from noon until 8 p.m.; Saturday, January 30, from 9 a.m. to noon—*Registration*
 Monday, February 1—*Classes begin at 6 p.m.*
 Saturday, March 13—*Final date to remove incompletes*
 Wednesday, March 17—*Mid-semester reports*
 Tuesday, April 13—*Easter recess begins at 10 p.m.*
 Wednesday, April 20—*Easter recess ends at 6 p.m.*
 Thursday, May 20—*Classes end at 10 p.m.*
 Monday, May 24 to Thursday, May 27—*Examination period*

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Wilkes College

Wilkes College had its beginnings in 1933 when Bucknell University, responding to a request of community leaders, established its Junior College in Wilkes-Barre. On June 26, 1947, Bucknell University Junior College came to an end and Wilkes College received its charter as a four-year liberal arts college. The College has grown slowly to its current enrollment of approximately 1400 full-time day students and 500 part-time evening school students.

From its inception the college has been dedicated to these twin goals—a sound and stimulating intellectual experience for students and a program of service to the community.

AN INDEPENDENT COLLEGE

It was inevitable that the new college should be non-sectarian, for its purpose was to serve all students equally and its supporters wished the College to integrate itself with all constructive efforts in the community. It was believed that these ends could be served best by an independent college that was interdenominational in its influence and non-denominational in its control.

A COOPERATIVE EFFORT

The original concept of community services has been strengthened with the passing of the years and with growing experience. It has been clearly demonstrated that the students, the College, and the community all benefit from cooperative effort. This cooperative relationship, with its emphasis on trained intelligence and extended planning, has resulted in cooperative action.

UNITY AMIDST DIVERSITY

A college that wishes to serve all groups requires both a definite philosophy and a working policy. Wilkes College has been guided by the thought that unity in our community, our nation, and our world requires not only great vision but warm understanding of peoples. In its small circle Wilkes College brings together students of many faiths, backgrounds, and countries. It encour-

ages them to maintain their convictions and their loyalties. It encourages them to create friendships based upon respect for differences, and to adhere to those ideals that create unity and good will amidst diversity.

While academic work is the basis of the College program, the faculty recognizes that academic training will be of little importance unless students emerge as men and women of strong faith and fine character. In the words of John Stuart Mill, "Before you can make men doctors and lawyers, you must first make them men."

Wilkes College is committed to education as a way of life.

DECADES OF GROWTH

Because of their interest and faith, friends have multiplied their support during the past decades and the campus has expanded steadily so that it now includes most of the properties facing the River Common. Fortunately, a growing endowment has kept pace with the expansion of the campus.

FREEDOM OF INQUIRY

Years have passed since Bucknell gave the control of the Junior College to a local Board of Trustees, guided by the late Gilbert S. McClintock, and events of these years demonstrate the wisdom of their decision. With responsibility came a pressing desire to strengthen the work of the faculty, united in their faith that the intellectual and spiritual resources of the student are vigorous where the creative mind is free.

ACCREDITATION

Wilkes is accredited by the Department of Public Instruction of the State of Pennsylvania and the Middle States Association of Colleges and Secondary Schools. The Accounting curriculum has been accredited by the Certified Public Accounting Examiners of the State of New York.

An Educated Man

seeks truth, for without truth there can be no understanding;

possesses vision, for he knows that vision precedes all great attainments;

is aware of the diversity of ideas and beliefs that exist among men;

has faith in the power of ideals to shape the lives of men;

knows that man's progress requires intellectual vigor, moral courage, and physical endurance;

cultivates inner resources and spiritual strength, for they enrich his daily living and sustain him in times of crisis;

has ethical standards by which he lives;

respects the religious convictions of all men;

participates constructively in the social, economic, and political life of the community;

communicates ideas in a manner that assures understanding, for understanding unites men in their search for truth.

Formulated and adopted by the faculty as a guide to learning.

Policies and Objectives

Admissions

Registration

Tuition, Fees, and Expenses

Financial Assistance

Education at Wilkes

The spirit of the College derives from the ideals of the faculty and the quality of its instruction; from its library, its laboratories and equipment.

The spirit of the College is the integrity of its mission, the intellectual climate that enriches the student as a person.

The College believes that no attention can be too great which intensifies a student's thinking or deepens his interest or develops his techniques and skills.

It believes that a good student commits himself to the disciplines of his work. To learn, to master, and to understand he must accept the responsibilities that he shares with others.

Admissions

True education demands a love of learning and a spirit of sacrifice and service. Education is not a right or privilege but an opportunity that carries with it obligations prescribed by the College and responsibilities shared with the student.

This concept has guided the faculty and trustees in developing the philosophy and procedures of the Admissions Committee, making it possible for students of ability, determination, and soundness of character to study at Wilkes.

Here the student will find an atmosphere of competitive learning in the world of ideas. His desire to undertake study at Wilkes places him among the ready men for whom education is an experience in excellence. He will be charged with the responsibility for fulfilling that trust.

The careful selection of able and committed students is deemed essential to the attainment of high standards and warm personal relationships between students and faculty.

Admission Requirements

HIGH SCHOOL RECORD

Candidates applying for admission to Wilkes should be high school graduates and should offer at least fifteen units of work representing the equivalent of the usual four-year high school or preparatory school course. For entrance into certain departments, specific courses in high school are necessary. An example would be four years of Mathematics for those interested in studying the physical sciences, engineering, or mathematics.

ENTRANCE EXAMINATIONS

All candidates for admission to the freshman class will be required to take entrance examinations. The Admissions Committee considers these test results in relation to the applicant's high school transcript and the record of performance during the high school years.

ADMISSIONS COMMITTEE

The Admissions Committee is comprised of the Director of Admissions, Dean of Men, Dean of Women, and three faculty members. This committee acts upon special cases referred to it by the Director of Admissions.

Admissions Procedure

APPLICATIONS FOR ADMISSION

To assist students seeking admission, the College has adopted procedures designed to simplify admissions.

Applications for admission may be obtained from the Director of Admissions and should be returned to him with a \$10.00 registration fee. Upon receipt of the application, the Director of Admissions will write to the student concerning his high school transcript and recommendations.

ADMISSION TESTS

The Scholastic Aptitude Test of the College Entrance Examination Board is required of all applicants. The December, January, or March tests are recommended as most suitable. If unusual circumstances prevent the applicant from taking this test, he must notify the Director of Admissions. Wilkes is a member of the College Entrance Examination Boards.

Students communicating with the Educational Testing Center in Princeton, New Jersey, or in Los Angeles, California, should refer to the Wilkes College code number 2977.

PERSONAL INTERVIEWS

A personal interview with each student is not required. Students and their families are invited to visit the College at their convenience. It is advisable to write for an appointment so that the Deans may arrange to meet with them.

ACCEPTANCE OF ADMISSION AND DEPOSIT

The Admissions Committee meets each week and acts upon all completed applications. Notification of admission is sent immediately. Resident students are required to forward a \$100.00 tuition and dormitory deposit by May 1; local students are requested to forward a \$50.00 tuition deposit by June 1 in order to guarantee their entree into the College.

The College accepts a limited number of applications for the February class. Procedures are similar to those followed in the fall semester.

TRANSFER STUDENTS

Candidates from other institutions wishing to enter with advanced standing shall follow the regular procedure for admission. The student should request the college or university he is attending to forward to Wilkes a transcript and an official statement of his 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. Acceptable credits will be placed on the Wilkes record of the student following a final evaluation.

College policy prohibits the Admissions Committee from considering for admission any student who has been placed on academic probation or who has been dropped from any other college or university.

ADVANCED COURSE STANDING

Freshmen who are equipped to enter advanced courses in college may enroll in such courses upon passing a placement examination, or upon approval by the department or departments concerned.

Registration

Every student is expected to register on the dates specified in the College calendar. A student presenting himself for registration after the time designated for registration will pay a late registration fee of \$5.00.

Expenses

TUITION

The flat tuition rate adopted by the College for a student carrying the normal load for his course is \$450.00 per semester. A student who registers for fewer than fifteen hours of work will pay either \$30.00 for each semester hour or the regular tuition fee, whichever amount is lower. A student who elects a heavier schedule than is normal for his course will be charged \$30.00 for each additional hour of credit beyond the normal load.

FEES

For those courses that require individual faculty supervision or the addition of supplies and equipment the College finds it necessary to charge nominal fees. These fees are listed in the Bulletin with the course description. When these fees total more than \$50.00 a flat fee of \$50.00 per semester will be charged.

The cost of individual instruction in applied music is \$50.00 for full-time students for a series of fifteen half-hour lessons. The College accepts a limited number of special students for individual instruction in applied music for a series of fifteen half-hour lessons at a cost of \$60.00 per semester.

A student activities fee of \$30.00 per year will be charged to those students taking fewer than 15 or more than 9 semester hours or to any special student wishing to participate in activities.

SPECIAL CHARGES

Graduation fee	\$25.00
Convocation fee (two-year students)	\$15.00
Transcript (no charge for the first copy)	\$ 1.00

EVENING SCHOOL

Students registered in the Evening School will be charged \$30.00 per semester hour. A fee of \$30.00 is charged for those wishing to participate in student activities. Further information regarding the content of the courses, requirements for undergraduate and graduate degrees, and requirements for teacher certification may be secured from the Office of Admissions.

SUMMER SCHOOL

Students registering for courses in the eight-week Summer School session will be charged \$30.00 per semester hour of study payable before registration.

CHEMISTRY BREAKAGE

Students taking chemistry laboratory courses are required to deposit \$10.00 to cover possible charges for broken, lost, or damaged equipment. The unexpended balance of this fee is refundable.

INSURANCE COVERAGE

The College makes available both accident and accident and health insurance to students through the American Casualty Company, Reading, Pennsylvania. Each student will be required to purchase an accident policy at a cost of \$10.00, and dormitory students also are required to accept a health insurance policy costing \$20.00. This health insurance is also available to commuting students but is optional with them. Both policies provide protection for the full College term and premiums are payable in full with the first semester charges. There are four fully accredited hospitals in the vicinity of the campus, and a college physician is available for emergency treatment.

PAYMENTS

Payment of all charges for tuition, fees, room and board is to be made at the Finance Office, Parrish Hall, before registration.

Several plans have been developed to assist students who do not have the cash in hand, and it is suggested these plans be considered when special assistance is needed.

1. Wilkes College participates in the National Defense Student Loan Program, and students needing financial assistance may apply to the College for such a loan.
2. If a student does not meet the requirements for a National Defense Student Loan, but wishes to space his payments over the school year, we recommend that he apply for an educational loan at one of the local banks. Information concerning this method of financing an education may be obtained at the College.
3. Grants-in-aid and scholarships will be credited toward the student's bill at the beginning of each term.

REFUNDS

Students in good standing who withdraw from the College will receive a refund of tuition under the following conditions:

During the first six weeks of a term one-half of the tuition will be refunded upon request if the withdrawal is made for adequate and satisfactory reasons. After the first six weeks no refunds are allowed and the student is obligated for the full costs for the term.

Refund of dormitory charges will not be allowed except under conditions beyond the control of the student.

No student who is suspended or expelled shall be entitled to any refunds.

Living Quarters and Board

DORMITORIES

Residence for boarding students is provided in a number of large mansions that have been given to, or purchased by, the College in recent years. At present there are nine men's and eight women's dormitories, each of which accommodates from eighteen to twenty-three students and a resident proctor. Every effort is made to maintain a homelike atmosphere. Students and their families are invited to inspect these homes. Each room includes a

bureau, desk, chair, and a bed. Students will supply their own blankets; bed linens and towels are furnished through a local laundry on contract by the College. The charge to the student for this service is \$26.00 per year.

All out-of-town students must reside in the College dormitories on campus. A deposit of \$50.00 is required to reserve a room. The charge for room and board is \$450.00 per student per semester. All dormitory students must purchase accident and health insurance at a cost of \$30.00.

Information regarding dormitories can be obtained from the Office of Admissions.

Financial Assistance

To provide assistance for those who need financial help, the College receives substantial gifts from friends. These gifts provide scholarship aid to those who are already making every effort to help themselves.

In accepting any form of aid from the College the student accepts an obligation—which is also the obligation of every other conscientious student—to:

1. Maintain a good scholastic record.
2. Exert a constructive influence in the College and the community.
3. Participate constructively in an all-college activity of his own choice.

In planning to meet any difference between his own resources and the cost of education the student should consider a combination of *work, loans, and scholarships*.

Scholarships

Scholarships and grants are available to students with good records of achievement and performance in high school or college who cannot fully finance the cost of their college education and who *can demonstrate seriousness of purpose and effort*.

A few honor scholarships are awarded without regard to need to students of outstanding achievement in appreciation of their contribution to the intellectual life of the group. The amount of each grant will be determined by the Scholarship Committee.

SCHOLARSHIP REQUIREMENTS

1. Students must be admitted to the College before their applications for scholarships will be considered.
2. All applicants for scholarships must obtain an interview with the Dean.

3. No scholarship will be granted until the student has made every reasonable effort to finance as large a portion as possible of the costs of this education.

4. Every applicant for scholarship aid shall submit confidential information pertaining to his financial needs and his record of achievement.

5. No student may simultaneously hold more than one scholarship granted by the College.

6. Scholarships will be forfeited if the student, at any time, carries fewer hours than are normal for the course.

7. No scholarship is awarded for more than one year, but scholarships will be renewed upon request, provided this request is supported by a good academic record, by evidence of continued need, and by constructive participation in at least one all-college activity of his own choice.

8. The amount of the grant is confidential, and any breach of this confidence shall terminate the scholarship.

INSTRUCTIONS TO THE APPLICANT

1. To establish eligibility for a scholarship, the student must first apply for admission to the College and must be accepted. Application for admission should be made prior to March 1.

2. Students requiring aid shall indicate their need on the application for admission to the College.

3. Wilkes is a member of the College Scholarship Service. Applicants for scholarship aid are required to forward to the College Scholarship Service in Princeton the Parents' Confidential Statement with a request that a copy be sent to Wilkes. The Parents' Confidential Statement can be secured from the high school guidance counselor.

Loans

The College participates in the National Defense Student Loan Program. Complete information concerning this program and applications for financial assistance under this program may be obtained at the College.

SPECIAL LOAN FUND

The Florence and Joseph A. Goldman Loan Fund has been created by the donors to assist Juniors and Seniors whose education may be interrupted by unexpected difficulties. The loan bears no interest and is to be repaid by the student at the earliest practical time so that other students may also receive needed assistance from this rotating loan fund.

Employment

PART-TIME EMPLOYMENT

College makes strict demands on a student's time. The student who finds it necessary to seek full-time employment during a semester is advised to work a year and then apply for admission.

The College cautions the student to limit off-campus work, especially during the freshman year, when working may result in academic failure.

However, part-time jobs in offices, stores, and industry are available for students wishing to earn part of their expenses. For such jobs the student shall register with the College Placement Office.

CAMPUS EMPLOYMENT

The College also offers part-time employment at standard rates in the dining room, offices, laboratories, library, or on the maintenance staff. The holder of these jobs will meet all obligations of his assignments or forfeit all help from the College.

Founders of Scholarships

Each year some 1000 friends contribute to the scholarship fund of the College on an annual basis. Other friends have created scholarships which bear the names of the donors or of persons whom they have memorialized by means of a scholarship.

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.

ANDREW J. SORDONI FOUNDATION SCHOLARSHIP.

This scholarship will be used to assist students of unusual promise and proved ability.

MRS. LEWIS H. TAYLOR left a bequest to the College to be used in assisting students of outstanding scholastic ability who otherwise could not gain a college education.

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.

THE WILLIAM H. CONYNGHAM MEMORIAL SCHOLARSHIP is awarded annually by Mrs. Conyngham in memory of her late husband, a friend and neighbor of the College, and for years an outstanding leader in business and community life.

JESSIE STURDEVANT MEMORIAL SCHOLARSHIP awarded to a student of unusual promise and ability has been made available from the interest of a fund established by the late Miss Sturdevant.

JOHN WELLES HOLLENBACK SCHOLARSHIP. Miss Anna Hollenback has created a scholarship in memory of her father, John Welles Hollenback, and the annual interest of the principal is used for scholarship purposes.

THE RICHARD H. ROYER SCHOLARSHIP is awarded annually to a student who has demonstrated outstanding ability in his studies and in student activities.

MR. HARLAND W. HOISINGTON gives an annual scholarship to assist students of high scholastic ability.

THE JOHN LLOYD EVANS MEMORIAL scholarship was created in memory of John Lloyd Evans, a life-long lover of music, conductor of the Dr. Mason Glee Society, conductor of The Sheldon Choral Society and the Wilkes-Barre Mixed Choral Society. The scholarship of \$300 will be awarded to a senior in music or music education who has demonstrated outstanding ability in his chosen field of study.

HENRY BLACKMAN PLUMB AND EDITH M. PLUMB SCHOLARSHIP TRUST has been established to provide scholarships for students of outstanding ability and character majoring in one of the sciences and attending Wilkes College.

THE BUSINESS AND PROFESSIONAL WOMEN'S CLUB of Wilkes-Barre offers to an outstanding woman student of the College a scholarship each year. The education committee of the club in cooperation with the administration choose a young woman who shows promise of making an outstanding contribution in business or professional life following graduation.

THETA DELTA RHO, the all-college women's service organization, offers a scholarship yearly to a woman student achieving a high score in a competitive examination conducted by the college.

THE NEIL DADURKA MEMORIAL SCHOLARSHIP is awarded annually by the Wilkes College Lettermen's Club. The money for this scholarship is earned and donated by the Wilkes

College Lettermen's Club. The scholarship itself is named in honor of one of the most beloved athletes of Wilkes, Neil Dadurka, who was killed while flying for the United States Marine Corps.

This half-tuition scholarship is given to an incoming freshman who is in need of financial aid and who is an outstanding athlete. The scholarship is given to enable an athlete to participate in the sport for which the scholarship is awarded.

THE NATIONAL COUNCIL OF JEWISH WOMEN—THE WILKES-BARRE SECTION—gives a scholarship annually to a young woman in the field of Education or Sociology. This young woman—a junior or senior—must be a resident of Wyoming Valley.

THE WILLITS COLEMAN MEMORIAL SCHOLARSHIP has been established in memory of Willits Coleman, a member of the Wilkes-Barre Rotary Club, a service organization long active in efforts to raise educational standards in the schools. The scholarship will be awarded to a senior who has demonstrated ability in the classroom and in student activities.

THE METROPOLITAN WIRE GOODS CORPORATION has created scholarships of \$500, \$300 or \$200 at Wilkes College for the sons or daughters of their employees. To qualify for candidacy, a student must graduate in the upper half of the high school class, must test above 550 on the College Board Examinations, and must demonstrate financial need. The scholarship will be granted through the College to the applicant making the best record in high school and on the College Board Examinations. To retain this scholarship, a student must make a strong academic record, and must exert a constructive influence in the College.

THE KING FIFTH WHEEL COMPANY offers each year a scholarship in the physical sciences. This scholarship will be awarded to a student entering the physical sciences who has earned an outstanding record in high school, and whose admission tests indicate the likelihood of superior achievement in the science of his choice.

Ordinarily this scholarship will be in the sum of \$500 for each of the four years of College. Its retention from year to year will depend upon the scholastic record and constructive influence of the recipient.

THE TERESA S. AND ROY P. WALTER SCHOLARSHIP will be granted to a student from Forty Fort who has demonstrated ability, ambition, and need. The scholarship will be for four years at \$425 per year.

Cost of Education Scholarships

A number of local firms make annual gifts to the scholarship fund so that the College may provide needed assistance to able and ambitious students. These grants amount to one-half tuition plus a small amount to cover a portion of the difference between the tuition charges and the cost of education.

THE LESLIE FAY SCHOLARSHIP is granted each year to the son or daughter of an employee of the Company whose record in high school and on the admissions tests has been outstanding. A recipient of the scholarship will be selected on a competitive basis by the Scholarship Committee of Wilkes College. The scholarship will be retained by the student for the four years in College, provided his achievement and influence at the College are deemed outstanding by the faculty.

ADRIAN AND RICHARD PEARSALL OF CRAFT ASSOCIATES INC. have created a half tuition scholarship which will be awarded to a high school graduate who has demonstrated leadership in his scholastic and extracurricular activities and who, without scholarship aid, would be unable to attend college.

Scholastic Endowments

THE W. S. CARPENTER MEMORIAL FUND was established in 1956 by W. S. Carpenter, Jr., and his sons in memory of W. S. Carpenter, who was born in Wilkes-Barre on April 5, 1853, and lived in this community during his entire active business life. The fund was given to strengthen the work of the science division by subsidizing research projects, assisting the College in attaining able teachers, providing scholarships for outstanding students, providing lectures by speakers of national prominence, purchasing exceptional tools, apparatus, or other equipment for use in the science department.

THE ALLAN HAMILTON DICKSON CHAIR OF ENGLISH LITERATURE has been created by his daughter Dorothy Dickson Darte to encourage enlightened teaching, extended scholarship, and creative writing in the fields of literature.

The Facilities of the College

Buildings and Plant

Experience at Wilkes

Education is the process of connecting and relating, of testing and retesting, of discovery and rediscovery.

The faculty can teach the student facts, but his contribution to a free society depends upon the continual expansion of his knowledge and upon its relevance to human experience.

The student can strive for technical and professional competence, but the inner resources of the mind and spirit must nourish and enrich his achievement.

The Facilities of the College

Buildings and Plant

The College is constantly seeking to implement and improve its facilities for instruction. A growing campus provides added classrooms, modern laboratories, and an up-to-date scientific research center. Preparations are under way for building a new library, dormitory and dining quarters. A theater and recital hall is under construction and will be completed in September 1965. The Board of Trustees has approved plans for the construction of a music and art building adjacent to the theater.

THE LIBRARY

The present library is the former residence of Mr. and Mrs. Fred Morgan Kirby. The home was presented to the College in 1941 as a gift of Allan Kirby, one of Wilkes-Barre's most generous benefactors. The building was first named the Kirby Home for Education. Since 1947 it has been used as the College library.

This three-floor stone structure contains more than 70,000 volumes and some 500 current periodicals and journals. Students and faculty use the resources of the periodical, reference, and Treasury rooms for research and reading assignments. Shelved on open stacks, the books are easily accessible and may be borrowed for periods of two weeks. Reserve books for particular courses circulate for the time period specified by the instructor.

The library is open Monday through Thursday from 8 a.m. to 10 p.m. and on Friday from 8 a.m. to 5 p.m.; on Saturday and Sunday from 1 p.m. to 4 p.m. During vacation periods the hours are 9 a.m. to 5 p.m.; during examination periods from 8 a.m. to 10 p.m. on weekdays, from 8 a.m. to 4 p.m. on Saturdays, and from 1 p.m. to 4 p.m. on Sundays. Students may borrow books from the ten nearby libraries (public and college) through the interlibrary loan system.

An introduction to the use of the library is given to every freshman during the freshman orientation week.

STARK HALL OF SCIENCE

The departments of biology, chemistry, and physics are housed in Stark Hall of Science, named in honor of Admiral Harold R. Stark, former Chief of Naval Operations and currently Chairman of the Board of Trustees of the College. This building was completed in 1958 and enlarged in 1963, so that it now provides approximately 85,000 square feet of modern classroom, laboratory, and office space. Complete facilities are included for undergraduate instruction and student research in all departments, and for graduate study in chemistry and in physics.

In addition to the usual instructional facilities, Stark Hall houses the Science Research Center, where faculty, graduate students, and selected undergraduate students conduct various research programs, many with industrial or governmental financial support.

Research in the sciences has included such varied work as research in allergy, immunochemistry, developmental plant morphology, protozoology, limnology, theoretical acoustics, atmospheric physics, experimental solid state physics, thermochemistry, surface chemistry, fuel cell research, and organic synthesis.

Outside sponsors of recent research programs have included the National Science Foundation, the Pennsylvania Heart Association, the National Institutes of Health, the United States Air Force, the Petroleum Research Fund of the American Chemical Society, the Research Corporation, and numerous private industries and individuals.

GYMNASIUM AND OUTDOOR ATHLETIC PLANT

Completed in September of 1950, the Gymnasium is well equipped for intramural and intercollegiate athletic events. It has a seating capacity of 2400. Recently, the College added modern training room facilities off campus adjacent to Kirby Park. Here also are located the playing fields for football, soccer, baseball, and hockey, as well as asphalt tennis courts and an archery range. All students are invited by the Jewish Community Center, on South River Street, and the YM-YWCA, on South Franklin Street, to use their swimming pools and bowling alleys.

THE BOOKSTORE

Books, stationery, and supplies may be purchased at the College Bookstore, Harding House, on South Franklin Street. The bookstore is operated on a cash basis. The cost of books and supplies will vary with the course of study, but will average approximately \$50.00 per semester.

The College also maintains a United States Post Office sub-station in Harding House.

On the second floor are meeting rooms for Student Government.

GUIDANCE CENTER

The College maintains a testing center to assist the Deans in their counseling of students. The College Testing Service is available at no charge to all Wilkes students and, for a fee, to members of the Community. The testing center also provides assistance to the State Bureau of Rehabilitation and other agencies. The Guidance Center, on South River Street, was the law offices of the late Gilbert S. McClintock, the first Chairman of the Board of Trustees.

PLACEMENT OFFICE

The Placement Office assists seniors in finding permanent employment in a position suitable to their talents and training. It also extends such assistance to any graduate of the College. The Placement Office also assists students in securing part-time employment during the school year and during the summer.

Complete information about job opportunities and graduate schools is available. Each year the Office is visited by over one-hundred representatives of industries and one hundred school systems from all parts of the United States to interview students for business and teaching positions.

Comfortable quarters are provided for representatives from industry, from school systems, and from graduate schools to interview and discuss with students opportunities available to them.

The Placement Office is located in the Guidance Center, on South River Street, next to McClintock Hall.

THE COMMONS

The Commons, facing South Street, serves as a dining hall for the resident students. It also provides cafeteria service for commuting students.

SNACK BAR

Cafeteria service is also provided at the College's newly furnished Snack Bar, behind McClintock Hall. An attractive patio provides a pleasant meeting place in warm weather.

CONYNGHAM ANNEX (ART)

Classes in art education meet in Conyngham Annex, behind Conyngham Hall. Here also the art club holds its annual Art Fair. Work of the students is shown, and the public is invited to the displays and exhibits. Opportunities are offered to the students to enter their paintings in local and regional competition.

GIES HALL (MUSIC)

Gies Hall, on South Franklin Street, is the temporary home of the Music Department. Faculty offices, practice and rehearsal rooms are located in this building. In 1945 it was affectionately named in memory of the late Professor Paul Gies, who in the early years of the College was director of music.

The band, choruses, and woodwind ensemble present concerts locally and on tour. To encourage musicianship the department has been host to the Pennsylvania Intercollegiate Choral Festival. Nationally known music educators, clinicians, and performers have participated in workshop and classroom activities. During the winter and spring semesters *Town and Gown* concert series presents students and music faculty in instrumental and vocal programs before audiences from both the College and the community.

CHASE THEATER

Chase Theater, once the carriage house behind Chase Hall, was presented to the College in 1937 by Admiral and Mrs. Harold R. Stark, as a memorial to Fred M. Chase and his wife, the sister of Admiral Stark.

Cue and Curtain, the student drama group, has given one-act plays by O'Neill, Sartre, Albee, Anouilh, Tennessee Williams, and others. Frequently, the plays are student directed. Over the years the College has presented Elizabethan plays of Shakespeare, Webster, Dekker, Middleton, as well as those of Moliere, Shaw, Ibsen, Pirandello, Wilder, Osborne, Noel Coward, Philip Barry.

The College, in cooperation with the Wilkes-Barre Kiwanis Club, has presented the following musical comedies: *Bloomer Girl*, *Paint Your Wagon*, *Annie Get Your Gun*, and *The Music Man*.

ALUMNI OFFICE

The Alumni Office keeps records of all graduates and alumni of the College. It edits the *Alumnus* and acts as liaison for the College with alumni and interprets to the alumni chapters the changes and needs of the institution.

Prospective students interested in finding out more about the College may write for information to the Alumni Office. They are always welcome at Alumni Chapter meetings.

Current active Chapters are located in Pennsylvania in Wilkes-Barre, Allentown, Bethlehem, Easton, Harrisburg, Scranton, Philadelphia; in New York in Binghamton, New York City, Long Island; in New Jersey in Newark, Somerville, Morristown, Trenton; Wilmington, Delaware; Baltimore, Maryland; Washington, D. C.

OFFICES OF ADMINISTRATION

Chase Hall, 180 South River Street, the first building on the campus, was donated in 1937 by Admiral and Mrs. Harold R. Stark.

On the first floor are the Director of Admissions, the Registrar, and the Director of Student Activities; on the second, the Dean of Men, the Dean of Women, and the Director of Athletics; on the third floor are the Alumni Office, the office of Information and News, and the office of College Development.

Weckesser Hall, the College's most recent building, is the gift of Mr. and Mrs. Frederick J. Weckesser. The President and the Dean of Academic Affairs have their offices in Weckesser.

CLASSROOMS AND INSTRUCTION

Parrish Hall, formerly the Glen Alden Building of the Lehigh and Wilkes-Barre Coal Company, was acquired in 1958. Presently, the Finance Office occupies the first floor.

The Office of Community Services and the Institute of Municipal Government occupy the fifth floor. Classes and faculty offices in Commerce and Finance, Education, Political Science, and Psychology are in Parrish Hall.

The building also has a room devoted to Polish art treasures and craftsmanship, furnished by the Women's Committee for the Polish Room at Wilkes College.

Conyngham Hall, located on South River Street, was one of the earliest properties acquired by the College. The Conyngham home was a gift in 1937 of Mrs. Bertha Robinson Conyngham, in memory of her husband John N. Conyngham.

Pickering Hall, facing South Franklin Street, is presently being used by the Modern Foreign Language Department and contains the language laboratory, a gift of the graduating class of 1962.

DORMITORIES

Men's dormitories are Ashley, Barre, Butler, Dennison, Gore, Hollenback, Miner, Slocum, and Warner Halls.

Women's dormitories are Catlin, Chapman, McClintock, Sterling, Sturdevant, Susquehannock, Weckesser, and Weiss Halls.

Dormitories are named after prominent local families and for patriots of the American Revolutionary War, whose history forms part of the rich heritage of the Wyoming Valley region.

Student Life

Counseling

Student Activities

Social Activities

Athletics

Student Regulations

Studying at Wilkes

In college the teacher works with the student, challenging him to extend the limits of his mind. He encourages him to think courageously and truthfully and to create with all his resources so that he may act with independent judgment.

In a college community freedom of inquiry and responsibility are essential.

In the world community the right of the individual to differ safeguards the freedom of all men.

As student and teacher engage in the experience of creative thinking, the heritage of learning becomes the responsibility of everyone.

Counseling

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; most of all he must learn to assume responsibility for all he does.

FRESHMAN ORIENTATION PROGRAM

The transition from the directed work of the high school to the independent and more intensive work of the College occasionally causes difficulty. Several days at the beginning of the term are therefore set aside to assist freshmen in planning their academic program.

During the first week, new students take aptitude, interest, foreign language, and English-placement tests. The week also gives the new students an opportunity to become acquainted with one another and to learn about the College, the curriculum, and the student activities.

Throughout their first term small groups of freshmen meet for one hour a week to discuss informally their personal, academic, and vocational objectives. Representatives of the faculty discuss with them:

1. Methods of intelligent self-directed study.
2. Standards of value in personal conduct and in relationships with others.
3. Values of the College extracurricular program.
4. The value of college experiences in developing a philosophy of life.

By placing responsibility upon the student for planning and conducting these discussions, the College encourages clear thinking, initiative, poise, and breadth of view.

STUDENT ADVISEMENT

Students sometimes need guidance in resolving personal, social, and academic difficulties. Since a student's physical and mental

health affect his studies and his grades, he is encouraged throughout his college career to consult with his classroom instructors, his faculty adviser, the Deans, or the Department Chairmen concerning his scholastic progress.

COLLEGE CONSULTATION SERVICE

The College Consultation Service offers individual assistance to students with difficulties of a personal or environmental nature. Students may apply directly to the Consultation Service for appointments or may arrange for consultation through the Deans' Office. Interviews with the specially trained staff are conducted on an entirely confidential basis.

Student Activities

The student activities of the College broaden a student's interests begun in the classroom. The faculty encourages a program of extracurricular activities that contribute to the educational development of the student who chooses to participate.

Student activities are designed to appeal to a wide variety of tastes and talents; as such they enjoy the support of the College community. The student activities include Athletics, Dramatics, the College Band, Debating, Choral Club, Collegians Male Chorus, Women's Chorus, Madrigal Singers.

There are four class organizations. In addition, special departmental clubs stimulate and satisfy individual interest in academic, professional, and artistic fields. These clubs are developed for students in cooperation with the faculty. All women students may become members of Theta Delta Rho, headed by its own executive committee, which plans and arranges social activities.

The College requires that all campus organizations be open to all students; consequently, groups that are exclusive do not exist. All student groups work in cooperation with faculty advisers and the Deans.

STUDENT GOVERNMENT

Government of student affairs rests in a Council composed of annually elected members representing the classes and other student groups. The Council serves as a coordinating agency; it appropriates funds from the Student Activities budget to all student groups; it supervises the College social calendar; it arranges the program for Homecoming; it establishes social regulations and conduct; and it serves in an advisory capacity to the Director of Student Activities and the Administrative Council.

INTER-DORMITORY COUNCIL

The Inter-Dormitory Council, made up of elected representatives from the men's and women's residence halls, plans and coordinates dormitory social functions and develops and administers dormitory policy.

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.

Each student is required to attend assemblies during each of his four years. He will, however, be allowed the following number of cuts each year: freshman and sophomore year, four cuts; junior year, eight cuts; senior year, fifteen cuts.

These requirements must be satisfied to establish eligibility for graduation.

PUBLICATIONS

The students publish the *Beacon*, a weekly newspaper; the *Manuscript*, a literary magazine, issued in the Spring; and the *Amnicola*, the College annual. There are opportunities for students on the editorial, art, and business staffs.

Graduated amounts, in the form of tuition stipends, are available to students in the upper classes who hold editorial and managerial positions on the *Beacon* and the *Amnicola*. Students eligible for these grants should make written application to the faculty director of the publication before April 1.

Social Activities

The College believes in helping students to help themselves. Groups are encouraged to initiate programs that will serve their interest and benefit others. It has been found that students gain most from those activities, social and cultural, which release the best talents of the individual.

Special projects include the following: TDR's Golden Ages Christmas party, at which residents of Convalescent Homes are entertained; Student Government's party for children of St. Stanislaus Orphanage; Wilkes J.C.'s party for YMCA children; Student Work Day, in support of an orphan in a foreign land.

In addition there are various social affairs to raise money for the United Fund, to collect toys for the Salvation Army, and to donate books for students in foreign countries.

The Student Seminar Committee, patterned after the Faculty Seminars, encourages discussion of topics of interest to the student body. Under sponsorship of Student Government, the seminars attract students as well as faculty.

A full and varied program of social and recreational activities supplement the extracurricular program. At all these functions members of the faculty and their wives are invited guests and chaperones.

COME-AND-MEET-US-PARTY

Student Government makes plans for student leaders to welcome the freshmen one week before the semester starts. An informal party and dance for the entire student body culminate the week's introduction to college life.

PARENTS' DAY

After they have adjusted themselves to the academic life of the College, students invite their families to a weekend of social, cultural, and athletic events. Preparations for the annual Parents'

Day program are entirely the responsibility of a Student Planning Committee. The agenda includes intercollegiate soccer and football games, luncheon with the faculty, a play, and a film.

HOMEcoming

To welcome returning alumni, students construct displays on campus and decorate dormitory and classroom buildings. For the outstanding displays an alumni committee presents awards during halftime ceremonies at the football game. A Homecoming Queen and her escorts are feted at a dinner dance.

FORMAL DANCES

Student organizations and clubs sponsor four formal affairs, open to the entire student body. The Homecoming Dance, for alumni and undergraduates; the Lettermen's Christmas Formal; Theta Delta Rho's Valentine Formal; and during Spring Weekend the Cinderella Ball have become traditions on campus.

TDR AND LETTERMEN TEAS

Throughout the year TDR and the Lettermen sponsor afternoon teas and student receptions. The women of Theta Delta Rho entertain those high school seniors who plan to enter the College the following year.

IDC CHRISTMAS PARTY

The Inter-Dormitory Council sponsors an annual Christmas party preceding the winter vacation. The student body, faculty, and administration are invited to a buffet and dance at the Commons.

HAMPTON EXCHANGE PROGRAM

IDC also sponsors a social exchange program between students from Wilkes and Hampton Institute, Hampton Roads, Virginia. Several Wilkes students during the last week of April and an equal number of Hampton students during the first week of May visit the other's campus. Faculty members and Deans accompany both groups.

WILKES OPEN WRESTLING TOURNAMENT

Between Christmas and New Year's the College sponsors the Wilkes Open Wrestling Championships. Known as the "Rose Bowl of Wrestling," this annual tournament attracts athletes from over sixty colleges, athletic clubs, and YMCA's throughout the United States. Wilkes wrestlers join them in competing for individual and team awards. Tourneys and clinics are held over a three-day period in the Wilkes gymnasium. The Tournament, the largest in the country, has the record for the most number of entries.

WINTER CARNIVAL

Student Government sponsors a Winter Carnival, held at one of the nearby resorts in the Poconos. A day of skiing, tobogganing, and ice skating climaxes the close of the examination period.

SPRING WEEKEND

Student Government also plans Spring Weekend. Clubs and organizations set up gala outdoor booths, and the campus takes on a Mardi Gras atmosphere. At the Ball at midnight on Saturday a senior, chosen by the student body by secret ballot, is crowned Cinderella Queen.

THE MANUSCRIPT FILMS

During each semester the *Manuscript* Society brings to the campus distinguished motion pictures, produced by American and foreign film companies.

CLUB ACTIVITIES

In addition to the regular social calendar, campus organizations plan their own special activities, such as the Beaux Arts Ball, sponsored by the Art Club.

THE PRESIDENT'S PICNIC

On the Saturday before Commencement the graduating class is invited by the President to a picnic and outing in the country.

Athletics

Athletics are an integral part of the activity program and as such are subject to policies set by the faculty and administration and approved by the Board of Trustees.

The College maintains intercollegiate schedules in eight varsity sports: football, baseball, basketball, soccer, golf, tennis, swimming, and wrestling. Men who take part in intercollegiate sports satisfy the requirements for physical education for the duration of that sport.

A program of intramural sports and physical education stresses physical standards and cooperative team spirit and recreation. Every man has a chance to participate in basketball, touch football, volleyball, softball, and bowling. The athletic program for women includes dancing, folk and modern, bowling, basketball, softball, and swimming.

ATHLETIC POLICY

Intercollegiate athletics are introduced for the benefit of the student body and in consequence athletes receive the same consideration in admissions and in the awarding of scholarships that is given to other students. Wilkes enters into intercollegiate competition with other colleges of the Middle Atlantic Conference adhering to similar policies of admission and maintaining comparable scholastic standards.

The College is a member of the Middle Atlantic Collegiate Athletic Conference, the National Collegiate Athletic Association, and the Eastern Collegiate Athletic Conference.

Student Regulations

It is recognized that courtesy and consideration are the basis of good relations between individuals. Informal and friendly associations between students and faculty are a tradition on campus.

Although these relations are flexible, certain precedents have been established in the best interests of the individual and the College. A few are mentioned here:

1. The possession and use of liquor on campus are forbidden, and none will be served at college affairs.
2. Smoking is not permitted in classrooms or hallways, in the library, or on the first floor of the Commons. Facilities are available in various buildings for students who may wish to smoke during their free periods.
3. The College provides several parking lots for student automobiles. Since facilities are limited, dormitory and commuting students are required to purchase at the Finance Office a permit which entitles them to park their cars in the areas reserved for their use. Cars which do not display appropriate parking stickers will be towed away at the student's expense. Freshmen and sophomore dormitory students are not permitted to maintain cars on campus.
4. Although participation in at least one student activity is encouraged, each student is responsible for planning and utilizing his time effectively.
5. The faculty cooperates with students who miss classes because of illness, or as representatives of the College, or for special religious observances; in cases of excessive absence the student shall present his instructors with a note from the Deans. In all instances the student is expected to make up the work that is missed.

STUDENT RESPONSIBILITY

The students in a great measure determine the influences of the College. The faculty counts upon their cooperation in establishing the highest possible standards of intellect and morals.

Because students benefit from a program and policies to which they subscribe, the College may request students to withdraw when their influence and behavior are deemed detrimental to the best interests of the student body.

The Academic Program

Curricula

Academic Requirements

Graduation Requirements

Learning at Wilkes

Education leads men to seek answers to problems of significance and to inquire into ideas and beliefs of eternal relevance. There is no better expression of man's purpose than his sense of belonging to a universe ruled by truth.

Creative thinkers set the standards and the high aims of education. One may not reach these standards in his lifetime; that they are recognized and sought after is the measure of one's creative interests.

The faculty encourages the student to cultivate learning that he may grow in wisdom. In this way the mind in its journeyings finds constant surprise and delight at rediscovering itself.

Curricula

Graduate Programs

CHEMISTRY AND PHYSICS

To fulfill its objective of service to the community and the nation, Wilkes in 1961 introduced two new curricula leading to the degrees of Master of Science in Chemistry and in Physics. These curricula are designed to make practicable either full-time graduate study toward the degrees or part-time study by engineers and scientists with appropriate undergraduate training employed in the Wilkes-Barre area.

Full details of this program are published in the bulletin of the Graduate Division.

COOPERATIVE GRADUATE PROGRAM

Wilkes is cooperating with Temple University to bring to the area a graduate program in education.

The Temple University program leads to the degree of Master of Science in General Education and is accepted by the Commonwealth for permanent certification of classroom teachers.

Candidates may register at the College. Under this cooperative program all credits are granted by Temple University.

Details of this graduate program in education may be obtained by writing to the Director of Admissions.

Undergraduate Programs

Wilkes is a liberal arts college that offers the degree of Bachelor of Arts in the humanities, the social sciences, and the natural sciences.

All course work in education required for careers in teaching is available in combination with the degree programs mentioned.

The College also confers the degree of Bachelor of Science in chemistry, physics, medical technology, commerce and finance, and secondary education.

A detailed description of these programs is provided in the section of the bulletin titled "Degree Programs."

PRE-PROFESSIONAL DEGREE PROGRAM

Four years of undergraduate study are ordinarily required to qualify for the Bachelor's degree. Wilkes College makes an exception to this requirement for medical and dental students. These students may, with the approval of the graduation committee, satisfy the requirements for the bachelor's degree by completing three years of undergraduate study at Wilkes and by requesting credit toward the degree for their first two years of work in graduate school.

Such students must petition the graduation committee for permission to graduate, submit official transcripts from the professional school, and pay the usual graduation fees. In all cases the final approval for the granting of the degree rests with the graduation committee of Wilkes College.

ENGINEERING

Qualified students may enter the two-year engineering curriculum. Upon the successful completion of the engineering program the student may transfer as a junior to an institution granting degrees in his field. A detailed description of these programs is provided in the section of the bulletin titled "Degree Programs."

TERMINAL PROGRAM

Students may earn a terminal Certificate in the two-year secretarial curriculum. A detailed description of this program will be found under "Degree Programs."

Evening Division

The evening division offers educational opportunities to adults who cannot attend day classes. Students may register for courses in the Evening Division and earn credits toward an undergraduate degree.

Students will confer with the Director of the Evening Division to arrange a course of study to meet their needs, abilities, and special requirements. During the semester students will consult with the Assistant Director of Evening Classes concerning their program.

When the student completes thirty hours, his record is reviewed by the Admissions Committee. At this time the Committee recommends that a student continue to work for a degree, or be placed on probation, or withdraw from the Evening Division.

Students who do not desire a degree are admitted to all classes which they are qualified to take by reason of their maturity, previous education, and experience. High school training is desirable but not necessary, provided the student is qualified to follow special courses of instruction in which he wishes to register.

The courses offered in the Evening Division are designed for 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. Individuals wishing to broaden their knowledge or to increase their skill in certain fields for their personal satisfaction and improvement.

Day School students will be allowed to take courses in the Evening Division only after having received written permission from the Deans or the Registrar.

Summer School

The faculty offers selected courses during an eight week summer session, which begins in the third week of June.

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.

Academic Requirements

GRADES

The primary purpose of any marking system is to inform the student of his achievement. Marks also aid in evaluating students for purposes of recommendation. Grade reports are sent to students and parents at the end of each term. Mid-term reports are sent if the work is unsatisfactory.

Five numerical grades are given for academic work.

Grade	Interpretation
4	Academic achievement of outstanding quality.
3	Academic achievement of high quality.
2	Academic achievement of acceptable quality in meeting requirements for graduation.
1	Academic achievement of quality below the average required for graduation.
0	Academic achievement below the minimum required for course credit.

Inc. means that a student receives an incomplete grade. Incompletes will be granted to students who because of illness or reasons beyond their control have been unable to satisfy specific course assignments. All unfinished work must be completed before the sixth week of the following term. If an incomplete is not removed within this period, the grade will be changed to a zero.

COURSE CREDITS

Each course at the College is assigned a specific number of credits. For example, English 101 is a 3 credit course and English 151 is a 4 credit course. Usually, credits assigned to the course are determined by the number of hours that the class meets per week.

POINT AVERAGES

The student is given a number grade for every course in which he is enrolled. To calculate the number of points earned in a course, multiply the grade in each course by the number of credit hours for the course. To compute the point average, total these points for all courses and divide by the total number of credit hours.

Below is an example illustrating the method used to compute point averages.

Course	Credit Hrs.		Points	Credit Hrs.	
	Carried	Grade		Passed	
Bio. 101	3	4	12	3	
Eng. 101	3	0	0	0	
Fr. 101	3	2	6	3	
Hist. 101	3	1	3	3	
Mus. 100	3	3	9	3	
Total credit hrs. carried...	15				
Total credit hrs. passed				12	
Total points earned			30		
Average.....	$30 \div 15 = 2.0$				

Notice that the student has accumulated 12 credits toward graduation. The zero grade in English means that the student must repeat that course.

Averages are cumulative; the work of each semester will be added to the total. *To graduate a student must have at the end of his senior year a 1.85 average in all his courses and a 2.0 average in his major field.*

CLASS STANDING

Marks and averages at the end of each of the four academic years indicate a student's progress. The faculty expects students to achieve the following averages:

	Average
End of Freshman Year	1.4
End of Sophomore Year	1.7
End of Junior Year	1.85

If these yearly averages are not attained, the student's record is reviewed by the Committee on Academic Standing to determine whether or not he should be allowed to remain in college.

PROBATION AND DISMISSAL

Any student failing to meet these grade requirements will be placed on probation. Failure to attain these standards in the next semester will result in automatic dismissal from the College.

Unless special permission is granted, a student dropped for academic failure will not be considered for readmission until one year after being dropped.

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.

STUDENT LOAD

No students shall be allowed to carry an overload without approval of the adviser and the Dean. An overload will be permitted only for students with an average grade record of 3 or special need.

Credits in excess of the normal load are charged at the usual rate per credit, unless it can be shown that a student is compelled to take an overload because of the rotation of courses within a department.

WITHDRAWALS

Students may change their courses during the first week of a semester, provided they secure the approval of their faculty adviser and the Dean. A student who withdraws from a course after the first week but who continues other courses will receive a zero unless the Dean, faculty adviser, and instructor agree that the student be permitted to drop the course without prejudice. Students may drop overloads at any time without prejudice.

Students carrying a normal load may drop courses for personal reasons with the permission of the Dean, but the grades for the remaining courses will not count toward honors, awards, or scholarships.

No student who has been advised to withdraw from the College's day school program for academic reasons will be permitted to register in the Evening Division without the written consent of the Dean and then will be allowed to register only as a non-matriculating student.

Students who withdraw from the Evening Division or drop courses should give prompt written or verbal notice to the Director of the Evening Division and to the instructors concerned, in order that their records may not unjustly show failure in courses.

CHANGE OF PROGRAM

Students who wish to transfer from one department to another shall obtain the approval of the Department Chairmen and the Dean. The student shall satisfy the curriculum requirements of the Bulletin in force at the time of transfer.

TRANSFER OF SUMMER CREDITS

Students desiring to study at another college during the summer must petition the Graduation Committee for approval. The student must earn a grade of 2 or higher in order for the work to be credited toward graduation. In some cases it may be necessary for a student to take examinations before credit is granted.

DEAN'S LIST

The faculty gives recognition for high quality work. Candidates for the Dean's List, published at the end of each term, must obtain a point average of 3.25 or higher for all courses taken. Students taking less than the full credit load for their curriculum will not be eligible for the Dean's List.

HONORS

The granting of Honors at Commencement is based upon the academic record made by students carrying a normal load for their curriculum during their last two years at the College. Requirements for Honors are as follows: for *cum laude*, a cumulative average of 3.35; *magna cum laude*, 3.60; *summa cum laude*, 3.80.

Graduation Requirements

All candidates for degrees and certificates must be present at Commencement. If circumstances prevent their attendance, students must apply to the appropriate Dean for permission to take the degree or certificate *in absentia*.

The faculty has approved the following requirements which the student must satisfy in order to be eligible for graduation:

1. He must complete all subjects required for the degree as stated in the Bulletin in force at the time of his admission to the program. Transfer students must complete the last 30 credits in residence at the College.
2. He must earn a grade of 1 or better in each required subject.
3. He must obtain a cumulative average of 1.85 for all courses.
4. He must obtain a cumulative average of 2.0 for all subjects within his major.
5. He must satisfy all requirements pertaining to the orientation and assembly programs and physical education.
6. He must demonstrate competence in written and spoken English.

Students enrolled in the two-year terminal program must complete all course requirements and must earn a cumulative average of 1.7 for all courses.

Engineering students will receive certificates upon completion of 60 credits of required work plus P. E. 101, 102, 103, 104, 105, 106, provided they attain a cumulative average of 1.7 for all courses.

No student shall graduate until all financial obligations to the College have been satisfied.

Awards

At Commencement a number of awards are presented to outstanding students in selected fields. The Deans also give two special awards for highest academic achievement.

Senior Awards

THE DEAN'S SCHOLARSHIP AWARDS are granted to the man and woman in the graduating class who have excelled in scholarship throughout their four years at the College.

THE AWARD IN THE HUMANITIES AND SOCIAL SCIENCES is given each year by Miss Annette Evans to the man or woman in the graduating class who has demonstrated outstanding scholarship in one or both of these areas, and has manifested intellectual curiosity and creative imagination.

THE PHYSICS AWARD is presented annually to the graduate of the department who has maintained throughout his or her college career the highest average grade in physics courses.

THE BIOLOGY RESEARCH AWARD is presented annually to the graduate who has demonstrated exceptional ability in a research project. The faculty of the Biology Department selects the recipient of this award.

THE CHEMISTRY AWARD is presented by the Department of Chemistry to the graduate who has maintained the highest scholastic average throughout the four years of the chemistry course.

THE ENGINEERING AWARD is given by the faculty of the Department of Engineering to the student whose achievement in the two-year engineering course is most outstanding.

THE WALL STREET JOURNAL AWARD is granted to a graduate in commerce and finance for high scholarship in his field of concentration.

THE PENNSYLVANIA INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS AWARD is granted to a graduating senior who has received high grades in accounting and demonstrated qualities of leadership in other activities.

THE W. F. DOBSON AWARD IN ACCOUNTING is given to the graduate who has made the most outstanding record in accounting during his four years at the College.

THE L. J. VAN LAEYS AWARD IN JOURNALISM is given to the graduate who has done the most creditable work in journalism courses.

THE OUTSTANDING GRADUATE OF THE YEAR AWARD is given by the Wilkes College Alumni Association to the graduate considered by a special faculty committee to have made the strongest contribution to the life of the College.

Undergraduate Awards

THE MRS. JAMES McKANE AWARDS of \$25 each are made to the man and woman in the junior class who have ranked highest in their class throughout their first two years of college.

THE LINDA MORRIS AWARD is given by Mr. and Mrs. Herbert Morris in memory of their daughter, Linda, to that young woman who has maintained the highest academic record through the first three years at Wilkes College.

THE JOHN WILKES, INC., ANNUAL FORENSIC AWARD is made annually to the Wilkes student who has demonstrated outstanding ability in the field of forensics during the previous year.

THE WILKES FACULTY WOMEN'S AWARD is given to the sophomore woman who has ranked first in her class during her freshman year.

The College and the Community

Office of Community Services

Wilkes-Barre Philharmonic Orchestra

Fine Arts Fiesta

Service at Wilkes

It is his own deficiency, and no degree of fate, that makes a man sink into the depths. To think there is no escape from preordained misery is to make the misery perpetual. To seek new paths in a constant renewal of strength—that has always been the secret of progress. When a man waits helplessly for the turning in the wheel of fortune, he has to be regarded as shorn of manhood.

If we could free even one village from the shackles of helplessness and ignorance, an ideal for the whole of India would be established. Let a few villages be rebuilt in this way, and I shall say they are my India. That is the way to discover the true India.

RABINDRANATH TAGORE
Towards Universal Man

The College and the Community

The College was founded to serve the community and has received a large measure of its ever-growing support from outstanding leaders in the community. It has recognized for many years that its growth was related to the economic and social redevelopment of the community and, therefore, it has sought to participate in every effort for community betterment. In consequence, a pattern of cooperation has developed in which the College and the Community work with one another for their mutual benefit.

Office of Community Services

In cooperation with the Chamber of Commerce, The Industrial Fund, and other community groups, the College has provided for some years a program designed for the improvement of labor-management relations and for the study of modern practices in local government. These efforts have been maintained on a minimum basis by funds from the College, the Chamber of Commerce, local governments, and other civic groups.

These local efforts have been recently strengthened by a grant of \$150,000 from the Ford Foundation. In consequence, the work in both areas will be enlarged and a new Area Research Center has been established at Wilkes College.

AREA RESEARCH CENTER

The Area Research Center provides professional direction and secretarial and research assistance in cooperation with the county and city development agencies, the Economy League, the Industrial Fund, the Committee of 100, the Chamber of Commerce, employers, labor unions, the Planning Council of the United Fund, and other agencies desiring special services.

The purposes of the Center are (1) to coordinate the many studies of community problems and trends so that the results may always be available to interested community groups and to

others; (2) to assure continuity of studies so that long-time trends may be known and their significance in the local and national scene may be understood; (3) to make special studies for public and private groups, including municipalities, the Industrial Fund, corporations, labor organizations, the Economy League, school boards; (4) to cooperate with the Planning Commissions of the City and County, with the United Fund, and with other social agencies and civic organizations.

LABOR-MANAGEMENT TRAINING PROGRAM

Because Wilkes serves an area which has been undergoing drastic economic readjustments, it is deemed essential that every effort be made to encourage cooperative planning and action. To establish a climate for industrial redevelopment the College has pioneered a Labor-Management Training Program in which the needs of the individual and the company are analyzed.

Plans are arranged in consultation with officials, foremen, and other employees and are designed to meet the general and specific requirements of the particular company. Where several firms are confronted with common problems, special classes are organized to include representation of several companies.

The program designed for members of labor unions is tailored to the particular needs of the group. Broad topics in economics are presented to provide a basis for the discussion of ideas, laws, and practices. All classes are conducted on the College campus where the academic climate induces and stimulates free intellectual inquiry. It has been demonstrated that in this atmosphere the members participate more freely in the discussion and consideration of significant problems.

As an integral part of the three-pronged Labor-Management Training Program, union and management personnel sometimes meet together in an effort to develop that mutual understanding that is essential to constructive action.

INSTITUTE OF MUNICIPAL GOVERNMENT

The Institute of Municipal Government, developed from the activities of the Political Science department, offers an educa-

tional program for public officials. By providing training, the Institute informs locally elected or appointed public leaders of modern practices in government. The Institute does not campaign or enter politics. The Institute does cooperate with municipal leagues and associations engaged in consultation and research on the local governmental level.

The Institute publishes a monthly *Newsletter* containing timely articles related to the responsibilities of local officials interested in the development of the region.

The Institute has offered courses to magistrates, borough and township secretaries, police, councilmen and commissioners, health officers, and school directors. During the past five years over one hundred merit awards have been presented to outstanding local officials for service to their communities.

Wilkes-Barre Philharmonic Orchestra

The Wilkes-Barre Philharmonic Orchestra, organized under the ægis of the College in the fall of 1951, presents a series of three symphony concerts annually. A number of the members come from the department of music of the College.

Fine Arts Fiesta

The College participates with area-wide cultural groups in the Wyoming Valley Fine Arts Fiesta, a program of music, drama, and the arts presented on the public square each spring.

Degree Requirements

Leadership at Wilkes

Those of us who are concerned with the education of young people and with the vitality of our society can never accept uncertainty and confusion as the inevitable condition of society. We therefore are confronted with two choices. We can grasp and support a rigid ideology that offers final answers by ignoring uncongenial facts and truths, or we can make every effort to comprehend the significance of new facts, new truths, and new conditions.

We must endeavor to extend the vision of our students, enlarge their understanding, and prepare them to participate in strengthening and developing our social institutions.

DR. EUGENE S. FARLEY,
President, Wilkes College

Undergraduate Programs

The program at Wilkes has been carefully designed so that students may meet the entrance requirements of graduate and professional schools. Liberal arts preparation provides an excellent background for work in professional schools, such as those of Business Administration, Education, Medicine, Library, Law, or Theology.

Students planning to go to graduate school should consult as early as possible with their department chairman.

In its degree programs Wilkes College provides for a broad liberal education which aims at helping students achieve intellectual, social, aesthetic, and spiritual development, and for the concentration in special areas for which students are qualified and have interest.

In the Bachelor of Arts and Bachelor of Science degree programs the College endeavors to acquaint the student with the nature and extent of knowledge in all the principal fields, and to give him some idea of the methods used in controlling and extending that knowledge. In addition to gaining this general knowledge the student is required to develop greater competence and understanding in one major field of study.

Bachelor of Arts Degree

The Bachelor of Arts degree programs are 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. Studies are concerned with men and events, thoughts and institutions, art and science. Programs are designed to create breadth and perspective as opposed to more specialized skills.

A liberal arts 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 areas in which the student will carry on his explorations.

A R E A S

Humanities
English
Fine Arts
Foreign Languages
Mathematics
Music
Philosophy - Religion

Social Sciences
Commerce and Finance
Economics
Education
History
Political Science
Sociology

Sciences
Biology
Chemistry
Physics
Psychology

GENERAL REQUIREMENTS FOR B. A. DEGREE

The following courses are required of all candidates for the Bachelor of Arts degree. They will usually be taken in the semesters indicated.

In a curriculum that requires a student to begin with courses at a more advanced level, the advanced course will be accepted as fulfilling the general requirements in that subject.

Required Courses	Credit Hours	To be Taken in Semesters
English 101, 102	6	1-2
English 151, 152	8	3-4
History 101, 102	6	1-2
Philosophy 101, 102	6	5-6
Fine Arts 101 or Music 100	3	1 or 2
Foreign Languages ¹ 101, 102, 103, 104	12	1-2-3-4
Mathematics ² 101, 102; or Physics 101, 102; or Biology 101, 102	12	1-2-3-4
Economics 101, 102; or Political Science 101, 102; or Psychology 101, 102; or Sociology 101, 102	12	3-4-5-6
Physical Education 101, 102, 103, 104	0	1-2-3-4
Physical Education 105, 106	2	1-2
	67	

¹ In all curricula requiring foreign language the level of the course will depend upon the achievement of the student. Except for foreign language majors, the language requirement is through the 104 course, or an equivalent course prescribed by the student's adviser.

² Students planning to major in Mathematics, Biology, Chemistry, Engineering, and Physics should take courses in high school that prepare them to start the College mathematics program with the course in Analytic Geometry, Math. 122. Experience has shown that many students can profit from a course in algebra and trigonometry. These courses are usually offered in the summer at most colleges and universities and may be taken in the summer prior to the freshman year.

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, especially in the areas of biology, mathematics, and music. It is essential that the major field of concentration be elected before the beginning of the junior year.

Majors in the Bachelor of Arts degree program may be selected from the following subject areas:

Biology	Fine Arts	Philosophy - Religion
Economics	Foreign Language	Political Science
Education (Elementary and Secondary)	History	Psychology
English	Mathematics	Social Science
	Music	Sociology

Those students electing a career in elementary or secondary education are required to select a major in one of the subject areas. These subject areas may be selected from those listed above and from those listed under the Bachelor of Science degree programs that follow. Individual department programs will define the necessary course requirements. Teaching certification requirements for most states may be met at Wilkes College. Students are expected to familiarize themselves with specific state requirements.

COURSE REQUIREMENTS

The specific requirements for a degree in any of the above majors are listed in the section of this bulletin titled "Degree Requirements." The student with his faculty adviser will plan the proper sequence of his major course requirements.

Bachelor of Science Degree

The Bachelor of Science degree programs require more concentration upon a restricted area of human thought and activity. Although these programs emphasize knowledge and skill in special fields, a basic program of general education is coupled with this specialized effort.

GENERAL REQUIREMENTS FOR B. S. DEGREE

The general requirements for the Bachelor of Science degree are basically the same as those required for the Bachelor of Arts degree. Specific requirements are described in this bulletin under the section titled "Degree Requirements."

SELECTION OF A MAJOR

Majors in the Bachelor of Science degree program may be selected from the following subject areas:

Chemistry	Engineering ¹
Commerce and Finance	Music Education
(a) Accounting	Medical Technology
(b) Business Administration	Nursing Education
(c) Business Education	Physics
(d) Secretarial Studies	Secondary Education in Science

COURSE REQUIREMENTS

The specific requirements for a degree in any of the above majors are listed in the section of this bulletin titled "Degree Requirements." The student with his faculty adviser will plan the proper sequence of his major course requirements.

Terminal Program

The College awards a Certificate to those students who successfully complete the requirements of the program in secretarial studies.

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 program may be counted toward the degree of 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 these courses.

The specific requirements for a certificate are listed in the section of this bulletin titled "Degree Requirements."

¹ 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.

Degree Requirements

This section of the bulletin provides the detailed information on the requirements for each of the degree programs offered at Wilkes College.

General Requirements for B. A. Degree

Program of general requirements for all majors other than biology, fine arts, mathematics, and music¹

First Semester		Second Semester	
Eng. 101	3	Eng. 102	3
For. Lang. 101	3	For. Lang. 102	3
Hist. 101	3	Hist. 102	3
Math. 101 or Bio. 101 or		Math. 102 or Bio. 102 or	
Phys. 101	3	Phys. 102	3
F.A.101 ² , Mus.100, Eng.131	2-3	F.A.101 ² , Mus.100, Eng.131	2-3
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
	15-16		15-16
Third Semester		Fourth Semester	
Eng. 151	4	Eng. 152	4
For. Lang. 103	3	For. Lang. 104	3
Math. 101 or Phys. 101 or		Math. 102 or Phys. 102 or	
Bio. 101	3	Bio. 102	3
Psy. 101 or Ec. 101 or		Psy. 102 or Ec. 102 or	
P. S. 101 or Soc. 101	6	P. S. 102 or Soc. 102	6
P. E. 103	0	P. E. 104	0
	16		16
Fifth Semester		Sixth Semester	
Phil. 101	3	Phil. 102	3
Major and electives ³	12	Major and electives ³	12
	15		15
Seventh Semester		Eighth Semester	
Major and electives	15	Major and electives	15

¹ Detailed programs for these majors are outlined on the following pages.

² To fulfill the general requirements the student must take F. A. 101 or Mus. 100 in the first or second semester.

³ Students planning to fulfill requirements for teacher certification will usually take required education courses as electives in the fifth and sixth semester.

Course Requirements in the Majors

Biology¹

Students who major in Biology may be planning careers in medicine, teaching, industrial biology, research, or pre-professional training required for many positions in science-oriented business or professional schools. The biology program is a general program covering basic areas of biology. Specific pre-professional training is minimized in favor of the broadest possible background in the liberal arts as well as the biological sciences. Students planning to major in biology should take courses in high school that prepare them to start the College mathematics program with the course in analytic geometry, Math. 122. Experience has shown that many students can profit from a course in algebra and trigonometry. These courses are usually offered in the summer at most colleges and universities and may be taken in the summer prior to the freshman year. The following are the degree requirements for the Bachelor of Arts degree with a major in biology.

First Semester		Second Semester	
Bio. 103	4	Bio. 104	4
Chem. 101	4	Chem. 102	6
Eng. 101	3	Eng. 102	3
Math. 122	4	Math. 125	4
Phys. 103	1	P. E. 102	0
P. E. 101	0	P. E. 106	1
P. E. 105	1		
	<hr/> 17		<hr/> 18
Third Semester		Fourth Semester	
Bio. 201	4	Bio. 202	4
Chem. 221	4	Chem. 230	4
Eng. 151	4	Eng. 152	4
Hist. 101	3	Hist. 102	3
Ec. 101 or P. S. 101 or		Ec. 102 or P. S. 102 or	
Psy. 101 or Soc. 101	3	Psy. 102 or Soc. 102	3
P. E. 103	0	P. E. 104	0
	<hr/> 18		<hr/> 18

¹ A pre-professional degree program is described on page 50. The first three years of the program described here will be followed by pre-professional candidates.

Fifth Semester		Sixth Semester	
Bio. 221	3	Bio. 222	3
Chem. 232	4	F. A. 101 or Mus. 100	3
For. Lang. 101	3	For. Lang. 102	3
Phys. 111	4	Phys. 112	4
Ec. 101 or P. S. 101 or		Ec. 102 or P. S. 102 or	
Psy. 101 or Soc. 101	3	Psy. 102 or Soc. 102	3
	<hr/> 17		<hr/> 16
Seventh Semester		Eighth Semester	
Major elective	3-4	Major elective	3-4
Bio. 231	4	Bio. 232	3
For. Lang. 103	3	Bio. 262	1
Phil. 101	3	For. Lang. 104	3
Elective ¹	3	Phil. 102	3
		Bio. 271 (optional)	1
		Elective ¹	3
	<hr/> 16-17		<hr/> 16-18

Economics

Students who major in Economics are required to complete twenty-four hours of work in economics beyond Ec. 101, 102 in addition to the general requirements for the B. A. degree. Selection and scheduling of these courses will be done in consultation with the student's adviser. The twenty-four hours in economics which the major must carry include Ec. 201, 202, 231, 232, and 241.

Education

Those students electing a career in Elementary or Secondary Education are required to select a major in one of the major subject areas. These subject areas may be selected from those listed under the Bachelor of Arts or Bachelor of Science degree programs. Individual departmental programs will define the necessary course requirements for the prospective teacher. Teaching certification requirements for most states may be met at Wilkes College. Students are expected to familiarize themselves with specific state requirements.

¹ Electives must be selected from the humanities or social sciences.

English

Students who major in English are required to take English 101, 102, and 131 in the freshman year; 105, 151, and 152 in the sophomore year; and 21 credit hours, including 200, 205, 215, in addition to the general requirements for the B. A. degree. Selection and scheduling of these courses will be done in consultation with the student's adviser. Students with at least a 3.0 average in 101, 102, and 151 may take an advanced English course simultaneously with 152.

Fine Arts

Students who major in Fine Arts are required to complete the following program of studies in addition to the general requirements for the B. A. degree. Electives may be used to fulfill the requirements for certification in education.

B. A. IN FINE ARTS

First Semester		Second Semester	
Eng. 101	3	Eng. 102	3
Hist. 101	3	Hist. 102	3
For. Lang. 101	3	For. Lang. 102	3
F. A. 103	3	F. A. 104	3
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
Bio. 101 or Math. 101 or Phys. 101	3	Bio. 102 or Math. 102 or Phys. 102	3
	16		16
Third Semester		Fourth Semester	
Eng. 151	4	Eng. 152	4
For. Lang. 103	3	For. Lang. 104	3
F. A. 105	3	F. A. 106	3
F. A. 201	2	F. A. 202	2
P. E. 103	0	P. E. 104	0
Bio. 101 or Math. 101 or Phys. 101	3	Bio. 102 or Math. 102 or Phys. 102	3
	15		15

Fifth Semester		Sixth Semester	
Phil. 101	3	Phil. 205	3
F. A. 121	3	F. A. 122	3
F. A. 125	3	F. A. 126	3
F. A. 203	2	Elective (optional)	0-3
Ec. 101 or P. S. 101 or Psy. 101 or Soc. 101	6	Ec. 102 or P. S. 102 or Psy. 102 or Soc. 102	6
	17		15-18
Seventh Semester		Eighth Semester	
F. A. 205	2	F. A. 292	1
F. A. 220	2	Electives	14-15
F. A. 291	1		
Electives	10-12		
	15-17		15-16

Foreign Languages (Modern)

A major in any of the Modern Foreign Languages consists of twenty-four hours beyond the 102 course.

History

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 Hist. 101, 102, 107, 108. History 101 and 102, however, may not count toward the twenty-four hours constituting a major.

Mathematics

Students planning to major in Mathematics should take courses in high school that prepare them to start the College mathematics program with the course in Analytic Geometry, Math. 122. Experience has shown that many students can profit from a course in algebra and trigonometry. These courses are usually offered in the summer at most colleges and universities and may be taken in the summer prior to the freshman year.

In addition to the liberal arts general requirements, a mathematics major must complete a minimum of twenty-eight hours in mathematics courses. Credit will not count toward the major requirement in courses below Math. 122. The following program shows the sequence of the course requirements in the mathematics major.

B. A. IN MATHEMATICS

First Semester		Second Semester	
Bio. 101	3	Bio. 102	3
Eng. 101	3	Eng. 102	3
For. Lang. 101	3	For. Lang. 102	3
F. A. 101 or Mus. 100	3	F. A. 101 or Mus. 100	3
Math. 122	4	Math. 125	4
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
	<hr/> 17		<hr/> 17
Third Semester		Fourth Semester	
Math. 126	4	Math. 240	4
For. Lang. 103	3	For. Lang. 104	3
Eng. 151	4	Eng. 152	4
Hist. 101	3	Hist. 102	3
Eng. 131	2	Phys. 150	4
P. E. 103	0	P. E. 104	0
	<hr/> 16		<hr/> 18
Fifth Semester		Sixth Semester	
Phys. 151	4	Phys. 152	4
Math. 251	3	Math. 252	3
Ec. 101 or P. S. 101 or		Ec. 102 or P. S. 102 or	
Psy. 101 or Soc. 101	6	Psy. 102 or Soc. 102	6
Elective	3	Elective	3
	<hr/> 16		<hr/> 16
Seventh Semester		Eighth Semester	
Math. elective	3	Math. elective	3
Phil. 101	3	Electives	12
Electives	9-12		
	<hr/> 15-18		<hr/> 15

Music

Students who major in Music are required to complete the following program of studies in addition to the general requirements for the B. A. degree. Students interested in careers in Music Education should follow the program described in the Bachelor of Science in Music Education. This program is described in a later section of this bulletin. The following are the course requirements for the B. A. degree in music.

B. A. IN MUSIC

First Semester		Second Semester	
Math. 101 or Bio. 101 or		Math. 102 or Bio. 102 or	
Phys. 101	3	Phys. 102	3
Eng. 101	3	Eng. 102	3
For. Lang. 101	3	For. Lang. 102	3
Mus. 101	5	Mus. 102	5
Applied Music ¹	1	Applied Music ¹	1
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
	<hr/> 16		<hr/> 16
Third Semester		Fourth Semester	
For. Lang. 103	3	For. Lang. 104	3
Mus. 103	5	Mus. 104	5
Applied Music ¹	1	Applied Music ¹	1
Psy. 101	3	Psy. 102	3
Hist. 101	3	Hist. 102	3
Math. 101 or Phys. 101 or		Math. 102 or Phys. 102 or	
Bio. 101	3	Bio. 102	3
P. E. 103	0	P. E. 104	0
	<hr/> 18		<hr/> 18
Fifth Semester		Sixth Semester	
Eng. 151	4	Eng. 152	4
Phil. 101	3	Phil. 205	3
Mus. 109	3	Mus. 110	3
Applied Music ¹	2	Applied Music ¹	2
Soc. 101	3	Soc. 102	3
	<hr/> 15		<hr/> 15

¹Private instruction. Charges for this instruction are a separate billing and are in addition to the regular tuition charge.

Seventh Semester		Eighth Semester	
Applied Music ¹	2	Applied Music ¹	2
Mus. 215	2	Mus. 216	2
Mus. 217	2	Mus. 218	3
Electives	9	Electives	9
	15		16

Philosophy — Religion

A major in the combined fields of Philosophy and Religion consists of twenty-four hours in philosophy and religion courses. Philosophy 101 and 102 will not count toward the major but must be taken as part of the general requirements.

Psychology

A major in Psychology consists of twenty-four hours. Psychology 101 and 102 are not accepted toward a major; Sociology 255 and Education 200 are accepted. Psychology 203 and 204 are required for the major. In addition to the general requirements the department requires that the two-semester courses in mathematics, physics, and biology be taken. In addition, English 131 and Economics 231 are required.

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.

Political Science

A major in Political Science consists of twenty-four hours. Political Science 101 and 102 are not accepted toward a major.

Social Science

The Social Science major requires a total of thirty-six hours in economics, history, political science, and sociology. Eighteen hours must be

¹ Private instruction. Charges for this instruction are a separate billing and are in addition to the regular tuition charge.

in one of these subject areas and at least six hours in each of the other three. Only courses beyond the 101, 102 level will count toward these major requirements. Exception will be made to this requirement for students preparing to teach in public schools. In order to meet the certification requirements in education 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.

Sociology — Anthropology

A major in Sociology consists of twenty-four hours. Although Sociology 101, 102 are prerequisites to all the courses in sociology, they are not accepted toward a major in sociology. Political Science 204 and Philosophy 206 will 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 230, 255, 265, and 280. With the approval of the department chairman, however, other courses may in some instances be substituted.

Course Requirements for B.S. Degree Programs

Chemistry

The Chemistry curriculum is planned to provide thorough training in the fundamentals of the science and to contribute to the 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 students must complete one hundred thirty-one credits. These credits include forty-four in chemistry, thirty-two in physics and mathematics, a minimum of forty-six in the social sciences and the humanities, and the language requirement.¹

¹ 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.

Students planning to major in chemistry should take courses in high school that prepare them to start the College mathematics program with the course in analytic geometry, Math. 122.

B. S. IN CHEMISTRY

<i>First Semester</i>		<i>Second Semester</i>	
Chem. 101	4	Chem. 102	6
Eng. 101	3	Eng. 102	3
Math. 122	4	Math. 125	4
P. S. 101	3	Phys. 150	4
Phys. 103	1	P. E. 102	0
P. E. 101	0	P. E. 106	1
P. E. 105	1		
	<hr/> 16		<hr/> 18
<i>Third Semester</i>		<i>Fourth Semester</i>	
Chem. 210	3	Chem. 230	4
Chem. 221	4	Hist. 102	3
Hist. 101	3	Math. 240	4
Math. 126	4	Phys. 152	4
Phys. 151	4	P. E. 104	0
P. E. 103	0	Elective (optional) ¹	3
	<hr/> 18		<hr/> 15-18
<i>Fifth Semester</i>		<i>Sixth Semester</i>	
Chem. 231	5	Chem. 242	4
Chem. 241	4	Chemistry elective	3
For. Lang. 101	3	For. Lang. 102	3
Phys. 251	3	Electives ¹	8
Elective ¹	3		
	<hr/> 18		<hr/> 18
<i>Seventh Semester</i>		<i>Eighth Semester</i>	
Chem. 233	3	Chem. 222	5
Chem. 261	1	Chem. 262	1
Eng. 151	4	Eng. 152	4
For. Lang. 103	3	For. Lang. 104	3
Electives ¹	7	Chem. electives	3
	<hr/> 18	Electives ¹	2
			<hr/> 18

¹ Electives are to be selected with the advice and consent of the faculty adviser.

Commerce and Finance

B. S. IN COMMERCE AND FINANCE

MAJOR IN ACCOUNTING

<i>First Semester</i>		<i>Second Semester</i>	
Acct. 101	3	Acct. 102	3
Eng. 101	3	Eng. 102	3
Hist. 101	3	Hist. 102	3
Ec. 111	3	F. A. 101 or Mus. 100	3
Math. 101	3	Math. 102 or Math. 115	3
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	6
	<hr/> 16		<hr/> 16
<i>Third Semester</i>		<i>Fourth Semester</i>	
Acct. 111	3	Acct. 112	3
B. A. 231	3	B. A. 232	3
Ec. 101	3	Ec. 102	3
Eng. 151	4	Eng. 152	4
Bio. 101 or Phys. 101	3	Bio. 102 or Phys. 102	3
Eng. 131	2	P. E. 104	0
P. E. 103	0		
	<hr/> 18		<hr/> 16
<i>Fifth Semester</i>		<i>Sixth Semester</i>	
Acct. 201	3	Acct. 202	3
B. A. 233	3	Acct. 242	3
Ec. 201	3	B. A. 234	3
Ec. 231	3	Ec. 232	3
Soc. 101 or P. S. 101	3	Soc. 102 or P. S. 102	3
Phil. 101	3	Elective ¹	3
	<hr/> 18		<hr/> 18
<i>Seventh Semester</i>		<i>Eighth Semester</i>	
Acct. 221	3	Acct. 232	3
Acct. 231	3	Acct. 252	3
B. A. 209	3	Ec. 202 or Ec. 236	3
B. A. 225	3	Ec. 226	3
B. A. 237	3	Elective ¹	3
Elective ¹	3		
	<hr/> 18		<hr/> 15

¹ Students intending to sit for the New York State C.P.A. examinations should elect subjects in the humanities.

MAJOR IN BUSINESS ADMINISTRATION

First Semester		Second Semester	
Acct. 101	3	Acct. 102	3
Ec. 111	3	F. A. 101 or Mus. 100	3
Eng. 101	3	Eng. 102	3
Hist. 101	3	Hist. 102	3
Bio. 101 or Phys. 101	3	Bio. 102 or Phys. 102	3
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
	<hr/> 16		<hr/> 16
Third Semester		Fourth Semester	
B. A. 231	3	B. A. 232	3
Ec. 101	3	Ec. 102	3
Eng. 131	2	Eng. 152	4
Eng. 151	4	Math. 102	3
Math. 101	3	P. S. 102 or Soc. 102	3
P. S. 101 or Soc. 101	3	P. E. 104	0
P. E. 103	0		
	<hr/> 18		<hr/> 16
Fifth Semester		Sixth Semester	
B. A. 237	3	Ec. 202 or Ec. 226 or	
Ec. 201	3	C and F elective	3
Ec. 231	3	Ec. 232	3
Phil. 101	3	Phil. 102	3
Electives	6	B. A. 222	3
	<hr/> 18	Electives	6
			<hr/> 18
Seventh Semester		Eighth Semester	
B. A. 209	3	B. A. and Ec. electives	12
B. A. and Ec. electives	12	Elective	3
Elective	3		
	<hr/> 18		<hr/> 15

Students who major in Business Administration will select their electives from the following. At least six courses in one of these groups are required of students concentrating in this field.

BANKING AND FINANCE

B. A. 218	B. A. 226	Ec. 236
B. A. 220	Ec. 202	Ec. 241
B. A. 225	Ec. 225	Math. 115

ECONOMICS

Ec. 212	Ec. 226	Ec. 241
Ec. 223	Ec. 229	Ec. 245
Ec. 225	Ec. 230	Ec. 246
	Ec. 236	

MANAGEMENT AND INDUSTRIAL RELATIONS

B. A. 236	B. A. 239	Ec. 223
B. A. 237	B. A. 240	Psy. 212
B. A. 238	B. A. 241	

MARKETING

B. A. 114	B. A. 239	Ec. 245
B. A. 216	B. A. 240	Ret. 101
B. A. 217	Ec. 225	

MAJOR IN BUSINESS EDUCATION

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.

<i>First Semester</i>		<i>Second Semester</i>	
Acct. 101	3	Acct. 102	3
B. A. 107	3	Mus. 100 or F. A. 101	3
Bio. 101 or Phy. 101	3	Bio. 102 or Phy. 102	3
Eng. 101	3	Eng. 102	3
Hist. 101	3	Hist. 102	3
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
	<hr/> 16		<hr/> 16
<i>Third Semester</i>		<i>Fourth Semester</i>	
Acct. 111 or Ret. 101	3	Acct. 112 or Ret. elective	3
Ec. 101	3	Ec. 102	3
Hist. 107	3	Hist. 108	3
S. S. 105	2	S. S. 106	2
S. S. 107	2	S. S. 108	2
Psy. 101	3	Psy. 102	3
P. E. 103	0	P. E. 104	0
	<hr/> 16		<hr/> 16
<i>Fifth Semester</i>		<i>Sixth Semester</i>	
S. S. 201	1	S. S. 202	1
S. S. 207	3	S. S. 208	3
B. A. 231	3	B. A. 232	3
Soc. 101 or P. S. 101	3	Soc. 102 or P. S. 102	3
Eng. 151	4	Eng. 152	4
Ed. 100	3	B. A. 238	3
	<hr/> 17		<hr/> 17
<i>Seventh Semester</i>		<i>Eighth Semester</i>	
S. S. 243	3	Ed. 230	12
S. S. 205	4	Elective	3
Phil. 101	3		
Ed. 200	3		
B. A. 209	3		
Eng. 131	2		
	<hr/> 18		<hr/> 15

MAJOR IN SECRETARIAL STUDIES

<i>First Semester</i>		<i>Second Semester</i>	
Bio. 101 or Phys. 101	3	Bio. 102 or Phys. 102	3
Eng. 101	3	Eng. 102	3
Hist. 101	3	Hist. 102	3
Math. 101	3	Math. 102	3
Electives	3	Electives	3
P. E. 101	0	P. E. 102	0
P. E. 101	1	P. E. 106	1
	<hr/> 16		<hr/> 16
<i>Third Semester</i>		<i>Fourth Semester</i>	
Acct. 101	3	Acct. 102	3
Eng. 105	3	P. S. 102	3
Eng. 131	2	Mus. 100	3
P. S. 101	3	S. S. 106	2
S. S. 105	2	S. S. 108	2
S. S. 107	2	Elective	3
P. E. 103	0	P. E. 104	0
	<hr/> 15		<hr/> 16
<i>Fifth Semester</i>		<i>Sixth Semester</i>	
Ec. 101	3	Ec. 102	3
Eng. 151	4	Eng. 152	4
S. S. 201	1	S. S. 202	1
S. S. 207	3	S. S. 208	3
Electives	6	Electives	6
	<hr/> 17		<hr/> 17
<i>Seventh Semester</i>		<i>Eighth Semester</i>	
B. A. 209	3	B. A. 238	3
S. S. 205	4	Electives	15
Electives	8-9		
	<hr/> 15-16		<hr/> 18

Engineering

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, Cornell, Drexell, Georgia School of Technology, Lafayette, Lehigh, Massachusetts Institute of Technology, New York University, Pennsylvania State University, Purdue, Stevens Institute, Syracuse, and the University of Nebraska.

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.

Students planning to major in Engineering should take courses in high school that prepare them to start the College mathematics program with the course in analytic geometry, Math. 122. Experience has shown that many students can profit from a course in algebra and trigonometry. These courses are usually offered in the summer at most colleges and universities and may be taken in the summer prior to the freshman year.

B. S. IN ENGINEERING

FRESHMAN YEAR

(COMMON TO ALL ENGINEERING COURSES)

First Semester		Second Semester	
Chem. 101	4	Chem. 102 or Chem. 104 ¹	4-6
Engi. 100	2	Engi. 106	2
Engi. 105	3	Eng. 102	3
Eng. 101	3	Math. 125	4
Math. 122	4	Phys. 150	4
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 106	1
	<hr/> 17		<hr/> 18-20

¹ Chemical engineers will register for Chem. 102 (six hours). All other engineering students will register for Chem. 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 include paper, textiles, gasoline, other petroleum products, coke, gas, dyes, electrochemical products, paints, rubber, plastics, ceramics, drugs, heavy chemicals, solvents, and many others. The chemical engineer is one skilled in the design, construction, operation and management of industrial plants in which materials are produced by chemical change. The chemical engineer may be engaged in research or in the development of a process, for he is expert in the application of the fundamental unit-manufacturing processes which underlie 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, control, or sales engineer. (For freshman year see page 88.)

SOPHOMORE YEAR

Third Semester		Fourth Semester	
Ec. 101	3	Eng. 134	3
Math. 126	4	Math. 240	4
Phys. 151	4	Phys. 152	4
M. E. 211	3	Ch. Engi. 106	3
Chem. 221	4	Elective ¹	3
P. E. 103	0	P. E. 104	0
	<hr/> 18		<hr/> 17

¹ E. E. 202 or M. E. 212 is suggested

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, 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.

SOPHOMORE YEAR ¹			
Third Semester		Fourth Semester	
C. E. 103	3	C. E. 104	4
Ec. 101	3	Math. 240	4
M. E. 211	3	Eng. 134	3
Math. 126	4	M. E. 212	3
Phys. 151	4	Phys. 152	4
P. E. 103	0	P. E. 104	0
	<hr/> 17		<hr/> 18

ELECTRICAL ENGINEERING

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 used in the home.

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

SOPHOMORE YEAR ¹			
Third Semester		Fourth Semester	
Ec. 101	3	Eng. 134	3
Math. 126	4	Math. 240	4
Phys. 151	4	Phys. 152	4
M. E. 211	3	M. E. 212	3
Engi. 111 or C. E. 103	3	E. E. 202	3
P. E. 103	0	P. E. 104	0
	<hr/> 17		<hr/> 17

¹ For freshman year see page 88.

ENGINEERING PHYSICS

The curriculum in engineering physics is designed to equip men with a flexible background of basic scientific knowledge. The primary emphasis is on the fundamental principles of physics. At the same time the engineering viewpoint is developed so that practical problems can be pushed to completion. The first two years of work, offered at Wilkes, are similar to those of the other engineering curricula. They provide a sound basis for study toward advanced degrees in either physics or specific fields of engineering.

SOPHOMORE YEAR ¹			
Third Semester		Fourth Semester	
Ec. 101	3	Eng. 134	3
Math. 126	4	Math. 240	4
Phys. 151	4	Phys. 152	4
M. E. 211	3	M. E. 212	3
M. E. 111	3	E. E. 202	3
P. E. 103	0	P. E. 104	0
	<hr/> 17		<hr/> 17

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 cooperation 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 YEAR ¹			
Third Semester		Fourth Semester	
Ec. 101	3	Ec. 102	3
Phys. 151	4	Phys. 152	4
M. E. 211	3	M. E. 212	3
Math. 126	4	Math. 240	4
C. E. 103	3	Eng. 134	3
P. E. 103	0	P. E. 104	0
	<hr/> 17		<hr/> 17

¹ For freshman year see page 88.

MECHANICAL ENGINEERING

The mechanical engineer is concerned with the design, construction, installation, and operation of machinery necessary for the economical application of mechanical power to industry. He must utilize power from whatever source derived. The generation of power, whether by steam, hydro or internal-combustion engines is of primary concern to the mechanical engineer in the power field. His services are necessary wherever process equipment and machine tools are made or used.

The mechanical engineer must of necessity be broadly trained in the fundamental sciences and in economics and humanities. Ability and skill in the application of the basic sciences are not sufficient. He must have an understanding of the influence of his profession upon our way of life and how its development and expansion affect our future.

SOPHOMORE YEAR¹

Third Semester		Fourth Semester	
Ec. 101	3	Eng. 134	3
Math. 126	4	Math. 240	4
Phys. 151	4	Phys. 152	4
M. E. 211	3	M. E. 212	3
Engi. 111	3	M. E. 206	3
P. E. 103	0	P. E. 104	0
	17		17

Medical Technology

The American Society of Clinical Pathologists and the American Society of Medical Technologists recommend certain requirements for a program of training leading to a degree in Medical Technology. The curriculum offered at Wilkes College follows these recommendations and is presented below. The final year in this program is taken in hospitals approved for such training.

B. S. IN MEDICAL TECHNOLOGY

First Semester		Second Semester	
Bio. 103	4	Bio. 104	4
Chem. 101	4	Chem. 102	6
Eng. 101	3	Eng. 102	3
Math. 107	3	Math. 109	3
Phys. 103	1	P. E. 102	0
P. E. 101	0	P. E. 106	1
P. E. 105	1		
	16		17

¹ For freshman year see page 88.

Third Semester

Bio. 204	3
Chem. 221	4
Eng. 151	4
Hist. 101	3
For. Lang. 101	3
P. E. 103	0
	17

Fifth Semester

Bio. 211	4
For. Lang. 103	3
Phys. 111	4
Psy. 101	3
Soc. 101 or Ec. 101 or P. S. 101	3
	17

Seventh Semester¹

Clinical Chemistry	13 weeks
Microbiology	8 weeks
Urinalysis	4 weeks

Fourth Semester

Eng. 131	2
Chem. 230	4
Eng. 152	4
Hist. 102	3
For. Lang. 102	3
P. E. 104	0
	16

Sixth Semester

Bio. 212	4
For. Lang. 104	3
Phys. 112	4
Psy. 102	3
Soc. 102 or Ec. 102 or P. S. 102	3
	17

Eighth Semester¹

Haematology and Blood Bank	12 weeks
Histology	6 weeks
Serology	7 weeks

Music Education

B. S. IN MUSIC EDUCATION

First Semester		Second Semester	
Eng. 101	3	Eng. 102	3
Bio. 101 or Phys. 101	3	Bio. 102 or Phys. 102	3
Mus. 101	5	Mus. 102	5
Mus. Ed. 101 or Mus. Ed. 103	2	Mus. Ed. 102 or Mus. Ed. 104	2
Hist. 101	3	Hist. 102	3
Applied Music ²	1	Applied Music ²	1
Band, Orchestra, Chorus	1/2	Band, Orchestra, Chorus	1/2
P. E. 101	0	P. E. 102	0
P. E. 105	1	P. E. 105	1
	18 1/2		18 1/2

¹ To be taken at an approved school of medical technology.

² Private instruction. Charges for this instruction are a separate billing and are in addition to the regular tuition charge.

<i>Third Semester</i>		<i>Fourth Semester</i>	
Eng. 151	4	Eng. 152	4
Mus. Ed. 101 or Mus. Ed. 103	2	Mus. Ed. 102 or Mus. Ed. 104	2
Mus. 103	5	Mus. 104	5
Mus. 109	3	Mus. 110	3
Applied Music ¹	1	Applied Music ¹	1
Psy. 101	3	Psy. 102	3
Band, Orchestra, Chorus	1/2	Band, Orchestra, Chorus	1/2
P. E. 103	0	P. E. 104	0
	<hr/> 18 1/2		<hr/> 18 1/2
<i>Fifth Semester</i>		<i>Sixth Semester</i>	
Ed. 100	3	Ed. 200	3
Ec. 101 or P. S. 101 or Soc. 101	3	Ec. 102 or P. S. 102 or Soc. 102	3
Mus. Ed. 105	2	Mus. Ed. 106	2
Mus. Ed. 109	2	Mus. Ed. 110	2
Mus. Ed. 111	2	Mus. Ed. 112	2
Applied Music ¹	1	Applied Music ¹	1
Band, Orchestra, Chorus	1/2	Band, Orchestra, Chorus	1/2
Mus. 111 or Soc. Sci. elective	2-3	Mus. 112 or Soc. Sci. elective	2-3
	<hr/> 15 1/2-16 1/2		<hr/> 15 1/2-16 1/2
<i>Seventh Semester</i>		<i>Eighth Semester</i>	
Mus. 215	2	Mus. 216	2
Mus. Ed. 107	2	Mus. Ed. 108	2
Mus. Ed. 113	2	Mus. Ed. 114	2
Mus. Ed. 240	8	Applied Music ¹	1
Applied Music ¹	1	Band, Orchestra, Chorus	1/2
Band, Orchestra, Chorus	1/2	Elective	6
Mus. 113 or elective	2	Mus. 114 or elective	2-3
	<hr/> 17 1/2		<hr/> 15 1/2-16 1/2

Nursing Education

The program in Nursing Education is designed for the preparation of instructors, head nurses, and supervisors in 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-three, of which at least seventy-three must be college credits.

¹ Private instruction. Charges for this instruction are a separate billing and are in addition to the regular tuition charge.

The number of credits allowed for the school of nursing program ranges from thirty-five to fifty and will be determined by an evaluation of the student's record and by results obtained on the Graduate Nurse Qualifying Examination.

Wilkes College is cooperating with Albright College in offering a degree in Nursing Education to registered nurses in Reading, Pa. Academic credits earned at Albright College may be credited toward the B. S. degree in Nursing Education from Wilkes College. In order to receive the degree from Wilkes College the student must take a minimum of 15 credit hours on the Wilkes Campus. Students participating in this cooperative program should seek assistance from the chairman of the Nursing Education Department at Wilkes in planning their curriculum.

B. S. IN NURSING EDUCATION

<i>First Semester</i>		<i>Second Semester</i>	
Eng. 101	3	Eng. 102	3
Hist. 101	3	Hist. 102	3
Bio. 103 or Math. 101 or Phys. 101	3-4	Bio. 104 or Math. 102 or Phys. 102	3-4
F. A. 101 or Mus. 100	3	N. E. 104	2
Soc. 101 or Psy. 101	3	Soc. 102 or Psy. 102	3
N. E. 101	2	N. E. 106	2
		Elective (optional) ¹	2-3
	<hr/> 17-18		<hr/> 16-19
<i>Third Semester</i>		<i>Fourth Semester</i>	
Eng. 151	4	Eng. 152	4
Phil. 101	3	Phil. 102	3
P. S. 101 or Ec. 101	3	P. S. 102 or Ec. 102	3
Ed. 241	2	N. E. 102	2
N. E. 107	2	N. E. 112	4
N. E. 108	1	Elective	2-3
Elective	2-3		
	<hr/> 15-18		<hr/> 16-19

Physics

The Physics curriculum is designed to provide a thorough grounding in the fundamentals of this rapidly-expanding science, as well as to acquaint the student with the current frontiers of knowledge and re-

¹ If the Bio. 104 laboratory course is taken, the elective will not be allowed.

search. Upon completion of the requirements for the degree, the student will be well prepared either to proceed to graduate study leading to an advanced degree, or to undertake an industrial position.

Students planning to major in physics should seek to complete high school courses in trigonometry, solid geometry, and advanced algebra so that they may begin their college mathematics with the course in analytic geometry. In event of a deficiency in this respect, it must be made up by summer school attendance so that the course in differential equations can be completed before the beginning of the junior year.

B. S. IN PHYSICS

First Semester		Second Semester	
Math. 122	4	Math. 125	4
Eng. 101	3	Eng. 102	3
Chem. 101	4	Chem. 104	4
Engi. 105	3	Engi. 106	2
Phys. 103	1	Phys. 150	4
P. E. 105	1	P. E. 106	1
P. E. 101	0	P. E. 102	0
	16		18
Third Semester		Fourth Semester	
Math. 126	4	Math. 240	4
Phys. 151	4	Phys. 152	4
M. E. 211	3	M. E. 212	3
Ger. 101 ¹	3	Ger. 102 ¹	3
Hist. 101	3	Hist. 102	3
P. E. 103	0	P. E. 104	0
	17		17
Fifth Semester		Sixth Semester	
Math. 251	3	Math. 252	3
Phys. 201	4	Phys. 202	4
Phys. 221	3	Phys. 211	4
Eng. 151	4	Eng. 152	4
Ger. 103	3	Ger. 105	3
	17		18

¹ Students who have completed the equivalent of Ger. 102 before entering colleges (as determined by a placement test) will take Ger. 103 and 105 in the sophomore year. Those students will then be permitted electives in place of the German in the junior year.

Seventh Semester		Eighth Semester	
Phys. 261	4	Phys. 262	4
Phys. 212	3	Phys. 242	0-2
Phys. 241	0-2	Eng. 134	3
Elective ¹	6-8	Elective ¹	6-8
Phys. 281 ²	3	Phys. 282 ²	3
	16-18		16-18

Science Education

B. S. IN SCIENCE EDUCATION

Candidates for the degree of Bachelor of Science in Science Education must complete the first two years in one of the science degree curricula (B. A. in Biology, B. S. in Chemistry, or B. S. in Physics) as described in this bulletin.

During the student's sophomore year he will plan with his adviser a modification of his program for the third and fourth years. This modified program will include courses required for teacher certification. When such a modified program is approved by the chairman of his department and the chairman of the education department, he will be admitted to the B. S. in Science Education curriculum. Courses required for certification are:

Psy. 101, 102	6
Ed. 100, 200, 210	18

¹ Elective hours must be chosen with the approval of the student's adviser. The selection will depend upon the student's choice of industry or graduate study.

² Either physics 281 or 282, but not both are required.

Terminal Program

Secretarial Studies

The College awards a Certificate to those students who successfully complete the requirements of the following program. 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 program may be counted toward the degree of Bachelor of Science in Commerce and Finance or toward that of Bachelor of Science Education when students desire to continue their education after completing these courses. 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 ability. Placement examinations will be given the first week of the term to determine the student's levels of attainment.

TERMINAL PROGRAM IN SECRETARIAL STUDIES

First Semester		Second Semester	
Acct. 101	3	Acct. 102	3
Eng. 101	3	Eng. 102	3
Hist. 101	3	Bio. 102	3
S. S. 105	2	Hist. 102	3
S. S. 107	2	S. S. 106	2
P. E. 101	0	S. S. 108	2
P. E. 105	1	P. E. 102	0
Bio. 101	3	P. E. 106	1
	17		17
Third Semester		Fourth Semester	
B. A. 107	3	B. A. 238	3
B. A. 231	3	Ec. 101	3
S. S. 201	1	S. S. 202	1
S. S. 207	3	S. S. 208	3
S. S. 205	4	Psy. 102	3
Psy. 101	3	B. A. 209	3
P. E. 103	0	Eng. 131	2
		P. E. 104	0
	17		18

Courses of Instruction

Description of Courses

Three credits—MR. CURTIS

Acct. 201. Cost Accounting I

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: Acct. 112 or approval of instructor.

Three credits—MR. P. WERNER

Acct. 202. Advanced Cost Accounting II

Establishing the practical use of cost systems through analytical and comparative statements; detailed study of various cost systems; standard costs; budgets; interpretation of data. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Acct. 201 or approval of instructor.

Three credits—MR. P. WERNER

Acct. 220. Accounting Systems

Analysis of procedures necessary for the establishment of a proper accounting system, and review of specialized systems for mercantile, manufacturing, and service organizations.

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

Three credits—MR. CAPIN

Acct. 221. Taxes I

The preparation of Federal income tax returns for individuals based on current law, regulations and court decisions; problems of inclusion and exclusion from income; gains and losses from sales and exchanges; allowable deductions. Class, two hours a week; laboratory, two hours a week.

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

Three credits—MR. CURTIS

Acct. 222. Taxes II

Tax accounting for installment and deferred payment sales; Federal tax returns for partnerships; fiduciaries and corporations; miscellaneous Federal and Pennsylvania corporate taxes. Class two hours a week; laboratory, two hours a week.

Prerequisite: Acct. 221.

Three credits—THE STAFF

Acct. 231. Auditing Principles I

An analysis of modern auditing concepts involving staff organization, professional ethics and legal responsibility, internal control, audit programs, and working papers, and original record examination. Class, two hours a week; laboratory, two hours a week.

Prerequisite: Acct. 202.

Three credits—MR. CAPIN

Acct. 232. Auditing Practice II

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: Acct. 231.

Three credits—MR. CAPIN

Acct. 242. Advanced Accounting

Problems of consolidation, bankruptcies and insolvencies, and estates and trusts.

Prerequisite: Acct. 112.

Three credits—THE STAFF

Acct. 252. Accounting Internship

This course provides a minimum of 240 hours of accounting in the office of a Certified Public Accountant.¹

Three credits

BIOLOGY

Professor Reif, chairman; Professors Cohen and Michelini; Associate Professor Ogren; Assistant Professors Gershenowitz, Kimball; Instructor Schonwetter.

Bio. 101-102. Biological Science

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.

Three credits each semester—MR. GERSHENOWITZ

¹ Or the equivalent.

Bio. 103-104. General Zoology

General Zoology surveys the entire animal kingdom, outlines the history of biology, the organization of living matter, the structure of representative animals, and the methods of their classification. It considers the basic principles of physiology, genetics, embryology, evolution, and ecology. Biology 103 has class three hours a week; laboratory, three hours a week. Biology 104 has class three hours a week; laboratory, three hours a week. Fee: \$20 each course.

Four credits each semester—MR. REIF

Bio. 111-112. General Botany

General Botany presents a broad consideration of the plant world. It includes the study of the fundamental principles of biology, emphasizing the structure, physiology, genetics, and ecology of plants. Class, two hours a week; laboratory, three hours a week. Fee: \$20 each course.

Three credits each semester—MR. MICHELINI

Bio. 121-122. Advanced General Biology

Advanced General Biology presents a study of the contemporary flora and fauna of the Eastern United States, emphasizing the classifying, collecting, preserving, culturing, and utilizing of available organisms for biological study. Class two hours a week; laboratory (including field work), four hours a week. Fee: \$20 each course. Prerequisite: Bio. 104 and Bio. 112 or permission of instructor.

Three credits each semester—THE STAFF

Bio. 201. Comparative Anatomy of the Vertebrates

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. Fee: \$20. Prerequisite: Bio. 104.

Four credits—MR. OGREN

Bio. 202. Embryology

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. Laboratory work includes the technique of making slides. Class, two hours a week; laboratory, six hours a week. Fee: \$20. Prerequisite: Bio. 201, or permission of instructor.

Four credits—MR. OGREN

Bio. 204. Microtechnique

Biological technique is a laboratory course involving the preparation of tissues and organs for study. This course is given in conjunction with the laboratory portion of Embryology, Bio. 202, for those students who do not take Embryology. Lecture, one hour a week; laboratory, six hours a week. Fee: \$20.

Three credits—MRS. SCHONWETTER

Bio. 211-212. Bacteriology

Bio. 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. Fee: \$20. Prerequisite: Bio. 104.

Bio. 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. Fee: \$20. Prerequisite: Bio. 211.

Four credits each semester—MISS KIMBALL

Bio. 221. Histology

Histology is the study of normal tissues and the arrangement of tissues to form organs and organ systems. Material is restricted to vertebrate tissues. Class two hours a week; laboratory three hours a week. Prerequisite: through Bio. 202 or permission of instructor. Fee: \$20.

Three credits—MR. REIF

Bio. 222. Genetics

Genetics is the study of the inheritance of normal characters and the variation of those characters in plants and animals. The laboratory work concerns primarily studies of inheritance in the fruit fly. Class, two hours a week; laboratory, three hours a week. Prerequisite: through Bio. 221 or permission of instructor. Fee: \$20.

Three credits—MR. OGREN

Bio. 231. Physiology

Physiology is the study of the physical and chemical activities characteristic of all living organisms. Laboratory work includes experiments involving living forms. Class, two hours a week; laboratory, six hours a week. Prerequisite: through Bio. 222, Chem. 230, and Phys. 112, or permission of instructor. Fee: \$20.

Four credits—MR. OGREN

Bio. 232. Ecology

Ecology is the study of the relationship between organisms, singly and collectively, and their environments, including the biotic and physical factors of the environments. Class, two hours a week; laboratory and field trips, three hours a week. Prerequisite: through Bio. 231 or permission of instructor. Fee: \$20.

Three credits—MR. REIF

Bio. 262. History of Biology

A study of the history of biology is designed as a correlating effort in the field of biology through an historical approach. It is limited to senior students majoring in biology. Class, one hour a week. Prerequisite: permission of instructor.

One credit—THE STAFF

Bio. 271. Research Project

Credit for this may be given only in the eighth semester. Work may begin after satisfactory completion of the fourth semester. Prerequisite: permission of instructor.

One credit—THE STAFF

BUSINESS ADMINISTRATION

Professor Rosenberg, chairman; Associate Professor Chiang; Assistant Professors Elliot, Farrar, Gera, Hoover, R. Werner; Instructors Capin, Casper, Johns, Krohn, Roberts.

B.A. 107. Business Mathematics

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.

Three credits—MR. HOOVER

B.A. 114. Salesmanship

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.

Three credits—MR. HOOVER

B.A. 209. Business Correspondence and Reports

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

Prerequisite: Eng. 102.

Three credits—MR. HOOVER, MRS. ROBERTS

B.A. 216. Advertising

A study of basic principles of advertising. Elements of advertising; a survey of different departments of advertising work, including copy, art, display, engraving, trade-marks, and media. Analysis of current advertisements. Advertising as a social force.

Three credits—THE STAFF

B.A. 217. Transportation and Traffic Management

Problems and policies of railroads, buses, trucks, inland waterways, and air and ocean transportation; economic aspects of transportation and traffic management; use of rates and tariff; significance of transportation to society.

Prerequisite: Ec. 102.

Three credits—THE STAFF

B.A. 218. Credit and Collections

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

Prerequisite: Ec. 102, Acct. 102.

Three credits—THE STAFF

B.A. 220. Real Estate

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

Prerequisite: Ec. 102.

Three credits—MR. FARRAR

B.A. 222. Marketing

The fundamentals of the marketing system, its functions, institutions and their importance in the economy are studied. Marketing pricing policies and practices are investigated; reference is made to marketing activities and government participation.

Prerequisite: Ec. 102.

Three credits—MR. R. WERNER

B.A. 225. Corporation Finance

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: Ec. 102.

Three credits—MR. CHIANG

B.A. 226. Investments

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: B.A. 225.

Three credits—MR. CHIANG

B.A. 231. Business Law—Introduction and Contracts

The foundation for all subjects in the field of business law. The nature, classification and sources of law. An introduction to the structure and functioning of the Federal and State Courts as agencies for enforcement of legal rights. A brief resume of the law of Torts and Crimes with reference to business problems. Examination of the essential elements of a contract under both the common law and the Uniform Commercial Code, the nature of contract rights, discharge of contracts and remedies for their breach.

Prerequisite: Ec. 102 or approval of instructor.

Three credits—MR. CASPER, MR. KROHN

B.A. 232. Business Law—Agency and Sales

A general study of the law of agency; its nature and creation, the rights and liabilities of principals, agents and third persons, and the termination of the agency. A study of the law of sales of goods, the transfer of title and risk of loss, warranties in sales, the duties and liabilities of the parties, remedies for breach, security interests in goods. A comparison of the uniform sales act with the sales article of the Uniform Commercial Code.

Prerequisite: B.A. 231.

Three credits—MR. CASPER, MR. KROHN

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

The principles of law governing partnerships and corporations, with emphasis on the historical development of business enterprises. The law with respect to the formation, operation, internal relationships and dissolution of partnerships and corporations with particular reference to their dependency upon the law of agency. Rights and duties of the partnership and corporate enterprise with respect to the government, the owners, and the public. Advantages and disadvantages of these forms of business activity.

Prerequisite: B.A. 231.

Three credits—MR. KROHN

B.A. 234. Business Law—Property

The law of real property, nature and types of interests in land. A discussion of deeds and their prerequisites. The rights and duties of the landowner to the public. Rights of the government versus rights of the landowner. The landlord-tenant relationship, the mortgagor-mortgagee relationship. Business crimes (crimes affecting property). The protection of personal and business property, tangible and intangible.

Prerequisite: B.A. 231, 232, Acct. 102.

Three credits—MR. KROHN

B.A. 236. Personnel Management

A study of principles of organization; problems of the interrelationship of the functions operating in the fields of management; principles and modern practices of personnel management; instruments of control; the training and education of the worker; incentives used and special problems encountered.

Prerequisite: Ec. 102 or approval of instructor.

Three credits—THE STAFF

B.A. 237. Production Management

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

Prerequisite: Ec. 102 or approval of instructor.

Three credits—THE STAFF

B.A. 238. Office Management

The organization and management of the office with emphasis on administration and effective control of office activities; work simplification and paperwork cost reduction with output efficiency. Office layout and working conditions; work-flow processes; forms design and control; records administration; systems analysis; scheduling, mechanization, and paperwork production and utilization. Job analysis, specification, motivation, training, job description, evaluation, and salary determination. Emphasis on measurement and control of office work and setting of standards; importance of time and motion study.

Prerequisite: Approval of instructor.

Three credits—THE STAFF

B.A. 239. Sales Management

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: B.A. 237 or approval of instructor.

Three credits—THE STAFF

B.A. 240. Property Insurance

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

Prerequisite: B.A. 232 or approval of instructor.

Three credits—MR. FARRAR

B.A. 241. Life Insurance

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.

Three credits—MR. FARRAR

B.A. 244. Time and Motion Study

The principles and techniques of time and motion study. Class, three hours a week; laboratory, two hours a week.

Three credits—MR. JOHNS

CHEMISTRY

Professor Bastress, chairman; Assistant Professors Bone, Rozelle, Salley, Soeder, Swain.

Chem. 101. General Inorganic Chemistry

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. Fee: \$20.

Four credits—THE STAFF

Chem. 102. General 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. Fee: \$20.

Prerequisite: Chem. 101.

Six credits—MISS BONE, MR. ROZELLE, MR. SALLEY, MR. SOEDER

Chem. 104. General Chemistry

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. Fee: \$20.

Prerequisite: Chem. 101.

Four credits—MISS BONE, MR. ROZELLE, MR. SOEDER, MR. SWAIN

Chem. 210. Inorganic Chemistry

A study of the periodic relationships of the elements and their compounds. An introduction to physical inorganic chemistry.

Three credits—MR. ROZELLE, MR. SWAIN

Chem. 221. Inorganic Quantitative Analysis

Theory and practice of typical analyses. Class, two hours a week; laboratory, six hours a week. Breakage deposit required. Fee: \$20.

Prerequisite: Chem. 102.

Four credits—MR. SALLEY

Chem. 222. Inorganic Quantitative Analysis

A continuation of Chemistry 221. Class, two hours a week; laboratory, nine hours a week. Breakage deposit required. Fee: \$20.

Prerequisite: Chem. 221.

Five credits—MR. SALLEY

Chem. 230. Organic Chemistry

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. Fee: \$20.

Prerequisite: Chem. 221.

Four credits—MR. BASTRESS, MR. SOEDER

Chem. 231. Organic Chemistry

A continuation of Chemistry 230, with special attention to cyclic compounds. Class, three hours a week; laboratory, six hours a week. Breakage deposit required. Fee: \$20.

Prerequisite: Chem. 230.

Five credits—MR. BASTRESS, MR. SOEDER

Chem. 232. Organic Chemistry

A continuation of Chemistry 230, with special attention to cyclic compounds. Class, three hours a week; laboratory, three hours a week. Breakage deposit required. Fee: \$20.

Prerequisite: Chem. 230.

Four credits—MR. BASTRESS, MR. SOEDER

Chem. 233. Qualitative Organic Analysis

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. Fee: \$20.

Prerequisite: Chem. 231.

Three credits—MR. BASTRESS, MR. SOEDER

Chem. 234. Topics in Organic Chemistry

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

Prerequisite: Chem. 231.

Three credits—MR. BASTRESS, MR. SOEDER

Chem. 241-242. Physical Chemistry

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. Fee: \$20 each course.

Prerequisite: Chem. 221, Math. 126, Phys. 152.

Four credits each semester—MR. SWAIN

Chem. 243. Topics in Physical Chemistry

A study of advanced thermodynamics, chemical equilibrium, kinetics, and colloid chemistry. Advanced material is presented concerning the three phases of matter. Class, three hours a week.

Prerequisite: Chem. 242.

Three credits—MR. ROZELLE, MR. SWAIN

Chem. 244. Topics in Inorganic Chemistry

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

Prerequisite: Chem. 221.

Three credits—MR. ROZELLE, MR. SALLEY

Chem. 251. Biological Chemistry

The application of chemical and physiochemical principles and methods to chemical constitution, reaction, and products of living matter. Class, three hours a week.

Prerequisite: Chem. 221 and 230.

Three credits—MR. SOEDER

Chem. 261. History of Chemistry

The development of the science in terms of the personalities responsible for the development.

Prerequisite: completion of twenty chemistry credits.

One credit—MR. BASTRESS

Chem. 262. Chemical Literature

An orientation course in foreign and domestic chemical literature.
Prerequisite: completion of twenty chemistry credits.

One credit—MR. BASTRESS

Chem. 271-272. Research Project

Fee: \$7 per credit.

Prerequisite: approval of research adviser.

One to three credits each semester—THE STAFF

ECONOMICS

Professor Rosenberg, chairman; Associate Professor Chiang; Assistant Professors DeYoung, Elliot, Farrar, R. Werner.

Ec. 101. Principles of Economics I

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.

Three credits—THE STAFF

Ec. 102. Principles of Economics II

This course is a logical sequence to Economics 101. It is based upon a broad micro-economic foundation concentrated on such units as the firm, the industry, and the consumer.

Prerequisite: Ec. 101.

Three credits—THE STAFF

Ec. 111. Economic History

A study of the development of economic institutions with emphasis on the historical roots and evolutionary development of our modern economy. Analysis of causes of development. Major stress is on institutions.

Three credits—MR. DEYOUNG

Ec. 201. Money and Banking

A study of money, credit, and banking operations. Development of American monetary and banking system. Central banking and the Federal Reserve System. Instruments of monetary control. Financial intermediaries. Monetary standards and international monetary relations.

Prerequisite: Ec. 102.

Three credits—MR. CHIANG

Ec. 202. Theory of Money

Development of monetary theory. Liquidity preference and loanable funds theories of interest. Saving, investment, and income determination. Keynesian and neo-Keynesian analysis. The inflationary process. Exchange rates and international monetary mechanism.

Prerequisite: Ec. 201.

Three credits—MR. CHIANG

Ec. 204. Consumer Credit

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.

Two credits—MR. ROSENBERG

Ec. 212. Government and Business

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, trusts, transportation, extractive industries, and public enterprise.

Prerequisite: P.S. 101, Ec. 102.

Three credits—MR. FARRAR

Ec. 222. The American Labor Movement

A study of the evolving American labor movement and its ideology. This course deals with the development of American labor ideology and psychology in comparison with other labor movements. The relationship of the American labor movement to other political, social and economic institutions is investigated.

Prerequisite: Ec. 102.

Three credits—MR. R. WERNER

Ec. 223. Collective Bargaining

An introduction to labor problems and an analyses of major issues in the field of labor. This course deals with collective bargaining, employment, wages, hours and union policies. Governmental participation in labor relations and collective bargaining is also investigated. Reference is made to social welfare devices such as social security, unemployment compensation and workmen's compensation.

Prerequisite: Ec. 102.

Three credits—MR. R. WERNER

Ec. 225. International Trade

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: Ec. 102.

Three credits—MR. ELLIOT

Ec. 226. Economic Geography of the World

A study and analysis of the economic and geographic factors which underlie the national, regional, and international potentials and problems of modern man. The course attempts to give to each student a more basic understanding of causative factors and a better appreciation of the complexities involved in policy formation.

Prerequisite: Ec. 102.

Three credits—MR. ELLIOT

Ec. 227. Economic Geography of North America

A study and analysis of the North American continent, with special emphasis on the United States. Attention is given to the economic and geographic factors which have contributed to past growth and which are important determinants of future growth. In addition to a study of the nation as a unit, separate regional analyses are made of the component sections.

Prerequisite: Ec. 102.

Three credits—MR. ELLIOT

Ec. 229. Comparative Economic Systems

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: Ec. 102 or approval of instructor.

Three credits—MR. FARRAR

Ec. 230. Business Cycles

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

Prerequisite: approval of instructor.

Three credits—MR. FARRAR

Ec. 231. Applied General Statistics

A course in statistical methods and their application. A collection and interpretation of statistical data, frequency distribution and measures of central tendency, fitting the normal curve, analysis of variance. 3 hours lecture; 2 hours laboratory.

Prerequisite: approval of instructor.

Three credits—MR. ROSENBERG

Ec. 232. Economic Statistics

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

Prerequisite: Ec. 231.

Three credits—MR. ROSENBERG

Ec. 236. Public Finance

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: Ec. 102, P.S. 101.

Three credits—MR. ROSENBERG, MR. R. WERNER

Ec. 241. Economic Analysis

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: Ec. 102.

Three credits—MR. FARRAR, MR. DEYOUNG

Ec. 245. Consumer Economics

The place of the consumer in the economic system. Theories of consumption; consumption minima; problems of the individual consumer as affected by income, taxes, consumer habits and standards of living are investigated. A study is made of the trends in consumption, income, income disposition and marketing and pricing of consumer goods. Relationships between government activities and the consumer are studied.

Prerequisite: Ec. 102.

Three credits—MR. R. WERNER

Ec. 246. Economics Investigation

Each student conducts an investigation in the field of his major interest and constructs a final report. Class instruction includes: (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 (for seniors only).

Three credits—THE STAFF

EDUCATION

Professor Hammer, chairman; Professor Jessee; Associate Professors Colson, Hulser; Assistant Professors Hoover, West; Instructors Barone, Richards, Siles.

Ed. 100. Introduction to Education

A study of the historical development of American education, the role of the school in American life, educational philosophies, educational organization and administration, school finance, school curricula, school personnel, and current issues in education.

Prerequisite: Sophomore standing.

Three credits—MR. HULSER

Ed. 200. Educational Psychology

A study of the principles of learning and the application of psychological principles in the practice of education.

Prerequisite: Psy. 102, Junior standing.

Three credits—MR. HAMMER

Ed. 209. Principles of Elementary Education

A study of the historical development and organization of the American elementary school.

Prerequisite: Ed. 100, 200.

Three credits—MR. HULSER

Ed. 210. Professional Semester in Elementary Education

Provides classwork and practical experience to prepare students for elementary school teaching. Fee \$20.

To qualify for admission into the Professional Semester, students must secure the recommendation of the department chairman in their major and the approval by the Education Department Chairman.

Prerequisite: Ed. 209, Math. 102.

Fifteen credits—MR. SILES

For transfer and certification purposes, credit will be assigned as follows:

Ed. 211. The Teaching of Reading

An introduction to the teaching of reading in the elementary grades.

Two credits

Ed. 212. Methods and Materials in Elementary School Arithmetic

A study of curriculum content and teaching procedures in elementary school arithmetic.

Two credits

Ed. 213. Methods and Materials in Elementary School Science

A study of curriculum content and teaching procedures in elementary school science.

Two credits

Ed. 214. Methods and Materials in Elementary School Social Studies

A study of curriculum content and teaching procedures in elementary school history, geography, and government.

Two credits

Ed. 215. Multi-Sensory Techniques in Elementary School Teaching

A study of the use of multi-sensory teaching aids in the elementary school classroom.

One credit

Ed. 216. Student Teaching in the Elementary School

Students are assigned to work with experienced classroom teachers. They assume classroom responsibility and teach under supervision. Conferences are arranged with co-operating teachers and college supervisors.

Six credits

Ed. 220. Professional Semester in Fine Arts Education

Provides classwork and practical experience to prepare students for the teaching of art in elementary and secondary schools. Fee \$20.

To qualify for admission into the Professional Semester, students must secure the recommendation of the department chairman in their major and the approval by the Education Department chairman.

Students may schedule late afternoon or evening classes during the professional semester.

Prerequisite: Ed. 200.

Fourteen credits—MR. WEST

For transfer and certification purposes, credit will be assigned as follows:

Ed. 221. Art Curriculum

A study of the organization of teaching materials for most effective use in the art curriculum.

Three credits—MR. RICHARDS

Ed. 222. The Teaching of Art

A study of materials, techniques, and experiences in the public school art program; evaluation of past and present philosophies.

Three credits—MR. RICHARDS

Ed. 223. Multi-Sensory Techniques in the Teaching of Art

A study of the use of multi-sensory aids in the teaching of art in elementary and secondary schools.

One credit

Ed. 224. General Classroom Methods

A study of various instructional procedures used in public school classrooms.

One credit—MR. WEST

Ed. 225. Student Teaching in Art

Students are assigned to work with experienced classroom teachers and art specialists. They observe and teach in elementary and secondary school classrooms. Opportunities are provided for them to participate in school-wide activities. Conferences are arranged with co-operating teachers and college supervisors.

Six credits

Ed. 230. Professional Semester in Secondary Education

Provides classwork and practical experience to prepare students for secondary school teaching. This program includes study of the teaching of reading in secondary school subjects. Fee \$20.

To qualify for admission into the Professional Semester, students must secure the recommendation of the department chairman in their major and the approval by the Education Department chairman.

Students may schedule late afternoon or evening classes during the professional semester.

Prerequisite: Ed. 200.

Twelve credits—MR. WEST

For transfer and certification purposes, credits will be assigned as follows:

Ed. 231. Principles of Secondary Education

A study of the historical development and organization of the American secondary school.

Two credits—MR. HAMMER

Ed. 232. Secondary School Curriculum

A study of the content and organization of the secondary school curriculum.

Two credits—MR. HAMMER

Ed. 233. Secondary School Teaching Methods

A study of various teaching procedures employed in the secondary school classroom.

One credit

Ed. 234. Multi-Sensory Techniques in Secondary School Teaching

A study of the use of multi-sensory teaching aids in the secondary school classroom.

One credit

Ed. 235. Student Teaching in the Secondary School

Students are assigned to work with experienced classroom teachers. They assume classroom responsibility and teach under supervision. Conferences are arranged with co-operating teachers and college supervisors.

Six credits

Ed. 241. Educational Measurements

A study of the characteristics, construction, and use of various educational measuring instruments commonly available in secondary schools.

Prerequisite: Ed. 200.

Two credits—MISS JESSEE

Ed. 242. Guidance

An introduction to general principles and the techniques employed in guidance programs in public schools.

Prerequisite: Ed. 200.

Three credits—MR. BARONE

Ed. 243. Occupations

An introduction to occupational research as a part of the secondary school guidance program.

Prerequisite: Ed. 200.

Three credits—MR. BARONE

Ed. 244. Teaching Secondary School English

A study of the organization and presentation of curricular content in secondary school English courses. (Offered summers only)

Prerequisite: Twenty-four credits in English.

Three credits—THE STAFF

Ed. 245. Teaching Secondary School Mathematics

Same as Math. 127. (See page 138.)

(Offered summers only)

Prerequisite: Math. 125.

Three credits—MR. WEST

Ed. 246. Teaching Secondary School Science

A study of the organization and presentation of curricular content in secondary school science courses. (Offered summers only)

Prerequisite: Twenty-four credits in sciences other than Psychology.

Three credits—THE STAFF

Ed. 247. Teaching Secondary School Social Studies

A study of the organization and presentation of curricular content in secondary school social studies courses. (Offered summers only)

Prerequisite: Twenty-four credits in social sciences other than Education.

Three credits—MR. HULSER

Ed. 250. Introduction to Educational Administration

A survey of the principles of educational administration at the federal, state and local levels. (Offered summers only)

Prerequisite: Ed. 100.

Three credits—THE STAFF

ENGINEERING

Professor Hall, chairman; Assistant Professors Heltzel and Thomas.

Engi. 100. Engineering Problems

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, vertical freehand lettering. Instruction in the use of the slide rule necessary to problem solution. Graphs. Lecture, one hour; practicum, three hours a week. Fee: \$5.

Two credits—THE STAFF

Engi. 101. Basic Drawing

A basic course covering the elements of projection drawing necessary for students of chemistry. It includes use of instruments, sketching, orthographic and isometric drawing and dimensioning. Practicum, six hours a week. Fee: \$10.

Two credits—THE STAFF

Engi. 105. Engineering Drawing

This and the following course bear the same relation to the engineering profession as the subject of English bears to our daily life. Deals with the representation of objects according to engineering conventions. Several systems of representation, such as orthographic, isometric, and oblique, are studied. Use of instruments. Freehand sketching is emphasized. Practicum, seven hours per week. Fee: \$10.

Three credits—MR. HELTZEL

Engi. 106. Descriptive Geometry

Spatial relationships as represented by points, lines, planes, and other surfaces applied to problems in space. Emphasis is on applications to promote visualization by the solution of practical problems. Practicum, six hours per week. Fee: \$10.

Prerequisite or Co-requisite: Math. 122; Engi. 105 is recommended.

Two credits—MR. HELTZEL

Chemical Engineering

Ch. E. 106. Stoichiometry

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: Chem. 221; Phys. 151.

Co-requisite: Phys. 152.

Three credits—MR. SALLEY

Civil Engineering

C.E. 103. Plane Surveying

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. Fee: \$20.

Prerequisite: Engi. 105, Math. 105 or 107 and 109.

Three credits—MR. THOMAS

C.E. 104. Route Surveying

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. Fee: \$20.

Prerequisite: C.E. 103.

Four credits—MR. THOMAS

Electrical Engineering

E.E. 202. Electric and Magnetic Circuits

An introduction to Electrical Engineering. Sources of electrical energy. Basic treatment of electric and magnetic circuits. Steady state network theorems. Class three hours per week.

Prerequisites: Phys. 151 and co-requisite Math. 126.

Three credits—MR. THOMAS

Mechanical Engineering

M.E. 111. Manufacturing Processes

Lectures, demonstrations by trips to industrial plants, instructional movies of the forming of metals and plastics by casting, rolling, press-

ing. Also methods of machining, and the functions performed by various machine tools on metals and plastics. Class, two hours a week; practicum, three hours a week. Fee: \$15.

Three credits—MR. THOMAS

M.E. 206. Kinematics

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, gear tooth outlines and their application, epicyclic gear trains. Class, two hours a week; practicum, three hours a week. Fee: \$5.

Prerequisite: Engi. 106, Math. 122, Phys. 150.

Three credits—MR. HELTZEL

M.E. 211. Mechanics I. Statics

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

Prerequisite: Phys. 150, Math. 125.

Co-requisite: Math. 126.

Three credits—MR. HELTZEL

M.E. 212. Mechanics II. Dynamics

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.

Three credits—MR. HELTZEL

ENGLISH

Professor Davies, Chairman; Associate Professor Rizzo; Assistant Professors Fiester, Groh, Gutin, Lord; Instructors Kerr, Kish, Miller, Mistichelli, R. Roberts, Tyburski, Williams.

Composition

Eng. 101. Composition

Principles of exposition; collateral reading; writing of themes.

Three credits—THE STAFF

Eng. 102. Composition

Principles of exposition continued; collateral reading; writing of themes; research paper.

Prerequisite: Eng. 101.

Three credits—THE STAFF

Eng. 105. Advanced Exposition

A study of the various expository types. Readings. Intensive practice in the writing of informative articles.

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

Three credits—THE STAFF

Speech

Eng. 131. Fundamentals of Speech

A basic course in the preparation and delivery of short speeches.

Two credits—THE STAFF

Eng. 134. Fundamentals of Speech

Similar to Eng. 131, but with an extra hour of work. Required for engineering students.

Three credits—THE STAFF

Language and Literature

Eng. 151. Western World Literature

Survey of western world literature to the beginning of the eighteenth century; lectures, quizzes, conferences.

Prerequisite: Eng. 102, or substitute in composition.

Four credits—THE STAFF

Eng. 152. Western World Literature

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

Prerequisite: Eng. 151.

Four credits—THE STAFF

Eng. 200. History of the English Language

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

Prerequisite: Eng. 152.

Three credits—MR. RIZZO

Eng. 205. Chaucer

Study of Chaucer's life and major works, including *The Canterbury Tales* and *Troilus and Criseyde*.

Prerequisite: Eng. 152.

Three credits—MR. RIZZO

Eng. 211. Early English Drama

Study of the drama from the tenth century to 1642; reading of plays by pre-Elizabethan and Elizabethan dramatists exclusive of Shakespeare.

Prerequisite: Eng. 152.

Three credits—MR. GROH, MISS LORD

Eng. 212. Restoration and Eighteenth Century Drama

Study of the drama from 1660 to 1780.

Prerequisite: Eng. 152.

Three credits—MR. GROH, MISS LORD

Eng. 214. Tudor Prose and Poetry

Study of English non-dramatic literature from 1485 to 1603.

Prerequisite: Eng. 152.

Three credits—THE STAFF

Eng. 215. Shakespeare

A study of selected plays; written reports on others not studied in class.

Prerequisite: Eng. 152.

Three credits—MR. DAVIES

Eng. 216. Milton and the Seventeenth Century

A study of the non-dramatic literature of the period with special emphasis on the poetry of John Milton.

Prerequisite: Eng. 152.

Three credits—MR. DAVIES

Eng. 220. The Eighteenth Century

The chief poets and essayists of the eighteenth century. Includes Swift, Pope, and Johnson.

Prerequisite: Eng. 152.

Three credits—MR. MILLER

Eng. 237. Early English Novel

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

Prerequisite: Eng. 152.

Three credits—MR. DAVIES

Eng. 238. Later English Novel

The major novelists of the nineteenth and early twentieth centuries.

Prerequisite: Eng. 152.

Three credits—MR. DAVIES

Eng. 240. Romantic Prose and Poetry

Study of Wordsworth, Coleridge, Shelley, Keats, and Byron, with related prose writers of the Romantic Period.

Prerequisite: Eng. 152.

Three credits—MR. MILLER, MR. RIZZO

Eng. 245. American Literature

A study of significant literature from the Age of Franklin to 1900.

Prerequisite: Eng. 152, or the granting of permission.

Three credits—MR. GUTIN

Eng. 250. Victorian Prose and Poetry

Readings in Tennyson, Browning, Arnold, and other significant writers of the Victorian Age.

Prerequisite: Eng. 152.

Three credits—MR. DAVIES, MR. RIZZO

Eng. 290. Senior Seminar

Designed to cover periods and figures not studied in course work; special emphasis on the research paper.

Three credits

Eng. 291. Modern Poetry

Study of the major English and American poetry of the Twentieth Century.

Prerequisite: Senior Standing.

Three credits—MR. GUTIN

Eng. 294. Modern Novel

Study of the major English and American novels of the Twentieth Century.

Prerequisite: Senior Standing.

Three credits—MR. RIZZO

Eng. 296. Modern Drama

Study of important dramatists, European and American, from the time of Ibsen.

Prerequisite: Senior Standing

Three credits—MR. GROH, MISS LORD

FINE ARTS

Associate Professor Colson, chairman; Instructors Evangelista, Richards.

FA 101. Experiencing Art I

Two and three dimensional studio work is planned for exploration of the creative process in a variety of media. Part of the general education program, this course is open to all students; no art experience is necessary. Lecture, two hours; studio, two hours.

Three credits—THE STAFF

FA 102. Experiencing Art II

A continuation of FA 101.

Prerequisite: FA 101.

Three credits—THE STAFF

FA 103. Color and Design

A study of color systems which includes their physical, psychological, and sociological properties. Lecture, two hours; studio, two hours.

Prerequisite: FA 102 or equivalent.

Three credits—MR. COLSON

FA 104. Drawing and Composition

An introductory course which explores the potential of line, form, space, and texture with a variety of media. Studio problems include figure drawing, landscape, still life, and non-objective organization. Lecture, two hours; studio, two hours.

Prerequisite: FA 103.

Three credits—MR. COLSON

FA 105. Oil Painting

An introductory course; no art experience is necessary. Lecture, two hours; studio, two hours.

Three credits—MR. RICHARDS

FA 106. Water Color Painting

A basic course in transparent water color painting. Lecture, two hours; studio, two hours.

Prerequisite: FA 104.

Three credits—MR. RICHARDS

FA 121. Modeling and Three Dimensional Construction

An introductory course in three-dimensional expression; various materials are employed for experimentation with realistic and non-realistic forms. Lecture, two hours; studio, two hours.

Prerequisite: FA 102.

Three credits—THE STAFF

FA 122. Ceramics

Students explore the making of pottery by solid, coil, slab, casting, wheel, and primitive techniques; they experiment with a variety of methods for surface decoration including slip, engobe, sgraffito, and underglaze. Lecture, two hours; studio, two hours.

Prerequisite: Permission of instructor.

Three credits—THE STAFF

FA 125. Metalwork and Jewelry

A course in basic metalwork and jewelry techniques and design. Lecture, two hours; studio, two hours.

Prerequisite: Permission of instructor.

Three credits—MR. EVANGELISTA

FA 126. Graphics

A study of graphic expression including silkscreen, linoleum block, and wood block printing; etching; and lithography. Lecture, two hours; studio, two hours.

Prerequisite: Permission of instructor.

Three credits—MR. RICHARDS

FA 201. History of Art I

History of art from the prehistoric period through the Gothic era.

Two credits—MR. COLSON

FA 202. History of Art II

History of art from the Renaissance through the nineteenth century.

Prerequisite: FA 201.

Two credits—MR. COLSON

FA 203. History of Modern Art

A study of twentieth century art forms.

Two credits—MR. EVANGELISTA

FA 205. Contemporary Design

A study of man's visual expression as conditioned by materials, technology, form, and function.

Two credits—MR. EVANGELISTA

FA 220. Studio Problems

Provides advanced study and research for Fine Arts Education students. Lecture, 2 hours.

Prerequisite: Permission of instructor.

Two credits—THE STAFF

FA 291. Senior Exhibit

A study of exhibition techniques; each senior exhibits his work at the College. Studio, two hours.

Prerequisite: Permission of instructor.

One credit—THE STAFF

FA 292. Senior Exhibit

A continuation of FA 291.

Prerequisite: FA 291.

One credit—THE STAFF

GENERAL SCIENCE

Bio. 101-102. Biological Science

(See page 103.)

Geol. 100. General Geology

General geology deals with the probable formation of the planet Earth, the establishment of its crust, and subsequent movements of the crust. The chief approach of the course is through a consideration of the paleontological, physical, and economic evidence in Earth's rocks.

Two credits—MR. REIF

Phys. 101-102. Physical Science

(See page 158.)

HISTORY

Professor Thatcher, chairman; Associate Professors Bliss, Cox, Kaslas; Assistant Professor Connolly; Instructor Hughes.

Hist. 101-102. History of Western Civilization

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.

Three credits each semester—THE STAFF

Hist. 107. American and Pennsylvania History to 1865

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.

Three credits—MR. THATCHER

Hist. 108. American History Since 1865

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

Three credits—MR. THATCHER

Hist. 221-222. American Social and Intellectual History

A study of social and intellectual developments in the United States from the colonial period to the present time. During the first semester emphasis will be placed on the influence of the American environment during the colonial period and of expansion and sectional disputes in the federal period upon society and upon religious, economic, and political thought. During the second semester the influences of industrialization, the rise of nationalism, and the emergence of the United States as a World Power will be emphasized.

Prerequisite: Hist. 107 and 108.

Three credits each semester—MR. COX

Hist. 223-224. American Constitutional History

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: Hist. 107, 108, and P.S. 102. Restricted to juniors and seniors. Hist. 223 is a prerequisite for Hist. 224.

Three credits each semester—MR. THATCHER

Hist. 225. History of the American Frontier

A study of the westward movement in American history.

Prerequisite: Hist. 107 and 108.

Three credits—MR. THATCHER

Hist. 228. History of the Foreign Policy of the United States

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

Prerequisite: Hist. 107, 108, and P.S. 102. Restricted to juniors and seniors.

Three credits—MR. THATCHER

Hist. 235-236. History of the Far East

A study of the history of the civilizations developed in India, China, and Japan with emphasis on their inter-relations and distinctive characteristics and on their transformation in response to the penetration of

western civilization from the sixteenth century onward. Some attention will be given to similar developments and changes among the countries of Southeast Asia.

Winter semester: to c. 1760. Spring semester: 1760 to the present.

Prerequisite: Hist. 101 and 102.

Three credits each semester—MR. BLISS

Hist. 241-242. History of Great Britain and the British Empire and Commonwealth

A study of British history from the Roman occupation to recent times. During the first semester emphasis is placed on the relations and contrasts between British and continental developments and the rise of the British nation and its expansion overseas. During the second semester emphasis is placed on the transition from a constitutional monarchy to a mature democracy, from an essentially agricultural to an industrial economy, and from the mercantilist empire to the Commonwealth of Nations. Intellectual and artistic developments will be touched upon insofar as they are related to the above changes.

Prerequisite: Hist. 101 and 102.

Three credits each semester—MR. BLISS

Hist. 255. Europe in the Nineteenth Century

A study of the political, social, and cultural development of Europe from the Congress of Vienna to World War I.

Prerequisite: Hist. 101 and 102.

Three credits—MR. KASLAS

Hist. 256. Europe in the Twentieth Century

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

Prerequisite: Hist. 101 and 102.

Three credits—MR. KASLAS

Hist. 257. History of Russia to 1815

A brief review of demographic and geographic factors will be used as background for a study of the political, social, and intellectual history of Russia from early times to 1815.

Prerequisite: Hist. 101 and 102.

Three credits—MR. KASLAS

Hist. 258. History of Modern Russia

A thorough examination of nineteenth century Imperial Russia will serve as a basis for a detailed study of the development of Russia in the twentieth century. Emphasis will be on the origins and political, social, and cultural evolution of the Soviet State from its inception to the present.

Prerequisite: Hist. 101 and 102.

Three credits—MR. KASLAS

MATHEMATICS

Associate Professor T. R. Richards, chairman; Associate professor Earl; Assistant Professors De Cosmo and Wasileski; Instructors Klein, Salsburg.

Math. 99. Algebra Review

Secondary algebra, extending through simultaneous quadratic equations.

Three hours a week.

No credit—THE STAFF

Math. 101-102. Fundamentals of Mathematics

A course designed for those who want a general background in mathematical concepts without specialization in techniques. Students taking Math. 105, 107, or 109 will not be granted credit for Math. 101 or 102.

Three credits each semester—THE STAFF

Math. 105. College Algebra and Trigonometry

A combination of Math. 107 and 109.

Prerequisite: Math. 99 or its equivalent.

Five credits—THE STAFF

Math. 107. College Algebra

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

Prerequisite: Math. 99 or its equivalent.

Three credits—THE STAFF

Math. 109. Plane Trigonometry

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

Prerequisite: Math. 99 or its equivalent.

Three credits—THE STAFF

Math. 115. Mathematics of Finance

Progressions, binomial theorem, logarithms, simple interest, compound interest, equations of value, annuities, sinking funds, amortization, depreciation, capitalized cost.

Prerequisite: Math. 99 or its equivalent.

Three credits—THE STAFF

Math. 118. Introduction to Statistics

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: Math. 99 or its equivalent.

Three credits—THE STAFF

Math. 122. Analytic Geometry

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: Math. 105, or both Math. 107 and Math. 109.

Four credits—THE STAFF

Math. 125. Calculus I

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

Prerequisite: Math. 122.

Four credits—THE STAFF

Math. 126. Calculus II

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

Prerequisite: Math. 125.

Four credits—THE STAFF

Math. 127. Teaching of Mathematics in Secondary Schools

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: Math. 125.

Three credits—MR. WASILESKI

Math. 213. Higher Algebra

Sets, mappings, operations, relations, groups, integral domains, fields; particular illustration of the foregoing by an axiomatic development of the real and complex number systems.

Prerequisite: Math. 125, or permission of instructor.

Three credits—MR. SALSBURG

Math. 214. Linear Algebra

Vector spaces, linear independence, linear transformations, matrices, determinants, systems of linear equations.

Prerequisite: Math. 213 or permission of instructor.

Three credits—MR. SALSBURG

Math. 220. College Geometry

Similar figures, systems of circles, circular inversion, triangles, Ptolemy's theorem, circles of antisimilitude, poles and polars, medians, orthocenters, nine-point circle, Desargues' theorem, Pascal's theorem, theorem of Pappus.

Prerequisite: plane geometry.

Three credits—MR. WASILESKI

Math. 228. Mathematical Statistics I

Probability, frequency functions, empirical distributions of one variable, moment generating functions, binomial and Poisson distributions, normal distribution, the null hypothesis, elementary sampling theory.

Prerequisite: Math. 126.

Three credits—MR. WASILESKI

Math. 229. Mathematical Statistics II

Correlation and regression, theoretical distributions of more than one variable, normal surface, goodness of fit, chi-square distribution, testing hypotheses, estimation of parameters, confidence intervals, small samples, student's t-distribution, testing for randomness.

Prerequisite: Math. 228.

Three credits—MR. WASILESKI

Math. 235. Vector Analysis

Vector algebra, differentiation of vectors, divergence and curl, the operator del, curvilinear coordinates, vector fields, applications.

Prerequisite: Math. 126.

Three credits—MR. RICHARDS

Math. 240. Differential Equations and Infinite Series

First order equations, linear equations, applications, solution by successive approximation, systems of differential equations, infinite series, power series solution of differential equations.

Prerequisite: Math. 126.

Four credits—THE STAFF

Math. 251. Advanced Calculus I

Introduction to the theory of functions of real variables. The emphasis in this course and the following one is on proof, by the delta-epsilon technique, of theorems concerning sequences and other functions of one variable. Some time is spent on functions of more than one variable.

Prerequisite: Math. 126.

Three credits—MR. RICHARDS

Math. 252. Advanced Calculus II

A continuation of Math. 251.

Prerequisite: Math. 251.

Three credits—MR. RICHARDS

Math. 255. Introduction to Functions of a Complex Variable

The complex numbers and complex plane. The elementary functions. Continuity and differentiability, the Cauchy-Riemann equations. Cauchy's integral theorem and formulas. Power series.

Prerequisite: Math. 252.

Three credits—THE STAFF

Math. 260. Introduction to Topology

Sets, metric spaces, topological spaces, compactness, separation, connectedness, Stone-Weierstrass theorems, Hausdorff spaces, normed linear spaces.

Prerequisite: Math. 126.

Three credits—MR. EARL

MODERN FOREIGN LANGUAGES

Associate Professor Disque, chairman; Instructors Ribas, Valero.

French

Fr. 101. Elementary French

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

Three credits—THE STAFF

Fr. 102. Elementary French

Continuation of Fr. 101.

Prerequisite: Fr. 101 or the equivalent.

Three credits—THE STAFF

Fr. 103. Intermediate French

Review of grammar; practice in oral and written French; selected readings of modern French prose.

Prerequisite: Fr. 102 or the equivalent.

Three credits—MR. VALERO

Fr. 104. Intermediate French

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

Prerequisite: Fr. 103 or the equivalent.

Three credits—MR. VALERO

Fr. 105. Technical French

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: Fr. 103 or the equivalent.

Three credits—MR. VALERO

Fr. 106. French Conversation

Intensive practice in the spoken language, with emphasis on idiomatic usage. Use of records to acquire fluency in speaking French.

Prerequisite: Fr. 104 or the equivalent.

Three credits—MR. VALERO

Fr. 107. French Composition

Study of grammar and idiomatic usage in modern French, applied to composition exercises and free composition.

Prerequisite: Fr. 104 or the equivalent.

Three credits—MR. VALERO

Fr. 201-202. Survey of French Literature

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: Fr. 104 or the equivalent.

Three credits each semester—MR. VALERO

Fr. 203. French Literature of the Seventeenth Century

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

Prerequisite: Fr. 201-202 or the equivalent.

Three credits—MR. VALERO

Fr. 205. French Literature of the Eighteenth Century

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

Prerequisite: Fr. 201-202 or the equivalent.

Three credits—MR. VALERO

Fr. 206. French Literature of the Nineteenth Century

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

Prerequisite: Fr. 201-202 or the equivalent.

Three credits—MR. VALERO

Fr. 208. Contemporary French Drama

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

Prerequisite: Fr. 201-202 or the equivalent.

Three credits—MR. VALERO

German

Ger. 101. Elementary German

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

Three credits—THE STAFF

Ger. 102. Elementary German

Continuation of German 101. Reading of easy prose and poetry. Some stress on German culture, life, and customs.

Prerequisite: Ger. 101 or equivalent.

Three credits—THE STAFF

Ger. 103. Intermediate German

Emphasis on difficult grammatical construction and idioms. Reading of prose; practice in speaking and writing German.

Prerequisite: Ger. 102 or equivalent.

Three credits—MR. DISQUE

Ger. 104. Intermediate German

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

Prerequisite: Ger. 103 or equivalent.

Three credits—MR. DISQUE

Ger. 105. Scientific German

Reading of selections from scientific German.

Prerequisite: Ger. 103 or equivalent.

Three credits—MR. DISQUE

Ger. 106. German Conversation

Emphasis laid on speaking, with drill in the colloquial vocabulary.

Prerequisite: Ger. 104 or equivalent.

Three credits—MR. DISQUE

Ger. 107. German Composition

Idiomatic usage in modern German. To develop the ability to write free compositions.

Prerequisite: Ger. 104 or equivalent.

Three credits—MR. DISQUE

Ger. 201-202. Survey of German Literature

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

Prerequisite: Ger. 104 or equivalent.

Three credits each semester—MR. DISQUE

Ger. 203. Goethe

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

Prerequisite: Ger. 201-202 or equivalent.

Three credits—MR. DISQUE

Ger. 204. Schiller

Poet of German idealism.

Prerequisite: Ger. 201-202 or equivalent.

Three credits—MR. DISQUE

Ger. 205. Nineteenth Century German Drama

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: Ger. 201-202 or equivalent.

Three credits—MR. DISQUE

Ger. 206. Modern German Short Story

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

Prerequisite: Ger. 201-202 or equivalent.

Three credits—MR. DISQUE

Spanish

Sp. 101. Elementary Spanish

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

Three credits—THE STAFF

Sp. 102. Elementary Spanish

Continuation of Spanish 101.

Prerequisite: Sp. 101 or equivalent.

Three credits—THE STAFF

Sp. 103. Intermediate Spanish

Review of grammar; practice in oral and written Spanish; selected readings from modern Spanish prose.

Prerequisite: Sp. 102 or equivalent.

Three credits—MR. RIBAS

Sp. 104. Intermediate Spanish

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

Prerequisite: Sp. 103 or equivalent.

Three credits—MR. RIBAS

Sp. 105. Commercial Spanish

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: Sp. 103 or equivalent.

Three credits—MR. RIBAS

Sp. 106. Spanish Conversation

Intensive practice in the spoken language, with emphasis on idiomatic usage. Use of records to acquire fluency in speaking Spanish.

Prerequisite: Sp. 104 or equivalent.

Three credits—MR. RIBAS

Sp. 107. Spanish Composition

Study of grammar and idiomatic usage in modern Spanish, applied to composition exercises and free composition.

Prerequisite: Sp. 104 or equivalent.

Three credits—MR. RIBAS

Sp. 108. Spanish American Culture

The cultural, economic, and political development of the Spanish American countries.

Prerequisite: Sp. 103 or equivalent.

Three credits—MR. RIBAS

Sp. 201-202. Survey of Spanish Literature

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: Sp. 104 or equivalent.

Three credits each semester—MR. RIBAS

Sp. 203. The Golden Age of Spanish Literature

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: Sp. 201-202 or equivalent.

Three credits—MR. RIBAS

Sp. 204. Nineteenth Century Spanish Drama

Study of representative works of nineteenth century Spanish drama.

Prerequisite: Sp. 201-202 or equivalent.

Three credits—MR. RIBAS

Sp. 205. Nineteenth Century Spanish Novel

The development of the Spanish novel in the nineteenth century.

Prerequisite: Sp. 201-202 or equivalent.

Three credits—MR. RIBAS

MUSIC

Associate Professor Gasbarro, acting chairman; Assistant Professors Chapline and Friedmann; Instructors Balshaw, A. Liva, Marcase.

Applied Music

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 demonstration (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.

Fees for private instruction are in addition to the regular tuition charge.

Mus. 100. Introduction to Music

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.

Three hours—THE STAFF

Mus. 101-102-103-104. Theory of Music

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.

Five credits each course—MR. MARCASE

Mus. 109. History of Music

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

Three credits—MR. FRIEDMANN

Mus. 110. History of Music

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.

Three credits—MR. FRIEDMANN

Mus. 111-112. Piano Class 1 and 2

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.

Two credits each semester—MRS. LIVA

Mus. 113-114. Piano Class 3 and 4

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: Mus. 112.

Two credits each semester—MRS. LIVA

Mus. 121-122-123-124. Band

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.

One-half credit each semester—MR. MARCASE

Mus. 125-126-127-128. Chorus

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.

One-half credit each semester—MR. CHAPLINE

Music 131-132-133-134. Orchestra

Participation in the Wilkes-Barre 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.

One-half credit each semester—MR. GASBARRO

Music 215. Instrumentation

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

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

Two credits—MR. GASBARRO

Music 216. Orchestra and Band Arranging

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

Prerequisite: Mus. 215.

Two credits—MR. GASBARRO

Mus. 217. Analysis

The technique of composition as disclosed by melodic, harmonic, and structural analysis of music in varied styles and from diverse periods.

Prerequisite: Mus. 102 or equivalent as demonstrated by an examination.

Two credits—MR. MARCASE

Mus. 218. Counterpoint

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

Prerequisite: Mus. 102.

Three credits—MR. MARCASE

MUSIC EDUCATION¹

Mus. Ed. 101-102. Clarinet Class and Methods

Methods of teaching and instruction in the clarinet for those in the public school music course.

No prerequisite.

Two credits each semester—MR. GASBARRO

Mus. Ed. 103-104. Brass Class and Methods

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

No prerequisite.

Two credits each semester—MR. MARCASE

Mus. Ed. 105. Woodwind Class Methods

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.

Two credits each semester—MR. GASBARRO

Mus. Ed. 106. Brass Class Methods

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.

Two credits—MR. MARCASE

Mus. Ed. 107-108. Voice Class and Methods

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.

Two credits each semester—MR. CHAPLINE

¹ There is an instrument rental fee of \$10.00 per semester for music education students.

Mus. Ed. 109-110. Conducting and School Music Materials

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.

Two credits each semester—MR. GASBARRO

Mus. Ed. 111-112. Violin Class and Methods

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

No prerequisite.

Two credits each semester—MR. FRIEDMANN

Mus. Ed. 113-114. String Instrument Class Methods

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.

Two credits each semester—MR. FRIEDMANN

Mus. Ed. 201. Elementary School Music Methods

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.

Two credits—THE STAFF

Mus. Ed. 202. High School Music Methods

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

No prerequisite.

Two credits—THE STAFF

Mus. Ed. 240. Professional Semester in Music Education

Provides classwork and practical experience to prepare for the teaching of music in elementary and secondary schools. Fee: \$20.

To qualify for admission into the Professional Semester, students must secure the recommendation of the department chairman in their major and the approval of the Education Department chairman.

Students may schedule late afternoon or evening classes during the professional semester.

Prerequisite: Ed. 200.

Eight credits—MR. WEST

For transfer and certification purposes, credit will be assigned as follows:

Mus. Ed. 241. General Classroom Methods

A study of various instructional procedures used in public school classrooms.

One credit

Mus. Ed. 242. Multi-Sensory Techniques in the Teaching of Music

A study of the use of multi-sensory aids in the teaching of music in elementary and secondary schools.

One credit

Mus. Ed. 243. Student Teaching in Music

A course in the observation and student teaching of vocal or instrumental music in elementary and secondary schools.

Six credits

NURSING EDUCATION

Professor Jessee, chairman; Instructors Jackson, Janjigian, Klein, Liggett, M. Riley, Seeherman.

Enrollment in all of the following courses with the exceptions of N.E. 102 and 104 is limited to graduate nurses.

N.E. 101. Foundations of Nursing

A general survey of the history of nursing with emphasis upon the religious, social, and educational factors that have stimulated its development.

Two credits—MISS JESSEE

N.E. 102. Trends in Nursing

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

Two credits—MISS JESSEE

N.E. 104. Community Resources

A survey of the functions and activities of agencies and organizations contributing to the health and social welfare of the citizens of the community.

Two credits—MISS JESSEE

N.E. 106. Supervision and Administration

A discussion of the basic principles of supervision and administration with emphasis upon democratic leadership and the development of constructive interpersonal and interdepartmental relationships.

Two credits—MISS JESSEE

N.E. 107. Principles and Methods in Nursing Education

This course deals with the selection and organization of teaching materials and learning experiences. It includes the appraisal of effective methods of teaching and the evaluation of student progress and achievement.

Prerequisite: Ed. 200.

Two credits—MISS JESSEE

N.E. 108. Multi-Sensory Techniques in Nursing Education

A study of the use of multi-sensory teaching aids in nursing education.

Prerequisite: N.E. 107 (may be taken concurrently).

One credit—MISS JESSEE

N.E. 112. Field Experience in Supervision or Teaching

Supervised observation and practice in a hospital.

Prerequisite: Approval of adviser.

Four credits—MISS JESSEE

N.E. 113-114. Medical and Surgical Nursing

Advanced study of nursing principles and techniques as applied to the expert nursing care of medical and surgical patients. Offered in two semesters.

Two credits each semester—MISS LIGGETT

N.E. 115. Obstetric Nursing

Advanced study of nursing principles and procedures as applied to expert care of the obstetric patient.

Two credits—MRS. SEEHERMAN

N.E. 116. Pediatric Nursing

Advanced study of nursing principles and procedures as they apply to the effective care of children.

Two credits—DR. KLEIN

N.E. 117. Psychiatric Nursing

Advanced study of nursing principles and procedures as utilized in providing expert care for psychiatric patients.

Two credits—DR. JAN JIGIAN

N.E. 118. Public Health Nursing

An introduction to the field of public health nursing, including historical development, organization, functions, and trends.

Two credits—MISS JACKSON

N.E. 119. Public School Nursing

A study of the public school health program and the functions of the nurse as an integral part of the health team.

Two credits—MISS JACKSON

N.E. 120. Problems of School Nursing

The identification and discussion of the problems involved in the administration of school health programs.

Two credits—MISS JACKSON

PHILOSOPHY — RELIGION

Professor Vujica, chairman; Instructors Barras, Gilmore, Jacobson.

Philosophy

Phil. 101. Introduction to Philosophy

An introduction to the nature and function of philosophy, and its relations to some of the other fields of human interest. The approach is through such typical problems as: the nature and origin of life, the relation of mind and body, freedom of the will, the theories of right and wrong, arguments for theism.

Three credits—THE STAFF

Phil. 102. Logic and Scientific Method

Elementary principles and techniques of clear and sound thinking. General rules of inductive and deductive reasoning; recognition of fallacies; the nature of scientific knowledge, its methods, its aims, its presuppositions.

Three credits—MR. VUJICA

Phil. 105. Ethics

A critical study of standards for judging the rightness or wrongness of conduct. An inquiry into what men *ought* to do. A survey of representative ethical theories with the emphasis on their application to currently controversial issues in the social, economic, and political fields.

Three credits—THE STAFF

Phil. 204. Philosophy of Religion

An examination of various problems that arise when religion is made the object of philosophic reflection. The nature and forms of religious experience; the relation of faith and reason; arguments for God's existence; the problem of evil; the argument for immortality.

Three credits—MR. VUJICA

Phil. 205. Aesthetics

Analysis of the nature, standards and criteria of value in literature, painting, music, and other forms of arts; the meaning of aesthetic judgments and processes of appreciation. An examination of the objective qualities of those things which are found to be aesthetically effective.

Three credits—THE STAFF

Phil. 206. Social and Political Philosophies

Social and political institutions as seen by such classical critics as Plato, Aristotle, Hobbes, Hume, Burke, Bentham and others. Special attention to analysis of the problems of censorship, relation of church and state, prejudice, aims and methods of democratic institutions.

Three credits—THE STAFF

Phil. 207. Philosophies of History

A study of the various interpretations of history. The views of Augustine, Vico, Rousseau, Kant, Hegel, Marx, Comte, Spengler, Schweitzer, Toynbee, Sorokin, Niebuhr and others on the meaning of historical events.

Three credits—MR. VUJICA

Phil. 208. The History of Philosophy

A brief survey of the major historical divisions; a systematic analysis of some of the major figures and a consideration of their relevance to present problems.

Three credits—MR. VUJICA

Religion

Rel. 200. Man's Religion

Nature and origin of religion. Sacred literatures, beliefs, and rituals of the great historical and living faiths. A comparison of the more important features of the great religions. The contributions of religion to the development and preservation of cultural values.

Three credits—THE STAFF

Rel. 201. The Literature of the Old Testament

The course aims at giving the student an insight into the books of the Old Testament and the range and depth of the religious heritage received from Israel. The biblical message is studied in its dynamic context of the culture, geography and history of the ancient Near East.

Three credits—MR. VUJICA

Rel. 202. The Literature of the New Testament

An examination of the form and content of the books of the New Testament as literary products and as records of the faith that gave rise to the Christian Church. The teachings of Jesus and the Apostolic Church are studied against the background of their own time and examined in their significance for contemporary life.

Three credits—MR. VUJICA

PHYSICAL EDUCATION AND HYGIENE

Associate Professor Reese, chairman; Instructors Ferris, Saraceno, Schmidt.

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 games.

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. 101-102-103-104. Physical Education

This course is designed to promote physical well being and good health habits and to encourage participation in activities that will provide relaxation and exercise throughout life. Two hours each week.

THE STAFF

P.E. 105-106. Personal Hygiene¹

A study of present day health problems. The course undertakes to help students enjoy maximum health and happiness through better understanding of nutrition, infection, disease, nervous and mental disorders, and problems of parenthood. One hour each week.

One credit each semester—THE STAFF

¹ Class instruction in personal hygiene is required of all students, even those excused by physicians from taking physical education.

PHYSICS

Professor Detwiler, chairman; Professor Hall; Associate Professors Bellas, Ripley; Assistant Professors Bruch, Holden, Thomas.

Phys. 101-102. Physical Science

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 and discussion three hours a week.

Three credits each semester—MR. RIPLEY

Phys. 103. Basic Physical Problems

An introduction to the proper procedure for problem solution, both mathematical and graphical. Slide rule practice, graphs, and lettering. Practicum 3 hours a week. Fee: \$5.

One credit—THE STAFF

Phys. 111-112. Introductory Physics

An introductory course designed to promote an understanding of the more important fundamental laws and methods of the major sections of Physics. Laboratory work to emphasize basic principles and to acquaint the student with measuring instruments and their use as well as the interpretation of experimental data. First semester: mechanics, wave motion, sound, and heat. Second semester: electricity, magnetism, and optics. Three class hours and one three-hour laboratory each week. Fee: \$20 each semester.

Prerequisite: Math. 105, or Math. 107, 109, or permission of instructor.

Four credits each semester—THE STAFF

Phys. 150. General Physics I

A thorough grounding in the physical laws of nature. Mechanics. Instruction by demonstration lecture, recitation, and experimental work. Class three hours a week and laboratory three hours a week. Fee \$20.

Prerequisite: Math. 105, or Math. 107, 109.

Four credits—THE STAFF

Phys. 151. General Physics II

Continuation of Phys. 150. Electricity and modern physics. Class three hours a week and laboratory three hours a week. Fee: \$20.

Prerequisite: Phys. 150

Four credits—THE STAFF

Phys. 152. General Physics III

Continuation of Phys. 150 and 151. Sound, heat, and light. Class three hours a week and laboratory three hours a week. Fee: \$20.

Prerequisite: Phys. 150.

Four credits—THE STAFF

Phys. 201-202. Electricity and Magnetism

Static and dynamic electricity, magnetism, electromagnetism, thermoelectricity, etc., are covered in considerable detail. The emphasis in this course is on fundamental analysis rather than applications. Three hours class and one three-hour laboratory a week each semester. Fee: \$20 each semester.

Prerequisites: Phys. 151, Math. 240.

Four credits each semester

Phys. 211. Optics and Light

The principles of geometrical and physical optics are considered in considerably greater detail than in the introductory course. Image formation, refraction, diffraction, origin of spectra, polarized light, optical activity, etc. Three hours class and one three-hour laboratory a week. Fee: \$20.

Prerequisites: Phys. 152, Math. 240.

Four credits

Phys. 212. Thermodynamics

The fundamental concepts of thermodynamics. The first and second laws of Thermodynamics, Carnot cycle, entropy, and an introduction to statistical mechanics. Three hours lecture-discussion.

Prerequisites: Phys. 151, 152, Math. 252, Math. 240.

Three credits

Phys. 221-222. Electronics

A study of vacuum tubes, transistors, and their application in circuits for rectification, amplification, oscillation, switching, etc. Two hours class and one three-hour laboratory a week. Fee: \$20 each semester.

Prerequisites: Phys. 152, Math. 240.

Three credits each semester

Phys. 241-242. Advanced Laboratory

Students desiring to undertake laboratory work in topics of their own choosing should consult the department chairman. Lab fee: \$7 per credit hour.

Prerequisites: Phys. 152, Math. 240.

One or two credits—Hours to be arranged

Phys. 251. Electrical Measurements

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 a week. Fee: \$20.

Prerequisite: Phys. 151, Math. 126.

Three credits

Phys. 261. Atomic Physics

The structure of the atom, the photo-electric effect, crystal structure, X-rays, spectra, introduction to quantum theory. Class three hours and one three-hour laboratory a week. Fee: \$20.

Prerequisites: Phys. 202, Math. 240.

Four credits

Phys. 262. Nuclear Physics

Special relativity, natural and induced radioactivity, nuclear structure, nuclear reactions, reactors, etc. Class three hours and one three-hour laboratory a week. Fee: \$20.

Prerequisite: Phys. 261.

Four credits

Phys. 271. Modern Physics

A further study of the modern concepts of atomic and nuclear physics. Spectra: radioactivity, photo-electricity, X-rays, solids. Intended for students not majoring in physics. Class three hours.

Prerequisite: Phys. 151, 152, and Math. 240.

Three credits

Phys. 281. Topics in Theoretical Physics

Selected topics depending upon the interests of the instructor and students. Topics might include advanced mechanics, quantum mechanics, electromagnetic theory, relativity, etc. Class three hours.

Prerequisites: Math. 240, Math. 252.

Corequisites: Atomic Physics 261 or approval of the instructor.

Three credits

Phys. 282. Topics in Solid State Physics

Selected topics, depending upon the interests of the instructor and students. For example, theory of electrical and thermal conductivity, semiconductors, bonding in solids, point defects, dislocation, magnetic properties, etc. Class three hours.

Prerequisites: Math. 240, Math. 252, and Phys. 261, or approval of the instructor.

Three credits

POLITICAL SCIENCE

Professor Mailey, chairman; Associate Professor Kaslas; Instructors Tuhy, Welsh.

P.S. 101. Political Science I

A broad, comprehensive introduction to the great topics which constitute political science, covering the nature and main elements of the modern states, their politics, their institutions, and their relations with one another.

Three credits—THE STAFF

P.S. 102. Political Science II

A descriptive and analytical study of the theory and practice of American National Government including its constitutional basis, organization, powers, and functions and services.

Three credits—THE STAFF

P.S. 201. Constitutional Law I

A course intended to show the growth of the American Constitution particularly United States governmental structure and relationships with special emphasis on change in the Constitution, the three branches of government, the Federal System, and the powers of the National Government. The case study method is used.

Prerequisite: P.S. 101 and 102.

Three credits—MR. MAILEY

P.S. 202. Constitutional Law II

A course intended to show the growth of the American Constitution particularly the relations between the individual and his government with special emphasis on liberty against government, protection of civil rights, citizenship and its privileges. The case study method is used.

Prerequisite: P.S. 101 and 102.

Three credits—MR. MAILEY

P.S. 203. Politics and Political Parties

A course intended to analyze the movements of political parties, elections, and the various methods used to gain control.

Prerequisite: P.S. 101 and 102.

Three credits—MR. MAILEY

P.S. 204. Public Opinion and Propaganda

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: P.S. 101 and 102 and Soc. 101 and 102.

Three credits—MR. MAILEY

P.S. 205. State Government

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: P.S. 101 and 102.

Three credits—MR. TUHY

P.S. 206. Municipal Government

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: P.S. 101 and 102.

Three credits—MR. TUHY

P.S. 207. Public Administration

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

Prerequisite: P.S. 101 and 102.

Three credits—MR. TUHY

P.S. 208. Labor Legislation

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: P.S. 101 and 102.

Three credits—MR. MAILEY

P.S. 209. Social Legislation

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: P.S. 101 and 102.

Three credits—MR. MAILEY

P.S. 210. Government of Metropolitan Areas

An examination of the politics and the processes of contemporary urban government, with special emphasis upon the complex problems presented by the rapidly expanding population in standard metropolitan areas.

Prerequisite: P.S. 101 and 102.

Three credits—THE STAFF

P.S. 221. International Law

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: P.S. 101 and 102.

Desideratum: United States and European history.

Three credits—MR. KASLAS

P.S. 222. International Politics

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

Prerequisite: P.S. 101 and 102.

Desideratum: Some knowledge of history, governments, and geography.

Three credits—MR. KASLAS

P.S. 223. Cabinet Systems of Government

A study of the European versions of democratic government beginning with Great Britain and considering the variations from the British system of government found on the continent.

Prerequisite: P.S. 101 and 102.

Three credits—MR. KASLAS

P.S. 224. Soviet System of Government

A course dealing with the structure and functions of the Soviet Government emphasizing the contrasts and similarities in form with governments of the West.

Prerequisite: P.S. 101 and 102.

Three credits—MR. KASLAS

PSYCHOLOGY

Professor R. Riley, chairman; Assistant Professor Zellner; Instructors Kanner, Krasno.

Psy. 101-102. General Psychology

An introduction to the field of psychology with emphasis on objective and systematic methods of inquiry. Extensive treatment of major psychological topics such as sensation, perception, learning, motivation, intelligence, and personality development. Frustration, conflict, and mental health also receive attention.

Three credits each semester—THE STAFF

Psy. 201. Advanced General Psychology

A more detailed study of topics treated only superficially in the introductory course. More attention will be given to physiological foundations of behavior, to learning, perception, and the emotions. (Offered in alternate years.)

Prerequisite: Psy. 101 and 102. Some background in biology or physiology would be desirable.

Three credits—THE STAFF

Psy. 203-204. Experimental Psychology

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 years.)

Prerequisite: Psy. 101 and 102.

Three credits each semester—THE STAFF

Psy. 207. Child Psychology

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: Psy. 101 and 102.

Three credits—THE STAFF

Psy. 208. Human Behavior

Human adjustment and maladjustment to life situations with emphasis on motivation, emotional control, personality formation, and the treatment of the lesser personality disorders.

Prerequisite: Psy. 101 and 102.

Three credits—THE STAFF

Psy. 210. Psychologic Theory

A comprehensive survey of classical and contemporary theories and their relationship to empirical research. Special emphasis is placed on attempts to reconcile and translate these theories into operational descriptions.

Prerequisites: Psy. 101 and 102.

Three credits—MR. KANNER

Psy. 212. Psychological Tests

A survey of the functions measured by psychological tests with emphasis on intelligence and personality. A variety of the group and individual tests which measure these functions are studied. This course is a prerequisite for Psy. 251 and Psy. 255.

Prerequisite: Psy. 101 and 102.

Three credits—THE STAFF

Psy. 251. Industrial Psychology

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: Psy. 212.

Three credits—THE STAFF

Psy. 254. Systematic Psychology

A historical introduction to the various 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.)

Prerequisite: Psy. 101 and 102 and one other course in psychology.

Three credits—THE STAFF

Psy. 255. Clinical Psychology

A survey of the clinical method in psychology with consideration of diagnostic and treatment techniques and the role of the professional psychologist in various settings. (Offered in alternate years.)

Prerequisite: Psy. 212.

Three credits—THE STAFF

Psy. 257. Abnormal Psychology

A general survey of the principal forms of mental abnormalities, with emphasis on causes, symptoms, course, and treatment. (Offered in alternate years.)

Prerequisite: Psy. 207, 208 and permission of head of department.

Three credits—THE STAFF

Psy. 271-272. Research in Psychology

An opportunity to conduct individual research projects under supervision. (*Open to psychology majors only.*)

Prerequisite: permission of head of department.

Three credits each semester—THE STAFF

RETAILING

Professor Rosenberg, chairman; Instructor D'Zerko.

Ret. 101. Principles of Retailing

A basic course that discusses the opportunities in retailing; types of retail institutions; problems of store policy, store location; study of the organizational structure of department stores; organization and functions of operating division.

Three credits—THE STAFF

Ret. 210. Elements of Merchandise

Merchandise information; fibers and fabrics; history, production, manufacturing process from fiber to finished fabric; textile terminology, trade names. Identification, testing of fibers; care of fabrics; new developments. Study of natural, industrial and synthetic materials.

Three credits—THE STAFF

Ret. 211. Merchandise Information

Materials, other than textiles, used in the creation of merchandise are covered through the study of raw materials. Categories of merchandise covered include: leather goods, such as shoes, gloves, handbags, and luggage; floor coverings; glass, pottery, and china; and furniture.

Three credits—THE STAFF

Ret. 212. Purchases and Merchandising Control

The principles, techniques, and problems encountered in merchandising; purchase planning, markup, markdown, inventories and their control, turnover, retail method of inventory, and the types and limitation of stock control systems.

Prerequisite: B.A. 107 or approval of instructor.

Three credits—THE STAFF

Ret. 214. Retail Buying

A study of the scientific principles of what, when, and how much to buy; a study of customer demand. Special attention is given to the technique of buying; markups, markdowns, stockturns, and other factors that are necessary to keep lines complete.

Prerequisite: approval of instructor.

Three credits—THE STAFF

Ret. 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.

Two credits—THE STAFF

Ret. 224. Recent Trends and Developments in Retailing

Review of fundamentals; trends in retailing; study of developments in cooperation with retail store executives. Laboratory work; reports on trends and developments.

Three credits—THE STAFF

Ret. 225. Retail Practice

Required of all retailing majors in the seventh semester. In co-operation with local stores, a program in Retailing Practices has been established. Under this program, students majoring in Retailing must be employed for an average of 25 hours a week during the fall term of the senior year. During the period of employment, students will be required to submit reports concerning their work to the instructor; the store manager or personnel director is required to evaluate the students' ability and aptitude for retailing. Credit for the course given upon certification by the manager or personnel director of the co-operating store that students have satisfactorily completed their terms of employment.

Students who wish to seek their own place of employment may be permitted to do so, provided the place of employment has been approved by the instructor. In general, this approval will be given to employment in department stores, independent stores, variety stores, chain stores, and specialty stores where students will receive a variety of experience, and the stores are of a sufficient size to provide adequate and diversified experience.

Three credits—THE STAFF

SECRETARIAL STUDIES

Professor Rosenberg, chairman; Assistant Professors Gera, Hoover.

S.S. 105-106. Elementary Shorthand

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.

Second semester: 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.

Two credits each semester—MR. GERA, MR. HOOVER

S.S. 107-108. Elementary Typewriting

Presentation and mastery of the keyboard and operating parts of the typewriter; stroking techniques and control emphasized. 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.

Four hours each week. One hour lecture and three hours laboratory. Required laboratory fee: \$10 each course. Minimum passing requirement: 50 words net per minute.

Two credits each semester—MR. GERA, MR. HOOVER

S.S. 201-202. Advanced Typewriting

Development of greater speed and accuracy in typewriting; review of form and style in typewritten material; advanced application of typewriting skills; production typing; accuracy, speed and job techniques emphasized; development of desirable work habits and attitudes. Three hours laboratory.

Required laboratory fee: \$10 each course.

Prerequisite: S.S. 108 or equivalent and net typing rate of 50 words per minute.

One credit each semester—MR. GERA

S.S. 205. Office Procedures and Machines

A study of technical procedures and problems in typical business and professional offices; analysis of personal and professional requirements for office personnel; a general survey and comparison of major office machines classifications; administrative machine procurement problems and procedures; operation and use of office machines and equipment, namely, adding, calculating, dictating and transcribing, duplicating, photocopying, accounting, integrated data processing. Eight hours each week. Two hours lecture, six hours laboratory.

Required laboratory fee: \$10.

Prerequisite: approval of instructor.

Four credits—MR. GERA

S.S. 207-208. Advanced Shorthand

Review and strengthen knowledge of the principles of Gregg Shorthand Simplified; build shorthand—writing skill and speed in taking dictation with great emphasis placed on the development of transcription skill; development of desirable work habits and attitudes. Five hours each week. Two hours lecture, three hours laboratory.

Prerequisite: S.S. 106 or equivalent and net typing of 50 words a minute.

Three credits each semester—MR. GERA

S.S. 243. Principles and Methods of Business Education

Principles of business education; business curricula in secondary schools; psychology of skill-building; objectives, standards, content; tests and measurements, and techniques of instruction in business education courses; observation.

Three credits—MR. HOOVER

SOCIOLOGY AND ANTHROPOLOGY

Associate Professor Moravec, chairman; Instructors Bloomburg, Greenspon, Moroski, Welliver.

Soc. 101. Introduction to Sociology and Anthropology I

Man in Society; a systematic view of sociology, providing essentials for an approach to questions about man in society; analysis of social processes, structures, and functions.

Three credits—THE STAFF

Soc. 102. Introduction to Sociology and Anthropology II

Man and Culture; a general survey of the field of anthropology stressing its cultural aspects; study of contemporary non-literate societies and their institutions.

Three credits—THE STAFF

Soc. 200. The Family

History and ethnological studies of family. Role of family in the development of the individual. Interrelation of church, state, and family. Social conditions and changes affecting the American family. Family instability and disorganization.

Prerequisite: Soc. 101 and 102 or permission of instructor.

Three credits—THE STAFF

Soc. 215. Sociology of Urban Life

The development of modern cities; effects of urban life upon social organization and personality patterns; major social problems of the cities.

Prerequisite: Soc. 101 and 102.

Three credits—THE STAFF

Soc. 230. Social Problems

A survey of most pressing contemporary social problems and an examination of current theories of social disorganization.

Prerequisite: Soc. 101 and 102.

Three credits—THE STAFF

Soc. 235. Crime and Juvenile Delinquency

Evaluation of current theories and research into causative factors and sociological implications of criminal and delinquent behavior.

Examination of problems, programs, and issues in prevention and treatment of deviant behavior.

Prerequisite: Soc. 230, or permission of the instructor.

Three credits—THE STAFF

Soc. 245. Fields of Social Work

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: Soc. 101 and 102 and Psy. 101 and 102.

Three credits—THE STAFF

Soc. 255. Introduction to Social Psychology

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: Soc. 101 and 102 and Psy. 101 and 102.

Three credits—THE STAFF

Soc. 260. Personality and Social Structure

Examination of current theories and research bearing upon the relationship between personality and social structure; contributions and convergent development in psychology, anthropology, and sociology.

Prerequisite: Soc. 101 and 102; Soc. 265.

Three credits—THE STAFF

Soc. 265. Sociology of Industry

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: Soc. 101 and 102 and Ec. 101 and 102, or permission of the instructor.

Three credits—THE STAFF

Soc. 270. Peoples and Cultures of the World

A survey of the non-Western cultures of the world with an emphasis on one of the following areas: The Middle East, The Far East, South-East Asia, Africa, Australasia, Latin America.

Prerequisite: Soc. 101 and 102.

Three credits—THE STAFF

Soc. 275. Sociology of Minorities

A theoretical analysis of inter-group tensions and processes of adjustment with special reference to modern racial, national, and religious conflicts.

Prerequisite: Soc. 101 and 102 and Psy. 101 and 102.

Three credits—THE STAFF

Soc. 280. Sociological Theory

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: Soc. 101 and 102 and two other courses in sociology or permission of the instructor.

Three credits

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ALFRED S. GROH
FRANCIS J. MICHELINI
CHARLES B. REIF
JOHN P. WHITBY

Library Committee

ROBERT E. WERNER, *Chairman*
FREDERIC E. BELLAS
CHESTER COLSON
ELWOOD DISQUE
JULIEN A. RIPLEY
PHILIP L. RIZZO
NADA VUJICA

Admissions Committee

JOHN P. WHITBY, *Chairman*
MARGARET M. AHLBORN
JOHN J. CHWALEK
WELTON G. FARRAR
GEORGE F. RALSTON
ROBERT C. RILEY

Scholarship Committee

JOHN P. WHITBY, *Chairman*
MARGARET M. AHLBORN
JOHN J. CHWALEK
ARTHUR J. HOOVER
GEORGE F. RALSTON

Athletic Committee

HAROLD W. THATCHER, *Chairman*
GEORGE ELLIOT
EUGENE L. HAMMER
ARTHUR J. HOOVER
GEORGE F. RALSTON
JOHN G. REESE
THOMAS R. RICHARDS

Student Activities and Planning

ARTHUR J. HOOVER, *Chairman*
MARGARET M. AHLBORN
WILLIAM R. GASBARRO
GEORGE F. RALSTON
JOHN G. REESE

Calendar Committee

HUGO V. MAILEY, *Chairman*
FRANCIS J. MICHELINI
JOHN P. WHITBY

Student Publications Committee

ALFRED S. GROH, *Chairman*
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JOSEPH H. SALSBURG
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Curriculum Committee

ROBERT C. RILEY, *Chairman*
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WILLIAM R. GASBARRO
STANLEY S. GUTIN
EUGENE L. HAMMER
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HUGO V. MAILEY
FRANCIS J. MICHELINI, *Ex-officio*
CHARLES B. REIF
SAMUEL A. ROSENBERG
STANKO VUJICA
STANLEY H. WASILESKI

Mediation Committee on
Academic Freedom

SAMUEL A. ROSENBERG
HAROLD W. THATCHER
FRANCIS J. MICHELINI
ROBERT C. RILEY

Graduation Committee

GEORGE F. RALSTON, *Chairman*
MARGARET M. AHLBORN

Faculty-Trustee Committee
on Academic Freedom

FRANK J. J. DAVIES
EUGENE L. HAMMER

Ex Officio on all Committees except committees
on academic freedom—EUGENE S. FARLEY

Desk Copy



WILKES COLLEGE

WILKES-BARRE, PA.

EVENING SCHOOL

Fall Semester

1964 - 1965

5129

WILKES COLLEGE
BULLETIN



EVENING SCHOOL

Fall Semester

1964-1965

WILKES-BARRE, PENNSYLVANIA

EVENING SCHOOL CALENDAR

Fall Semester 1964-1965

Thursday, September 17, Friday, September 18, and
Monday, September 21, from noon until 8 p.m.;
Saturday, September 19 from 9 a.m. to noon.....Registration
Monday, September 21.....Classes begin
Saturday, November 7.....Final day to remove Incompletes
Wednesday, November 4.....Mid-semester reports
Tuesday, November 24.....Thanksgiving recess begins 10 p.m.
Monday, November 30.....Thanksgiving recess ends at 6 p.m.
Thursday, December 10.....Christmas recess begins at 10 p.m.
Monday, January 4, 1965.....Christmas recess ends at 6 p.m.
Thursday, January 14.....Classes end at 10 p.m.
Monday, January 18 to Thursday, January 21.....Examination period

KEY TO BUILDINGS

Chase Hall	Administration	184 S. River St.
Co.	Conyngham Hall	120 S. River St.
GHA	Gies Hall A	191 S. Franklin St.
GHB	Gies Hall B	195 S. Franklin St.
Kirby Hall	Library	190 S. River St.
Par.	Parrish Hall	16 S. River St.
Pick.	Pickering Hall	181 S. Franklin St.
Stark Hall	Science Hall	rear 159 S. River St.

Wilkes College

Wilkes College had its beginnings in 1933 when Bucknell University, responding to a request of community leaders, established its Junior College in Wilkes-Barre. On June 26, 1947, Bucknell University Junior College came to an end and Wilkes College received its charter as a four-year liberal arts college. The College has grown slowly to its current enrollment of approximately 1400 full-time day students and 500 part-time evening school students.

From its inception the college has been dedicated to these twin goals — a sound and stimulating intellectual experience for students and a program of service to the community.

AN INDEPENDENT COLLEGE

It was inevitable that the new college should be non-sectarian, for its purpose was to serve all students equally and its supporters wished the College to integrate itself with all constructive efforts in the community. It was believed that these ends could be served best by an independent college that was interdenominational in its influence and non-denominational in its control.

FREEDOM OF INQUIRY

Years have passed since Bucknell gave the control of the Junior College to a local Board of Trustees, guided by the late Gilbert S. McClintock, and events of these years demonstrate the wisdom of their decision. With responsibility came a pressing desire to strengthen the work of the faculty, united in their faith that the intellectual and spiritual resources of the student are vigorous where the creative mind is free.

UNITY AMIDST DIVERSITY

A college that wishes to serve all groups requires both a definite philosophy and a working policy. Wilkes College has been guided by the thought that unity in our community, our nation, and our world requires not only great vision but warm understanding of peoples. In its small circle Wilkes College brings together students of many faiths, backgrounds, and countries. It encourages them to maintain their convictions and their loyalties. It encourages them to create friendships based upon respect for differences, and to adhere to those ideals that create unity and good will amidst diversity.

While academic work is the basis of the College program, the faculty recognizes that academic training will be of little importance unless students emerge as men and women of strong faith and fine character. In the words of John Stuart Mill, "Before you can make men doctors and lawyers, you must first make them men."

Wilkes College is committed to education as a way of life.

A COOPERATIVE EFFORT

The original concept of community services has been strengthened with the passing of the years and with growing experience. It has been clearly demonstrated that the students, the College, and the community all benefit from cooperative effort. This cooperative relationship, with its emphasis on trained intelligence and extended planning, has resulted in cooperative action.

DECADES OF GROWTH

Because of their interest and faith, friends have multiplied their support during the past decades and the campus has expanded steadily so that it now includes most of the properties facing the River Common. Fortunately, a growing endowment has kept pace with the expansion of the campus.

ACCREDITATION

Wilkes is accredited by the Department of Public Instruction of the State of Pennsylvania and the Middle States Association of Colleges and Secondary Schools. The Accounting curriculum has been accredited by the Certified Public Accounting Examiners of the State of New York.

An Educated Man

seeks truth, for without truth there can be no understanding;

possesses vision, for he knows that vision precedes all great attainments;

is aware of the diversity of ideas and beliefs that exist among men;

has faith in the power of ideals to shape the lives of men;

knows that man's progress requires intellectual vigor, moral courage, and physical endurance;

cultivates inner resources and spiritual strength, for they enrich his daily living and sustain him in times of crisis;

has ethical standards by which he lives;

respects the religious convictions of all men;

participates constructively in the social, economic, and political life of the community;

communicates ideas in a manner that assures understanding, for understanding unites men in their search for truth.

*Formulated and adopted by the
faculty as a guide to learning.*

FALL SEMESTER

INFORMATION

REGISTRATION

All applicants must register in person at Parrish Hall, Room 3, 16 South River Street, Wilkes-Barre, on the dates specified.

The office of the Director of the Evening School will be open daily from 12 noon to 8 p.m. throughout the registration period.

Classes will begin September 21 according to schedule.

Students are urged to take only courses for which they have prerequisites. Those who lack the prerequisites specified for the courses they wish to take must consult with the Director of the Evening School or the Registrar.

TUITION AND FEES

Students registering for courses in the Evening Session will be charged \$30.00 per semester hour of study payable before registration.

Payment of a \$3.00 fee entitles the student to a parking permit for the eight-week session.

WITHDRAWAL

Students who withdraw from the Evening Semester or drop courses should give prompt written or verbal notice to the Director of the Evening School and to the instructors concerned, in order that their records may not unjustly show failure in courses.

Students in good standing who withdraw from the College will receive a refund of tuition under the following conditions:

During the first two weeks of the Evening Semester one-half of the tuition will be refunded upon written request to the Director, Evening School, Wilkes College, if the withdrawal is made for adequate and satisfactory reasons. After the first two weeks no refunds are allowed and the student is obligated for the full costs of the term. No student who is suspended or expelled shall be entitled to any refunds.

The Library

The Library, located on the corner of South River and South Streets is open Monday, Tuesday, Wednesday and Thursday from 8 a.m. to 10 p.m., and on Friday from 8 a.m. to 5 p.m. The Library is also open Saturday and Sunday from 1 p.m. to 4 p.m. Telephone number is 824-4651, Ext. #28.

THE BOOKSTORE

The Bookstore, in Harding Hall, 141 South Franklin Street, will be open on Monday from 12 noon to 5 p.m., and from 6 p.m. to 8 p.m.; Tuesday through Friday the Bookstore will be open from 9 a.m. to 5 p.m.

CANCELLATION OF COURSES:

The College reserves the right to change hours and to cancel any course.

The office of the Director of the Evening School will be open daily from 12 noon to 8 p.m. throughout the registration period.

Classes will begin September 21 according to schedule.

Students are urged to take only courses for which they have prerequisites. Those who lack the prerequisites specified for the courses they wish to take must consult with the Director of the Evening School or the Registrar.

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THE LIBRARY

The Library, located on the corner of South River and South Streets, is open Monday, Tuesday and Thursday from 2 p.m. until 10 p.m., and Wednesday and Friday from 9 a.m. until 5 p.m. Telephone number after 5 p.m. is 824-4652.

THE BOOKSTORE

The Bookstore, in Harding Hall, 141 South Franklin Street, will be open on Monday from 12 noon to 5 p.m., and from 6 p.m. to 8 p.m.; Tuesday through Friday the Bookstore will be open from 9 a.m. to 5 p.m.

CANCELLATION OF COURSES:

The College reserves the right to change hours and to cancel any course.

EVENING SCHOOL SCHEDULE

Fall Semester 1964-1965

SUBJECT	COURSE	DAYS & HOURS	ROOM NO.	S.H.
ACCOUNTING:				
Acct. 101E	Elementary Accounting I	MW 6:30-8	Par. 35	3
Acct. 102E	Elementary Accounting II (Pre: Acct. 101)	MW 8-9:30	Par. 35	3
Acct. 111E	Intermediate Accounting I (Pre: Acct. 102)	TTH 6:30-8	Par. 35	3
Acct. 201E	Cost Accounting (Pre: Acct. 112 or approval of Instructor)	TTH 8-9:30	Par. 35	3
Acct. 220E	Accounting Systems (Pre: Acct. 112, 202 or approval of Instructor)	MW 6:30-8	Par. 45	3
Acct. 231E	Auditing Principles I (Pre: Acct. 202)	MW 8-9:30	Par. 45	3
BIOLOGY:				
Bio. 101E	Biological Sciences	MW 6:30-8	Stark 116	3
BUSINESS ADMINISTRATION:				
B.A. 209E	Business Correspondence and Reports (Pre: Eng. 102)	TTH 6:30-8	Par. 26	3
B.A. 231E	Business Law — Introduction and Contracts (Pre: Ec. 102 or approval of Instructor)	MW 8-9:30	Par. 43	3
B.A. 237E	Production Management (Pre: Ec. 102 or approval of Instructor)	MW 6:30-8	Par. 43	3
ECONOMICS:				
Ec. 101E	Principles of Economics I	MW 6:30-8	Par. 23	3
Ec. 102E	Principles of Economics II (Pre: Ec. 101)	MW 6:30-8	Par. 27	3
Ec. 201E	Money and Banking (Pre: Ec. 102)	MW 8-9:30	Par. 26	3
Ec. 223E	Collective Bargaining (Pre: Ec. 102)	MW 8-9:30	Par. 27	3

SUBJECT	COURSE	DAYS & HOURS	ROOM NO.	S.H.
Ec. 227E	Economic Geography of North America (Pre: Ec. 102)	TTH 8-9:30	Par. 25	3
Ec. 231E	Applied General Statistics I (Pre: Approval of Instructor)	TTH 6:30-8	Par. 23	3
Ec. 241E	Economic Analysis (Pre: Ec. 102)	MW 8-9:30	Par. 25	3
EDUCATION:				
Ed. 242E	Guidance	TTH 6:30-8	Par. 43	3
ENGLISH:				
Eng. 101E	Composition	TTH 6:30-8	Co. 104	3
Eng. 101EE	Composition	TTH 8-9:30	Co. 104	3
Eng. 102E	Composition (Pre: Eng. 101)	MW 8-9:30	Co. 104	3
Eng. 131E	Fundamentals of Speech	T 6-8	Co. 209	2
Eng. 151E	Western World Literature (Pre: Eng. 102)	MW 6-8	Co. 104	4
GEOLOGY:				
Geo. 100E	General Geology	T 8-10	Stark 116	2
HISTORY:				
Hist. 101E	History of Western Civilization	TTH 8-9:30	Co. 103	3
Hist. 107E	American and Pennsylvania History to 1865	TTH 6:30-8	Co. 103	3
HYGIENE:				
P.E. 105E	Personal Hygiene (1st part)	T 7-8	Par. 27	1
LANGUAGES:				
Fr. 101E	Elementary French	MW 6:30-8	Co. 204	3
Sp. 101E	Elementary Spanish	MW 8-9:30	Co. 204	3
Ger. 101E	Elementary German	TTH 6:30-8	Co. 204	3
Russ. 101E	Elementary Russian	TTH 8-9:30	Co. 204	3

SUBJECT	COURSE	DAYS & HOURS	ROOM NO.	S.H.
MATHEMATICS:				
Math. 109E	Plane Trigonometry (Pre: Math. 99 or equivalent)	MW 6:30-8	Par. 26	3
Math. 115E	Mathematics of Finance (Pre: Math. 99 or equivalent)	MW 8-9:30	Par. 23	3
MUSIC:				
Music 100E	Introduction to Music	MW 8-9:30	GHA 101	3
NURSING EDUCATION:				
N.E. 102E	Trends in Nursing	M 4-6	Par. 46	2
N.E. 106E	Supervision and Administration	T 4-6	Par. 46	2
N.E. 113E	Medical and Surgical Nursing	TH 4-6	Par. 46	2
PHILOSOPHY:				
Phil. 101E	Introduction to Philosophy	MW 6:30-8	Par. 25	3
POLITICAL SCIENCE:				
P.S. 101E	Introduction to Political Science	MW 8-9:30	Par. 46	3
P.S. 205E	State Government (Pre: P.S. 101 and 102)	MW 6:30-8	Par. 46	3
PSYCHOLOGY:				
Psy. 101E	General Psychology	TTH 6:30-8	Par. 46	3
Psy. 257E	Abnormal Psychology (Pre: Psy. 207, 208 and permission of head of dept.)	TTH 8-9:30	Par. 46	3
RELIGION:				
Rel. 200E	Man's Religion	TTH 8-9:30	Par. 27	3
SOCIOLOGY:				
Soc. 101E	Introduction to Sociology	MW 8-9:30	Par. 8	3
Soc. 245E	Fields of Social Work (Pre: Soc. 101 and 102 and Psy. 101 and 102.)	TTH 6:30-8	Par. 25	3

