# WILKES COLLEGE 

CATALOGUE ISSUE - 1949-1950


ANNOUNCEMENTS - 1950-1951

Marks of An Educated Man

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




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COLLEGE CALENDAR 1950-51 SPRING, 1950

January 30, Monday February 6, Monday March 20, Monday. March 25 , Saturday. April 5, Wednesday April 11, Tuesday.
May 24, Wednesday.
May 27, Saturday
May 30, Monday
June 3, Saturday June 12, Monday
reshman Orientation Week begins Classes begin at 8 A.M. Week of mid-semester examinations Removal of Conditions and Incompletes Easter vacation begins at 5 P.M. Classes resume at 8 A.M.
Trial Registration to April 19
Classes end at 5 P.M. except for Mathematics and Science course
Classes end for Mathematics and Science courses
Final examinations begin and continue through June 8 Founders Day Graduation

SUMMER, 1950
June $15,16,17$
Thursday Fri
Thursday, Friday, Saturday . . Registration for summer school June 19, Monday July 4, Tuesday. August 8, Tuesday. August 12, Saturday. des benin 8 A.M. Independence Day; no clas inal examinations begí Final examinations end at 5 P.M.

## FALL, 1950

September 11, Monday. September 13, Wednesday

September 14, 15
Thursday, Friday.
September 18, Monday
November 8, Wednesday November 11, Saturday November 15, Wednesday
November 18, Saturday
November 18, Saturday
November 22, Wednesday November 27, Monday
reshman Orientation Week begins reshman
tration

Registration for Upperclassmen Classes begin at 8 A.M. Mid-Semester grades due Armistice Day; no classes Trial registration to November 29 Incompletes must be satisfied by this date Homecoming
Thanksgiving vacation begins at 5 P.M Classes resume at 8 A.M.

December 19, Tuesda January 3, Wednesday January 8, Monday January 19, Friday January 20, Saturda January 31, Wednesday

CALENDAR

Christmas vacation begins at 5 P.M - Classes resume at 8 A.M. Final registration (A-M) Final registration (N-Z) Classes end at 5 P.M.
Final examinations begin Final examinations end at 5 P.M.
SPRING, 1951
February 1, 2, 3
Thursday, Friday, Saturday . . Freshman Orientation period February 7, Wednesday March 22, Thursday April 4, Wednesd. April 4, Wednesday April 7, Saturday. April 16, Monday
May 25, Friday May 26, Faturday. May 30, Wednesd. June 7, Thursday.. June 9, Saturday June 9, Saturday.

June 13, 14, 15
Wednesday, Thursday
Friday
Friday
June 18 ,
June 18, Monday. .
July 4 , Wednesday
July 4, Wednesday
August 11, Tuesday.
es begin Classes begin at 8 A.M Classes resume begins at 5 P.M. Mid-Semester grades due Incompletes must be satisfi Trial registration to statisfied by this date Classes end at 5 P.M. Final examinations begin Decoration Day; no classes Final examinations end at 5 P.M Founders Day Graduation

SUMMER, 1951

Registration for summer school Classes begin at 8 A.M. Independence Day; no classes inal examinations begin

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amuel M. Davenport, M.D. (Virginia) College Pbysician
seph H. Myers, B.L.S. (McGill) Librarian

Mary F. Harvey, B.L.S. (Drexel) Circulation and Reference Librarian

Nada Vujica, A.M. (Zagreb)
Assistant in Library
Clare Bedillion, A.M. (New York) Secretary to the Faculty

Thomas J. Moran, B.S. (Bucknell) Divector of Public Relations and Secretary of the Alumn

Gladys B. Davis Head Resident, Weckesser Hall

## ASSISTANTS IN ADMINISTRATION

## OFFICE OF THE REGISTRAR

| Louise C. Brennan | Assistant to the Registr |
| :---: | :---: |
| Emma Grilli | Office Macbine Clert |
| Jean Machonis. | Switchboard Operatior |
| Madelyn Lawson | Registration Cle |
| Irene Sheplock | ...... Recorder |
|  | Secretary to the Regi |

## OFFICE OF THE COMPTROLLER

Jane L. Dodson.
Dolores Henczel
Jean Jones.
Mary Popple

Secretary to the Comptroller .................Casbier Accorts Pable Bookkeeper

OfFICE OF THE PRESIDENT
June E. Stevens.
Secretary to the President

OFFICE OF THE DEAN
Anna Havir
Secretary to the Dean.

Celine Popielarz
Secretary to the Director of Guidance

Mildred Gittens
BOOKSTORE
-
CAFETERIA
Mrs. James A. Brennan.

## MAINTENANCE

$\mathbb{W I L L I A M}$ Jervis
s....

## GUIDANCE CENTER

11 Office Machine Clert witchboard Operator Recorder Scretary to the Registrar
adelyn Laws
Irene Sheplock...

## Faculty

Eugene Shedden Farley, Ph.D. (Pennsylvania) President
Herbert John Morris, A.M. (Pennsylvania) Director of Admissions and Assistant Professor of Busines Administration
George Francis Ralston, A.B. (North Carolina) Dean of Men and Instructor in Biology

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Mary Elizabeth Craig, Ph.D. (Cornell) Professor of English

Charles Braddock Reif, Ph.D. (Minnesota) Professor of Biology
harold W. Thatcher, Ph.D. (Chicago) Professor of History
Alfred W. Bastress, Ph.D. (Yale) Professor of Chemistry
Samuel A. Rosenberg, M.B.A. (Boston U.) Professor of Economics
Voris Blaine Hall, M.S. in E.E. (Bucknell), A.M. (Columbia) Associate Professor of Pbysics

Elwood John Disque, A.B. (Dickinson) Associate Professor of German
Frank J. J. Davies, Ph.D. (Yale) Associate Professor of English
Thomas R. Richards, M.S. (Buckneli) Assistant Professor of Mathematics
Konstantin Symonolewicz, M.S. (Warsaw) Assistant Professor of Sociology
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STANLEY H. WASLLESKI, M.S. (Bucknell) Assistant Professor of Mathematics

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Clare Bedillion, A.M. (New York) Assistant Professor of Secretarial Studies
Mildred E. Hull, A.M. (Pennsylvania) Assistant Professor of Mathematics
Edward M. Williams, A.M. (Columbia) Assistant Professor of English
Edward Nicholas Heltzel, M.S. (Bucknell) Assistant Professor of Engineering
Kathryn E. Dominguez, A.m. (Columbia) Assistant Professor of Psychology
Thaddeus Mitana, Ph.D. (Cracow) Assistant Professor of Modern Languages
Leon Agranat, M.S. (New School) Assistant Professor of Economic
Huco V. Mailey, Ph.D. (Pennsylvania) Assistant Professor of Political Science
Arthur N. Kruger, Ph.D. (Louisiana) Assistant Professor of English
Stanko M. Vujica, Ph.D. (Zagreb)
Assistant Professor of Pbilosophy and Religion
Donald E. Cobleich, A.M. (Wisconsin)
Assistant Professor
Assistant Professor of Music
Assisitant $^{\text {StiA }}$ Dworst Ph.D. (Yale)
Assistant Professor of French

CROMWEL
Instructor in Engineering (Washington and Lee)
$P_{A U L}$ R. WW
In. Wituctor in , M.S. (New York)

## 14

Edwin R. Creasy, M.S. (Bucknell) Instructor in Mathematics
James J. Laggan, B.S. (Pennsylvania) Instructor in Business Administration

Edward J. Manley, B.S. (Bloomsburg) Instructor in Accounting
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Welton G. Farrar, M.S. (Pennsylvania) Instructor in Economics and Political Science
John J. Chwalek, B.S. (Tennessee State) Instructor in Sociology

FACULTY
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Joseph H. Kanner, A.B. (Bucknell) Instructor in Psychology
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Robert C. Riley, A.B. (Bucknell)
Instructor in Psycbology
Peter L. Fela, M.A. (Pennsylvania)
Instructor in Sociology

PART TIME FACULTY
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ClifFord E. Balshaw, F.A.G.O. (Guilmant Organ School)
Instructor in Instructor in Music
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Instructor in Psychology
Instructor inay, A.M. (Bucknell)
Instructor in English
Instructor in S.S. (Bucknell)
instructor in Secretarial Studies
Heodore Alfred Evans, L.L.B. (Pennsylvania)
$I_{\text {nstructor in }}$ Endisher
Instructor in English
Instructor in Ralig, A.B. (Western Reserve)
Mubl uctor in Religion
nstructor in Psychology., M.D. (Cornell)
RUTH E. Grun in Psybology

${ }^{\text {Mistructor in English }}$
Onleare
${ }^{*} \mathrm{O}_{\mathrm{n}}$ leave of absence for advanced study.
(B. Henderson, A.B. (Bucknell) arles N. Henderson
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Sports Editor, Wilkes-Barre, Pa., SUNDAY INDEPENDENT

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Mary E. Harvey Arthur N. Kruger Joseph M. Markowitz Joseph H. Myers harold W. Thatcher Edward M. Willian (with six students) Atbletics Geoge F. Ralston, Chairman George J. LagGan Thomas J. Moran Herbert J. Morris Robert W. Partridg Cromwell E. Thomas

## A History of the College

To PROVIDE opportunities for education comparable to those offered by other communities of the nation, Bucknell University, in 1933, established a two-year center in Wilkes-Barre and named it Bucknel
University Junior College. Prior to that year, Wilkes-Barre and th Wyoming Valley were the largest community in Pennsylvania, if not in the United States, lacking a local college.
For several years the Junior College was maintained on an experi mental basis while the interest of students in advancing their education and the willingness of citizens to support the new college were determined. By 1938, the response from both groups was known and plans for a permanent college were made
While these plans were under consideration, Bucknell University adopted a policy in relation to the Junior College that significantly af-
fected its development. In 1938, the University promised the College fected its development. In 1938, the University promised the College
complete autonomy when its foundations were firmly established, but offered to continue its sponsorship as long as this support was of value to the new college. At the same time, the responsibility originally assumed by the Board of Trustees of the University was transferred to a local Board as being more strategically placed to forecast future needs and to integrate the College as a community institution.
Under this agreement, the Junior College advanced rapidly and by successive steps extended its program to include four years of work. In 1946, the University offered extension courses in Wilkes-Barre enabling students to finish their Junior and Senior years at Wilkes-Barre. At the
same time, the College trustees expanded the facilities of the College and established an endowment of more than $\$ 500,000$. Having satisfied
ender the requirements of the State, the Junior College was chartered as Wilkes College in June, 1947, and thus gained an independent legal status. World War II deterred the growth of the College for a period of years, but the impetus to education resulting from war experiences accelerated its development in the years immediately following the cessation of hostilities. Early in the war, from February, 1943, to June, 1944, a contingent of 250 Air Crew students was stationed at the College with the Sixth College Training Detachment. These cadets were quartered regular college Sterling and received training in classes separate from the were a majority, as in For several years following the war, veteran they have been outnumbered by non-veterans, and their numbers will Durinue to diminish during the next two or three years.
graduates the years in which the College offered only two years of study versities; transferred to more than 100 four-year colleges and universities; in two-thirds of these colleges they made records superior to
those earned at Bucknell University Junior College. At present, only two classes have been graduated, but a surprising number of graduates have entered graduate and professional schools. Present reports show that more than 37 percent of the graduates are continuing their studies beyond the baccalaureate degree

Record of Growth
The first classes were held in a rented office building with an enroll ment of 155 students, and a majority of the faculty were drawn from the staff of Bucknell University. After an experimental three years, th admitration and local Trustes appealed to leading citizens to enable he College to move from rented quarters into a permanent home. Th response was prompt and generous.
the first donors, and John N. Coynghan Mrs. Harold R. Stark were 937, were dedicated by President Marts Hall and Chase Hall, given in esidents of the Valley contributed to the funds for adapting these build ings to college use. Mr. and Mrs. Frederick Weckesser added the resi dence at 78 West Northampton Street to the College property in 1938 In 1941, Mr. Allen Kirby's gift, of the former residence of his par nts with spacious grounds adjoining those of Chase Hall, provided the College with a real campus and permitted expansion from quarters Home for Education, was dedicated on December 2, 1941
Members of the Board of Trustees gave the College three additional buildings during 1945 and 1946, which were subsequently named Isaac Barré Hall, in honor of the English statesman friendly to the cause of the American Revolution, Zebulon Butler Hall in honor of the American patriot, and Gies Hall, named in memory of Paul Gies, former professor of music, who died in 1948. Another adjacent property, Ashley Hall Mrs. Marion A. Ahlborn, Dr. Henry A Carr, and Roccena Wolfe. In 1947, Mr. Andrew J. Sordoni presented the College with the lot at the corner of South Franklin and South Streets, and later in the same year lot on South Franklin Street was purchased as the site of a gymnasium he construction of which is planned for 1950
In 1949, three additional properties were acquired. Timothy Pickering Hall was purchased by the Board of Trustees in the spring, and of December, Sterling Hall was left to the College through a bequect of Colonel walter C. Sterling, and lhe fresith with funds contributed specifically for that purpose by a frend College.
onetary gifts paralleled these other gifts and purchases, and per mitted the equipping, adaptation, and erection of new buildings. In assets have been increased by more than $\$ 2,000,000$


Curricula
The College offers courses leading to degrees in Liberal Arts, Chemistry, Biology, and Commerce and Finance. In addition, the first two years are offere
successfully co tion as a Junior.
Terminal Curricula
To students who desire only two years of college or who are unable o make arrangements for a four-year college course, the College offer work, radio production, and laboratory-technician training.

Extension Classes
Extension courses from Bucknell University are offered for both undergraduate and graduate credit. Selected courses have been offered in the evening during the past ten years, and now courses are being offered through which students may obtain a special training or credit toward a degree. Persons seeking a Master's degree from Bucknell University
may take six hours in Wilkes-Barre, but must take the remaining hours in residence at Lewisburg.

## Accreditment

Wilkes College is accredited by the Department of Public Instruction of the State of Pennsylvania, and by the Middle States Association of Colleges and Secondary Schools. The Liberal Arts and Science Programs are also approved by the University of the State of New York

Admissions
Students applying for admission to the College are requested to arrange a personal interview with the Director of Admissions or the Deans, and to submit their application, accompanied by a $\$ 5.00$ fee, on forms provided by the College.
Interviews are a part of the admissions program and may be scheduled at the College. In the event the home of the student is some distance from the College, the Director of Admissions will arrange an interview at a time and place that are mutually convenient. During the interview, arrangements for taking admissions tests will ordinarily be made. How these results in place of the examination ordinarily given by the College Following receipt of the application the Director of Admissions will Following receipt of the application the Director of Adlege formerly obtain an official transcript from the high school or college forme on
attended by the student. Upon receipt of this record the Committe on Admissions will consider the full record of the applicant and will notify the applicant as early as possible. It takes much time, however, to 2
semble all reports required by the committee and is in the submission weeks for action, although in some instances slown a the submission of transcripts may delay action for instances slownes Advanced Standinc
cedures for adm to transfer from other colleges will follow the usul o forward a transcript and ay will request the institution last attended mittee on advanced standing will then honorable dismissal. The coma faculty adviser will counsel the student concerniative evaluation, and upon the educate will be based upon the work previously new schedule. pletion of the first orjective of the student at Wirkes included on the recort, a final evaluation will be made and the comStudents who
do so upon the are eqsing of a pla enter advanced courses in college ceive credit for the courses alacement examination. They will not may necessity of repeating work which they hed, but they will be saved the college. A record of this procedure shall be already covered outside of transcript so that the report may be complete. be entered on the student' Grades
Grades will be given to students at mid-semester and at the end of
each term.
ber of the work. The significance is in which letters designate the cali A-Excellent
B-Above Aver
C-Average
D-Below Average, but passin
F-Failer
F-Failure
Inc-Ince
Inc-Incomplete: Work must be made up by a specified date
or the incomplete will
WP-Withdrew Passing: Will be batically become an $F$.
WF draw from a course whill be given to students who with
WF-Withdrew Failinse when their grade is $D$ or higher
draw from a course will be given to students who wi
To translate letter grades into their grade is F .
$A, B, C, D$, or $F$.


This system of grades ation in the following manner
advancement and grad "A" in a three hour subject will gain three A student earning an "A in a nine points. A "C" in a three hour points for each hour for a total of nour or a total of three. His average subject will gain one point for each hour or amber of points gained by the number of credits of work taken
requirements for Class Advancement and Gridutio

|  | Credits | Point Average |
| :--- | :---: | :---: |
| Class | 30 | .5 |
| Sophomore | 60 | .7 |
| Junior | 90 | .9 |
| Senior | As specified | 1. |
| Graduation | Two-YEAR CourSES |  |
|  | 30 | .7 |
| Sophomore | $60^{*}$ | 1. |

Graduation
60*
robation
Probamon and not attaining the grade necessary to advance him to the Any student not attaining probation for one semester. If, at the end next class shall, he has not attained the mini
of that period, hall be dropped from colleg
Withdrawals
Withdrawals A student may withdraw from any single course from one or more
weeks without penalty. A student who withdraws fro weeks withour the first two weeks but who continues to attend upon
courses after courses aill receive an " F " unless the administrative coun "WP" or recomm
"WF."
A student college after the first two week will A student who withdraws from collerse he has taken, together vi
 notation from each
Requirements for Gradun meet all course requirements to both Candidates for graduation must meet alc course with all regulations of quantity and quality of
the College.
Counseling
Each student will be assigned a faculy adviser ath this adviser concern Freshman year and will be expected problems.
ing his schedul

* Plus Physical Education


## Registration

Students are required to register at the beginning of each term on the dates designated for this purpose. Failure to comply with this regulation necessitates an additional charge

The maximum registration recommended for each course and covered by the tuition charge of $\$ 225$ per semester is indicated in the program
of courses. Any student taking a load beyond that which is recomed must maintain at least a " B " average and must pay for each additional hour at the usual hourly rate.

Attendance
Attendance at all classes is taken for granted and repeated absence is cemed a sufficient cause for failure.
Satisfaction of the requirements for attendance at assemblies is also expected. Failure to meet these requirements may lead to the withholding of all credit.
Faculty
The value to be derived from a college is less dependent upon material equipment than upon the character of its teachers and the quality of their interest in the students. The faculty of the College have been carefully been granted degrees by forty colleges and universities in the United been granted degrees by forty colleges and universities in the United
States, Canada, and Europe: Alabama, Boston University, Bryn Mawr, Saces, Canadl, Chicago, Columbia, Comenius, Cornell, Cracow, Delaware, Dickinson, Duke, Harvard, Hunter, Louisiana, Michigan, Minnesota, New England Conservatory of Music, New Rochelle, New York, North Carolina, Northwestern, Peabody Conservatory of Music, Pennsylvania, Pennsylvania State, Pittsburgh, Stanford, Syracuse, Tennessee State, Warsaw, Washington and Lee, Western Reserve, Wisconsin, Wyoming, Yale, Zagreb. A cosmopolitan group, they have taught in schools and have taken them to all parts of the world. They bring to the College a breadth of experience and of vision that enables them to treat their subjects in large perspective, and they bring an academic preparation that fits them to give the intensive training essential to their various
fields.

Transfer of Credits
When the College offered only two years of study, graduates trans-
ferred to the College offered only two years of study, graduates translege work more than one hundred colleges. Now that four years of collonger necessary except for degrees in Physics, Engineering, and Music
Education.

Approximately forty percent of the Wilkes graduates have entered Approximately forty percent of the Wilkes graduates have entered
graduate and professional schools. It is recommended that students graduate and professional schools. It is recommended that students
wishing to extend their education beyond the Bachelor's degree take wishing to extend their education beyond the Bachelor's degree take
the Graduate Record Examination or another appropriate professional examination in their Senior year. These examinations are generally required by graduate and professional schools and it is best to take them at the end of the college course.

Expenses
The flat tuition rate adopted by the College enables a student to gain an education in most of the curricula outlined in the bulletin at the rate of $\$ 225.00$ per semester for tuition, provided the normal load of semester hours as stated in the bulletin for each semester is not exceeded. An additional charge of $\$ 15.00$ will be made for each semester hour in
excess of the normal load.

## Schedule of Rates

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

> Tuition .

Laboratory fee for Biology, Chemistry, Engineering, Phys-
ics.
Laboratory fee for Secretarial Studies $99,101,102,107$, 108, 109, 110, 115, 116

Chemistry Breakage Deposit
(any balance refunded)
Student Teaching fee-Bucknell University Extension.
Music-individual instruction:
ne lession a week per semester of fifteen weeks in
piano, organ, or wind instrument
One lesson a week per semester of fifteen weeks in
violin, viola or 'cello
One lesson a week per semester of fifteen weeks in
wkins
One lesson a week per semester of fifteen weeks in
voice with Mr. Isaacs
Rental of practice room per semester
Diction Laboratory-part-time voice students

## Music-group instruction:

One hour lesson a week per semester of fifteen weeks
in violin, viola or 'cell in violin, viola or 'cello, each group to consist weeks less than three or more than five students.
normal load as prescribed students and for semester hours beyond the Semester hour of study regular courses:

Semester hour of study
Laboratory fees (see above) ............................. $10.00,15.00$
Student Activity fee for those taking less than 14 or more than 9 semester 200 wishing to participate in or for any part-time student

Charges for Summer School (
Semester hour of study our of study
Laboratory fees (see above) . . . . . . . . . . . . . 10.00, $15.00 \& 20.00$
Dormitory charges per semester:
Board and Room
Bills for board and room in college dormitories are due 275.00 is required to reserve the semester. A deposit of $\$ 50.00$

Special Charges:
Change of schedule pampany application for admissio
Change of schedule per credit hour.
Transcript (No charge for the first copy)
Late Trial Registration.
Late Final Registration
Convocation fee (two-year students)
Charges acation fee (two-year students)
$P_{\text {AYMENT }}$. MMENT
Bills for tuition, fees, and incidentals are payable at the beginning
each semester. of each semester.
Thleletics and dramatitics of includes the cost of such student activities as
$N_{0}$ students matics to which no admission is charged activities as angements have may take a mid-term examination until
all bills. No studen been made with the Comptroller for satisfactory ar gations to the college may take a final examination until all financial of

Withdrawals and Refund
Refund of tuition will be made to students who withdraw voluntarily Refund of tuition will be mad standing under the following conditions: During the first six weeks of a term, one-half the tuition will be refunded upon requ
satisfactory reasons. Tuition for unfinished courses will be Act.
from the College by the Selective Service Act. Refund of room and board (do
except ay be dropped after the second week, except with ap. proval of the Dean, Registrar, or President.

## Student Welfare

## Guidance Center

The Guidance Center of the College, which was set up in April, 1945, offers its services to veterans seeking entitlement under the Vocational Rehabilitation Act and "G. I. Bill." A staff of experienced Vocational Counselors and a Testing Department, headed by a clinical psychologist,
are on hand five days a week to help veterans and students explore their backgrounds, capacities, interests, and general qualifications for the purpose of developing or forwarding a vocational plan.

## Careers Library

The Careers Library has taken its place on the campus because the College recognizes its responsibility for helping a student to launch his
career with maximum effectiveness. The library is intended to obviate the one great factor in occupational maladjustment of American youth, namely scarcity of information. It is an instrument of the consulting service which is provided not only for Seniors but for all classes in the
College. A consultant on careers, maintained by the College, has estabCollege. A consultant on careers, maintained by the College, has estab-
lished and continues to maintain contact with representative industries and professional associations throughout the country. From these primary sources comes first hand information on careers. Thousands of pages culled from this raw material provide background information, and are under constant revision. Individual attention is given the problems and queries of each student as he seeks to set himself in the right vocational direction. One section of the library is devoted to scholarships, fellowships, and company training programs. Another has to do
with careers from a geographic point of view. Forty house organs, emwith careers from a geographic point of view. Forty house organs, em-
ployee magazines, and professional periodicals are a feature. In the ployee magazines, and professional periodicals are a feature. In the
library there are some 600 catalogs and bulletins from more than 500 American colleges and universities, in addition to announcements from foreign institutions of learning, especially at the graduate or professional
level. level.
The Careers Consulting Service is not concerned with placement but have availed himself a career. Long before graduation a student should ave availed himself of this service.

Counseling
Counseling at Wilkes College is considered to be one of the most important ways in which we are able to help in the development and
gro growthant ways in which we are able to help in the development and tional objectives are considered at the time of application, so that, insofar realize the, the academic program can be planned to enable him to realize these objectives.

Upon entering the College, each student participates in a testing pro gram, the purpose of which is to provide all of us who are concerned with his progress with information about his abilities, inth student has aptitudes. Through a program of faculty advisement, each saculty for the a continual opportunity to consult with a member any social or personal purpose of discussing scholastic problem with which the student needs help.
problem with which the stad Women cooperate with faculty advisers in The Deans of Men and infomation and guidance wherever possible providing the student with informailes of these opportunities for help. Students are urge troblem of choosing a career is a realistic and pressing one for most college students, the College has institutedable to the student located in the Guidance Center, whout hundreds of occupations, proa wealth of current information abols.
fessional schools, and graduate schools.
The guiding principle of abilities and potentialities, and to assist him dent to discound, independent decisions.

Physical Education
ntercollegiate sports schedules are maintained in football, basketball, Intercollegiace sports, tennis, soccer, golf, and swimming. Colleges within the state and in adjacent states are met in these sports. Men may substitute an intercollegiate sport for physical education comural sports and departmental requirements. A program of tor to participate. Basketphysical education gives every mall, bowling, swimming, and table tennis ball, boxing, handball, volley
are some of the sports available. Physical Education requirements are waived for veterans.
The physical education program for women includes folk and moder The physical education programnis, field hockey, basketball, and soft ball.
Orientation Program
Th me the secondary school to the The transition from the directed work of the secondary sconally causes independent and more intensive work of ad adjustment, several days
difficulty. To assist students in making an early adjusins with Freshmen difficulty. To assist students in make set aside for discussions with Freshmen. at the beginning of the term are set
This program ranges from individual conferences to lectures on the This program rangege education. During this first week, new sun test makn aptitude, interest, foreign language, and English placemisers and They also discuss their plans and hopes with theek also gives the new arrange schedules under their guidance. This week one another and students the opportunity to be

During the first term the Freshman class is divided into small section which meet once a week with a representative of the faculty. These groups discuss informally, and with as little faculty participation as pos-
sible, some of the problems of every day living and college adjustment. sible, some of the problems of eve tudent for planning and coinducting By placing responsibility upon the student for planning and conducting
these discussions, the College encourages clear thinking, initiative, poise, and breadth of view.

Special Interests
Many students have interests and abilities that lie outside the field of studies. Activities supplementing the academic program provide opportunities for the expression and development of interests and talents in such recreational and semi-professional fields as athletics, dramatics, de bating, journalism, and choral work. Special clubs include Economics Pre-Medical, Engineering, Debating, French, German, Spanish, Inter national Relations, Psychology, Sociology, Cue 'n' Curtain, Lettermen's titral 1 time needed for study

Community Program
In addition to its regular classes, the College occasionally offers non credit programs for groups and organizations desiring specialized train ing. All such programs are adapted to the needs and desires of the sponsoring group, and emphasis is placed upon practical applications rather than theory.
The character and extent of such work may be determined by means of a job analysis, thus assuring the practicability of the work. Some idea of the services that are available can be gained from a statement of services that already have been offered.

During the war, special courses in Drafting, Mathematics, and En gineering were offered to prepare persons for work in defense plants Currently, a group of underwriters is studying Life Insurance problem
and policies to increase their understanding of the services they sell Over a period of years, special courses in musical literature have been offered by the Department of Music. Also, a refresher course has been exfered for chiropractors from eastern Pennsylvania to prepare for the examination given by the State Board of Medical Examiners.
As the College expands its faculty and facilities, it will be able to hoped that technical in Economics, Selling and Advertising; and it is hoped that technical services in Chemistry may be available to small in
dustries nomically in riring laboratory services that cannot be maintained eco Economics department Whes College is engaged in research projects on a community basis.

Competitive Scholarships
A number of scholarships are available through the interest and generosity of friends of the College. They are awarded to students who the highest grades in competitive examinations.
Scholarship winners must maintain at least an average of 75 in orde Scholarship winnership. The Deans will review the records of all to retain the scholashic
scholarship holders at the end of the academic year.
The William Hillard Conyngham Scholarship is awarded annually by Mrs. Conyngham in memory of her husband, formerly a friend an neighbor of the College, and for years an outstanding leder in business and community life.
All competitors must apply for admission to the College to be eligible for the Scholarship.
Scholarships may not be used as an initial payment, but they are ac cepted for the final balance of each term. A stud
ing the term cancels any scholarship arrangements. The holder of a scholarshe reive the funds that have been appropriated in the catalog account.

Student Employment
More than one-third of the students earn some part of their College expenses. Students desiring work should apply to the Director of Ftudent ment. A number of part-time jobs are available. Requests for student elp are frequently received from local business office ad referred to the placement office.
Placement Service
A placement office for students and graduates is located in the Guidance Center. All students interested in obtaining employment are dince Center. All students interested in seeking students for part. requested to register in this office. Employers seeking this office.
ime employment are requested to make inquiries at this ofice.
Graduates of the College, or those in their last arear
mediate employment upon graduation, are invited to register.
mediate employment upon graduation, are invited to sponsoring this office by contributing to its maintenance.

Preparation for Professions and Vocations

Training and skill are required in many fields, but they are not enough. The world needs men possessing broad vision as well as technical competence. The telegraph, radio, airplane, and finally the atomic bomb have rendered obsolete the isolated nationalism of yesterday. As science and technology reduce the size of the world, and man's mobility increases the tempo of competition, a liberal education becomes a necessity rather than a privilege.
Two thousand years ago, Aristotle wrote: "Educated men are as much superior to uneducated men as the living are to the dead." The character of a man's world has always been determined by his understanding
of the motives of other men. To offset the trend of specialization which limits the field of a man's knowledge, the scientist and technologist need increasingly to temper their training with a background of the humanities, the distilled essence of the experience of mankind. Specialized training should be combined with courses that help the student to understand human nature, his own and other men's.
The College offers two opportunities: a general education for life, and specific training for various vocations. The general education develops understanding of our civilization and prepares the student for constructive citizenship. The specific training consists of courses required for selected occupations and professions.
The Liberal Arts and Science courses may be adapted to specific vocations by the selection of congenial fields of concentration and of appropriate electives. A prospective journalist may enroll for the Bachelor of Arts course; he may major in one of the Social Studies and choose in his future work In Engineering.
In Engineering, and in Commerce and Finance, the course of study is, by contrast, primarily technological, although courses from the Liberal Arts program are required, and the choice of electives is left to the
individual preference. Students find the Engineering course a useful preparation for our mechanized civilization, even though they do not make engineering their life work. The curricula in Engineering and in Commerce and Finance are also adapted for those who plan to teach these
subjects. subjects.

## Business Administration

Training applicable to most fields of business is offered in the two Course is for the Commerce and Finance curriculum. The General Course is for those desiring a broad business background, and the Secre-

The Commerce and Finance curriculum covers business principles and practices; it also includes Liberal Arts electives. This diversification of practices; it also includes Liberal Arts electives. This diversification of
program enables the student to secure a comprehensive foundation for program enables the student to secure a comprehensive foundation fo
business, secretarial, public service, or teaching career. Young men and women with this broad cultural background find themselves eligible for opportunities closed to those lacking such training.

## Chemistry

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

## Engineering

The first two years of work in chemical, civil, electrical, industrial, and mechanical engineering may be taken at Wilkes College. At the end of the second year, students may transfer their credits to other
engineering schools if they make their plans in advance. With slight engineering schools if they make their plans in advance. With slight of work in such additional types of Engineering as aeronautical, mining and metallurgical, and administrative.
Two years of the engineering curriculum afford a foundation for ${ }^{2}$ wide range of occupations. Students desiring such technological training should consult the Registrar or the Engineering faculty when planning their programs

## Journalism

A number of well-known graduate schools of journalism require a reliminary four-year college course, but aspirants may also follow the orking their way
to fit in with the broad demands made upon the newspaper reporer Arts degree with English composition is fundamental. The Bachelor ism students, but the English major is the most popular choice of journal the newspaper reports all phases of her courses also prove useful, since terests of the United States in otheman activity. The increasing in oreign languages particularly desirableuntries make a knowledge o positions as foreign correspondents. Journalism students mardents.
taff of one of the student publications: the Be by working on the Manuscript.
Law
Preparation for the practice of law is based on the fundamental liberal arts: English, History, Political Science, Economics, Sociology, Natural a required major in undergraduate work. Most law schools do not specify

Library Work
Librarians are generally expected to complete a four-year college cours Eefore beginning their special library training. Foreign language English, Science, History, Economics, Sociology, or Education constitute appropriate major fields. Many library schools also require a knowled Music

The aim of the music curriculum is two-fold. to interest the organizations arocation which may lead to active participation many music; second or to a greater pleasure in hearing the master works of professional careers as teachers who have special talents along the road to in music may commence their or performers. Students who concentrate quality pre-college training is very of applied music at Wilkes. High majors must expend their greatest efforts unowever. Although music and applied, the schedule is so arranged that music, both theoretical ree with a major in music represents the fulfillment Bachelor of Arts de-解 Medicine
$W_{\text {ilkes }}$
stricted various medical schools. The that is adapted to the requirements stricted their enrollment mehools. The latter have, in recent rears, cations of applicants. Medical Pssible the demands they must aspirants should determine as soon

Ministry
The various churches differ widely as to the training required of prospective ministers. The student should learn the requirements of his denomination and its divinity schools. In general, the Liberal A
course, with major or electives in Religion and Bible, is appropriate. Nursing
The demand for nurses with college training has increased with the progress of medical science and the wide adoption of highly skilled scientific techniques. A number of hospitals and universities now offer
three years of training with a Bachelor of Science degree to student three years of training with a Bachelor of Science degree to student
nurses who have completed two years of college. For those who wish to make a life work of nursing, and who aspire to administrative positions in the major hospitals, this course is recommended.
Demand for extended training has been further accelerated by the recent expansion of health services in Federal Agencies and by increased governmental support to medical programs.
Physics
The first two years of work leading to the degree of Bachelor of Science in Physics may be taken at Wilkes College. After that, students may transfer to other colleges to complete their course. The program
at Wilkes has been carefully designed to fulfill the requirements of at Wilkes has been carefully designed to fulfill the requirements of those colleges to which students are likely to transfer.
In the modern world, the application of Physics to everyday life is becoming more and more common but is, perhaps, not sufficiently recognized nor understood. The tools of communication, electronics,
transportation, the motion picture, illumination, engineering, manutransportation, the motion picture, illumination, engineering, manu-
facturing, and medicine (to mention but a few of the many activities of modern industrial civilization) are developed and perfected by the employment of the fundamental laws of Physics.
Psychology
World Wars I and II stressed the importance of the application of sychology in many diversified fields. Since then, the need for graduate work and specialized training has been recognized.
Liberal Arts preparation on the undergraduate level, consisting of a sound foundation in Psychology, Biology, Sociology, and relats.
Opportunities for the professional psychlogist re available in college eaching, clinical work, education, business, industry and personnel.

Social Work
The demand for trained social workers has grown enormously in reent years. Taxpayers rebel against the wastefulness of haphazard distri
bution of charity as a matter of political patronage. Government sity for a professional approach to federal, are realizing the neces sity for a professional approach to the problems of unemployment
poverty, and crime. Wilkes offers a supplemented by work in Psycholog pre-social work program. Sociology a valuable background.
Speaking and Dramatics
The College offers preliminary work in Speech. Courses in Speech and opportunity for development in this field.
Teaching
A teacher's training depends upon the kind of teaching contemplated. For college and university work the best institutions require advanced
degrees; their faculty members degrees; their faculty members ordinarily take graduate require advanced in which they concentrated as undergraduates. Prospective teachers of
English, History Stad English, History, Sociology, take the Arts degree; teachers in the schools
of science take the Bacher cialized fields as engineering of Science degree or degrees in such speCed fields as engineering.
ing requirements: the collegeo deaching is usually based on the followand some specialization in teaching specialized courses in Education, authorized by the State Department subjects. Bucknell University is secondary teachers in most of the usual fields of histruction to prepare and offers work in Wilkes-Barre for the benefit high school instructio Wilkes College students.
General Opportunities
Promotion ortunities
ing. It is sometimes practicable for studente possible by additional train tinue their education without giving up their who are employed to con be of the widest possible service to Wyoming Valleys. In its desire to part time and special students.
Anyone interested in some
Admissions. professions and vocations opening not included in this list Admissions.

## Student Activities

The scholastic program is supplemented by a representative group of student activities, organized and controlled by the students. They supply values whe concouraged to participate in at least one activity du students are encouraged to participate in at least one activity durin the year.
Student Government
To provide a co-ordinating agency, to establish social standards, and o assure responsibility, a Student Council, representative of all stuents, is elected annually. The Council is responsible for plannin upervising, and executing the program of student activities.
Dramatics
Students of the drama present several one-act plays, and two major productions each year. The students are given training in the arts of the theatre, acting, make-up, scenery-building, costuming, and stag
lighting. The College Theatre serves as workshop for major and ex perimental productions.
College Band
The College band is organized for the furtherance of instrumental The College band is organized for the furtherance of instrumental
experience, performs at all athletic events, and gives concerts through out the year
The College owns instruments which are used by musicians who do not have their own bass horns, drums, etc. A uniform is distributed to each member at the beginning of the year. The band library is constantly supplemented by the best martial and concert music
Choral Club
The College maintains a mixed chorus with membership open to all students who pass an elementary voice test. Previous vocal experienc students who pass an elementary voice test. Previous vocal experired o
and the ability to read music at sight are important but not requir members. The chorus meets three times each week for the study o choral literature covering various periods of music history. Severa programs are presented each semester before the College community an the general public.

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

College Orchestra
All students interested in forming an orchestra should consult with the director of the School of Music. The College is eager to assist in the development of instrumental music and an orchestral society will be organize
campus.

Publications
Amnicola, an annual yearbook; the Beacon, a newspaper; and Manz script, a literary magazine are published by the students. Those intereste in writing, photography, art and advertising have an opportunity to join the staffs.
Debating
Debating has proved particularly popular with students preparing for the law, or prested in public speaking. A number of intercol egiate debates are arranged each year.

ATHLETICS
Intercollegiate sports schedules are maintained in football, baseball, basketball, golf, soccer, swimming and wrestling. Colleges within the state and in adjacent states are met in these sports. Men may substitute in intercollegiate sport for Physical Education if they meet departmental requirements.
A program of intra-mural sports and physical education gives every man an opportunity to participate. Basketball, boxing, handball, volleyball, bowling, swimming, and table tennis are some of the sports
available.
The athletic program for women includes dancing, folk and modern bowling; swimming; tennis; field hockey; basketball; and softball.
Clubs
Special clubs stimulate and satisfy individual interest in academic,作期ional, and artistic fields. These clubs, developed cooperatively y students and faculty, are kept quite flexible in order that they may easily adapted to changing and current interests.

## College Curricula

The curricula include courses leading to the Bachelor of Arts and Bachelor of Science degrees, and a number of shorter programs requir ing only two or three years of college training.
The degree courses include four-year programs in the Liberal Arts, Biology, Chemistry, and Commerce and Finance, and two-year programs in Physics, Engineering, and Music Education. Students completing these two-year programs satisfactorily may transfer credits for their first two years of work to selected colleges offering degrees in these three fields of study.
The two- and three-year programs lead to no degree but do give professional, semi-professional, and technical training required in number of occupations. Among the occupations which may require two or three years of college background are dentistry, chiropractic, osteop business and medicine, music, and radio.
Special programs may be arranged for persons wishing to select courses that will satisfy individual interests or needs.


## College Curricula

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Special programs may be arranged for persons wishing to select courses that will satisfy individual interests or needs.




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wilkes college

BACHELOR OF ARTS
Purpose
The Liberal Arts course is primarily concerned with individual development and with the cultivation of an understanding of our civilization and of the men who have created it and lived in it. Its studies are concerned with men
and events, thoughts and institutions, art and science. It creates breadth and nd events, thoughts and institutions, art and science. It creates breadth and
perspective as opposed to narrow skills. It is expected, however, that ability in expression and interpretation will be developed.
Nature of the Program

A liberal program must necessarily include a wide range of subjects if it is oo cultivate understanding of the thoughts, ideals, and institutions upon which our civilization is based. For the sake of simplicity, these subjects are classified hich he will select his major study.

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

Selection of a Major
To provide depth of knowledge, some concentration is required. It is desirable that a major be elected as early as possible, and it is essential that it be elected before the beginning of the Junior year. Students wishing to major
in Biology, Mathematics, or Music must choose their major when they enter in Biology,
A major may be taken in any subject listed in the divisions except Chemistry, Education, and Physics. The requirements for each major are specified pre ceding the description of courses.
A major may also be taken in Social Science. The Social Science major requires a total of 36 hours in Economics, History, Polititial Science, and Sociology. Eighteen hours must be taken in one of these and at least six hours years shall not count toward this majo
Students preparing to teach in the public schools are required to take twenty ours in Education to obtain certification. It is therefore impossible for the pospective teacher of Social Studies to satisfy all of the above requirements. prospective teacher of Social Studies to satisfy all of the above requireme will
Hence, a student preparing to teach Social Studies in the public schools wis in Hence, a student preparing to teach Social Studies in the pupic sce courses in
receive credit toward the Social Science major for all required Economics, History, Political Science, and Sociology. Physical Science.........
Phys. Ed. and Hygiene.


Third Semester
History of Religions
Intro. to Philosphy
Alternates ${ }^{3}$
Intro. to Economics.
In
Intro. to Economics.
Intro. to Education.
American Federal Go
General Psychology.
Intro to
Io Sociology.
Elective.
Physical Education
er
$\qquad$

|  |  | T Fourb Ser | - |
| :---: | :---: | :---: | :---: |
| Number | Cr. | Title | Numb |
| Eng 151 | 4 | World Literature. | Eng 152 |
| . 103 or 200 | 3 | Foreign Language ${ }^{1}$. |  |
|  |  | ${ }^{\text {Alteraa }}$ |  |
|  | 3 | Hist. of Religions.... | . Rel 101 |
| Phil 101) |  | Intro. to Philosophy ${ }^{2}$. Alternates ${ }^{3}$ : | Phil 101 |
|  |  | Intro. to Economics. |  |
|  |  | Intro. to Education. |  |
|  |  | American Federal Go |  |
|  | 6 | Geeieral Psychology |  |
| Soc 100 |  | Elective. |  |
| E. 103 | 1 | Physical Education. |  |

Junior Year
Fifth Semester
Major and Electives-30 hours Senior Year
Seventh Semester
Major and Electives-30 hour
${ }_{2}^{1}$ The level of the course will depend upon the achievement
${ }^{2}$ Philosophy is required in either the third or four semester. ${ }^{3}$ During the third and fourth semesters, nine hours must be chosen from the alternato
with only three hours being allowed for electives. In the event that the scheduling of During the third and fourth semesters, nine hours must be chosen from she sheding of
with only thre hours being allowed for electives. In the event that the
any of the alternates interfereses with the necessary sequence of a maior, one or more of any on the alternates interferes with the necessaras sequence of a major, one or mor
the alternates may be delayed, with the approval of the adviser, until the Junior rear

DEGREE COURSES

## BACHELOR OF ARTS

Major in Biology
Freshman Year
First Semester
Freshman Year
Sophomore Year
Junior Year

$$
\begin{aligned}
& \begin{array}{l}
\text { Fundamentala sof seec } \\
\text { Foreign Language.... }
\end{array} \\
& \begin{array}{c}
\text { Alternates: } \\
\text { Hist of W. Wivilization } \\
\text { Amer. His. }
\end{array} \\
& \begin{array}{l}
\text { Aist. of W. Civilizatio } \\
\text { Amer Hist to 1865... } \\
\text { College Algebbra ...... }
\end{array}
\end{aligned}
$$

## BACHELOR OF ARTS

Major in Music
First Semester Freshman Year Second Semester
Freshman Year Second Semester
First Semester $\qquad$ Second Semester Title
Nar. and Des. Writing $\begin{array}{llll}\text { Bio } & 100 & 3 & \text { Nar. and Des. Writing. } \\ \text { Eng } & 101 & 3 & \text { Fundmentals of Speech } \\ \text { En }\end{array}$ Composition......
Foreign Language
Alternates: Algebra. and Trig. or
College Algebra and Clane Trigonomerry............
Phys. Ed. and Hygiene.


Sophomore Year
Third Semester
SOPHOMORE TEAR

|  | Fourth Semester |  |
| :---: | :---: | :---: |
| Number Cr. | Title | Number |
| Eng 1514 | World Literature. | Eng 1040200 |
| 103 or 200 | Foreiga Language ${ }^{\text {e }}$. | Math 126 |
| Math 125 | Integral Calculus... | P.E. 103 |
| Phys 201 | Physical ${ }^{\text {Electives....a }}$ |  |
| P.E. 103 |  |  |
|  |  |  |
| 17 |  |  |

Junior Year
Fifth Semester $\qquad$ Sixth Semester $\qquad$
Number Cr. Titlo
Iteranates:
Hist. or W. Civilization Hist 10
Tir
 Amer. Hist. to 1885 ..
Mathematis.
Genective..
eeneal Psychology.... General Psychology....
Intro. Et Economics...
Principles of Economic
 Principles of Econom

Intro. to Sociology. | . Ec | $101\}$ |
| :--- | :--- |
| $\ldots$ | 100 | $\begin{array}{rrrr}\text { iil } & 101 & 3 \\ \text { S. } & 101 & 3 \\ 3-5\end{array}$

| Seventh Semester | Senior Year |  |  |
| :---: | :---: | :---: | :---: |
|  | Eighth Semester |  |  |
| Tits |  | Mathemat | ics Electi |
| Mathematics Elective. | 12 | Electives. |  |
| Electives..... |  |  |  |

## Pacher of science

curricula leading to the degree of Bachelor of Science provide a thorThe curricula leading to the degree othod, supplemented by a study of the ough grounding in the scientific method, suppleala in science are intended Humanities and Social Sciences. Tre or advanced study.
o prepare students for technical work

> Group I-Biology

Sparis upon Biology is recommended in preparation for the study Special emphasis upon Biology is recommended in prepariens the teaching of Biology; f medicine, osteopathy, dentistry, and alled graduate work in Biology.
Group II-Chemistry
aror for students planning to enter graduate study in Chemistry This group is for students planning to enter
Group III—Physics

This group is for stude
study or industrial Physics. study, or industrial Physics. Only the first two years of this course are offered by Wilkes College.
Language Requirements
knowledge of scientific German or of French is required for this A reading knowledge of scientific German and
degree. The requirenared in a language may take a reading-knowledge test.

1. A student prepareas taken two years or more of German in high school
2. A student who has
3. A student who has
must complete scientific German; if he has taken two years or more of French, he must complete six hours of intermediate or advanced Fres.
4. A student beginning either language in college must complete 12 ser ter hours.

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

| First Semester |  | Second Semester |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Title | Number | Titlo | Number |  |
| General Inorganic Chem. | Chem 101 | Inor. Chem. \& Qual. An | Chem 102 | 6 |
| Composition... | Eng 101 | Nar. and Des. Writing | Eng 102 |  |
| Hist. of W. Civivization. | Hist 101 | Hist. of W. Civilization | Hist 102 |  |
| Algebra and Trig. ${ }_{\text {Phe }}$ Ed and Hygiene. | Ma ${ }^{\text {Pe }}$ |  |  |  |
| Phys. Ed. and Hygiene. | .P.E. 101 | Phys. Ed. and Hygien | . 102 |  |
|  | 16 |  |  | 17 |
| Third Semester Sорном |  | re Year |  |  |
|  |  | Fourth Semester |  |  |
| Title | Number $C_{\text {r }}$. | Tite | Number |  |
| General Zoology | . Bio 1015 | General Zoology | . Bio 102 |  |
| Inor. Quantitative Analysis... | Chem 121 |  |  |  |
| World Literature. | Eng 151 | World Literature. | Eng 152 |  |
|  | 101 or 103 | Foreign Language | 102 or 104 |  |
| Physical Education | P.E. 103 | Physical Education. | P.P. 104 |  |
|  | 17 |  |  |  |
|  | Nio | Year |  |  |
| Fifth Semester |  | Sixth Semester |  |  |
| Tith | Number Cr. | Titlo | Number |  |
| Comp. Anatom | Bio 201 | General Botany |  |  |
| nic | Chem 231 | Histolog |  |  |
| eign | 103 or 2 | Foreign Language | 104 or 200 |  |
| General Physics. | Phys 201 | General Physics. | Phys 202 |  |
|  | 17 |  |  | 18 |
| Seventh Semester SENIO |  | Year |  |  |
|  |  | Eighth Semester |  |  |
| Alternates: <br> Bacteriology | Number Cr. | Titlo | Number | cr. |
|  |  | Iternates: |  |  |
|  |  |  |  |  |
| siology |  |  |  |  |
| $\xrightarrow{\text { Proseminar }}$ Elective iniolo |  | ${ }_{\text {Proseminar in }}$ Piology |  |  |
|  | $6-7$ | Fundamentals of Speech | Eng 131 |  |
|  |  |  |  |  |

The level of the course will depend upon the achievements and interests of the student. The department of Biology also offers courses in the Taxonomy of Flowe are given in the sugy 113) and in Entomology (Biology 223), both of which

BACHELOR OF SCIENCE IN CHEMISTRY
The Chemistry Department offers a four-year curriculum leading to a Bachelor of Science in Chemistry. To satisfy the requirements for this degree a student must complete a total of 140 credits. These credits must include 48 in Chemistry, 33 in Physics and Mathematics, 18 to 24 in the Social Sciences and Psychology, and 24 to 30 in Humanities.
The Chemistry curriculum is planned to provide thorough training in the fundamentals of the science and to contribute to the broad general educatio of the student.
Graduates in Chemistry may enter industry immediately upon graduation or
may continue their studies in graduate school. may continue their studies in graduate school.

First Semester Freshman Year Second Semester General Inorganic Chem..
Engineering Problems... Composition
Hist. of W. Hist. of W. Civilization
Algebra and Trig.
Phys. Ed and Hygiene. Phys. Ed. and Hygiene. $\qquad$
Fifth Semester Junior Yea
Title $\begin{aligned} & \text { Tnor. Quantitative Analy }\end{aligned}$ Advanced Exporive
Dition
Difential Callaulus. Differential Calcu
General physics
Physical Educatio

Title
Organic Che
Physical Che Organic Chemistr
Physical Chemist
Elective.
Electrical Measurement
$\square$

| Number | Gr. |
| :--- | ---: |
| Chem 231 |  |
| Chem 241 | 4 |
| Phys | 251 |
|  | 3 |
|  | 18 |
| ter | SENIC |

Seventh Semest
Title listory of Chemistry.
Chemistry Elective. Chistory of Chemistry
Chemistry Elective.
Elective. Number
.$\quad$ Chem 23
Chem
Chem

 Chemistry Elective | ${ }_{2}^{2}$ |  |
| ---: | :--- |
| 12 | Ele |
| 18 |  |

The language requirement for the Bachelor of Science degree must b satisfied.
Electives are to be selected with the advice and consent of the faculty adElectives are
viser as follows:
viser as follow
Humanities: Twelve to eighteen credits are to be chosen from the following: English 131 ,
Mathematics 240 .
Social Sciences: Sollowing: Sociol Eighteen to twenty-four credits are to be chosen from the 101, 102; History 107, 108; Education 101, 201, 207. ter Number
Chem
Chem 242
5 Inor. Quantitative Analysis Inor. Quantitative
Physical Chemistry.
Elective.

 ..... $\overline{18}$ $\underset{\text { Chember } 262}{\text { Nat }}$ | Chem 262 | 1 |
| :--- | :--- |
| Chem | 13 | $\overline{18}$

BACHELOR OF SCIENCE IN PHYSICS
Wilkes College offers the first two years of work leading toward a majo
in Physics or in Engineering Physics. The need form tion was greatly engineering Physics. The need for men with this type majo during the recent conflict. The curriculum offers a firm bhich needed solution fundamentals, without which further study offers a firm grounding in the The course in Physics prepares the student for industry teantinued profitably

Freshman Year
First Semester
Titl
General General Inorganic Chem.
Engineering Problems. Composition....
Algebra and Trig.
American American Government.
Phys. Ed. and Hygiene.


Third Semester
Sophomore Year



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

BACHELOR OF SCIENCE IN COMMERCE AND FINANCE
The Commerce and Finance Department provides training for economic and business activities combined with a well-pounded education. Its objectives are to prepare the student for effective personal, social, and economic life in
competitive society, to aid in the development of an appreciation for cultur pursuits, to broaden the viewpoint, to develop of an apprectiation for cuinking and intellectual pursuits, to broaden the viewpoint, to develop sound thinking and intellectual
interests, and to provide technical instruction in preparation for business and interests, and to provide technical inst
professional careers and graduate study.
The Commerce and Finance Department offers four groups of study to meet the individual needs and purposes of the students. To insure a well balanced program, faculty advisers assist each student in the choice of his elective studies.

Group I-Accounting
Special emphasis is placed on Accounting in preparation for a career is rivate or public Accounting. Related courses in Economics and Busines Administration provide a broad business background for students in Ac counting.

Group II-Business Administration
This group is designed for students who desire a broad business background with special work in Banking and Finance, Management and Industrial Rela tions, or Marketing.

Group III-Retail Merchandisin
A broad background of business is recommended for students interested in Retail Merchandising. Emphasis is placed on specialized courses in Reta Merchandising which are offered in cooperation with retail establishments.

## Group IV-Secretarial Studies

This group prepares students for secretarial positions. It offers training to students who desire a broad cultural and business background as well as specialization in Secretarial Studies.
Courses in all groups are arranged so that the student will devote about half of his work to Commerce and Finance courses. The remainder of his work will be in the Social Sciences, Science, and Humanities.

REQUIREMENTS FOR GROUP MAJORS


MAJOR IN ACCOUNTING ${ }^{1}$
MAJOR IN BUSINESS ADMINISTRATION
Freshman Year
First Semester $\qquad$ Second Semest $\qquad$ Elementary Accounting
Survey of Business........ Survey of Business
Biological Science
Composition.... Biological scie
Composition.
Alternates: Alteranates.
Hist. of W. Civilizatio Hist. of C. Civiirati
Amer. Hist. to 1855 .
Phys. Ed. and Hygiene A. Act
. BA.
.Bio
. Eng
.
 $\left.\left.\begin{array}{l}\text { Hist } \\ \text { Hist } \\ \text { Hint } \\ \text { P.E }\end{array}\right\} \begin{array}{l}\text { Amer. }\end{array}\right\} \begin{aligned} & \text { Amer. Heder. } 1 \text { inco } \\ & \text { Physical Science. }\end{aligned}$ $\frac{1}{16}^{\text {Phys. Ed. }}$
Sophomore Year Fourth Semester



Fifth Semester $\qquad$ Sixth Semester
 Seventh Semester
 Title
vanced
$C$ dvanced Cost Acco
ccounting Systems Advanced Cost
Acounting Syst
Business Law. Business Law.
Alterates: Alternates:
Theory yof Money
Public Finance.
Econlimic Geor Public Finance.
Economic Ceopraph
Economic Statistics. $\overline{17}$
Senior Year
Title Tax Accounting ..........
Auditing Principles...
Bus. Cor.and Reports.
Corporaion Finance. Bus. Cor. and Reports
Corporation Finance. Elective.
$\begin{aligned} & \text { Auditing Practice. } \\
& \text { Intro. to Music... } \\
& \text { Intro. to Philisoph } \\
& \text { History of Relisio }\end{aligned}$
$\begin{aligned} & \text { History of } \\
& \text { Electives... }\end{aligned}$

| Acct |
| :--- |
| B.A 209 |
| B.A. 225 |

15


[^0]Students who major in Business Administration (Group II) in the Bachelor f Science course in Commerce and Finance may select their electives from the following:


MAJOR IN RETAIL MERCHANDISING
Freshman Year
Number Cr. Title Second Semester
Title First Semester
Number Title Second Semester ${ }_{\text {Elementery Accounting }}$ Biological Sciencounting Biological Scienc
Survey of Busine
Composition Composition
Alternates: Alternates:
Hist. of
Am. Civilization Am. Hist. to 1865 ....
Phys. Ed. and Hygiene. Acct
Bio
B.
Bng
Eng
.
. Hist
Hist
P.E. Hist $\begin{aligned} & \text { Hist.es. } \mathrm{W} \text {. Civilization } \\ & \text { Amer. Hist. since } 1865\end{aligned}$ $\left.\begin{array}{c}\text { Hist } \\ \text { Hist }\end{array} 107\right\} \begin{aligned} & \text { Phymer. Hist. sincence. }\end{aligned}$ Amer. Federal Govt.......
Phys. Ed. and Hygiene $\begin{array}{cccc}\text { Accter } & 102 & 3 \\ . & \text { Eng } & 102 & 3\end{array}$

Third Semester
Sophomore Year
$\qquad$ Fourth Semester
${ }_{\text {Business }}^{\text {Title }}$ Business Laww
Prinipiles of E
World
Witerat World Literature.
Fundamentals
Fin Fundamentals of Math.
Priciples of Retailing.
Physical Education.... Number
AB.A. 23
A. 10
Eng 15
Enath
M. 10
R.M. 10
. P.E. 10 ${ }^{\text {Tittle }}$ Business Law.
Principles of Ecc
World Literatur World Literature.........
Fundamentals of Math Funcamentals of Math
Retail Store O Physical Education.

Junior Year

$$
\begin{aligned}
& \text { Fifth Semester } \\
& \begin{array}{l}
\text { Applied General Statistics. } \\
\text { Undamentals of Speech. }
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \begin{array}{l}
\text { Etail Selling sales Prom. } \\
\text { Elective in Social Science. }
\end{array}
\end{aligned}
$$


Eighth Semester

Senior Year
$\qquad$ Seventh Semester Organization \& Operation of Number Cr.
 Electives..

MAJOR IN SECRETARIAL STUDIES

First Semester
Freshman Year Second Semester Title Titlo
urvey of Business Curvey of
Composition
Alterates: Alernates:
Hist. . . W. Civilizatio
Amer. Hist. Amer. Hist. to 1865. Fundamentais
Shorthand and Tyewwriti
Phys.
 Title

Sophomore Year
Third Semester


Junior Year Fifth Semester $\qquad$ Number Cr. Tit Sixtb Semester

 \begin{tabular}{cc}

| Numbor |
| :---: |
| Ec |
| Eng |
| Eng |
| 152 | \& 4 <br>

\hline
\end{tabular} Titte

Principles of Econ
World Literature.
Alternates
 Electives.
$\left.\begin{array}{cc}\text {..s.S. } & 210 \\ \text {...s. } & 203\end{array}\right\} \begin{aligned} & 3 \\ & 6 \\ & \\ & \\ & \end{aligned}$
Senior Year
Seventh Semester Title
Bus. Cor. and Title $\begin{aligned} & \text { It } \\ & \text { Bus. Cor. and Reports.... }\end{aligned}$ Electives. Number
B.A. 209 Title
Ofice Manag Eighth Semester Office Mana
Electives.. $\begin{array}{rr}3 & \text { Ole } \\ 4 & \text { Elec } \\ 8-9 & \end{array}$

$$
\overline{15-16}
$$

World Lite
Electives.

Commerce and Finance and Lib Electives should be divided between Commerce and andives of each student. Arts courses according to the interests and vocational objectives of and

BACHELOR OF SCIENCE IN ENGINEERING
Wilkes College offers the first two years of the Engineering curriculum. Upon completion of the second year, students making acceptable records ma
transfer to the Junior year of other engineering schools. transfer
In the past, students have transferred to, and successfully completed, their
work at such representative colleges as: Alabama, Bucknell, Catholic Uniwork at such representative colleges as: Alabama, Bucknell, Catholic Uni Massachusetts Institute of Technology, New York University, Pennsylvania State College, Stevens Institute, Syracuse, and University of Nebraska.
The engineer's main purpose is to apply scientific knowledge and discoveries
to the uses of civilization. The engineer is obliged to specialize because of the vast range of modern engineering techniques. In selecting his particular field the student should consider his natural interests. The demands of this pro fession are exacting, but it should appeal to those genuinely interested in Mathematics, the Natural Sciences and their application.
The following general distinctions may be made between the various fields: Research appeals to the imaginative mind; the more practical person may be results of construction, operation, and production. Technically trained men are always needed to sell applications and equipment. As his experience broadens and his judgment matures, the engineer qualifies for the higher executive and administrative positions.
During, the first year the curricula for all engineering courses are the same with the exception that Chemical Engineering students must take two addi-
tional hours more Chemistry in the second term. For this reason the sudent should decide by the middle of the first yearm. For this reason the studen and one of the and one of the other branches of Engineering. The curricula change further at the middle of the second year. For this reason the student should decid
by then whether he will pursue Civil, Industrial, Electrical Engineering.


[^1]MAJOR IN SECRETARIAL STUDIES

First Semester
Freshman Year Second Semester Title
Survey of Business Composition:
Alternates: Alternates: . Civilizatio
His. or
Amer. Hist. Amer. Hist. to 1865 . Fundamentals of Mawriting
Shorthand and Typeritin.
Phys. Ed. and Hygiene..

Sophomore Year
Third Semester
SOPhOMORE Year Fourth Semester


Fifth Semester
Junior Year

Number Cr. Title

Sixth Semester
Number Cr. Title
of Economics.. $\qquad$
$\left.\begin{array}{cc}\text {.s.s. } & 210 \\ \text {.S.S. } & 203\end{array}\right\}$
Electives.
Principles of
World Liter
Electives..

Senior Year
Seventh Semester
 Electives should be divided between Commerce and Finance and Liberal. Arts courses according to the interests and vocational objectives of each

BACHELOR OF SCIENCE IN ENGINEERING
Wilkes College offers the first two years of the Engineering curriculum. Upon completion of the second year, students making acceptable records ma
transfer to the Junior year of other engineering schools. In the students have tenferred to and succe
In the past, students have transferred to, and successfully completed, their
work at such representative colleges as: Alabama, Bucknell, Catholic Uniwork at such representative colleges as: Alabama, Bucknell, Catholic Uni
versity, Columbia, Drexel, Georgia School of Technology, Lafayette, Lehigh Massachusetts Institute of Technology, New York University, Pennsylvania State College, Stevens Institute, Syracuse, and University of Nebraska.
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to the uses of civilization. The engineer is obliged to specialize bectuse of the vast range of modern engineering techniques. In selecting his particular fiel the student should consider his natural interests. The demands of this pro fession are exacting, but it should appeal to those genuinely interested in Mathematics, the Natural Sciences and their application.
The following general distinctions may be made between the various fields: Research appeals to the imaginative mind; the more practical person may be results of construction, operation, and production. Technically trained men are always needed to sell applications and equipment. As his experience broadens and his judgment matures, the engineer qualifies for the higher executive and administrative positions
During the first year the curricula for all engineering courses are the same with the exception that Chemical Engineering students must take two addi-
tional hours more Chemistry in the second term. For this reason the should decide by the middle of the first yearm. Fot this reason the studen and one of the other Ber Chemical Engineering at the middle of the second year For this reason the student change further at the middle of the second year. For this reason the student should decice Engineering.


[^2]AERONAUTICAL ENGINEERING
Mechanical Engineering is basic for 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
nclude paper, textiles, gasoline, other petroleum products, coke, gas, dyes include paper, textiles, gasoinne, other petroleum products, coke, gas, dyes,
electrochemical products, paints, rubber, plastics, ceramics, drugs, heavy chemelectrochemical products, paints, rubber, plastics, ceramics, drugs, heavy chemdesign, construction, operation and management of industrial plants in which
materials are produced by chemical change. The chemical engineer may be 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 training of the chemical engineer includes a thorough knowledge of Chemistry, Physics and Mathematics, and a sound understanding of such fundamentals of Chemical, Mechanical, and Electrical Engineering as will make him a competent development or sales engineer.

Tbird Semester
Sophomore Year
Titlo

intro. to Economamics. Fundamentans. of Speech
Differential Calculus. General Physics.:
Physical Education

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
Number Cr. Title Titto
Plane Surveying.
 Differential Calcul
General Physics.
and General Physics.
Physical Education

ELECTRICAL ENGINEERING
Today nearly every activity of civilized life depends upon electricity. The entrical engineer is trained to design, construct, and operate all The generating equipment. He must supervise and control the distribution of railways, chemical processing, heating, lighting, and for all mines; for electric used in the home.
The communications field, including telegraph, telephone, Devetype, transmission of print and pictures, offers numerous radio, rad esses offers opportunities in many fields of end equipment for commercial proc


INDUSTRIAL ENGINEERING
The field of Industrial or Management Engineering has to do with the of design manufacture and production; the effects thereon of personnel ; background in science, engineering prodion requirements. Preparation with management, and history is necessary. The successfulusiness administration, not only possess technical skill and ability; it is of equal importanineer must He must work with humanistic interests, and character and personality as well common woal. The industrial enlist their co-operation in the pursuit of a chines and materials. This curriculm offers thith people as well as with marimarily interested in the administration of technical enterprises. for those


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 sourc
derived. The generation of power, whether by steam, hydro or internal-com bustion engines is of primary concern to the mechanical engineer in the powe 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 under-
standing of the influence and result of his profession upon our way of life and how its development and expansion affect our future.

Sophomore Year
Third Semester
Num $\qquad$ Tithe
Tine
Surv Pathe Surveying.
Intro. to Economic ntro. to Econom.ics.
Fundamentals of Spee Difderentialals of Sppee
Generat Physus. Eeneral Physics
Physical Education

Degree courses

A PRELIMINARY PROGRAM IN MUSIC EDUCATION Wilkes College offers, individual courses required in the preparation of public
school teachers. It is possible, therefore, school teachers. It is possible, therefore, by the judicious selection of courses
to complete two years of college work in this field. To assist students wher to complete two years of college work in this field. To assist students who may
wish to take two years of work in Music Education in Wilkes-Barte before wish to take two years of work in Music Education in Wilkes-Barre, before
transferring to a college which offers the degree in Music Education, the following sequence of courses is suggested.
Students interested in such a program are advised to consult with the head
of the Music Department before registering of the Music Department before registering.

| Title |  |  | Second Semester |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Composition <br> Fundamentals of Speech <br> Mus. App. (piano, voice, inst. <br> Music, Band. <br> Music, Chorus <br> Phys. Ed. and Hygiene | ${ }_{\text {Number }}$ | $\mathrm{Cr}_{3}$ | Titte | Number |  |
|  |  |  | Intro. to Education |  |  |
|  |  |  | Nar. and Des. Writing. | Eng 102 |  |
|  | Mus 101 |  | Inus. App. (piano, voice, in |  |  |
|  | Mus 121 | 1/2 | Music, Theory | Mus 10 |  |
|  |  |  | Music, Band | Mus 102 |  |
|  | P.E. 101 | 1 | Music, Mand. | Mus 122 |  |
|  |  |  | Phys. Ed. and Hygiene. | Mus. 126 |  |
|  |  |  |  |  |  |

\footnotetext{
Third Semester
Sophomore Year


LABORATORY AND MEDICAL TECHNOLOGY The following requirements for laboratory technicians or medical technologists are those set forth by the Registry of Medical Technologists of the curriculum are eligible to apply for registration.

## REQUIREMENTS

Biology:
12 semester hours, of which 10 hours must be in Zoology. Additional courses which may be taken to fulfill this requirement are Histology, Em bryology, Comparative Anatomy, Physiology, Bacteriology, and Hygiene.
Chemistry:
10 hours of General Inorganic Chemistry, including laboratory work. 4 hours of Quantitative Analysis, including laboratory work.
Electives:
Sufficient to give a total of 60 semester hours of college credit. The following courses are recommended, but not required: Physics, Organic Chemistry

Freshman Year
First Semester


$\qquad$ Sophomore Year

| Third Semester |  | Fourth Semester |  |
| :---: | :---: | :---: | :---: |
| Title | Number Cr. | Tito | Number ${ }^{\text {cre}}$ |
| Alternates: |  | Alternates: |  |
| $\underset{\text { Histology \& Organology. }}{\text { Bacteriology }}$ | $\left.\begin{array}{ll}\text { Bio } \\ \text { Bio } & 202 \\ 211\end{array}\right\} 5$ | Bacteriology | $\ldots$ |
| Inor. Quantitative Analysis. | Chem 1214 | Organic Chemistry | .Chem 230 |
| Electives. | 6 | Electives. |  |
| Physical Education | P.E. 1031 | Physical Ed | P.E. |
|  | 16 |  |  |

MUSIC
A two-year course in music is offered for those who wish to extend their such a restricted course should be followed by more advanced study struction. It is possible, however, during two years of concentrated study inestablish a sound foundation in the fundamentals of Music.
First Semester Freshman Year Title


Sophomore Year

|  |  |  | Fourth Semester |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Title Number |  | Cr. |  |  |  |  |
| Foreign Languagel...... | 103 or 200 Hist 101 | 3 |  |  |  |  |
| Music Applied |  |  |  |  |  |  |
| Music, Theory | Mus 103 | 5 |  |  |  |  |
|  |  |  | Alte |  | 104 |  |
| Music, History. |  |  | Music, History |  |  |  |
| Mhysical Edistory. |  |  | Music, History |  | 10 |  |
|  | P.E. 103 | 1 | Physical Education |  | 104 |  |
|  |  | 16 |  |  |  |  |

${ }^{1}$ The level of the course taken by the student will depend upon his achievement.

PRE-DENTAL
(Two years)
The following Pre-Dental curricula are recommended as fulfilling the reand quirements established by the majority ormits a more complete preparation in Chemistry and Biology.

| Freshman Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| First Semester |  |  | Second Semester |  |
| Title | Number | cr. | Title | ${ }_{\text {Number }}{ }_{\text {crem }}$ Chem $102{ }_{6}$ |
| General Ingoranic Chem. | Chem 101 | 4 | Inor. Chem. and Qualitative. | Eng 102 |
| Composition. | Eng 101 |  | Alternates: |  |
| Alternates: Hist. of W. civilization... | Hist 101 | 3 | Hist. of W. Civilization. | $\left.{ }_{\text {Hist }}^{\text {Hist }} 108\right\}^{3}$ |
| U. S. History to 1865 | Hist 107 |  |  | Math 122 |
| College Algebra. | Math 107 | 3 | Analys. Ed. and Hygiene. | PE 102 |
| Plane Trigonomerry. ${ }^{\text {P }}$. | P. P . 101 |  |  |  |
|  |  |  |  |  |

Third Semester
Sophomore Yeal General Zoology.
Inor. Quantitative Anal Inor. Quantiarosition
Advanced Expsit
General Physics General Physics...
Physical Education
$\qquad$ Fourth Semester

 | Chem 121 | 4 | $\begin{array}{c}\text { Organic Chemistry } \\ \text { On ... }\end{array}$ |
| :--- | :--- | :--- |

 .. Bio
...he
...ng
...phy
...P.E.

## wilkes College

RADIO PRODUCTION
As the influence of radio increases, so will an inevitable demand for men and women possessed of broad training and specialized technical skills. This course does not pretend to develop experts in radio production and programming, but it does help to create
with courses in general education. with courses in general education.
The course in general education will be given in the college and the technical courses will be given in the workshop of a local broadcasting station.

Freshman Year
First Semester
Number Cr. Title Second Semester $\qquad$ Title
Biological Science.
Con Composition. . . .....
Fundamentals of Spech. Alternates:
Hist. of W. Civilization Amer. History to 1865 Intro. to Music
Intro, to Radio
Intro. to Radio
Phys. Ed. and Hygiene. .


Sophomore Year
Tbird Semester
${ }^{\text {Number }}$
 Fourth Semester
Title Title
Intro to Economics
World Literature Intro. to Economic.
World iterature.
General Psycholog General Psycholo
Radio Writing. Radio Writing. . Pro.
Con. Rm. Tech.
Physical Education.


 Electivel
Physical
Education $-$

The two-year intensive secretarial program has a threefold purpose: to provide a general education; to develop an understanding of business activities provide a general education; to develop an underst
and to give specialized training for secretarial work.
The required courses in this curriculum may be counted toward the Bachelo of Science Degree in Commerce and Finance when students desire to continue their education after completing their secretarial training. The flexibility of the program leading to this degree permits students to elect a 24 -hour sequence
either in commerce and finance or in another field of study, according to the interests and objectives of each student.


Sophomore Year

| Tbird Semester |  |  | Fourth Semester |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Title Number |  | cr. | $\begin{gathered} \text { Title } \\ \text { Business Law } \end{gathered}$ | Number |  |
| ${ }_{\text {Business Law }}$ | B.A. 231 | 3 |  | .B.A. 232 |  |
| Fundamentals of Math. | Math 101 | 3 | Advanced Stenography |  |  |
| Advanced Stenography... Ofice Pro and Maphy |  | 4 | Secretarial Accounting | S.S. 120 |  |
| Eliective. and Machines |  | 4 | Office Managament. | S.S. 206 |  |
| Physical Education. | P.E. 103 | 3 | Elective ${ }_{\text {Preal }}$ | P.E. 104 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

[^3] he first week of the term to determine their levels of attainment.

## MEDICAL STENOGRAPHY

Medical secretaries require special training so that they may have an intelliMedical secretaries require special training so that they may have an intelli-
gent understanding of their part in the work of a medical office. To provide gent understanding of their part in the work of a medical omice. To provide
the essential background, the secretaial courses are supplemented by Biology
and laboratory courses in Chemistry and Physiology. The courses in Secretarial the essential background, Chemistry and Physiology. The courses in Secretarial
and laboratory courses in Chem
Accounting and Office Procedures are adapted to the needs of the students Accounting and Office Procedures are adapted to the needs of the students preparing for work in the offices of physicians.

Freshman Year

$\qquad$


Third Semester
Sophomore Year
Fourth Semester

| Title | Number |  | cr. | $\begin{gathered} \text { Title } \\ \text { Physiology. } \end{gathered}$ | Number |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Physiology | Bio | 251 | 4 |  | Bio |  |  |
| Alternates: Hist. of W. Civilization |  |  |  | Alternates: Hist. of W. Civilization. |  |  |  |
| Amer. Hist. to 1865 |  | 107 | 3 | Amer. Hist. since 1865. | Hist | 108 |  |
| Advanced Steno |  | 109 | 4 | Medical |  |  |  |
| Office Pro. and Machines | S.S. | 205 | 3 | Office Management | . | 206 |  |
| Elective. |  |  | 3 | Elective |  |  |  |
| Phys | P.E. | 103 |  |  |  | 04 |  |
|  |  |  | 18 |  |  |  |  |

A candidate for a degree with a major in Medical Stenography should conult with his adviser before planning his program of study. A student who completes the two-year program and then decides to continue
degree, should carefully plan the last two years with his advise


Medical secretaries require special training so that they may have an intelliMent understanding of their partial in the work of a medical office. To provide yent understanding of their part in the work of a medical office. To provide and laboratory courses in Chemistry and Physiology. The courses in Secretarial Accounting and Office Procedures are adapted to the needs of the students preparing for work in the offices of physicians.

Freshman Year
First Semester
First Semester
$\quad$ Number
...Bio 10
..Eng 10
F...Math 10


Sophomore Year
Tbird Semester
Title
Physiog

 Amer. Hist. to $1865 .$.
dvanced Stenography. Advanced Stenography.
Office Pro. and Machines.
Physical Education.

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


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\begin{aligned}
& \begin{array}{l}
\text { Elective. } \\
\text { Physical Edication }
\end{array}
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## ACCOUNTING

Professor Rosenberg; Instructors Cooney, Laggan, Manley, Werner Whitby.

Acct. 101. Elementary Accounting-Tbree bours $\qquad$ Fundamental theory of debits and credits; problems of classification and interpretation of financial data; technique of recording; preparation of financial statements. Class, two hours a week; laboratory, two hours a week.
Acct. 102. Principals of Accounting-Three bours The Staff A continuation of Accounting 101. Principles of partnership and and branch accounting.' financial analyses of statements. Class, two hours and branch act Prerequisite: Accounting 101

Acct. 111. Intermediate Accounting-Three hours The Staff Intermediate problems involving interpretation and detailed analyses of Balance Sheet accounts; analytical processes and miscellaneous state ments. Class, two hours a week; laboratory, two hours a week Prerequisite: Accounting 102.
Acct. 112. Advanced Accounting-Tbree hours
An advanced study of partnerships and corporations; consignments and branch accounting; consolidated statements; estate and municip Class, two hours a week; laboratory, two hours a week Prerequisite: Accounting 111.

Acct. 201. Cost Accounting-Tbree hours The Staff
Accounting for material, labor, and overhead expenses; methods of apportionment of manufacturing costs; detailed study of job-cost and process-cost methods. Class, two hours a week; laboratory, two hours week.
Prerequisite: Accounting 112.
Acct. 202. Advanced Cost Accounting-Tbree bours The Staff Establishing the practical use of cost systems through analytical and comparative statements; detailed study of various cost systems; standard costs; interpretation of data. Class, two hours a week; laboratory tw hours a week.
Prerequisite: Accounting 201.

Acct. 220. Accounting Systems-Tbree hours
A study of the accounting methods Mr. Manley, Mr. Werner loan associations, and other specialized of banks, utilities, building and given to internal control, ease of recording and fos, with special attention

Acct. 221. Tax Accounting-Three bours
Mr. Laggan, Mr. Manley, Mr. Werner
A study of Federal taxes including income, estate, gift, corporate Prerequisites: Accounting 112 of various forms; application of rates.

Acct 231. Aud
Acct. 231. Auditing Principles-Three hours
Methods used in Mr. Manley, Mr. Werner and Balance Sheet verifying, analyzing, and interpreting the recor and Balance Sheet and Income accounts; study of the procedures applicable under various circumstances. Class, two hours a week; laboratory
two hours a week.
Prerrs a week
Prerequisite: Accounting 202
Acct. 232. Auditing Practice-Three hours
Mr. Manley, Mr. Werner
Advanced application of auditing principles to actual pratice ems of classification and interpretation of accounts; study of methods eek; laboratory
Prerequisite: Accountin
A. Problems-I hree hours

Mr. Manley, Mr. Werner
Review of all phases of accounting through a study of advance Prerequisites: Accounting 202 various C. P. A. examinations.

BIOLOGY
Professor Reif; Instructors Dague, and Namisniak
a Bachelor of Science or to the student of Biology. He may take eithe selected is largelyce or a Bachelor of Arts course. The course that is individual. The curr
intended for persons whe to the degree Bachelor of Arts in Biology is
specializal specialization in Biology, desire a broad liberal background with
choice of cultural subjects and is designed for those who wish to write in the field of Natural History, those who wish to enter museum work, those whose aim is teaching at the college level, and those who plan graduate work in the Natural Sciences. The requirements for a major in Biology are listed on page 45 .

Bio. 100. Biological Science-Three hours Miss Dague Biological Science is a survey course intended for students who take no other courses in Biology. It presents the essential general information about plants and animals, explains fundamental laws governing the biological world, and emphasizes their relationship to man. Class, three hours a week
Bio. 101-102. General Zoology-Five bours each semester
${ }_{\text {Mr. Reif }}$
General Zoology surveys the entire animal kingdom, outlines the history of Biology, explains the organization of living matter, teaches the structure of representative animals, the methods of their classification, and the basic principles of Genetics, Embryology, Evolution, and tion, and the basic principles of Genetics, Embryology, Evolution
Ecology. Class, three hours a week; laboratory, four hours a week
Bio. 112. General Botany-Five hours
Mrs. Namisniak
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, three hours a week; laboratory, four hours a week.
Bio. 113. Botanical Taxonomy-Five hours
Mr. Reif
Botanical Taxonomy presents a survey of the great divisions of the plant kingdom with special reference to the seed plants. Class, two hours 2 week; field work, six hours a week.

Bio. 201. Comparative Anatomy of the Vertebrates-Five bours
Comparative Anatomy includes a study of the general morphological characteristics of selected vertebrates emphasizing the structural and embryological relationships of vertebrates generally. The taxonory ory, six hours a week

Bio. 202. Histology and Organology-Five bours
Mr. Reif Histology presents a study of the cells which compose normal tissues, and Organology considers the arrangement of tissues into organs areorgan systems. The preparations studied in the laboratory are predominantly $m$

Bio. 211-212. BACTERIOLOGY-Five bours each semester
Mrs. Namisniak
Bacteriology 211 covers generally the morphology and identificatio of bacteria. Laboratory work includes microscopy, techniques of making media, methods of sterilization, and the culturing of bacteria.

Bacteriology 212 emphasizes medical ad
biological prophylaxis and allergy, diseases and disease trens such as biolugical prophylaxis and allergy, diseases and disease transmission,
vickettsias, and pathogenic protozoa. Class, two laboratory, six hours a week.
Bio. 223. Entomology
Mr. Reif
Entomology is the study of insects through the collection and identifi cation of specimens. Life histories of insects are studied as well as their economic relationships, and their significance in industry and medicine Class, two hours a week; laboratory and field work, six hours a week. Bio. 251-252. Physiology-Four hours each semester Miss Dague Physiology is a study of the functioning of the Miss Dague and organs of the animal body. Laboratory work various cells, tissues, hvolving living forms. Class, two hours a week. a week.
Bio. 261. Genetics-Five bours
Miss Dague
Genetics presents the principles of inheritance of normal characters and variations of those characters in plants and animals. Laboratory
work includes experiments and urements of genetic variations. Class, two hours a week. hours a week.
Bio. 262. Embryology-Five hours
Miss Dague
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.
Bio. 291-292. Seminar in Biology-One credit each semes
Seminar in Biology is designed as a correlating stud Mr. Reif Biology for senior students. Each student prepares a pater field of ological topic for presentation to and discussion by the group. Class, one
hour a week.

BUSINESS ADMINISTRATION
Professor Rosenberg; Associate Professors Agranat, Morris; Assistan
Professor Williams Pan , Missor Williams; Instructors Bachman, Boyce, Cooney, Farrar I gan, McLaughlin, Manley, Munts, Riley, Rokosz, Werner, Whitby.
B.A. 100. Survey of Business-Three hours

A basic course in the essentials of modern business. Studies Staff A basic course in the essentials of modern business. Studies are made
of problems pertaining to administrating and financing the organization of enterprise; manufacturing and distribution of goods; personnel problems; governmental policies toward business.
B.A. 114. Salesmanship-Tbree hours
B.A. 114. Salesmanship-Three bours Mr. Riley
The art of selling; the motive behind all buying; creation of interest The art of selling; the motive behind all buying; creation of interest
and desire; presentation of services; meeting objections; types of cusand desi
tomers.
Prerequisite: Economics 102 or approval of instructor
B.A. 209. Business Correspondence and Reports-Three bours Mr. Willian and reports.
B.A. 216. Advertising-Three bours Mr. Bachman A survey of the different departments of advertising work, including copy, art, display, engraving, trade-marks, and media; advertising as a social force
Prerequisite: Economics 102.
B.A. 217. Transportation-Tbree hours

Mr. Rosenberg Problems and policies of railroads, busses, inland waterways, and air and ocean transportation; economic importance of transportation; sig. nificance of transportation to society
Prerequisite: Economics 102
B.A. 218. Credits and Collections-Tbree hours Mr. Rosenberc The fundamentals of credit; investigation, analysis of risks; collection plans and policies. Special attention given to the organization of credit and collection offices.
Prerequisites: Economics 102, Accounting 102
B.A. 220. Real Estate-Three hours
hours

Mr. Boyce
The fundamentals of the real estate business, including consideration of titles, mortgages, leases, advertising, sale, purchase, development, and management of real property.
Prerequisite: Economics 102.
B.A. 222. Marketing - Three hours

Mr. Cooney, Mrs. Munts, Mr. Agranat Evolution of the marketing system and functions of marketing, trade structure, and organization and the nature of competition. Principle Each student is required to make a special study of the marketing of a selected commodity.
B.A. 225. Corporation Finance-Three hours

Mrance-Ibree hours
Mr. Agranat, Mr. Laggan, Mr. Rosenberc 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 in volved in promotion, disposition of net earnings, working capital and hort term financing, mergers, expansion, financial readjustments, and eorganization.
Prerequisite: Economics 102.
B.A. 226. Investments-Three hours Mr. Agranat, Mr. Laggan Consideration of leading types of investments, tests, and investment programs; financial reports of leading companies, forecasting methods and agencies, stock exchanges, brokerage houses, methods of buying and selling securities, fraudulent promotions and their detection. Laboratory work and case studies.
Prerequisite: Business Administration 225.
B.A. 231. Business Law-Contracts-Three hours Mr. Boyce The foundation for all subjects in the field of business law. Examination of the essential elements of a valid contract and the application to
typical business transactions. Thes typical business transactions. These essential elements are: the agreement; the subject matter (what the contract is about); the consideration (that value which is given by each party for his interest in the subject matter); the form (written or oral); the competency of parties; and Prerequisite: Econsent (legal or illegal inducement to agree). Prequisite. Economics 102.
B.A. 232. Business Law-Sales, Agency, Bailment-Three hours Mr. Boyce, Mr. Manley
A general study of the Law of Sales, the Law of Agency, and the Law manufacturers, Legal problems arising out of the sale of merchandise by mhipment, and warehours and dealers; out of the financing, processing regulations thereof. Prerequisite: Buf.
Prerequisite: Business Administration 231
B.A. 233. Business Law-Partnerships and Corporations

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\begin{array}{ll}
\text { Three bours } & \text { Mr. Boyce, Mr. Manle }
\end{array}
$$

formation of law governing partnerships and corporations, in thei ticular reference to internal relationships, and dissolution, with pa aspects of the to their dependency upon the law of agency. Lega and beneficiary insurance contract with respect to the insured, insurer tract.
Prerequisites: Business Administration 231, 232, Accounting 102.
B.A. 234. Business Law-Property- 1 bree houls

Mr. Boyce, Mr. Manley
Law of property; the mortgagor-mortgagee relationships; the land-lord-tenant relationship; business crimes (crimes against the person, property, business transactions); bankruptcy; and pacts (security of perproperty, business transactions), business relations, and business transactions)

Prerequisites: Business Administration 231, 232, Accounting 102.
B.A. 235. Industral Management-Three hours

Instructor to be announced ment of industry, with emA study of the crgles developed; problems of the interrelationship of phasis on the principles developeed, prom management, such as production the functions operating incing, and the forecasting of business conditions,
control, personnel, financion particularly as they relate to industry
Prerequisite: Business Administration 225.
B.A. 236. Personnel Management-Tbree hours

Mr. Riley Pand management; instruripers incentives used and special problems encountered.
Prerequisite: Economics 223.
B.A. 237. Production Management-Three hours Mr. Riley A study of the production problems that confront executives; develop ing operational plans; handling production problems; appraisal of rela tive risks.
Prerequisite: Economics 223
B.A. 239. Sales Management-Tbree hours Mr. Riley The relation of the sales department to all other departments; types of sales organizations; selection, training, compensation, and manage of sales organizations; selection, training, compensation, and mination ment of the sales force; sales research and market analysis, deter costs of
of price and brand policies; preparation of sales budgets; coll distribution.
Prerequisite: Business Administration 114 or equivalent.
B.A. 240. Property Insurance-Three bours

Mr. Boyce
The fundamentals of fire and marine insurance.
B.A. 241. Life Insurance-Three bours

Mr. BOYC The fundamentals of life and casualty insurance, and fidelity and surety bonds.
Prerequisite: Approval of Instructor.

## CHEMISTRY

Professor Bastress; Assistant Professor Bone; Instructor Ditoro, Gottlieb, Markowitz, and Kuzmak.
Students wishing to study Chemistry shall select the Bachelor of Science in Chemistry since a major in Chemistry is difficult to arrange in the Liberal Arts program.
Chem. 101. General Inorganic Chemistry - Four bours
Miss Bone, Mr. Ditoro, Mr. Markowitz
An introduction to the fundamental laws and theories of Inorganic Chemistry. The chemistry of selected non-metallic elements. Class, thre hours a week; laboratory, three hours a week. Breakage deposit required.
Chem. 102. Inorganic Chemistry and Qualitative Analysis
Six hours Bone, Mr. Ditoro
Miss
The reactions of the common metallic elements, the theory and prac ice of elementary Qualitative Analysis. Class, four hours a week; lab ratory, six hours a week. Breakage deposit required.
Prerequisite: Chemistry 101.
chem. 104. General Inorganic Chemistry-Four hours
Miss Bone, Mr. Markowitz
A continuation of Chemistry 101. The chemistry of the metals. Lab oratory work includes some Qualitative Analysis. Will not be accepted as a prerequisite for further Chemistry courses. Class, three hours a
week; laboratory, three hours a week. Breakage deposit required.
Prerequisite: Chemistry 101.
Chem. 121. Inorganic Quantitative Analysis-Four bours
Mr. Gottlieb
Theory and practice of typical analyses. Class, two hours a week; laboratory, six hours a week. Breakage deposit required.
Prerequisite: Chemistry 102.
Chem. 122. Inorganic Quantitative Analysis-Five hours
Mr. Gottlieb
A continuation of Chemistry 121. Class, two hours a week; laboratory, nine hours a week. Breakage deposit required.
Prerequisite: Chemistry 121
Chem. 230. Organic Chemistry-Four hours
$\mathrm{An}_{\mathrm{n}}$ introduction to the chemistry of carbon compounds. The prepara tion and properties of the aliphatic series. Class, three hours a week laboratory, three hours a week. Breakage deposit required.
Prerequisite: Chemistry 121.

Chem. 231. Organic Chemistry-Five bours
Mr. Bastress A continuation of Chemistry 230, with special attention to cyclic three hours a week; laboratory, six hours a week Breakage deposit required, Prerequisite: Chemistry 230.
Chem. 233. Qualitative Organic Analysis-Three hours
Mr. Bastress
A course designed to give practice in the systematic identification of A course designed to give practice in the systematic identification labpure organic compounds and mixtures. Class, one
oratory, six hours a week. Breakage deposit required.

Prerequisite: Chemistry 231.
Chem. 234. Advanced Organic Chemistry-Two bours
Mr. Bastress
Special topics in Organic Chemistry, including theories of organic reactions.

Prerequisite: Chemistry 231.
Chem. 241-242. Physical Chemistry-Four hours each semester
An introduction to the principles of Physical Chemistry and the elements of thermodynamics. Class, three hours a week; laboratory, three hours a week. Breakage deposit required.
Prerequisites: Chemistry 121, Mathematics 126, Physics 202.
Chem. 243. Advanced Physical Chemistry - T wo bours
hours
Mr. Markowitz Markowitz
A study of chemical equilibrium, using the methods of modern A study of chemical equilurian,
Prerequisite: Chemistry 242.
Chem. 244. Advanced Inorganic Chemistry-Two hours
Mr. Gottlieb
A course designed to introduce the student to the modern theories of Inorganic Chemistry.
Prerequisite: Chemistry 242
Chem. 251-252. Biological Chemistry - Three bours Mr. Bastress
The application of chemical and physiochemical principles and methods to chemical constitution, reaction, and products of living matter. Class, two hours a week; laboratory, three hours a week. Breakage d posit tequired.
Prerequisite: Chemistry 121 and 231.

Chem. 261. History of Chemistry-One hour Mr. Bastress
Chem. The development of the science in terms of the personalities respon development.
Prerequisite: Completion of twenty Chemistry credits.
Chem. 262. Chemical Literature--One hour
An orientation course in foreign and domestic chemical literature. Prerequisite: Completion of twenty Chemistry credits.

## ECONOMICS

Professor Rosenberg; Associate Professor Agranat; Instructors Cooney, Farrar, Laggan, Munts, Riley, Whitby.

Students who major in Economics in the Bachelor of Arts course are required to complete 24 hours of work in Economics beyond Economics 101 and 102. The 24 hours in Economics which the major must carry should include Economics 202, 232, and 241.
Ec. 100. Introduction to Economics-Three hours The Staff An introductory course in principles of economics designed for students who plan to take ONLY ONE semester of work in this field. ing, and international trade are included.
Ec. 101. Principles of Economics-Three bours The Staff
An introductory course which presents basic economic problems and shows how these problems are solved in a free enterprise economy; the effects of the increasing importance of the economic role of governmen are pointed out. The course provides orientation in the broad field of
Economics and makes use of the analytical trends by means of which the student can understand the economic problems of his environment.
Ec. 102. Principles of Economics-Three hours The Staff This course is a logical sequence to Economics 101. It is based upon a broad macro-economic foundation concentrated on such units as the rm, the industry, and the consume
Prerequisite: Economics 101.
Ec. 201. Money and Banking-Tbree bours Mr. Rosenberg A study of the organization of financial institutions, their operation and influence upon the economy. Consideration is given to commercial System savings banks, investment institutions, and the Federal Reserve System.
Prerequisite: Economics 102.
c. 202. Theory of Money-Tbree bours

Mr. Rosenberg An analysis of the theory of money and credit in relation to con temporary economics; currency and credit problems,

Preequisite: Economics 201
Ec. 212. Government and Business-Three hours Mr. Farrar A study of the relationship of government to economic enterprises A study of the relationship of special attention to conditions in the United States; the regulatory with special and results of governmental control. Reference is made to monopoly and quasi-monopoly situations, public utilities, trust, transportation, extra tive industries, and public enterprise.

Prerequisites: Political Science 103, Economics 102.
Ec. 223. Labor Problems-Three hours
Mr. Rlley
An introduction to American labor problems; analyses of major issures in the field of labor. This course deals with employment, wages, hours, history, growth and present position of organized labor, union policies, governmental participation in labor relations, collective bargaining
vestigation and arbitration in la
Prerequisite: Economics 102.
Prerequisite: Economics 102.
Ec. 225. International Trade-Tbree bours
Mr. Agranat, Mr. Cooney, Mr. Laggan
Theory and practice of international trade with special reference to contemporary problems and policies. The topics covered payments. A quotas, foreign exchange, equilibrium in international payments. instudy will be made of geographic, economic, social, and political fuences on international tr
Prerequisite: Economics 102.
Ec. 226. Economic Geography - Three hour $\qquad$
THE STAF A study of the relation of geography to the economic activity of Ans course describes and analyzes the world distrintroductory course in industries, and population. If is.
Prerequisite: Economics 102.
Ec. 227. Economic Geography-North America-Three bouts Mr. Cooney, Mr. Werner A study of the economic regions of North American continestern with special emphasis on the role of the United States in the hemisphere

Prerequisite: Economics 205

Ec. 229. Comparative Economic System-Three hours Mr. Farrar The institutions of planned economy of the U.S.S.R. and that of the contemporary experiment in evolutionary socialism in Great Britain are tudied. Comptristic of a capitlistic economy. Prerequisite: Approval of Instructor.

Ec. 230. Business Cycles-Three hours Mr. Agranat, Mr. Farrar
A historical analysis of major business cycles. Contemporary theorie and a critical examination of public policy toward business cycles. Prerequisite: Approval of Instructor.

Ec. 231. Applied General Statistics-Three hours
A course in statistical methods and their application to business. A collection and interpretation of statistical data, frequency distribution and measures of central tendency, fitting the normal curve, Chi-square test; test of significance for small samples, analysis of variance
Prerequisite: Approval of Instructor.
Ec. 232. Economic Statistics-Three hours
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

Prerequisite: Economics 231
Ec. 236. Public Finance-Three hours
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 gov-
rnment finance to the economy
Prerequisite: Business Administration 209.
Ec. 238. ECONOMIC HISTORY-Tbree hours
Mr. Agranat, Mr. Farrar
$\mathrm{A}_{\mathrm{n}}$ advanced course which deals with the origin, growth, and signifEure of economic institutions, with special emphasis upon those of Prere and the United States.
Prerequisite: Economics 102

Ec. 241. Economic Analysis-Tbree hours
Mr. Agranat, Mr. Farrar
This course is intended to coordinate the work of the special courses pursued in the general field of Economics and business. A more pene pursued in the general field of Economics and business. A more penetary Economics courses.
Prerequisite: Economics 102
Ec. 244. History of Economics Thought-Tbree hours The Staff A study of the historical development of economic doctrines. The writings of the leading thinkers in the field of Economics, beginning with the Greeks and Romans and continuing to the present. The lead ing economic movements and schools of thought.
Prerequisite: Approval of Instructor.
Ec. 245. Consumer Economics-Three hours
Mr. Agranat, Mr. Cooney, Mr. Rosenberg
The place of the consumer in the economic system. Theories of con sumption; problems of the individual consumer as afgeting; a stud of the trends of consumption, income disposition, marketing processe of consumption of goods. Each student is required to make a study of the consumption of a selected commodity
Prerequisite: Economics 102
Ec. 246. Economic Investigation-Three hours
Mr. Agranat, Mr. Farrar
Each student conducts an investigation in the field of his major in Each student conducts an investigation in the iield orll consist of: (1) terest and constructs a final report. Class instructilation and use of bibliographies, and (3) details of good form as to content, table, body, foot notes, and bibliography
Prerequisite: Approval of Instructor.

## ENGINEERING

Associate Professor Hall; Assistant Professor Heltzel; Instructo Ditoro, Thomas, and Williams.
Engl. 100. Engineering Problems-One bour
Mr. Heltzel, Mr. Williams
ectures 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, boule necessary to

Engi. 102. Basic Drawing-Three hours
Mr. Heltzel
A basic course covering the elements of projection drawing and deAcriptive geometry necessary for students of Chemistry and Physics. It includes lettering, use of instruments, sketching, orthographic and isometric drawing, dimensioning, and the analysis and solution of space problems involving the projection and revolution of points, lines and planes. Intersections and developments. Practicum, seven hours a week. Engi. 105. Engineering Drawing-Three hours Mr. Heltzel This and the following course bear the same relation to the engineerThis and the following course bear the same relation to the engineering profession as the subject of English bears to our daily life. Technical orthographic and auxiliary projection drawing with dimensions and sections; isometric drawing; tracings and reproduction processes. Pracicum, seven bours a week.
Engi. 106. Engineering Drawing and Descriptive Geometry Three bours

Mr. Heltzel
Augments Engineering 105. Application of standard conventions to the execution of detail and assembly drawings. Application of the principles of Descriptive Geometry to the solution of engineering spaceproblems by the projection and revolution of points, lines, planes and solids. Intersections and developments. Practicum, seven bours a week. Prerequisite: Engineering 105.

## CHEMICAL ENGINEERING

C.E. 206. Stoichiometry - Three bours Mr. Ditoro A problem course involving the application of basic chemical and A problem course involving the application of basic chemical and
physical concepts to the calculation of heat and material balances as 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 prod-
ucts. Class, three bours a week.
Prerequisite: Chemistry 203; Physics 201.
Co-requisite: Physics 202.

## CIVIL ENGINEERING

C.E. 103. Plane Surveying-Tbree bours

Mr. Williams, Mr. Thomas
Lectures, recitations Mr. Whama 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. Prac icum, seven bours a week.
Prerequisite: Engineering 105, Mathematics 105; or 107 and 109.
C.E. 104. Route Surveying-Four hours

Mr. Williams, Mr. Thomas
A study of the engineering and economic problems affecting the loca A study of the engineering and economic problems affecting the loca tion of routes of communication. Lectures, recitations, field work and
problems on the theory and use of simple horizontal, compound, reverse, problems on the theory and use of simple horizontal, compound, reverse,
spiral and vertical alignment curves; grades, cross sections, mass dia grams and earth work computations, grade crossing, right-of-way, and drainage problems. Solar observation to determine true bearing and azimuth. Class two hours a week: Practicum six hours a week.
Prerequisite: C.E. 103.

## MECHANICAL ENGINEERING

M.E. 206. Kinematics-Four bours

Mr. Thomas
Analytical and graphical studies of displacement, velocity and acceleration for rigid bodies in plane motion. Study of kinematic pairs and trains involving linkages, pulleys, gears and cams: instant centers geartooth outlines and their application, epicyclic gear trains. Class two ours a week: Practicum six hours a week.
Prerequisite: Engineering 106, Mathematics 122, Physics 201,
M.E. 211. Mechanics I. Statics-Three bours

Mr. Hall
Study of force systems in equilibrium: catenary; friction; first and second moments of areas, volumes, masses; centroids. Class, three bourr a week.
Prerequisite: Physics 201, Mathematics 125 .
Co-requisite: Matheratics
Co-requisite: Mathematics 126.
M.E. 212. Mechanics II. Dynamics - Three hours Mr. hall

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

## ENGLISH

Professor Craig; Associate Professor Davies; Assistant Professors Donnelly, Kruger, E. Williams, and G. Wiilliams; Instructors Conway Evans, Groh, Grun, and Tyburski.
Students who major in English are required to complete twenty-four hours of work beyond the prescribed courses of the Freshman and Soph omore years.

The twenty-four hours which the major must carry in English should be so distributed as to include an advanced course in Composition o Journalism, three hours of work in Linguistics (English 201, 203, of be reserved for English 215 . It is strongly recommend
in a foreign language beyond the minimumors in English take six hours in a students who wish to take graduate requirement of twelve hours. All students who wish to take graduate work in the field of English
should take at least twenty-for Majors who wish to teach in secondary soreign languages
English 275 . The credit feach in secondary schools are advised to elect the major or the credit for this course may be counted toward either tion. In planning his paction of requirements for certification in Education. In planning his program with his faculty adviser, the student should make an early decision regarding the field in which credit for
this course is desired.

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

## COMPOSITION

Eng. 99. Remedial English-No credit The Staff
A remedial course for students whose rating in the English placement test is unsatisfactory. Three hours.

Eng. 101. COMPOSTTION-Tbree bours The Staff
Principles of exposition; collateral reading; writing of themes.
Eng. 102. Narrative and Descriptive Writing-Three hours
Elementary narration The Stafe
themes. Prerequisite: English 101
Eng. 105. Advanced Exposition-Three hours
Mrs. Williams, Mr. Donnelly
Study of the principles of exposition; types of exposition. Collateral Prerequisem. Special sections for students interested in Science. Prerequisite: English 101 or exceptionally high rating in the English
placement test.
Eng. 106. Short Story-Three hours Mrs. Williams
A writing course. Training in the selection and use of materials for
the short tor
the short story.
Prerequisite: English 101 or 105

## JOURNALISM

Eng. 121. Journalistic Writing
Mrs. Williams A beginner's course in gathering and writing news. Topics include:
definition of news, writing leads and building the story, law of libel, definition of news, writing leads and building the story, law of libel, news sources; a brief survey of the history of American journalism and the current status of freedom of the press. Editors of local and nearby papers address the class and answer questions.
papers of U. S., both dailies and country weeklies. There is constant papers of $U$. S., both dailies and country weeklies. There is constant Prerequisite: English 102.

Eng. 122. Journalistic Writing

## Mrs. Williams

This course supplements English 121. Instruction in handling important assignments: accidents, disasters, elections, conventions, meetings, crime; covering the major beats: city hall, court house, police head-
quarters, federal building, labor, business, sports, society; editing copy, newspaper style, writing heads; measuring readability, semantics.
Visit to local and neighboring newspaper offices and printing plants. Term paper: series of articles suitable for newspaper on timely subject affecting the College or community.
Prerequisite: English 121.
Eng. 123. Public Relations
Mrs. Williams
Recent development in fields of: public opinion, propaganda, public relations. Use of public opinion polls by editorial and advertising offices of newspapers; the Continuing Study of Newspaper Reading by the Advertising Research Foundation. Recognizing propaganda, use of rumor, pictures, well known devices. Study of pressure groups and lobbies, government publicity, national publicity campaigns, press releases. Special attention is given to the 2,300 trade journals and 6,000 house organs covering

Prerequisite: English 102.
Eng. 124. Feature Writing
Mrs. Williams
Feature writing for newspapers and magazines. Analysis of the fea-
ture field and the magazine market. Finding suitable subjects and their ture field and the magazine market. Finding suitable subjects and their treatment: the interview, the how-to-do-it article, popular biograpises.
and success stories, personal experiences, narratives. Weekly themes. Prerequisite: English 102.

## LANGUAGE AND LITERATURE

Eng. 151. World Literature-Four bours Miss Craig, Mr. Davies Survey of western world literature to the beginning of the eighteenth ntury; lectures, term papers, quizzes, conferences, of the eighteent Prerequisite: English 101 and 102, or substitute in, collateral reading
Eng. 152. World Literature-Four bour
Mr. Davies, Mr. Donnelly, Mr. E. Williams Continuation of survey, bringing the study of literature down to resent time
Prerequisite: English 151
eng. 201. History of the English Language-Three hour
Mr. Donnelly
Study of the origins of the English language and of the principal Prenema of later development.
Prerequisite: English 152.
Eng. 203. Anglo-Saxon-Three hours
Stuty and language and literature of Old sentative selections.
Prerequisite: English 152 and consent of instructor
Eng. 205. Chaucer-Tbree hours
reading of repre-

Miss Craig
Canterbury Tales; written features of late Middle English; reading of the Prerequisite: English 152 .

Eng. 211. Early English Drama-Three hours Mr. Davies
Study of the drama as a literary type and its histo
imes to
Mr. Davie
ras 1642; reading of plays by pre-Elizabethan from the earlies ramatists exclusive of Shakespeare. Prerequisite: English 152.
Eng. 212. Later English Drama-Three bour
Study of the drama in Endama-1 bree bours
period; reading of representative plays. 1660 to the end of the Victorian
Prerequisite: English 152.
Eng. 215. Shakespeare-Three hours
Intensive study of selected plays; written reports on others not studied
in class.
Prerequisite: English 152.

Eng. 216. Milton and His Contemporaries-Three bours
Study of the poetical works of John Milton and his Miss Craic lectures, discussions, written reports.
Prerequisite: English 152.
Eng. 221. Age of Pope
A study of the poetry and non-fictional prose of this period, including the work of leading essayists, biographers, diarists, and letter writers. Prerequisite: English 152.
Eng. 222. Age of Johnson Mr. E. Williams A study of poetry and the non-fictional prose of 1740-1798, including A study of poetry and the non-fictional prose of $1740-1798$, including
the work of leading essayists, biographers, diarists, and letter writers. Prerequisite: English 152.
Eng. 237. Early English Novel-Three hours
English prose fiction of the sixteenth and seventeenth centuries; rise of the novel to the close of the eighteenth century. Prerequisite: English 152.
Eng. 238. Later English Novel-Tbree bours Miss Craig The major novelists of the nineteenth and early twentieth centuries. Prerequisite: English 152.
Eng. 241. The Romantic Movement-Tbree bours Mr. Donnelly The study of the works of Wordsworth, Coleridge, Scott, and the prose writers contemporary with them.
Prerequisite: English 152.
Eng. 242. The Romantic Movement-Three hours Mr. Donnelly The study of the works of Byron, Shelley, Keats and the prose writers The study of the works
contemporary with them.
Prerequisite: English 152.
Eng. 259. Tennyson and Browning-Three bours
Study of the poetry of Alfred Tennyson and Robert Browning and its relations to other literature of the nineteenth century.
Prerequisite: English 152.
Eng. 260. Victorian Prose-Three bours Mr. Davies Study of the influence of movements in Science, Philosophy, Art, Study of the influence of movements in Science, Philosophy,
Religion, and Society as reflected in the works of Carlyle, Arnold, HuxReligion, and Society as refle
ley, Newman, and Ruskin.
ley, Newman, and Ruskin.
Prerequisite: English 152.
eng. 269. Contemporary Literature-Tbree hours
Mrs. G. Williams, Mr. Kruger
A course designed to $\quad$ Mrs. G. Wilhms, Mr, Kruge twentieth century.
Prerequisite: English 152
Eng. 275. Teaching of English-Three bours $\qquad$ Miss Conway
Analysis and discussion of those methods of $\qquad$
Aeen used most effectively in the methods of instruction which have been used most effectively in the teaching of English Literature and Composition. Study of the principal phenomena in the development of
English. Eva 28
Eng. 283. American Literature-Three bours Mr. E. Williams Survey of American Literature from the beginning to the Civil War.
Prerequisite: English 152 Prerequisite: English 152
Eng. 284. American Literature--Three hours Mr. E. Williams Survey of American Literature from the Civil War to the present time. Prerequisite: English 152.
Eng. 287. American Drama-Tbree bours
The development of our native drama from the colonial Mr. Groh present. Representative plays for reading and study. Written reports.
Prerequisite: English 152 .

## SPEECH

Eng. 131. Fundamentals of Speech-Two hours
The physical, mental, and social equipment. Kruger, Mr. Evans speaking. Classroom projects, which include oral reading, gesture exer
cise, panter cise, pantomime, and various extemporaneous speeches, are designed to improve the student's physical behavior on the platform, to train his
voice, to develop Critice, to develop vocal variety, and to build habits of clear thinking produce not only better speakers but also better critice purpose being to ENG.
Eng. 132. Extemporaneous Speaking-Two hours Mr. Kruger Occantinuation of English 131. Projects include speeches for various
principles of per discussions, and symposiums, with emphasis on the principles of persuasion, types of evidence, and methods of reasoning practice in speaking analysis of speech technique and content; constant Prerequisite. Eng and thinking to a definite end.

Eng. 133. Oral Interpretation-Two hours
Mr. Kruger
The principles and methods of oral interpretation of common prose and poetic forms are studied, with frequent practice in class; emphasis hroughout is upon the sensitive understanding and appreciation of the lections read.
Prerequisite: English 131 and 132.
Eng. 134. Fundamentals of Speech for Technical Students Three bours

Mr. Kruger
Similar to English 131, but with an extra hour of work directed to the specific needs of the student.
Eng. 233. Argumentation and Debate-Two hours Mr. Kruger The commoner forms and methods of argumentation, both written and oral, are studied and practiced, with emphasis on briefing and debate; contemporary problems and current debate questions are discussed. Required of all students participating in intercollegiate debate.
Prerequisite: English 131.

## FOREIGN LANGUAGES

Associate Professor Disque; Assistant Professors Dworski, Mitana, Vujica; Instructors Davidoff, McAniff, Strmen, Zekan.
F.L. 99. Fundamentals of Comparative Grammar-No credit The Staff
A course designed to explain as briefly and as simply as possible the principles of grammar which cause difficulty for English-speaking perprinciples of grammar which cause difficulty for english-speaking per students who demonstrate their inadequacy in grammar. One hour

## FRENCH

A major in French consists of twenty-four hours, exclusive of French 01 and 102.
r. 101. Elementary French-Tbree bours

Mr. Disque, Miss Dworski, Miss McAniff
Introduction to French grammar; practice in reading, writing, and speaking the language.
Fr. 102. Elementary French-Three bours
Mr. Disque, Miss Dworski, Miss McAniff Continuation of French 101 Prerequisite: French 101.

## Fr. 103. Intermediate French-Tbree hours

Review of Mr. Disque, Miss Dworski reading of modern French prose.
Prerequisite: French 102 or the equivalent.
Fr. 104. Intermediate French-Three hours
Mr. Disque, Miss Dworski
Introduction to French civilization; practice in oral and written French.
Prerequisite: French 103 or the equivalent.
Fr. 105. Technical French-Tbree bours Miss Dworski
Intensive practice in translating. A course designed for students who wish to be able to read material in French in their particular field of in Prereqe Humanities, the Social Sciences, or the Natural Sciences. Prerequisite: French 103 or the equivalent.
Fr. 106. French Conversation-Three bours Miss Dworski Intensive practicesin the spoken language, with emphasis on idiomatic usage and the commonest expressions dealing with activities of everyda French. Pre
Prerequisite: French 104 or the equivalent.
Fr. 107. French Composition-Three bours
Study of grammar and idiomatic usage in modern French, applied to Prerequisite: French 104 or composition.

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

Miss Dworski
A survey of the evolution of French Literature from the Middle Ages
ing writers of each century general ideas, literary genres, and outstand-
selections from different periods of French a number of representative Perequisite: Frerent periods of French literature

Fr. 203. French Classic Drama-Tbree hours

Fr. 204. French Literature of the Seventeenth Century Three bours

Miss Dworski
Study of classicism and the outstanding writers of the seventeenth century, other than the dramatists. Three hours.
Prerequisite: French 201-202 or the equivalent.
Fr. 205. French Literature of the Eighteenth Century
Tbree hours

Miss Dworski
Study of the literature and thought in the eighteenth century, with special emphasis on Montesquieu, Diderot, Voltaire, and Rousseau.
Prerequisite: French 201-202 or the equivalent.
Fr. 206. French Literature of the Nineteenth Century Three bours

Miss Dworski
Study of Romanticism, Realism, Naturalism, the Parnassian poets, and Symbolism.
Prerequisite: French 201-202 or the equivalent.
Fr. 207. The Nineteenth Century French Novel-Three hours
Miss Dworski
The development of the French novel in the nineteenth century, with special emphasis on Hugo, Stendhal, Balzac, Flaubert, and Zola.
Prerequisite: French 201-202 or the equivalent.
Fr. 208. Contemporary French Drama-Three bours
Miss Dworski
The development of modern drama from the latter half of the nineteenth century to the present.
Prerequisite: French 201-202 or the equivalent
Fr. 209. Contemporary French Prose-Three hou
Miss Dworski Study of selected works from representative contemporary writers. Prerequisite: French 201-202 or the equivalent.

## GERMAN

A major in German consists of twenty-four hours, exclusive of Ger $\operatorname{man} 101$ and 102

Ger. 101. Elementary German-Tbree bours
Mr. Disque, Mr. Vujica Introduction to German grammar; practice in reading, writing, and Introduction the language.

Ger. 102. Elementary German-Tbree hours
Mr. Disque, Mr. Vujica
Continuation of German 101 Some stress on German culture, life, and customs easy prose and poetry, Prerequisite: German 101 or equivalent.

Ger. 103. Intermediate German-Three hours
Mr. Disque, Mr. Vujica
Emphasis on difficult grammatical construction and idioms. Reading of prose; practice in speaking and writing German.
Prerequisite: German 102 or equivalent.
Ger. 104. Intermediate German-Three hours
Mr. Disque, Mr. Vujica Continuation of German 103. Rapid reading of German works representative of German life and history; practice in writing and speak-
ing German. ing German.
Prerequisite: German 103 or equivalent.
Ger. 105. Scientific German-Tbree bours
Mr. Disque Reading of selections from scientific German Prerequisite: German 103 or equivalent.

Ger. 106. German Conversation-Three hours Ir. Dispu
Emphasis laid an Conversation-Tbree $\qquad$ r. DisQue Prerequisite: $G$ speaking, with drill in the colloquial vocabulary

Ger. 107. German Composition-Three bours
Mr. Disque
Idiomatic usage in modern German. To develop the ability to write free compositions.
rerequisite: German 104 or equivalent
Ger. 201-202. Survey of German Literature Three hours each semester
A survey of the literature of 01932.

Prerequisite: German 104 or equivalent.
Ger. 203. Goethe-Three hours
and individual and interpretation of selected works of Goethe. Lectures Prerequal reports.
rerequisite: German 201-202 or equivalent.

Ger. 204. Schiller-Three hours
Poet of Germ .lo
Prerequisite: German 201-202 or equivalent.
Ger. 205. Nineteenth Century German Drama-Three hours
Mr. Disque
The German drama of the nineteenth century from Ludwig Tieck The German drama of the nineteenth century from Ludwig Tieck
to Gerhart Hauptmann. Lectures and reports on the literary and cultural history of the times.
Prerequisite: German 201-202 or equivalent.
Ger. 206. Modern German Short Story-Three bours
Mr. Disque
The modern German short story from naturalism to the present. In dividual reports; lectures on the cultural and literary history of the period.
Prerequisite: German 201-202 or equivalent.

Assistant Professor Vujica.
Lat. 101. Elementary Latin-Tbree houts
A course in beginning Latin, designed to give the student a funda mental knowledge of grammar, forms and syntax. Emphasis is placed n etymological influences of Latin on English in an attempt to in still the habit of associating Latin words and their English derivatives.
Lat. 102. Elementary Latin-Three hours
Mr. Vujica A continuation of 101

Lat. 103. Intermediate Latin-Three bours Mr. Vujica A rapid review of grammatical forms and principles and reading of easy prose selections, including Caesar's Gallic War. The reading selections are intended to extend and deepen the knowledge of language as well as to acquaint the student with the various aspects of ancient life. Prerequisite: Latin 102 or two years of high school Latin.
Lat. 104. Intermediate Latin-Three hours Mr. Vujica Reading of the masterpieces of Latin literature, such as the works of Reading of the masterpieces of Latin literature, such as the works of
Pliny, Cicero, Vergil, and Ovid. A general survey of Latin literature Pliny, Cicero, Vergil, and Ovid. A general survey of Latin literature modern world. odern world.
Prerequisite: Latin 103 or three or more years of high school Latin.

## POLISH

Pol. 101. Elementary Polish-Tbree hours
Mr. Mitana Mr. Mitan lary. Exercises in simple conversation and writing.
Pol. 102. Elementary Polish-Three hours
Mr. Mitan Continuation of Polish 101
Prerequisite: Polish 101.
Pol. 103. Intermediate Polish-Tbree hours
Mr. Mitana
Exercises in sentence structure, colloquial language Mr. Mitan tempts at composition and more extensive conversation.
Prerequisite: Polish 102 or equivalent.
Pol. 104. Intermediate Polish-Tbree bours
Continuation of Polish 103. Introduction to the study of Polish ivilization as reflected in simple literary works. Exercises in written composition
Prerequisite: Polish 103 or equivalent.
Pol. 106. Polish Conversation-Three bours
Mr. Mitana
Intensive practice in the spoken language with emphasis on idiomatic usage.
Prerequisite: Polish 104 or equivalent.
Pol. 107. Polish Composition-Tbree bour.
Mr. Mitana
Analysis of form and style. Emphasis on original composition and
techniques of translation. Preres of translation.
Prerequisite: Polish 104 or equivalent.
Pol. 201-202. Main Currents in Polish Literature Three hours each semester
Broad outlines of main literary trends and movements against the fackground of the general cultural situation in a given period. Study ontributions to Western Polish culture from the earliest times. Polish
Prerequisite: Polish 104 in.
Prequisite: Polish 104 or equivalen
Pol. 203. The Golden Age of Polish Literature--Three hours
Study of Polish Literature of the sixteenth century Mr. Mitana zewski, and S and religious writers, such as Rey, Kochanowski, ModPrewi, and Skarga.
Prerequisite: Polish 201-202 or equivalent.

Pol. 204. Polish Romantic Poetry-Tbree bours Mr. Mitana Study of Poland's great poets of the Romantic Period, particularly Mickiewicz, Slowacki, Krasinski, and Norwid.
Pol. 205. Nineteenth Century Polish Novel-Three hours Mr. Mitana
The development of the Polish novel in the nineteenth century with special attention given to the works of Sienkiewicz, Prus, Reymont, and Zeromski.
Prerequisite: Polish 201-202 or equivalent.
SLOVAK
Slo. 101. Elementary Slovak - Three hour on pronunciation and the elements of grammar.
Slo. 102. Elementary Slovak-Tbree bours Continuation of Slovak 101
Slo. 207. History of Slovak Culture-Three bours Mr. Strmen History of Slovak culture from the earliest times.
Slo. 208. History of Slovak Culture--Three hours Mr. Strmen Continuation of Slovak 207

## SPANISH

A major in Spanish consists of twenty-four hours, exclusive of Spanish 101 and 102.
Sp. 101. Elemmentary Spanish-Tbree hours
Mr. Davidoff, Mr. Mitan
A study of basic elements of grammar, with extensive oral exercises. Introduction to the reading of simple Spanish prose.
Sp. 102. Elementary Spanish-Tbree hows
Mr. Davidoff, Mr. Mitan
Continuation of 101 with special emphasis on conversational approach and the natural idiom.
Prerequisite: Spanish 101 or equivalent.
Sp. 103. Intermediate Spanish-Tbree bours
Mr. Davidoff, Mr. Mitan Exercises in simple oral and written composition. Intensive review of Spanish grammar

Prerequisite: Spanish 102 or equivalent

SP. 104. Intermedinte Spanish-Tbree hours
Mr. Davidoff, Mr. Mitana
Introduction to the study of Spanish civilization. Readings from elected Spanish authors.
Prerequisite: Spanish 103 or equivalent.
Sp. 105. Commercial Spanish-Three hours
Mr. Davidoff, Mr. Mitana
The study of Spanish as it pertains to economic relations between the Spanish-speaking countries and the United States. Special emphasis
on business letter writing business letter writing.
Prerequisite: Spanish 103 or equivalent.
Sp. 106. Spanish Conversation-Three bours
Mr. Davidoff, Mr. Mitana
Intensive practice in the spoken language. Emphasis on idiomatic usage.

Prerequisite: Spanish 104 or equivalent.
Sp. 107. Spanish Composition-Three hours
Mr. Davidoff, Mr. Mitana
Stress will be laid on original composition and techniques of translation.
Prerequisite: Spanish 104 or equivalent.
Sp. 201-202. Main Currents of Spanish Literature Three hours each semester
A survey of the development of Spanish literary thought from the Middle Ages to the present time.
Prerequisite: Spanish 104 or equivalent.
Sp. 203. The Golden Age of Spanish Literature-Three hours
With em of the great authors of the sixteenth and seventeenth centurie Premphasis on the works of Cervantes, and Lope de Vega.
Prerequisite: Spanish 201-202 or equivalent.
Sp. 204. Nineteenth Century Spanish Drama-Tbree hours
Representative wost Mr. Mitana reports.
Prerequisite: Spanish 201-202 or equivalent.

Sp. 205. Nineteenth Century Spanish Novel-Three hours The development of the Spaish novel in the nineteenthan The develo Pat the

Sp. 206. Contemporary Spanish Literature-Three hours Mr. Mitana Reading and discussion of representative works in prose and poetry
f modern Spanish writers. The significance of the generation of 1898 . f modern Spanish writers. The significance of the generation of 1898 .
Prerequisite: Spanish $201-202$ or equivalent. Prerequisite: Spanish 201-202 or equivalent.

## HISTORY

Professor Thatcher; Assistant Professor Mui; Instructor Partridge.
A major in History shall consist of twenty-four hours, of which twelve shall be in courses numbered 200 or above. Majors in History are required to take both History 101 and 102 and History 107 and twenty-four hours constituting a major. Majors who wish to teach must elect History 120, but this course may not be counted toward a major.

Hist. 101-102. History of Western Civilization
Three bours each semester

The Staff A chronological survey of the civilization of the western world from Egypt and Mesopotamia to the present time. The development of government, social life, religion, scientific thought, literature and phi losophy, and commerce and industry will be traced in general outline

Hist. 105. English History to the Elizabethan Period
Mr. MuI
A general course on the development of the English nation. The A general course on the development of the English nation. Tar
principal topics are: Britain before the Anglo-Saxons, the Anglo-Saxon period, the Norman Conquest, the development of English common law, the beginnings of parliaments, towns and universities, continental wars, the Tudor dynasty, and the Revival of Learning.
Hist. 106. English History from the Reign of Elizabeth Three bours

Mr. MUI
Traces the growth and expansion of England from a national state to a world empire and later to a mother of commonwealths. The dof the American and the French revolutions, the industrial revolution, political and social reform, growth of the cabinet system, and liberalism.

Hist. 107. American History to 1865-Tbree bours
Mr. Thatcher
A general survey extending from the period of discovery and explora tion to the end of the Civil War.
Hist. 108. American History Since 1865-Tbree bours
Mr. Thatcher
A general survey covering the period from 1865 to the present.
Hist. 120. American and Pennsylvania History-Tbree bour Mr. Partridge
A course of study based upon the documents of American and Pennsylvania History. Emphasis will be placed upon the foundations of American civilization and the rise of significant institutions during the national and state periods. Social, economic, and cultural aspects as well as the political will be treated. This course meets the requirements for permanent certification of teachers by the Commonwealth of Pennsylvania.
Prerequisite: Two courses in History or the consent of the instructor.
Hist. 206. The United States in the Twentieth Century
Three bours
Mr. Thatcher
An intensive study of the period since the Spanish-American War, emphasizing the emergence of the United States as a world power and the economic and social problems of the present century.

Prerequisite: History 107 and 108.
Hist. 223-224. American Constitutional History Three bours each semester
A study of the origins of the American Constitution and the growth of the American constitutional system with special attention to the role of the Supreme Court.
Prerequisite: History 107, 108, and Political Science 101. Restricted to Juniors and Seniors. History 223 is a preerequisite for History 224.
sT. 225. History of the American Frontier-Three hours

A study of the westward movement in American history.
Prerequisite: History 107-108.
Hist. 228 Histor

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\begin{aligned}
& \text { History of the Foreign Policy of the United States } \\
& \text { Fout hours Mr. Thatcher }
\end{aligned}
$$

the relations of policies that give direction to
Prerequisite: He United States with other nations.
to Juniors and Seniors 107,108 , and Political Science 101. Restricted

Hist. 231. Hispanic American History-Tbree hours
A study of the tansit of Mr. Partridge New World and of the rise and growth of the Hispand Portugal to the publics.

Prerequisite: Two courses in History or the consent of the instructor Hist. 234. East Asia in Modern Times-Three bours
This course deals with the impact of western civilization on the different traditions and institutions of China, Japan, and Southeast Asia, with emphasis on the persistent problems arising out of the contact of civilizations and their possible solutions.
Prerequisite: History 101 and 102.
Hist. 235. Soviet Russia-Tbree hours
A study of the culture of the peoples of the U.S.S.R. against the pre-Revolution background.
Prerequisite: History 101 and 102
Hist. 255. Europe in the Nineteenth Century-Tbree bours
Mr. Partridge
A study of the political, social, and cultural development of Europe from the Congress of Vienna to World War I.
Prerequisite: History 101 and 102.
Hist. 256. Recent European History-Tbree hours
Mr. Partridge
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: History 101 and 102

## MATHEMATICS

Assistant Professors Richards, Hull, and Wasilewski; Instructor Creasy.
The major in mathematics is outlined on page 46.
Math. 98. Solid Geometry - Two hours The Staff Prerequisite: Plane Geometry
Math. 99. Algebra Review-Three bours The Staff Secondary Algebra, extending through simultaneous quadratic equations.

Math. 101. Fundamentals of Mathematics-Three bours
The origin and growth of the basic mathematical ideas; nature of postulational thinking
Math. 102. Fundamentals of Mathematics-Tbree hours
A continuation of Mathematics 101
The Staff
Math. 105. College Algebra and Trigonometry-Five hours
A combination of Mathematics 107 and 109.
Prerequisite: Mathematics 99 or its equivalent.
math. 107. College Algebra-Three bours
Proportion, progressions, inequalities, mathematica The Staff mial theorem, complex numbers, roots of equations, permutations ino combinations, probability, determinants, partial fractions.
Prerequisite: Mathematics 99 or its equivalent.
Math. 109. Plane Trigonometry ith

1. 10. Plane Trigonometry-Three hours

Trogonometric functions, solutions of tringes The Staff ties, inverse functions, trigonometric equations.
Prerequisite: Mathematics 99 or its equivalent
Math. 115. Mathematics of Finance I-Tbree hours The Staff Progressions, binomial theorem, logarithms, simple interest, compound interest, nominal and effective rates, equations of value, force of interest, amount and present value of simple annuity, deferred anprice of bond bough, perpetuities, general annuities certain, bonds, tion, depreciation cought between interest dates, sinking funds, amortiza, depreciation, capitalized cost.
Prerequisite: Mathematics 99 or its equivalent.
Math. 118. Introduction to Statistics-Three hours The Staff Frequency distributions and their graphical representation, measures
of central tendency tary curve fitting use dispersion, skewness. kurtosis, correlation, elemen-

Prerequisite: , use of tables of areas under normal curve.
Perequisite: Mathematics 99 or its equivalent.
Math. 122. Analytic Geometry-Four bours
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, paraGeometry. Prere

Math. 125. Differential Calculus-Four hours
The Staff Limits, derivatives, differentials, applications, theorem of mean value. Prerequisite: Mathematics 122.
Math. 126. Integral Calculus-Four bours
Integration, fundamental theorem, applications, series, partial differentiation, multiple integrals.
Prerequisite: Mathematics 125
Math. 127. The Teaching of Mathematics in Secondary Schools Three bours
Building of a program in secondary Mathematics, materials of instruction, aids in teaching, maintenance of interest, testing, informal practice in teaching Arithmetic, Algebra, Plane and Solid Geometry, Trigonometry, and Logarithms.
Prerequisite: Mathematics 125
Math. 208. History of Mathematics-Tbree bours Mr. Richards Beginnings in Babylon and Egypt, Greek Geometry, Arithmetic, and Algebra, contributions of the Romans, Maya, Chinese and Japanese, the Hindus and the "Arabic" notation, the Arabs as custodians of Mathematics in the Middle Ages, awakenings in Europe, Vieta and the Renaissance, Fermat and Descartes, Newton's importance in the seventeenth century, French mathematicians of the eighteenth century, the great expansion and the strengthening of the foundations in the nineteenth century, the trend to abstraction in this century.
Prerequisite: Mathematics 126.
Math. 213. Theory of Equations-Three bours
Roots and graphs of equations, determinants and matrices, miscellaneous topics.

Prerequisite: Mathematics 125.
Math. 216. Solid Analytic Geometry - Three bours Miss Hull Study of space Geometry by means of coordinate systems, including lines and planes and the relations between them, systems of planes, parametric equations of a surface, cylinders, surfaces of revolution, spheres, quadric surfaces, reduction of quadric surfaces to canonical forms.

Prerequisite: Mathematics 125
Math. 218. Mathematics of Finance II-Three bours Mr. Creasy A priori probability, empirical probability, mortality tables, annuities, certain, pure endowment, life annuities, whole life insurance, premiums, premium formulas, reserves, reserve systems, gross premiums. Prerequisite: Mathematics 115

Math. 221. Advanced Euclidean Geometry-Three hours
Mr. Wasileski
The notable lines, points, and circles associated with the triangle; ircles and systems of circles
Prerequisite: Plane Geometry.
Math. 222. Synthetic Projective Geometry-Tbree hours
Mr. WASILESKI
An introduction to projective methods and their application to the point, line, and plane
Prerequisite: Plane Geometry.
Math. 228. Statistical Methods-Three hours
Mr. Creasy
Frequency distributions of one variable, moments as statistical con stants, discrete frequency distributions, theoretical distributions for test ing hypotheses, frequency distributions of more than one variable, ran dom sampling, linear regression and correlation, introduction to multiple
and partial correlation. and partial correlation.
Prerequisite: Mathematics 126.
Math. 240. Differential Equations-Three hours
Solution of ordinary differential equations, applications.
Prerequisite: Mathematics 126.
Math. 251. Advanced Calculus I-Three bours
Mr. Richards An elaboration of the theory and applications of calculus. Prerequisite: Mathematics 126.
Math. 252. Advanced Calculus II-Three bours Mr. Richard Continuation of Mathematics 251.
Prerequisite: Mathematics 251.
Math. 256. Theory of Numbers-Three hou
Mr. Richards
Divisibility, continued fractions, congruences, quadratic residues,
diophantine diophantine equations.
Prerequisites: Twelve hours in Mathematics courses numbered above
200 .

## MUSIC

Assistant Professor Cobleigh; Instructors Balshaw, Henderson, Isaacs, Liva, McHenry, and Moran.
Liberal Arts students wishing to major in Music will follow the pro gram outlined on page 47

A special program for students wishing to transfer at the end of the Apond year to colleges training public school teachers of Music is sug. second year to colleges training public school teachers of Music is sug.
gested on page 63 , and a two-year terminal program is outlined on page 67 .

APPLIED MUSIC
Individual instruction is offered at all levels of difficulty to students in Piano, Pipe Organ, Voice, Violin, and several Band-Orchestra 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. is be oblained for such ste
ar Vice majic may receive one credit each semes ter for Voice or Instrumental study. No examination is necessary if

$$
\begin{aligned}
& \text { credit is not desired by the studen } \\
& \text { The ability, interest, and pro }
\end{aligned}
$$

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 ing semester if the faculty does not recommend opening of the follow Music major.
Mus. 100. Introduction to Music-Three hours
Mr. Cobleigh, Mr. Moran
An elementary course in the art of enjoying and listening 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 Non-technical, it covers briefly the entire range of Music in various
forms, styles, and media. Emphasis is placed upon enlarging the musical horizon through the use of a considerable number of illustrations.
Mus. 101-102-103-104. Music Theory-Five hours each course Mr. Cobleigh, Mr. Moran
The study of Music Theory 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
The writing of music through exercises in harmonic and contrapuntal technics.
The concentration of all Theory into these four courses is in accordance with the method now employed in many of our leading Music schools

The subject matter of the first two semesters of Theory is divided between ear training, two hours; solfeggio, two hours; harmony, one hour. The third and fourth semesters of Theory are divided
ear training, one hour; solfeggio, one hour; harmony, three hours. There is no prerequite for Theory 101
Students may be admitted to the other courses by examination.

Mus. 109. Music History-Three hour
Mr. Cobleigh
The composer and his music related to the social, economic political, and religious background of the period. A survey of musical activity from 1500 to 1800 . Offered in alternate years. Given in 1949-50

Mus. 110. Music History-Tbree credits
Mr. Cobleigh Music in the nineteenth century. The rise of Nationalistic Schools. Italian, German, and French opera. Offered in alternate years. Offered in 1949-50.

Mus. 121-122-123-124. Band-One-balf hour a semester Mr. Moran Membership in the Band is required of all students who are taking the curriculum described on page 63. These students will receive onehalf credit a semester with a total of two credits for four semesters. All students desiring credit for participation in the Band should consult with the Band director.
Mus. 125-126-127-128. Chorus-One-balf hour a semester
Mr. Cobleigh
Membership in the Chorus is required of all students who are taking the curriculum described on page 63. These students will receive onestudents desiring credit for participation in the Chorus should consult with the Chorus director

Mus. 209. Music History-Tbree bours
A detailed study of one of the following topics
(a) The Symphony
(b) Wagnerian Oper
(c) Music since 1900
(d) The Concerto
(e) Vocal Music
(f) Beethoven
(g) Bach
(h) Brahms
(i) The Symphonic Tone Poem

The choice of subject material will be determined as far as possible by we interests of those electing the course. Announcement of the topic will be made on or about May 15 , for the first semester of the next
academic year. All students interested are asked to consult with the Chairme year. All students interested are asked to consult with the niman of the Music Department. Offered in alternate years. Offered Prerequis
Prerequisite: Music 100

Mus. 210. Music History-Three hours
A detailed study of one of the topics listed under Music 209. An nouncement of topics will be made on or about December 15, for the nouncement of topics will be made on All interested should consult with the Chairman of the Music Department before that date. Offered in alternate years. Offered in 1950-51.
Prerequisite: Music 100.
Mus. 215. Instrumentation-Three bours
The instruments of the modern symphonic orchestra, their capabilitie nd limitations. The technique of scoring for small instrumental con
binations; transposis
Prerequisite: Music 102 or the approval of the Chairman of the Department.

Mus. 216. Orchestra and Band Arranging-Three bours
Mr. Mora
Scoring for the large orchestra of the modern symphonic band. The student may select his field of concentration
Prerequisite: Music 215.
Mus. 217. Analysis-Two hours Mr. Cobleigh The technique of composition as disclosed by melodic, harmonic, and structural analysis of Music in varied styles and from diverse periods. Prerequisite: Music 102 or equivalent as demonstrated by an examination.

PHILOSOPHY
Assistant Professors Mitana and Vujica; Instructor Schindler.
A major in the combined fields of Philosophy and Religion consists A major-four hours in Philosophy and Religion. Philosophy 101 and Religion 101 are not accepted for credit toward a major. The courses Religion
may be selected from these two fields as is desired by the student.
Phil. 101. Introduction to Philosophy-Three bours The Staff An introduction to the main problems of Philosophy. Among the opics to be considered are the nature of the universe; the origin of life, the nature of mind and soul; the freedom of the will, mora, The purpose and aesthetic values; the sources and validity of knowledge.
of the course is to acquaint the student with the traditional solution of of the course is to acquaint the student with the traditer ind serive thought,
these problems in order to interest him in serious and reflective these problems in order to interest him in serious and red an intelligent
to coordinate his knowledge, and to aid him in gaining an understanding of the world and life.

Phil. 102. Locic-Tbree hours
Mr. Mitana
The objective of the course is to familiarize the student with the elementary principles of clear thinking. The use and validity of reasoning hypothesis, induction, deduction, and other approaches to knowledge in the field of the Natural and Social Sciences will be presented.
Phil. 203. Individual and Social Ethics-Three bours
Mr. Schindler
A study of the great ethical systems such as Hedonism, Formalism, Utilitarianism and Self-Realizationism. The application of moral principles to the life of the state, the family and the economic order. The nature of virtue, conscience, morgal character and the chere fields of knowledge are discussed in this course.
Phil. 204. Philosophy of Religion-Three hours Mr. Schindler The treatment of religious problems in Philosophy; the nature, scope and validity of religious knowledge; forms and expressions of religious behavior. The aim of the course is to give the student an understanding of the basic principles of Religion and the contribution of religious thought to current interpretations of life.

Phil. 205. Aesthetic-Three hours
Mr. Mitana
Theories of the essential character of beauty, its purpose and standards; the application of general aesthetic principles to poetry and the fine arts; the comparison of the aesthetic with other types of experience.
Phil. 211. History of Ancient and Medieval Philosophy
Three hours

Mr. Vujica
The development of philosophical thought from its appearance in Tonia to the Renaissance. The permanent contributions of the Greek Ionia to the Renaissance. The permanent contributions of the Greek
thinkers, particularly Plato and Aristotle, to Western culture. Patristic thinkers, particularly Plato and Aristotle, to Western culture. Patristic
and scholastic philosophy. The culmination of scholasticism in the systems of Thomas Acquinas and Duns Scotus. Jewish and Mohammedan medieval thought.
Prerequisite: Philosophy 101.
Phil. 212. History of Modern Philosophy-Three hours
The most important systems of Philosophy from the Renaissance The most important systems of Philosophy from the Renaissance
through the end of the Nineteenth Century. Seventeenth Century Rathrough the end of the Nineteenth Century. Seventeen Century Empir-
tionalism (Descartes, Spinoza, Leibnitz). Eighteenth Cel icism. (Locke, Berkeley, Hume) Kant's Criticism and Hegel's Idealism. Post-Kantian and Post-Hegelian philosophies. The impact of modern science in philosophical speculation.
Prerequisite: Philosophy 101

Phil. 213. Recent and Contemporary Philosophy-Three hours Mr. Vujica
The principal trends in Twentieth Century philosophies. The con-
ributions of Bergson, James, Dewey, Croce, Russell, Whitehead, Heidtributions of Bergson, James, Dewey, Croce, Russell, Whitehead, Heidegger, Maritain and other living philosophers to the problems and ideas characteristic of the age.
Prerequisite: Philosophy 101.
PHYSICAL EDUCATION AND HYGIENE
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 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 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 nd a physical examination. The work in Physical Education, so far as possible, is done out of doors and includes soccer, football, wrestling, tennis, and golf. The indoor work during the winter includes a large number of competitive games.
The College women also are given a thorough medical and physical examination before entering upon the program of Physical Education. During the spring and fall, the work for women consists of outdoor natural gymnastics are carried on.
P.E. 101-102. Physical Education and Hygiene One bour each semester

The Staff
This course includes three hours of physical instruction and one hour of class instruction in personal Hygiene each week. It is designed to promote physical coordination, good health habits, and to encourage participation ine activities that will p .
P.E. 103-104. Physical Education-One hour each semester

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

PHYSICS
Associate Professor Hall; Assistant Professor Heltzel; Instructors Ditoro and Taylor.

Phys. 119. Meteorology - Three hours
Mr. Taylor A course for the non-science student to enable him to understand and appreciate the universe in which he lives; the methods, concepts, vocab ulary, and applications of some of the more outstanding principles of Physics to the needs of the individual and the community; and the manner in which the continually expanding frontiers of science affect our future way of life. Lecture demonstration three hours a week.
Phys. 119. Meterology-Tbree hours
Mr. Taylor
A treatment of the fundamentals of meteorology, such as the earth's atmosphere, composition and movement. Atmospheric conditions ac-
companying weather changes. Weather and the evaluation of weather and climate as related to agriculture, architecture, aviation, public utilities, transportation, business, industry health, and recreation. Class three hours a week.
Phys. 201. General Physics-Five hours
Mr. Hall ANd Staff A thorough grounding in the physical laws of Nature, meeting re-
quirements for later work in technical courses. Required of all Science quirements for later work in technical courses. Required of all Science
students and elective for other students. Mechanics, Heat students and elective for other students. Mechanics, Heat, and Sound.
Instruction by demonstration lecture, recitation in the laboratory. Class four hours a week and laboratory three work a week.
Prerequisite: Mathematics 105 ; or 107 and 109.
Phys. 202. General Physics-Five hours
Mr. Hall and Staff Continuation of Physics 201. Electricity, Light and Modern Physics. Prerer hours a week and laboratory three hours a week
Prerequisite: Physics 201
Phys. 251. Electrical Measurements-Tbree hours Mr. Hall Precision measurement of electrical quantities and their application
to the field to the field of Chemistry: includes thermal electromotive force, resistance thermometers, photo electromotive force, elementary electronic ciscuits a week . application. Class two hours a week and laboratory three hours

POLITICAL SCIENCE
Assistant Professor Mailey; Instructors Hibbard, and Kazlauskas.
A major in Political Science shall consist of twenty-four hours. All Courses except Political Science 100 and 101 are acceptable toward the also acceptable. In addition, History 223, 224, and 228, and Economics 212 are
P.S. 100. American Government-Ibree hours Mr. Mailey This course includes a treatment
The course is offered to the natural science students only. Bachelo of Arts and Commerce and Finance students may take the course only with the permission of the instructor.
P.S. 101. American Federal Government-I bree hours

A study of the National Government and the Institutions related to it. Particular emphasis is placed on the Constitutional bases of the American system, the processes by which policy is enacted into law, and the methods by which those same policies are administered. The impact of the citizen on the government and of the government on the citizen is repeatedly emphasized.
P.S. 201-202. Constitutional Law-Three hours each semester Mr. Hibbard
A course intended to show the growth of our Constitution by the case study method. The underlying principles of federalism and the hanging constitutional position of the states are particularly em-

Political Science 101 (Only Juniors and Seniors a Prerequ
eligible.)
P.S. 203. Politics and Political Parties-Tbree bours Mr. Malley A course intended to analyze the movements of political parties, elec tions, and the various methods used to gain contro
Prerequisite: Political Science 101 .
P.S. 204. Public Opinion and Propaganda-Tbree hours

Mr. Malley
study in the behavior of governance, including the factors whic determine attitude, the formation and expression of public opinion, an propaganda as used by pressure groups.
Prerequisite: Political Science 101 and Sociology 100
P.S. 205. State Government-Three hours

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

Prerequisite: Political Science 101
P.S. 206. Municipal Government-Tbree bours

Mr. Hibbard
course undertaking the study of the organization, work, and a ministration of local government. Since the national government ha assumed a new significance today, special attention is given to the rela tionship between local and national government.
Prerequisite: Political Science 101.
P.S. 207. Public Administration-Tbree bours

Mr. Mailey
A study of the organization, activity, problems, and the recruitment policy of the public service.
Prerequisite: Three courses in Political Science.
p.S. 208. Labor Law


A course dealing with the role of government in labor relations and with the laws affecting conditions of employment and employer-employee relations. History and philosophy underlying labor legislation are stressed.
Prerequisite: Political Science 101.
P.S, 210. Comparative Government-Tbree bours

Mr. Kazlauskas
A study of the government of the world. Since political institutions in the American system are traceable to the English, the English Government is stressed.
Prerequisite: Political Science 101.
P.S. 212. International Relations-Three hours

Mr. Kazlauskas
A broad, general course which aims to present many of the factors that condition the foreign policies of nations.
Prerequisites: Political Science 101 and 210
Prerequisites: Political Science 101 and 210.
Desideratum. History 107, 108, 255, 256, Economics 225.
P.S. 213. International Law-Three bours

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: Three courses in Political Science.
Desideratum: History 107, 108, 255, 256.
P.S. 214. Political Theory-Three hours ereignty, and the state.
Prerequisite: Three courses in political science.

## PSYCHOLOGY

Assistant Professor Dominguez; Instructors Boyle, Guttman, Harker Kanner, and Riley
A major in Psychology consists of a minimum of twenty-four hours in this field. Psychology 100 is not accepted toward a major; Sociology 255 is acceptable.
The department requires that Psychology majors substitute one year of a laboratory science in Biology, Chemistry, or Physics in place of Biological Science. Students planning to take graduate work in Psychol ogy must take either French or German to meet future graduate shool
requirements. equirements.
The major in Psychology is designed for students who plan to continue the study of Psychology on a graduate level, or whose interest lies in the teaching of Psychology in college, or in the application of Psychology to
such fields as advertising, clinical work, business, or educational or insuch fields as advertising, clinical work, business, or educational or in-
dustrial personnel. The student is cautioned that an undergraduate major in Psychology does not qualify him for professional psychological work. Advanced graduate study is always required before the individual can qualify as a psychologist. In a great many fields today, the Ph.D. degree is being required for qualification.
Students who wish to become certified by the Pennsylvania Department of Public Instruction as psychological examiners or as public school psychologists should plan their program carefully under the direction of their faculty adviser so that necessary courses may be taken.
Courses numbered above 250 are open to Seniors only.
Psy. 100. General Psychology-Three hours The Staff An introduction to the study of human behavior. The emphasis is on the study of the individual and his reactions to other individuals and to his environment. An attempt is made to equip the student with certain technical vocabulary. Not open to Freshmen.

Psy. 201. Advanced General Psychology-Three hours The Staff
A more detailed study of some of the topics treated only superficially in the introductory course. More attention is given to such subjects as learning, perception, emotions, etc. Recommended for prospective majors.

Prerequisite: Psychology 100.

Psy. 203. Introduction to Experimental psychology Three bours
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.
Prerequisite: Psychology 100
Psy. 204. Advanced Experimental Psychology-Three bours
A more advanced lecture and laboratory course, including practic A more advanced lecture and laboratory course, including practice
with the older as well as with the more recent methods employed in psychological research.
Prerequisite: Psychology 203.
Psy. 206. Applied Psychology-Tbree bours Mr. Kanner
A survey of significant contributions to individual differences. A survey of significant contributions to individual differences, to the individual, the home, the school, and to vocational and community life.
Prerequisite: Psychology 100.
Psy. 207. Child Psychology-Tbree hours
The course is designed to present a general view of the development and growth of the child. It is concerned primarily with the heredity and native equipment of the child and the manner in which this equipment is modified during childhood. Emotional development, language development, and social relations are considered.
Prerequisite: Psychology 100.
PsY. 208. Human Behavior-Three hours
Human adjustment and maladjustment to life situations with emphasis on motivation, emotional control, personality formation, and the treatment of the lesser personality disorders.
Prerequisite: Psychology 100.
PsY. 212. History and Development of Psychometric Methods Three bours

Mr. Riley
A study of the theory of psychological testing. The principles underlying test selection, standardization, and evaluation are stressed. This course is a prerequisite for the following courses: Psychology 251, 252,
and 255. Prer

Psy. 251. Industral Psychology-1 bree boun Miss Harker An introduction to the industrial application of Psychology in the selection, classification, and training of employees; reduction of monotselection, classification, maladjustment worker; accident prevention; work
ony and fatigue; the mater ony and fatigue; the maladjustment worker, accile.
conditions; and employee motivation and morale.
Prerequisite: Psychology 212.
Psy. 252. Personnel Psychology-Tbree hours
Miss Harker PSY. 252. Personnel psychology-1 introduction to the study of psychological factors underlying personnel procedures in business, industry, and education. Discussion of case studies in the settlement of personnel problems in the business world. The administration of the personnel program is analyzed from he point of view of the psychological effects it may have on the employee.
Prerequisite: Psychology 251 or permission of instructo
Psy. 254. Systematic Psychology-Three hours
Mr. Riley
Psy. 254. Systematic PsychologY-1
a historical introduction to the conflicting points of view in recent A historical introduction to the conflicting points of view in recent Psychology, followed by a study of the theories of
feeld as Watson, Freud, McDougall, Thorndike, and Kohler.
Prerequisite: Psychology 100, 201, and one additional course.
Psy. 255-256. Clinical Psychology-Tbree hours each semester Miss Dominguez
A detailed study of the administration and interpretation of some of A detailed study of the administration and interpretationity for actual the individual tests. The student is given the opportunits The interexperience in testing in the pretation, by the clinical method, of normal and abnormal behavior o pretation, by the clinical method, of normal and abnormal bethe including examinations, classification, prognosis, and remedial measures. Prerequisite: Psychology 207 and 212.
Psy. 257. Abnormal Psychology-Three bours
THE SNith A general survey of the principal forms of mental
emphasis on causes, symptoms, course, and treatment.
Prerequisite: Psychology 201 and 208. Open to Seniors only
Psy 301-302. Research in Psychology-Three hours The Staf Psy. 301-302. Research in PsychologY-Tbree bours under supe vision.
Prerequisite: Permission of head of department and open to Psychol ogy majors only.

## RADIO

Instructor Morgan and Staff: Hal Berg and Thomas Bigler
Ra. 100. Introduction to Radio-Three bours
Mr. Morgan and Staff
An orientation course covering the history, development, organization, and control of broadcasting. Including the international system, social and economic influences, as well as the administration, programming, and operation of the individual station.
Ra. 102. Radio Announcing-Tbree bours Mr. Morgan and Staff A laboratory-studio course in basic microphone techniques, stressing practical experience in the procedures and routines of announcing. Also developing an understanding of the announcer's qualifications, skills, and work.
Prerequisite: Radio 100
Ra. 201. Radio Writing - Three bours
Mr. Morgan and Staff An intensive study of the basic principles of good radio continuity writing, providing class instruction in the writing of all kinds of copy: commercial announcements, program continuity, dramatic scripts, etc. Individual exercises and assignments.
Prerequisite: Radio 102
Ra. 202. Radio News Editing and Broadcasting-Three hours
Mr. Morgan and Staff
A course in the editing, building, writing, and presentation of the
news program. Information about news sources and the history and ews program. Information about news sources and the history and portunities for actual preparation and presentation of newscasts.
Prerequisite: Radio 102
Ra. 203. Control Room Techniques and Production Problems Three bours

Mr. Morgan and Staff A course designed to acquaint the student with the technical aspects of control room operation, such as handling of console and turntables, proper care and cueing of records and transcriptions. Also a study of tion signals, handling of remote broadcasts, et cetera. of sudio prode Prerequisite: Radio 102.
Ra. 204. Radio Advertising-Three hours Mr. Morgan and Staff A study of Radio Advertising and its relation to other media. Orsanization of the sales staff, and the selling and servicing of commer-
cial accounts. Problems of time buying, audience measurement, market ing statistics as they relate to local, regional, and national accounts. Prerequisite: Radio 102.
Ra. 206. Radio Acting and Directing-Three hours
Mr. Morgan and Staff A workshop course affording opportunity for student participation in radio broadcasts and all types of radio dramatics. Also including experience in the techniques of radio production, tracing the development of a program from the idea stage to the presentation, emphasizin script reading, rehearsal techniques, sound effects, music, et cetera.
Prerequisite: Radio 102 . Prerequisite: Radio 102.

## RELIGION

Assistant Professor Vujica; Instructors Friedman and Schindler
A major in the combined fields of Philosophy and Religion consists of twenty-four hours in Philosophy and Religion. Philosophy 101 and Religion 101 are not accepted for credit toward a major. The courses may be selected from these two fields as is desired by the student.

Rel. 101. History of Religions-Tbree bours

> Mr. Vujica, Mr. Friedman

Nature and origin of Religion. Significant founders and leaders of the great historical and living religions. Sacred literatures, beliefs, and rituals. A comparison of the most important features of the great religions. The contributions of Religion to the development and preserva tion of cultural values.
Rel. 201. The Literature of the Old Testament-Three bours
Mr. Friedman
A study of the religious thought and practices of the early Hebrews. Codes and critical analysis of the earlier writings of the Old Testament. Comparative studies are made of the Douay, King James and Jewish translations of the Old Testament.
Prerequisite: Religion 101.
Rel. 202. The Teachings of the Great Hebrew Prophets
Tbree bours
Mr. Friedman A study of the Prophetic and Wisdom literature. Emphasis is placed apon the Prophetic and Post-Exilic periods of Hebrew history. The gradual rise of
of Religion 201
Prerequisite: Religion 101.

Rel. 204. The Literature of the New Testament-Three bours Mr. Schindler
A study of the types of literature found in the New Testament. Problems of language and authorship are discussed. The religious teachings of Jesus and the Apostolic Church are studied against the background of Prerequisite: Religimed in their significance for contemporary life. Prerequisite: Religion 101.

## RETAIL MERCHANDISING

Professor Rosenberg; Associate Professor Agranat; Instructors Bach man, Cooney, McLaughlin, Riley.
R.M. 101. Principles of Retailing-Tbree hours

Mr. Cooney Policies and practices of the various retail institutions; types of retail sales and service policies; employment, training and welf fore and layout,
R.M. 102. Retail Store Organization and Management Three hours
Basic principles of successful retail store organization; study Cooney organizational structure of department stores; organization and functions of operating divisions; planned observation in employment, training ment departments. Field trips trapping, phone, mail order and adjust-

RM, 201 .
R.M. 201. Color and Design-Two hours

Ages of civilization and
symbols, classicism, modern design. Components of comper Periods, style lems of function; proportion, balance, rhythm, color, light, texture Fundamentals of interior decoration. Color and design, light, textur
R.M. 205. Retail Advertising and Sales Promotion - Two hou The Staf
Study of basic principles of Retail Advertising and Sales Promotion. Organization and procedure of advertising department in retail stores; types of retail advertising; copy, headline, layout, type, advertising media, display; research.
R.M. 207. Retail Selling-Tbree hours

Fundamentals of retail selling; constructive attitude; mnowledge of iques; buis and the store; knowledge of the customer; selling tech selling; building permanent business. Laboratory observation; actual
sel
R. 210. Elements of Merchandise-Tbree bours The Staff Merchandise information; fibers and fabrics; history, rise, production, Merchandise information; fibers and fabrics; history, textile terminology, manufacturing process from fiber to finished fabric, cexie , new developments.
Natural, industrial, and synthetic materials; properties, technologies, Natural, industrial, and synthetic monstruction, leather and leather goods, glass, pottery, china.
R.M. 212. Purchases and Merchandise Control-Three hours

Importance of purchases; principles and methods; forms of proceImportance of purchases; principles and methods; forms of preth their dure, handling, storing, and warehousing cotrol systems; application of control,
ystems.
Prerequisite: Approval of Instructor.
The Staff
R.M. 214. Retail Buying - Two hours

Buying as a career; types of organizations; functional bureaus as aid in buying; determination of what to buy; analysis of customer demand where to buy; when and hoired.
P. Iequiste: Approval of Instructor

Prerequisite: Approval of Instruc
R.M. 215. DISPLAY-Two hours display of merchandise and services Techniques of store arrangem within the store; window display
R.M. 217. Fundamentals of Fashion-Tbree bours The Staff Fashion as a social force. How the fashion world works. Fashions Fashion as a social in Paris, England
Prerequisite: Approval of Instructor
2 219. Retall Personnel Relations-Tbree hours Mr. Rlley R.M. 219. Retail Personnel relalysis; employment procedure; wage Retail personnel policies; job analysis; employ en evaluation; employee
plans and incentives; employee training; employee plans and incentives; employee training; employee evalut iona problems in retailing.
R.M. 220. Organization and Operation of the Small Store Two bours

The Staff
Importance of small business; factors in business success, of new businesses; financing; location; policies; managemend business an the future.

RM. 222 Retal Credits and Coliections-Two hours The Stafe Organization of credit department; charge accounts; passing on application for credit; retail credit bureau; mercantile agencies; salescheck procedure; collection procedure and correspondence, personal financing;
R.M. 224. Recent Trends and Developments in Retaling
$\qquad$
Review of fundamentals; trends in retailing; study of developments in cooperation with retail store executives. Laboratory work; reports on trends and developments.

## SECRETARIAL STUDIES

Professor Rosenberg; Associate Professor Bedillion; Instructors Davies, Jenkins, Whitby.
S.S. 99. Personal-Use Typewriting-No Credit Miss Bedillion Development of skill in Typewriting; development of an understanding of good style and form in typewritten material; application of typing skill to the writing of business letters and term papers. Laboratory fee required. Four hours a week.
S.S. 101-102. Shorthand and Typewriting
Four hours each semester

Miss Bedillion Development of reading and writing skill in Gregg Shorthand; development of skill in Typewriting, and ability to apply skill to typical office problems; training in transcription from Shorthand notes, during second quired. Eight hours each week. Two hours lecture, six hours laboratory
S.S. 105-106. Shorthand-Two hours each semester Mr. Jenkins Development of reading and writing skill in basic Gregg Shorthand with emphasis on mastering fundamental principles, during the first semester; dictation and transcription, including principles of English during the second semester. Four hours each week. All laboratory.
S.S. 107-108. Typewriting-Two hours each semester Mr. Davies S.S. 107-108. TYPEWRITING-Two hours each semester Mr. DAVIES
Development of skill in Typewriting; application of skill to letter
writing envelopes Writing, envelopes and cards, tabulation problems, copying from rough Shorthand noscript writing; study of form and style; transcription from hours each week.
S.S. 109-110. Advanced Stenography-Four hours each semester

Miss Bedillion
Review of Gregg Shorthand with emphasis on fuency and legibility development of speed and accuracy in Shorthand, Typewriting, and ranscription; application of typing skill to letter writing, tabulation, ough drafts, commercial forms; preparation of telegrams, manuscripts and term papers, stencils and Ditto master copies; training in punctua ion, spelling, and other English problems; study of correct form and tyle; development of desirable work habits, attitudes, and traits. Lab oratory fee required. Eight hours each week. Two hours lecture, si ours laboratory.
Prerequisite: Secretarial Studies 102
S.S. 113-114. Advanced Shorthand-Two bours each semester

Review of Gregg Shorthand with emphasis on fluency and legibility dicucy and legibility;
 ttitudes. Four hours each week
Prerequisite: Secretarial Studies 106
S.S. 115-116. Advanced Typewriting-Two hours each semester Development of greater speed and accuracy in Typewriting; review of form and style in typewritten material; application of typing skill to etter writing, tabulation, rough drafts, commercial forms; preparation of telegrams, manuscripts and term papers, stencils and Ditto maste opies; transcription from Shorthand notes; development of desirabl work habits and attitudes. Laboratory fee required. Four hours each cek
Prerequisite: Secretarial Studies 108
S.S. 120. Secretarial Accounting-Three hours The Staff Fundamental principles of Accounting and their application to the keeping of books and records in business and professional offices.
S.S. 201. Medical Stenography-Three hours Miss Bedillion Study of accepted procedures in typical medical offices, clinics, and hospitals; application of stenographic skills to medical dictation; tran scription of case histories taken from hospital records; specialized dor insurance companies, for Veterans Administration, and for Workmen's Compensation. Six hours each week. Two hours lecture, six hours lab oratory.
Prerequisite: Approval of Instructor.
S.S. 203. Speech Reporting- Two bous

Miss Bedillion Speed dictation for speech reporting. Four hours each week
Prerequisite: satisfactory background in English; ability to take dictation at 100 words a minute and to transcribe notes rapidly and accurately. en lecture, three hours laboratory
Prerequisite: Approval of instructor
S.S. 205. Office Procedures and Office Machines-Four hours

Application of skills to integrated office problems; typical business and professional offices; study of personal procedures in requirements for secretaries; understanding and use of various commercial forms; operation and use of office machines and equipment; personal and vocational guidance. Laboratory fee required. Eight hours each week. Two hours lecture, six hours laboratory.
Prerequisite: Approval of instructor.
S.S. 206. Office Management-Four hours

Miss Bedillion
The organization and management of the office with emphasis on the administration and supervision of office routines; problems of office and effective use selection of stationery and other office supplies; design classification; selection forms; job analysis, specification, evaluation, and office arrangement and working conditions; and specialized equipment; compensation of office workers; the measuremployment, training, and of standards. Six hours each week. Two hours letting atory.
Prerequisite: Approval of instructor
SOCIOLOGY AND ANTHROPOLOGY
Assistant Professor Symonolewicz, Instructors Chwalek, and Hol
brook.
A major in Sociology consists of twenty-four hours. Although Sociol cepted toward 100 is a prerequisite for all the courses in Sociology, it is not ac A major in Sociology must ing nor is Sociology 200.
Alogy 255, 265, and in must include the three following courses: Soci ology 255,265 , and 280 . Political Science 204 may also be accepted
oward the major in Sociology The courses given by the De
are divided into six groups: Department of Sociology and Anthropology
I Sociological Theory
A systematic view of Socion to Sociology-Three hours The Staff approach to questions about man in providing essentials for an intelligent sociological problems.

Soc. 280. History of Sociological Theories-Three bours
A historical study of the development of Sociology as a science, traced through its principal leaders
Prerequisite: Two courses in Sociology
Soc. 285. Social Change-Three hours
Mr. Symonolewicz
Concepts, theores and methods in the study of social change. Trend Concepts, theories and methods in the study of social change. Trenc Prerequisite: Two courses in Sociolog

> II Population and Human Ecology

Soc. 215. Urban Sociology-Three hour
The development of modern cities; effects of organization and personality patterns, major social problems of the cities.
Prerequisite: Sociology 100.
Soc. 225. Population Problems-Three hours Miss Holbrook A study of qualitative and quantitative aspects of population with special reference to modern trends in growth, composition, migration, and differential rates in relation to the social structure
Prerequisite: Sociology 100.

## III Social Organization

Soc. 200. Marriage and the Family-Three hours
Mr. Chwalek, Mr. Symonolewicz
The development of marriage and the family in ethnological and his orical perspective. Problems of adjustment to modern condition Family disorganization and changes in marital and domestic relation or Practical aspects of marrig. Factors responsible for marital success or ailure.
Prerequisite: Sociology 100.
Soc. 210. Social Institutions-Three hour
Miss Holbrook, Mr. Symonolewic A study of the nature, development, and functioning of major social institutions
Prerequisite: Sociology 100,

## IV Social Change and Social Disorganization

Soc. 230. Social Problems-Three hours
Miss Holbrook, Mr. Symonolewicz A survey of most pressing contemporary social problems and an ex amination of current theories of social disorganization.
Prerequisite: Sociology 100.
Soc. 235. Criminology-Three hours
Miss Holbrook
Analysis of crime as a form of social behavior. A study of the individ Prerequisite: Soctors in juvenile delinquency and criminal careers.
Prerequisite: Sociology 100.
soc. 245. Introduction to the Field of Social Work
Three bours
Three bours

Mr. Chwalek
A pre-professional Mr. Chwalek requirements of the different fields of social dealing with the nature and Prerequisite: Sociology 100 and Psychology 100
V Social Psychology

Soc. 255. Social Psychology-Three hour
An analysis of the main forms of social Mr. Symonolewicz
Prerequisite: Sociology 100 and Psychory 10
Soc. 260. Cultura pin
A comparative study of the development and functioning ofewicz
personality in various
personality in various cultures from the thent and functioning of human ogy and Social Anthropology.
Prerequisite: Sociology 255
VI Antbropology

Soc. 265. General Anthropology-Three
A general survey of the field of Anthropology stressing its cultural aspects; fossil man and prehistoric cultures; modern races and thei characteristics, and elements of culture. Prerequisite: Sociology 100.
Soc. 270. Peoples of the World-Three hours Mr. Symonolewicz Aricalid survey of the peoples and cultures of the world in their his Prerations
Prerequisite: Sociology 100

Soc. 275. Minority Groups-Three hours
Miss Holbrook, Mr. Symonolewicz A study of the ethnic, religious, and racial minority groups in Amer an society; their origin, social organization, and contributions culture; the proces

## Education

SAFETY
Safety 1. Driver Education and Traffic Safety in the SecondARY Schools
Driver and pedestrian responsibilities, sound driving practices; so (iety's responsibilities; what makes the automobile go; driver and pede trian attitudes; city driving; open-road driving; adjusting driving to con ditions; road training; bicycle safety; practice driving; practice teachin of driving school patrols; school bus transportation; behind the wheel instruction emphasized.
safety 2. Material and Methods of Teaching safety in the Elementary Schools
The approach to safety instruction in the elementary schools; integration of safety material with the social studies program; techniques of instruction; consideration of physical arrangements in school buildings and programs from the standpoint of pupil safety; materials which can be obtained or created for safety instruction with young children.

Safety 3. Material and Methods of Teaching Safety in the SECONDARY Schools
Inspection and testing programs in the secondary schools; broadening of techniques of instruction; practical means of developing the safety attitude; a survey of current materials for use in safety programs. The course, will feature a study of testing devices and standard practices in
their use, and classroom demonstrations.
safety 4. Organizations and Administration in Safety edu cation
A discussion of the problems, procedures, principles and techniques involved in the organization, administration and supervision of accident prevention programs. Designed for college instructors, school adminisfor, organizing sad condur,

Safety 5. The Psychology of Accident Prevention
Treats one of the major approaches to the solution of the safety problem by means of developing better understanding of human nature and methods of dealing with it. It may be assumed that man is interested in his own bodily safety; but it must not be assumed that that interest is always active. Ways will be discussed to arouse and develop the interest that lies dormant; or is covered up by bad habits of attention, emotion because he is of low-grade intelligence, lacks knowledge, or has not been properly trained.

Safety 6. Visual and Other Aids in Safety Education
Discussion and demonstration of practical values in visual and other sensory aids; standards for appraising and their relationship to the cur riculum; guiding principles and techniques; minimum equipment and sources; housing and distribution.

## BUCKNELL UNIVERSITY COURSES

Professor Sauvain; Associate Professor Farley; Assistant Professor Millward; Instructors Dominguez, Hall, Miller and Morris.
The Department of Education is responsible for the professional training of teachers. In order that only persons who are capable of rendering adequate service may be sent into the profession, the privilege of taking the course in practice teaching (Education 207) is restricted
to students whose scholastic average for the Freshman and Sophomore years is C or better. Additional requirements are good health, character personality, and acceptable spoken and written English. Students planning to teach should arrange their programs so that they may take the practice teaching, Education 207, in either semester of the Senior year Students will be accepted for practice teaching on the basis of the recommendation of the Education Committee and will be required to do meeting with the Supervisor of Teacher Training three afternoon periods per week for regular class work.
101. Introduction to Education-Three hours

A broad, general introduction to the field of Education, the various branches of the service, preparation demanded by each branch, the out standing problems in the field at the present time, teaching as a proession, place of teaching as a profession in the social order, the preparation and personal qualifications required of the successful teacher
201. Educational Psychology-Tbree hours.

A psychological study of the nature of the learner and the nature of A psychological study of the nature of the learner and the nature of
the learning process. A consideration of such problems as the imthe learning process. A consideration of such problems as the im-
portance of the interaction of the child's and the teacher's personalities, the educational importance of individual differences, motivation in education, transfer of training, and a psychological evaluation of methods of teaching.
Prerequisite: Psychology 100.
207. Student Teaching-Eight hours

Students observe several teachers and teach in co-operation with and under the supervision of experts. Co-operative planning, teaching, and
evaluation of results are emphasized. Large group, small group and individual conferences provide opportunity for discussion of principles and problems.
Prerequisite: Two courses in Education, including Education 201.
214. Guidance-Three hours

A general survey of the principles and problems of guidance, and an
introduction to activities and the a public school. Required for the Pennsylvania a guidance program in counselors' certificates. Juniors, Seniors, and guidance teachers' and Prerequisite: Education 201.
216. Occupations and Occupational Research-Tbree bours A survey of fields of work in America with consideration of require of presenting such information to pupilss jeb evelopment, etc.; methods niques in vocational guidance, placement, and follows and research techPennsylvania guidance Seniors, and graduate students.
Prerequisite: Education 201.
250. Extra-Curricular Activities-Two hours

Consideration of the place of extra-curricular activities in the educaendency to bring them organization of extra-curricular activities; the guidance program.
251. The Modern Elementary School-Two hours

An effort is made to evaluate the trends in the modern elementary school. tion, and administratioluate the aims, objectives, curriculum, organizaa view to improving the the better elementary schools of today with democratic ideal.
258. Visual Education-Two hours
and plans for the materials and techniques of visual education; principles in the work of the use of visual aids; the incorporation of visual instruction Prerequisite: Edustrom.
303. F
303. Educational Measurement-Tbree hours

A consideration of the characteristics, uses, and interpretations of intelligence and subject-matter tests available for school use. A study
of the usual methods of treations of of the usual methods of treating scores. Supervised administration,
scoring tice in the constructiotion of standardized tests in public schools. Practice in the construction of objective tests.
304. Public School Administration-Two hours

The principles of educational organization and administration in their application to state, city and county schools. For students who plan to enter administrative or supervisory work. Required course for all administrative certificates.
356. SECONDARY SCHOOL SUPERVIIION - Two hourrs

A discussion of whether supervision can be carried on in the secondary school. If so, what philosophy must be accepted, and what techniques of supervision will succeed among a group of specialists.
363. Organization and Administration of Guidance Programs Two hours
The place of guidance in the school program; consideration of types of guidance programs that appear in a variety of school systems; principles that should underlie the organization of such a program. Each student attempts to plan a guidance organization for a specific school system.

Certification Requirements for Secondary School Teachers
Pennsylvania
Teaching Subjects:
(a) Academic subjects: 18 semester hours in each subject. ExcepAcademic subjects:
tions in Science and Social Studies will be explained in the Education office.
(b) Commercial subjects: A total of 30 hours in commercial subjects with specific requirements as follows:
Bookkeeping and Accounting
Commercial and Economics Geography Commercial Law
Office Practice
Shorthand
Typewriting
Salesmanship
Junior Business Training
Economics
Retail Selling
Business English: (a) Twelve semester hours in English. (b) Not less than two semester hours in Business English or Cor. respondence.
Education Courses:
Education 101, 201, 207, and six hours from an approved list of elec tives. History 220 is required for all certificates.

To the teacher's certificate may be added Guidance Certification for the teaching of Occupational Information which requires six semester hours (Education 214, Education 216, and Economics 223), in addition to twelve semester hours in Social Sciences. This certificate is required for teachers of Occupational Information.

Basic Requirements:
New Jersey
English, 12 hours
Teaching subjects
A major of 30 semester hours, and a minor of 18 semester hours or two minors of 12 semester hours each in prescribed fields. For pre-

Education Courses:
Students planning to teach in New Jersey, should take at least one two hour Biology course in addition to Biology 100. Such students should also include Education 201, 301, and 360, a three-hour methods course, and eight semester hours of practice teaching, which must in lude 150 hours of actual teaching.

Teaching Subjects:
Mathematics, 15 hours; English, foreign language, History, Biologica or Physical Science, 18 hours; Romance languages (any two), Classical languages, Social Studies, Sciences, 30 hours.*
Education Courses (18 semester hours required)
History, Philosophy, problems or principles of Educa
tion
Secondary school methods and materials
3 to 6 hours
Adolescent development and/or Psychology for 3 to 6 hours
teachers .............ent and/or Psychology for
Observation and supervised practice teaching $\ldots \ldots .3$ to 6 hours
To teach a modern foreign lanctice teaching ........ 2 to 6 hours language must be satisfactorily passed, in arten examination in the above requirements.

> Students whourer States

Confer early in expect to teach in states other than Pennsylvania should specific state requirements.

## GRADUATE WORK IN EDUCATION

Two graduate degrees are offered, the Master of Arts and the Maste Science in Education. They are based on the requirements for the corresponding undergraduate degrees, the Bachelor of Arts and the Bachelor of Science in Education, as given at Bucknell.
The candidate, after satisfying the requirements for beginning graduate work, will consult the head of the Department of Education relativ o his field of concentration, and will be assigned an adviser, who will assist him throughout the remainder of his course.
A thesis is optional with the student. The student who elects not 0 write a thesis is required to take a research seminar in Education. The andidate must pass an examination composed of two kinds of ques tions-(1) general or integrative questions pertaining to the total fiel
of Education, and (2) specific questions which may be chosen in thre of Education, and (2) specific questions which may be chosen in three
of the six following fields of concentration: Administration, Educational Psychology and Measurement, Secondary Education, Elementary Educa tion, Guidance, and Supervision. An additional oral examination may be required.

## The Evening Division

To meet the needs of ambitious men and women, who, while em College has organized the Eveniy come from college instruction, Wilkes as organized the Evening Division
A wide program of courses is offered each semester from which selec and made according to individual tastes and requirements.
couses offered by the Eve
,
desire and noed in business or governmental organizations who desire and need training to fit them for advancement.
raining for work in a new field.
Teackers, nurses and those in other professions who desire add fional training in one or more subjects in order to meet the pro
4. Business executives dinder them.
discussion courses offered in variousted in advanced problems and
Those who wish to prepres field.
aspire through the study of accounting courses accounting and certification by the Commonwealth of Pounses to qualify fo Public Accountants.
Individuals wishing to broaden their kow er skill in certain fields for their person sata provement.

Adents. Upon completior for evening courses are classed as special school transcript and his record as a special student will be tudent's high the request of the student, and he may then be registered as a ded at nraduate. However, no student may expect to count toward an under Students who more than thirty credits earned as a special student.
they are qualified do not seek a degree are admitted to all classes which and experience to take by reason of their maturity, previous education dent registering to have first is advisable, when possible, for each stuof part or all high school training does his high school course, the lack advantages of the practical training of the Coller an applicant from the ded to follow special courses of instruction in which pe wishes is quali-




[^0]:    Practical experience in Accounting is required
    lowing the Junior year or during the Senior year.

[^1]:    Chemical engineers will register for Chemistry 102 ( 6 hours). All other Engineering
    students will register for Chemistry 104 (4 hours).

[^2]:    Chemical engineers will register for Chemistry 102 ( 6 hours). All other Engineering
    stedentsts will register for Chemistry 104 (4 hours).

[^3]:    Students who have had shorthand and typewriting in high school may sub stitute electives for one or more of the courses in the stenographic skills, pro
    vided they demonstrate dey demontrate adequate skill. Placements examinations will be give

