

Volume 1 APRIL 20, 1948 Number 3

SUMMER SCHOOL

NUMBER 1948

INFORMATION REGARDING

SUMMER SCHOOL CLASSES

UNIVERSITY OF MARYLAND

COLLEGE PARK, MARYLAND

OFFICIAL PUBLICATION OF THE UNIVERSITY OF MARYLAND SUMMER SCHOOL NUMBER

SUMMER SCHOOL, 1948

CALENDAR

June 18, 19, Friday-Saturday—Registration, new graduate students only.
 June 21, Monday—Registration—all undergraduate students and matriculated graduate students.

June 26, Saturday—Classes as usual.

July 4, Friday-Holiday.

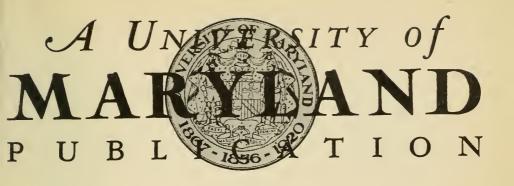
July 12-15-P.T.A. Summer Conference.

July 10, Saturday-Classes as usual.

July 31, Friday-Close of Summer School.

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SUMMER SCHOOL

NUMBER 1948

INFORMATION REGARDING SUMMER SCHOOL **CLASSES**

June 21, 1948, to July 30, 1948

UNIVERSITY OF MARYLAND COLLEGE PARK, MARYLAND

VOL. 1

APRIL 20, 1948

No. 3

A UNIVERSITY Of ARYLAN UBLICATION

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Edited by Harvey L. Miller, Director of Publications, University of Maryland.

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Summer Scene, University of Maryland

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SEE MAP OF CAMPUS

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GENERAL INFORMATION

The 1948 Summer School of the University of Maryland will open with registration on Monday, June 21, and extend for six weeks, ending Friday, July 30.

In order that there may be 30 class periods for each full course, classes will be held on Saturday, June 26, and July 10, to make up for time lost on registration day and July 5, which is a holiday. All divisions of the University at College Park, except the College of Engineering, will participate in the Summer School.

TERMS OF ADMISSION

Teachers and special students not seeking degrees are admitted to the courses of the Summer Session for which they are qualified.

The admission requirements for those who desire to become candidates for degrees are the same as for other sessions of the University. Before registering, a candidate for a degree will be required to be admitted to the University. He should see Dr. E. F. Long, Director of Admissions, and also should consult the Dean of the College in which he seeks a degree.

Graduates of accredited normal schools with satisfactory normal school records may be admitted to advanced standing in the College of Education. The objectives of the individual student determine the exact amount of credit allowed. The student is given individual counsel as to the best procedure for fulfilling the requirements for a degree.

ACADEMIC CREDIT

The semester hour is the unit of credit. A semester credit hour represents one lecture or recitation a week for a semester, which is approximately seventeen weeks in length. Two or three hours of laboratory or field work are counted as equivalent to one lecture or recitation. During the Summer Session a course meeting five times a week for six weeks requiring the standard amount of outside work is given a weight of two semester hours.

Students who are matriculated as candidates for degrees will be given credit towards the appropriate degree for satisfactory completion of courses. All courses offered in the Summer Session are creditable towards the appropriate degree.

Teachers and other students not seeking degrees will receive official reports specifying the amount and quality of work completed. These reports will be accepted by the Maryland State Department of Education and by the appropriate education authorities in other states for the extension and renewal of certificates in accordance with their laws and regulations.

NORMAL AND MAXIMUM LOADS

Six semester hours is the normal load for the Summer Session. Undergraduate students in the College of Education and teachers in service may take a maximum of eight semester hours if they have above-average grades. Extra tuition is charged for loads over six semester hours. For details, see "Tuition and Fees."

REGISTRATION

Registration for the Summer School will take place on Monday, June 21, from 9 a.m. to 4:30 p.m. for all students except new graduate students. Graduate students who are not matriculated should register on Friday and on Saturday morning, June 18 and 19, and should report to the office of the Graduate Dean, Dr. C. O. Appleman, 214 Science Building.

Teachers and other Summer Session students, except regular undergraduates who are candidates for degrees in colleges other than the College of Education, will register in the office of the Director of the Summer School, Science Building. Regular undergraduate students will register in the offices of their respective deans. After registration materials have been completed and approved, bills will be issued and fees paid at the offices of the Registrar and Cashier in the Administration Building.

Instruction will begin on Tuesday, June 22, at 8:00 a.m. The late registration fee on Tuesday, June 22, will be \$3.00; thereafter, it will be \$5.00.

Students who intend to become candidates for degrees and have not previously been admitted to and matriculated in the University should report before registration to the Director of Admissions, Dr. E. F. Long, in the Administration Building. Such students will find it advantageous to make arrangements for admission in advance by mail.

TUITION AND FEES

Undergraduate Students

Undergraduate Students	
General Tuition Fee This fee entitles the student to 6 semester hours of work, the general recreational program, and the use of a post office box.	\$35.00
Non-residence Fee Must be paid by all students who are not residents of Maryland.	15.00
Matriculation Fee Payable only once, upon admission to the Graduate School. Every student must be matriculated.	10.00
Special Tuition Fees For load of 4 semester hours or less, or for additional credits over 6 semester hours, per semester hour	8.00
Graduate Students General Tuition Fee This fee entitles the student to 6 semester hours of work, the general recreational program, and the use of a post office box.	\$40.00
Matriculation Fee Payable only once, upon admission to the University.	10.00
Special Tuition Fee For load of 4 semester hours or less, per semester hour	8.00

Miscellaneous Information

There is no non-residence fee for graduate students.

- Auditors pay the same fees as regular students except that no charge is made to students who have paid the general fee.
- A special laboratory fee may be charged for certain courses where such fee is noted in the course description.
- The diploma fee is \$10.00 for bachelors' and masters' degrees, and \$25.00 for doctors' degrees.
- A fee of \$3.00 is charged for each change in program after June 26th. If such changes involve entrance to a course, they must be approved by the instructor in charge of the course entered. Courses cannot be dropped after July_10th.
- All laboratory courses in chemistry carry a laboratory fee of \$10.00; in addition the student is charged for any apparatus which cannot be returned to the stock room in perfect condition.

CANCELLATION OF COURSES

Courses may be cancelled if the number of students enrolled is below certain minima. In general, freshman and sophomore courses will not be maintained for classes smaller than 15. Minimum enrollments for upper level undergraduate courses and graduate courses will be 10 and 5 respectively.

LIVING ACCOMMODATIONS—MEALS

Dormitory accommodations are available as follows:

Regular Dormitories, single rooms \$25 per term, double rooms \$20 per term (maid service) (WOMEN).

Regular Dormitories, double rooms, \$15 per term (no maid service) (MEN).

Temporary Dormitories, double rooms, \$15 per term (no maid service) (MEN).

Students living in the Regular Dormitories will be required to take their meals in the University Dining Hall. Residents of the Temporary Dormitories may take their meals off-campus.

A few off-campus rooms are available. Inquiries concerning them should be addressed to Mr. Doyle Royal, Office of Director of Student Welfare. He will furnish the names of those householders to whom you should write to make your own arrangements.

Board in the University Dining Hall will be \$60 for the term. Cafeteria meal service will be available to those summer school students who are commuting and those who live in off-campus houses.

Rooms may be reserved in advance but will not be held later than noon of Tuesday, June 22. Early application for reservations is advisable, as only those who have made reservations will be assured that rooms are ready for their occupancy. The University dormitories will be open for occupancy the morning of Monday, June 21. For reservations write to Miss Marian Johnson, Assistant Dean of Women, or Mr. Robert C. James, Men's Dormitories Manager.

Students attending the Summer School and occupying rooms in the dormitories will provide themselves with towels, pillows, pillow cases, sheets, and blankets. Trunks should be marked plainly with name and address (dormitory and room number if rooms have been assigned in advance). Trunks sent by express should be prepaid. Cleanliness and neatness of rooms is the responsibility of the individual. Due to existing labor conditions, the University cannot provide maid service in the men's dormitories.

The University assumes no responsibility for rooms and board offered to Summer Session patrons outside of the University dormitories and dining room.

REFUNDS

In cases of withdrawal for illness or other unavoidable causes, refunds will be made as follows:

For withdrawal within five days after registration full refund of fixed charges and fees, with a deduction of \$5.00 to cover cost of registration, will be made.

After five days, and up to two weeks, refunds on all charges will be prorated with the deduction of \$5.00 for cost of registration.

Applications for refunds must be made to the registrar's office and approved by the appropriate dean and the director. No refund will be paid until the application form has been signed by the dean and the director and countersigned by the dormitory representative if the applicant rooms in a dormitory.

STUDENT HEALTH

The University Infirmary, located on the campus, in charge of the regular University physician and nurse, provides medical service of a routine nature for the students in the Summer Session. Students who are ill should report promptly to the University Infirmary, either in person or by phone (Extension 326).

PARKING OF AUTOMOBILES

For the use of students, staff members, and employees, several conveniently located parking lots are provided. The University rules forbid the parking of cars on any of the campus roads. These rules are enforced by State police.

SOCIAL AND RECREATIONAL ACTIVITIES

There will be a carefully planned program of social and recreational events. The recreational fee of one dollar, paid by all registrants in the Summer Session, is used to finance the program.

A representative advisory committee of students will be appointed to plan such events as they may wish to provide. Suggestions as to the nature of the social program will be welcomed.

SUMMER GRADUATE WORK

Masters' degrees are offered through the Graduate School as follows:

Master of Arts

Master of Science

Master of Arts in American Civilization

Master of Education

Master of Business Administration

Doctors' degrees offered through the Graduate School are as follows:

Doctor of Philosophy

Doctor of Education

Graduate work in the Summer School may be counted as residence toward a Master's degree or Doctor of Education degree. A full year of residence or the equivalent is the minimum requirement for each degree.

The requirements for each of the seven degrees above may be procured from the Graduate School upon request.

Special regulations governing graduate work in Education and supplementing the statements contained in the Graduate School Announcements are available in duplicated form and may be obtained at the College of Education. Each graduate student in Education should have a copy. Students seeking the Master's degree as a qualification for a certificate issued by the Maryland State Department of Education or any other certifying authority should consult the appropriate bulletin for specific requirements. Advisers will assist students in planning to meet such requirements.

All students desiring graduate credit, whether for meeting degree requirements, for transfer to another institution, or for any other purpose, must be regularly matriculated and registered in the Graduate School. Those expecting to register as graduate students should bring with them transcripts of their undergraduate and graduate records from other institutions.

CANDIDATES FOR DEGREES

Undergraduate students who expect to complete their requirements for baccalaureate degrees during the summer session should make application for diplomas at the office of the Registrar during the first two weeks of the Summer Session.

LIBRARY FACILITIES

The General Library at College Park, completed in 1931, is an attractive, well equipped and well lighted structure. The main reading room on the second floor seats 250, and has about 5,000 reference books and bound periodicals on open shelves. The stack room is equipped with carrels and desks for the use of advanced students. About 20,000 of the 132,000 volumes or the campus are shelved in the Chemistry, Entomology and Mathematics departments, the Graduate School, and other units. Over 1,000 periodicals are currently received.

The University Library System is able to supplement its reference service by borrowing material from other libraries through inter-library loans or bibliofilm service, or by arranging for personal work in the Library of Congress, the United States Office of Education Library, the United States Department of Agriculture Library, and other agencies in Washington.

UNIVERSITY BOOKSTORE

For the convenience of students, the University maintains a students'

supply store, located in the basement of the Administration Building, where students may obtain at reasonable prices textbooks, stationery, classroom materials and equipment, confectionary, etc.

The store is operated on the basis of furnishing students needed books and supplies at as low a cost as practicable, and profits, if any, are turned into the general University treasury to be used for promoting general student welfare.

Students are advised not to purchase any textbooks until they have been informed by their instructors of the exact texts to be used in the various courses, as texts vary from year to year.

The bookstore is operated on a cash basis.

ART SCHOOL AT BLUE RIDGE SUMMIT

The Art Department of the University of Maryland announces the opening of a group of outdoor painting classes, this summer, to be located at beautiful Blue Ridge Summit, Maryland.

Elementary and advanced landscape painting (Art 7 and 8)—3 credits each, will be conducted by Mr. Herman Maril instructor of Art at the University. He will also give a course in Pictorial Composition (Art 16)—2 credits.

Outdoor classes in the study of the human figure and head will be conducted by Mr. M. R. Siegler, Acting Head of the Art Department (Art 1, 104, 106)—3 credits each.

Students who enroll for any of these courses will register at College Park on June 21, and arrangements will be made for transportation to Camp Ritchie, Cascade, Maryland. Dormitories and a dining room are provided for the students, and a large studio is available for use in inclement weather. Board and lodging will cost each student \$120.00 for the six weeks of the summer term, over and above the regular tuition.

The location is ideal because the different aspects of nature, which include mountains, a lake, fields, trees and farm houses, provide a great variety of forms and subject matter for the artist.

Other art courses are offered on the College Park campus.

NURSING EDUCATION IN BALTIMORE

Several courses in the field of Nursing Education will be offered as a part of the Summer School in the School of Nursing in the University of Maryland in Baltimore. The instructor will be Miss Gladys Sellew, Ph.D, R.N. Registration for these courses will be made through Miss Florence Gipe, Head, School of Nursing, University of Maryland, Lombard and Greene Streets, Baltimore.

INSTITUTE FOR CHILD STUDY SUMMER WORKSHOP

The Institute for Child Study offers a summer workshop designed for those persons who have been actively engaged in the Child Study Program sponsored by the Institute and for those persons who are interested in participating in such a program.

The summer experiences will provide opportunities for increasing knowledge of scientific concepts that explain behavior and for applying this knowledge to concrete school and community situations.

For further information write the Institute for Child Study, College of Education, College Park.

SPECIAL MEETINGS

The Parent-Teacher Association Summer Conference—July 12-15

The College of Education will cooperate with the Maryland Congress of Parents and Teachers in planning their convention to be held this summer on the University campus. The theme of the meeting will be: "A.B.C.'s of P.T.A." Persons of national reputation will be present as speakers and discussion leaders at the conference.

Office Management Institute

The National Education Committee of the National Office Management Association, in cooperation with the University of Maryland and the Baltimore and Washington Chapters of the National Office Management Association, will conduct a three-day institute on the College Park campus of the University of Maryland, July 14, 15, 16, 1948. The institute will deal with scientific methods and procedures in office management.

The Institute is designed to be of interest and help to (1) office managers and those interested in improving the services of the office and those looking forward to supervisory and managerial positions in the profession of office management who will be brought up to date with the latest scientific developments in all areas of office management, and (2) teachers of office management and those preparing for teaching positions in the field on both the secondary school and the collegiate levels who will benefit by the enriched content of the course.

Men of national reputation and wide experience in the field of office management have been secured to serve on the faculty of the Institute. Sessions will be held from 9:00 to 12:00 each morning and from 1:00 to 3:30 each afternoon.

Advanced registration or inquiries for further information should be addressed to Arthur S. Patrick, College of Business and Public Administration, University of Maryland, College Park.

COURSE OFFERINGS AND DESCRIPTIONS

(Unless otherwise stated, courses meet one hour daily, five days a week.)

AGRICULTURAL ECONOMICS AND MARKETING

A. E. 109. Research Problems (1-2). To be arranged. (DeVault.)

With the permission of the instructor, students will work on any research problems in agricultural economics. There will be occasional conferences for the purpose of making reports on progress of work.

A.E. 200. Special Problems in Farm Economics (2). To be arranged. (DeVault.)

An advanced course dealing extensively with some of the economic problems affecting the farmer, such as land values, taxation, credit, prices, production adjustments, transportation, marketing and cooperation.

A.E. S 207. Farm Business Analysis (1). First three weeks. To be arranged. (Hamilton.)

This course considers the preparation, keeping, and analysis of farm records; farm budgeting, farm management surveys, the reorganization of typical farms, and the use of farm records for income tax reports. Students will analyze records of different types of farms located in various parts of the State and make specific recommendations as to how these farms may be improved.

A. E. 210. Taxation in Relation to Agriculture (2). To be arranged. (Walker.)

Principles and practices of taxation in their relation to agriculture, with special reference to the trends of tax levies, taxation in relation to land utilization, taxation in relation to ability to pay and benefits received.

AGRICULTURAL EDUCATION AND RURAL LIFE

The three-week courses in Agricultural Education and Rural Life which follow are offered primarily for teachers of vocational agriculture, county agents and others interested in the professional and cultural development of rural communities. The normal load in such a program is three courses, which gives 3 units of credit. The courses of this department are offered in a cycle. By pursuing such a program successfully for four summers, a student will be able to earn 12 semester hours, a minimum major in this field, and could then return for two full summer sessions or one semester of regular school or for four more summers of three weeks each to complete the remaining 12 hours required for the master's degree. These courses are arranged to articulate with the three-week courses in Agricultural Economics and Marketing, Agronomy, Animal Husbandry, Botany, Dairy Husbandry, Entomology, Horticulture and Poultry.

In 1948 the first three-week period will extend from June 21 to July 10. School will be held on Saturdays, June 26 and July 10, to make up for registration day and July 5.

R. Ed. S 209 A-B. Adult Education in Agriculture (1-1). First three weeks. Part B. 9:00; New Agr. Bldg.-138. (Ahalt.)

Principles of adult education as applied to rural groups, especially young and adult farmers. Organizing classes, planning courses and instructional methods are stressed.

R. Ed. S 211 A-B. Rural Education Through the Agricultural Extension Services and other Agricultural Agencies (1-1). First three weeks. Part B. 11:00; New Agr. Bldg.-138. (Ahalt.)

Development of the extension service. Types of demonstrations and instruction used. The role of the County Agricultural and Home Demonstration Agents and 4-H Clubs in the development of rural society.

R. Ed. S 250 A-B. Seminar in Rural Education (1-1). First three weeks. Part A. 2:00; New Agr. Bldg.-138. (Ahalt.)

Current problems of teaching agriculture are analyzed and discussed. Students are asked to make investigations, prepare papers and make reports.

AGRONOMY

Agron. 206 S. Cropping System (1). First three weeks. 8:00; T-13. (Kuhn.)

An advance course primarily designed for teachers of vocational agriculture and county agents. It deals with outstanding problems and the latest developments in the field.

ART

At College Park:

Art 1. Charcoal Drawing (3). M., F., 10:00, 11:00; T., Th., 9:00, 10:00; W., 9:00, 10:00, 11:00; A-310.

Drawings from casts, preparatory to life and portrait drawing and painting. Stress is placed on fundamental principles, such as study of relative proportions, values and modelling, etc. (Kuzmiki.)

Art 5. Still-Life (3). M., F., 10:00, 11:00; T., Th., 9:00, 10:00; W., 9:00, 10:00, 11:00; A-310.

Elementary theory and practice of drawing. Methods of linear and tonal description with emphasis on perspective and light-and-shade. Theory and practice of painting in oil color. Theory and practice of composition introduced and utilized. (Kuzmiki.)

Art 7. Landscape Painting (3). M., F., 10:00, 11:00; T., Th., 9:00, 10:00; W., 9:00, 10:00, 11:00; A-310.

Outdoor studies with subsequent utilization in studio where organization of landscape material is studied. (Kuzmiki.)

Art 9. Historical Survey of Painting, Sculpture and Architecture (2). 2:00; A-300.

An understanding of the epochs of the advance of civilization as expressed through painting, sculpture and architecture. A background to more detailed study. (Kuzmiki.)

Art 10. History of American Art (1). T., Th., 11:00; F., 9:00; A-300.

A resume of the development of painting, sculpture and architecture in this country, and how American art was influenced by social, political and economical forces here and abroad. (Kuzmiki.)

Art 104. Life Class (drawing and painting) (3). M., F., 10:00, 11:00; T., Th., 9:00, 10:00; W., 9:00, 10:00, 11:00; A-310.

Careful observation and study of the human figure for construction, action, form, and color. (Kuzmiki.)

Art 110. Public School Art Education (2). 1:00; A-308.

Lectures and workshop. Deals with development of attitudes and methods for the teaching of art at the elementary and secondary levels.

At Camp Ritchie, Maryland:

Art 1. Charcoal Drawing (3). M., T., W., Th., 9:00, 10:00, 11:00.

Drawing from head, preparatory to Life and Portrait drawing and Painting. Stress is placed on fundamental principles. (Siegler.)

Art 7. Landscape Painting (3). M., T., W., Th., 2:00, 3:00, 4:00.

Outdoor drawing and painting; organization of landscape material. (Maril.)

Art 8. Landscape Painting (advanced) (3). M., T., W., Th., 2:00, 3:00, 4:00. (Maril.)

Art 16. Pictorial Composition (2). 1:00.

Principles underlying graphic presentation of ideas. Problems to stimulate the students' imagination and enable them to do creative work. (Maril.)

Art 104. Life Class (drawing and painting) (3). M., T., W., Th., 9:00, 10:00, 11:00.

Careful study and observation of the human figure in the diffused light of the outdoors, stressing color and construction. (Siegler.)

Art 106. Portrait Class (drawing and painting) (3). M., T., W., Th., 9:00, 10:00, 11:00.

Careful study of the head in relation to outdoor surroundings. Characterization, color and composition stressed. (Siegler.)

BACTERIOLOGY

Bact. 1. General Bacteriology (4). Five lectures and five two-hour laboratory periods a week. Lecture, 8:00; T-314; laboratory, 9:00, 10:00; T-311. Laboratory fee, \$8.00. (Doetsch.)

The physiology, culture, and differentiation of bacteria. Fundamental principles of microbiology in relation to man and his environment.

Bact. 5. Advanced General Bacteriology (4). Five lectures and five two-hour laboratory periods a week. Lecture, 9:00; T-314; laboratory, 10:00, 11:00; T-307. Prerequisites, Bact. 1 and Chem. 3. Laboratory fee, \$8.00. (Doetsch.)

Emphasis will be given to the fundamental procedures and techniques used in the field of bacteriology with drill in the performance of these techniques. Lectures will consist of the explanation of various laboratory procedures.

Bact. 181. Bacteriological Problems (3). Eight two-hour laboratory periods a week. To be arranged. Prerequisites, 16 credits in bacteriology. Registration only upon the consent of the instructor. Laboratory fee, \$8.00. (Faber.)

This course is arranged to provide qualified undergraduate majors in bacteriology and majors in allied fields an opportunity to pursue specific bacteriological problems under the supervision of a member of the department.

Bact. 290. Research. Prerequisites, 30 credits in bacteriology. Laboratory fee, \$8.00. (Staff.)

Credits according to work done. The investigation is outlined in consultation with and pursued under the supervision of a senior staff member of the department.

BOTANY

Bot. 1. General Botany (4). Five lectures and five two-hour laboratory periods per week. Lecture, 11:00; T-119; laboratory, 8:00; T-208. Laboratory fee, \$5.00. (Owens.)

General introduction to botany, touching briefly on all phases of the subject. The chief aim in this course is to present fundamental biological principles rather than to lay the foundation for professional botany. The student is also acquainted with the true nature and aim of botanical science, its methods and the value of its results.

- Bot. 206. Research, Physiology. (Credit according to work done). Students must be qualified to pursue with profit the research to be undertaken. (Appleman).
- Bot. 214. Research, Morphology. (Credit according to work done). (Bamford.)
- Bot. 225. Research, Pathology. (Credit according to work done.) (Jeffers.)

BUSINESS AND PUBLIC ADMINISTRATION

B. A. 10. Organization and Control (2). 12:00; A-21. (Clemens.)

A survey course treating the internal and functional organization of a business enterprise.

- B. A. 11. Organization and Control (2). 8:00; A-21. (McLarney.) Includes industrial management, organization and control.
- B. A. 20. Principles of Accounting (4). Ten periods a week. Daily, 10:00, 11:00; GG-10. (Bourne.)
- B. A. 21. Principles of Acounting (4). Prerequisite, B. A. 20. Ten periods a week.

Section 1—Daily, 8:00, 9:00; GG-10. (Cronin.) Section 2—Daily, 10:00, 11:00; A-12. (Daiker.) Section 3—Daily, 11:00, 12:00; Q-243. (Sweeney.)

The fundamental principles and problems involved in the accounting system; capital and surplus; bonds; and manufacturing and cost accounting.

B. A. 120. Intermediate Acounting (5). Prerequisite, B. A. 21. Thirteen periods a week.

Section 1—Daily, 8:00, 9:00; M., W., F., 10:00; Q-243. (Wedeberg.)

A comprehensive study of the theory and problems of valuation of assets, corporation accounts and statements, consignment and installments, and the interpretation of accounting statements.

B. A. 122. Auditing Theory and Practice (4). Prerequisite, B. A. 120 and 121. Daily, 8:00, 9:00; A-12. (Wright.)

A study of the principles and problems of auditing and the application of accounting principles, to the preparation of audit working papers and reports.

B. A. 130. Elements of Statistics (3). Prerequisite, junior standing. Eight periods a week. Daily, 8:00; M., W., F., 9:00; A-133. (Ash.)

This course is devoted to a study of the fundamentals of statistics. Emphasis is placed upon the collection of data; hand and machine tabulation; graphic charting; statistical distribution; averages; index numbers; sampling; elementary tests and reliability and simple correlations.

B. A. 140. Financial Management (3). Prerequisite, Econ. 140. Eight periods a week. Daily, 1:00; M., W., F., 2:00; A-1. (Calhoun.)

This course deals with principles and practices involved in the organization, financing, and reconstruction of corporations, the various types of securities and their use in raising funds, apportioning income, risk, and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

B. A. 150. Marketing Management (3). Prerequisite, Econ. 150. Eight periods a week. Daily, 8:00; M. W. F., 9:00; R-112. (Reid.)

A study of the work of the marketing division in a going organization. The work of developing organizations and procedures for the control of marketing activities are surveyed. The emphasis throughout the course is placed on the determination of policies, methods, and practices for the effective marketing of various forms of manufactured products.

B. A. 160. Personnel Management (3). Prerequisite, Econ. 160. Eight periods a week. Daily, 10:00; M., W., F., 11:00; F-112. (Sylvester.)

This course deals essentially with functions and administrative relationships between management and the labor force. It comprises a survey of the scientific selection of employees, "service" training, job analysis, classification and rating motivation of employees, employer adjustment, wage incentive, employee discipline and techniques of supervision, elimination of employment hazards, etc.

B. A. 165. Office Management (3). Prerequisite, B. A. 11, or junior standing. Eight periods a week. Daily, 1:00; M., W., F., 2:00; Q-246. (Patrick.)

Considers the application of the principles of scientific management in their application to office work.

B. A. 169. Industrial Management (3). Prerequisite, B. A. 11 and 160. Eight periods a week. Daily, 10:00; M., W., F., 11:00; F-103. (McLarney.)

Studies the operation of a manufacturing enterprise. Among the topics covered are product development, plant location, plant layout, production planning and control, methods analysis, time study, job analysis, budgetary control, standard costs, and problems of supervision. An inspection trip to a large manufacturing plant is made at the latter part of the semester.

B. A. 181. Business Law (4). Prerequisite, senior standing and B. A. 180. Daily, 8:00, 9:00; E-305. (Mounce.)

Legal aspects of business relationships, contracts, negotiable instruments, agency, partnerships, corporations, real and personal property, and sales.

Econ. 5. Economic Development (2). 9:00; F-112. (Dillard.)

An introduction to modern economic institutions—their origins, development, and present status. Commercial revolution, industrial revolution, and age of mass production. Emphasis on development in England, Western Europe, and the United States.

Econ. 31. Principles of Economics (3). Prerequisite, sophomore standing. Eight periods a week.

Section 1-Daily, 8:00; M., W., F., 9:00; Q-148. (Gruchy.)

Section 2—Daily, 10:00; M., W., F., 11:00; E-312. (Dillard.)

Section 3-Daily, 12:00; M., W., F., 1:00; R-110. (Cole.)

Econ. 32. Principles of Economics (3). Prerequisite, Econ. 31. Eight periods a week.

Section 1—Daily, 8:00; M., W., F., 9:00; N-101. (Sylvester.) Section 2—Daily, 10:00; M., W., F., 11:00; N-101. (Clemens.)

A general analysis of the functioning of the economic system. A considerable portion of the course is devoted to a study of basic concepts and explanatory principles. The remainder deals with the major problems of the economic system.

Econ. 137. Economic Planning and Post-War Problems (3). Prerequisite, Econ. 32 or 37. Eight periods a week. Daily, 11:00; M., W., F., 12:00; R-204. (Gruchy.)

An analysis of the theory and practice of economic planning in the United States and other countries, and an investigation of the relation of economic planning to postwar economic problems and the stabilization of economic enterprise.

Econ. 140. Money and Banking (3). Prerequisite, Econ. 32 or 37. Eight periods a week.

Section 1—Daily, 8:00; M., W., F., 9:00; E-311. (Watson.) Section 2—Daily, 10:00; M., W., F., 11:00; E-311. (Calhoun.)

Econ. 150. Marketing Principles and Organization (3). Prerequisite, Econ. 32 or 37. Eight periods a week. Daily, 12:00; M., W., F., 1:00; R-202. (Grubb.)

This is an introductory course in the field of marketing. Its purpose is to give a general understanding and appreciation of the forces operating, institutions employed, and methods followed in marketing agricultural products, natural products, services, and manufactured goods.

Econ. 160. Labor Economics (3). Prerequisite, Econ. 32 or 37. Eight periods a week.

Section 1—Daily, 10:00; M., W., F., 11:00; T-314. (Ratzlaff.) Section 2—Daily, 1:00; M., W., F., 2:00; R-1. (Sylvester.)

Geog. 2. Economics Resources (2).

Section 1—Daily, 12:00; Q-148. (Baker.) Section 2—Daily, 1:00; Q-148. (Baker.)

General comparative study of the geographic factors underlying production economics. Emphasis upon climate, soils, land forms, agricultural products. power resources, and major minerals, concluding with brief survey of geography of commerce and manufacturing.

S. T. 1. Principles of Typewriting (2). Laboratory fee, \$7.50. Meets ten periods a week. Daily, 8:00, 9:00; Q-143. (Patrick & Staff.)

The goal of this course is the attainment of the ability to operate the typewriter continuously with reasonable speed and accuracy by the use of the "touch" system.

CHEMISTRY

All laboratory courses in chemistry carry a laboratory fee of \$10.00; in addition the student is charged for any apparatus which cannot be returned to the stock room in perfect condition.

- Chem. 3. General Chemistry (4). Five lectures and five 3-hour laboratory periods per week. Prerequisite, Chem. 1. Lecture, 11:00; BB-5. Laboratory, 1, 2, 3; AA-6. (Rollinson.)
- Chem. 19. Quantitative Analysis (4). Five lectures and five 3-hour laboratory periods per week. Prerequisite, Chem. 1 and 3. Lecture, 12:00; R-1. Laboratory, 8, 9, 10 or 1, 2, 3; K-231. (Stuntz.)
- Chem. 37. Elementary Organic Chemistry (2). Second semester. Five lectures per week. Prerequisite, Chem. 35. 8:00; BB-5. (Reeve.)
- Chem. 38. Elementary Organic Laboratory (2). Five 3-hour laboratory periods per week. 9, 10, 11 or 1, 2, 3; CC. (Reeve.)
- Chem. 142. Advanced Organic Laboratory (2). Five 3-hour laboratory periods per week. Prerequisites, Chem. 19 or 23 and Chem. 37 and 38. Laboratory periods arranged. K-310. (Pratt.)
- Chem. 146. Identification of Organic Compounds (2). Five 3-hour laboratory periods per week. Prerequisites, Chem. 141 and 142. Laboratory periods arranged. K-310. (Pratt.)
- Chem. 166 and 167. Food Analysis (3). Three lectures and five 3-hour laboratory periods per week. Prerequisites, Chem. 19, 31, 32, 33, 34. Lecture, M., W., F., 10:00; BB-5. Laboratory periods arranged. (Wiley.)

Chem. 254. Advanced Organic Preparations (2 to 4). Five to ten 3-hour laboratory periods per week. Laboratory periods arranged. K-310 (Pratt.)

Chem. 258. The Identification of Organic Compounds, an advanced course (2 to 4). Five to ten 3-hour laboratory periods per week. Laboratory periods arranged. K-310. Two recitations per week. Arranged. (Pratt.)

Chem. 295. Heterogeneous Equilibria (2). Five lectures per week. 11:00; R-1. (Pickard.)

DAIRY HUSBANDRY

Dairy 124. Special Problems in Dairying (2-4). Arranged. (Staff.)

Prerequisites, students majoring in dairy husbandry, Dairy 1 and 101; students majoring in dairy products technology, Dairy 1, 108 and 109. Credit in accordance with the amount and character of work done.

Special problems which relate specifically to the work the student is pursuing will be assigned.

Dairy 201. Advanced Dairy Production (1). First three weeks. Arranged. (Cairns.)

An advanced course primarily designed for teachers of vocational agriculture and county agents. It includes a study of the newer discoveries in animal nutrition, breeding and management.

Dairy 204. Special Problems in Dairying (1-3). Arranged. Prerequisite, permission of professor in charge of work. Credit in accordance with the amount and character of work done.

Special problems which relate specifically to the work the student is pursuing will be assigned.

Dairy 208. Research (1-3). Arranged. Credit to be determined by the amount and quality of work done.

The student will be required to pursue, with the approval of the Head of the Department, an original investigation in some phase of dairy husbandry, carrying the same to completion and report results in the form of a thesis.

EDUCATION

Ed. 52. Children's Literature (2). 8:00; T-102. (Bryan.)

A study of literary values in prose and verse for children.

Ed. 101. History of Education (2). 8:00; T-119. (Selvi.)

Emphasis is placed on the post-Renaissance periods.

Ed. 105. Comparative Education (2). 12:00; T-119. (Selvi.)

A study of national systems of education with the primary purpose of discovering their characteristic differences and formulating criteria for judging their worth.

Ed. 108. Philosophy of Education II (2). 1:00; T-119. (Snyder.)

. Systems of thought affecting the development of education with emphasis on recent periods and the United States.

Ed. 123. The Child and the Curriculum (2), 9:00; T-119. (Denecke.)

This course will emphasize the relation of the elementary school curriculum to child growth and development. Recent trends in curriculum organization; the effect of school environment on learning; readiness to learn; and adapting curriculum content and methods to the maturity levels of children will be emphasized.

Ed. 124. Creative Expression in the Elementary School (2). 10:00; T-119. (Webb.)

This course should prove practical to classroom teachers and supervisors, since it will attempt to consider the so-called special subjects in their relation to children and the course of study. It is based on the point of view that the classroom teacher is the best teacher of her children and as such is responsible for the day by day development of special areas as an integrated part of the total program. Creativity as the natural expression of ideas and as a means of communication will be stressed in both language and manual arts. The relation of creativity to the integration of personality will be emphasized.

Ed. 130. Theory of the Junior High School (2). 10:00; T-102. (Baker.)

This course gives a general overview of the junior high school. It includes consideration of the purposes, functions, and characteristics of this school unit; a study of its population, organization, program of studies, methods, and staff; and other similar topics, together with their implication for prospective teachers.

Ed. 131. Theory of the Senior High School (2). 9:00; T-102. (Baker.)

The secondary school population; the school as an instrument of society; relation of the secondary school to other schools; aims of secondary education; curriculum and methods; extra-curricular activities; guidance and placement; teacher certification and employment in Maryland and the District of Columbia. This course is somewhat more general than Ed. 130.

Ed. 144. Materials and Procedure for the Junior High School Core Curriculum (2). 9:00; A-1. (Snyder.)

This course is designed to bring practical suggestions to teachers who are in charge of core classes in junior high schools. Materials and teaching procedures for specific units of work are stressed.

Ed. 147. Audio-Visual Education (2). 12:00; T-108. Fee, \$1.00. (Brechbill.)

Sensory impressions in their relation to learning; projection apparatus, its cost and operation; slides, film-strips, and films; physical principles underlying projection; auditory aids to instruction; field trips; pictures, models, and graphic materials; integration of sensory aids with organized instruction.

Ed. 150. Educational Measurement (2). 11:00; T-108. (Brechbill.)

A study of tests and examinations with emphasis upon their construction and use. Types of tests; purposes of testing; elementary statistical concepts, and processes used in summarizing and analyzing test results; school marks.

Ed. 160. Educational Sociology—Introductory (2). 8:00; T-108.

This course deals with data of the social sciences which are germane to the work of teachers. Consideration is given to implications of democratic ideology for educational endeavor, educational tasks imposed by changes in population and technological trends, the welfare status of pupils, the socioeconomic attitudes of individuals who control the schools, and other elements of community background which have significance in relation to schools.

Ed.161. Guidance in Secondary Schools (2). 1:00; T-103. (Gaither.)

This course is primarily designed for the classroom teacher in terms of the day-by-day demands made upon him as a teacher in the guidance of youth in his classes and in the extra-class activities which he sponsors. The stress is upon usable materials and upon practical common-sense guidance procedures of demonstrated workability.

Ed. 195. Teaching Traffic Safety and Automobile Operation (2). Prerequisite, two years driving experience. M., W., F., 1:00, 2:00, and arranged; T-108. Laboratory fee, \$300. (Heylmun.)

Practical and theoretical study of the driver, driver and pedestrian responsibilities, the automobile and its operation, traffic problems and regulations, and the organization and administration of the course in secondary schools. Dual control cars are used.

Ed. 203. Problems in Higher Education (2). To be arranged. (Blauch.)

A study of present problems in higher education with special attention to the junior college level.

Ed. 205. Seminar in Comparative Education (2). 9:00; T-108. (Benjamin and Selvi.)

Ed. 209. Seminar in History of Education (2). 8:00; R-1. (Wiggin.)

Ed. 210. The Organization and Administration of Public Education (2). 9:00; R-1. (Newell.)

This course deals with so-called "external" phases of school administration. It includes study of the present status of public school administration, organization of local, state and federal educational authorities; and the administrative relationships involved therein.

Ed. 211. The Organization, Administration, and Supervision of Secondary Schools (2). 10:00; R-1. (Newell.)

This course is designed as a continuation of Ed. 210, but may be taken independently. It includes what is called "internal" administration; the organization of units within a school system; the personnel problems involved; and such topics as schedule making, teacher selection, public relations, and school supervision.

Ed. 212. School Finance and Business Administration (2). 10:00; R-109. (Wenzl.)

This course deals principally with school revenue and taxation; federal and state aid and equalization; purchase of supplies and equipment; internal school accounting; and other selected problems of local school finance.

Ed. 214. School Buildings and Equipment (2). 12:00; R-109. (Wenzl.)

This course emphasizes the planning and construction of school buildings, the development of building programs, and the selection of equipment. The care and upkeep of school buildings also receive attention.

Ed. 216. High School Supervision (2). 10:00; R-103. (Mileham.)

This course deals with the nature and function of supervision; recent trends in supervisory theory and practice; teacher participation in the determination of policies; planning of supervisory programs; appraisal of teaching methods; curriculum reorganization, and other means for the improvement of instruction.

Ed. 217. Administration and Supervision in Elementary Schools (2). 11:00; T-102. (Webb.)

A study of the problems connected with organizing and operating elementary schools and directing instruction.

Ed. 219. Seminar in School Administration (2). 8:00; R-109. (Wenzl.)

Ed. 229. Seminar in Elementary Education (2). 1:00; R-109. (Denecke.)

Ed. 232. Student Activities in the High School (2). 1:00; R-103. (Mileham.)

This course offers a consideration of the problems connected with the socalled "extra-curricular" activities of the present-day high school. Special consideration will be given to (1) philosophical bases, (2) aims, (3) organization, and (4) supervision of student activities such as student council, school publications, musical organizations, dramatics, assemblies, and clubs. Present practices and current trends will be evaluated.

Ed. 236. Curriculum Development in the Secondary School—Home Economics (2). 10:00; T-108. (Meshke.)

Curriculum planning; philosophical bases, objectives, learning experiences, organization of appropriate content, and means of evaluation.

Ed. 239. Seminar in Secondary Education (2). 8:00; R-103. (Mileham.)

Ed. 245. Applications of Theory and Research to High School Teaching (2).

Section I—English and Social Studies. 11:00; R-109. (Snyder.)

Section II—Science, 11:00; R-110, (Strauss.)

Implications of experimental practices, the proposals of eminent writers and the results of research for the improvement of teaching on the secondary level.

Ed. 250. Analysis of the Individual (2). Fee, \$10.00. (Nyweide.)

Section I-9:00; N-106.

Section II-10:00; N-106.

This course is concerned with the selection and administration of tests and inventories. Interpretation and use of data are stressed.

Ed. 261. Counseling Technique (2), 10:00; A-133. (Gaither.)

This course deals with the various specialized techniques, procedures, and materials utilized by guidance specialists in the schools.

Ed. 262. Occupational Information (2). 11:00; N-106. (Nyweide.)

This course is designed to give counsellors, teachers of social studies,

school librarians, and other workers in the field of guidance and education a background of educational and occupational information which is basic for counseling and teaching.

Ed. 269. Seminar in Guidance (2). 8:00; R-110. (Gaither).

Ed. 280. Research Methods and Materials in Education (2). 10:00; R-110. (Hornbake.)

A study of research in education, the sources of information and techniques available, and approved form and style in the preparation of research reports and theses.

Ed. 289. Research (1-6). (Staff.)

BUSINESS EDUCATION

B. Ed. 101. Methods and Materials in Teaching Office Skills (2). 10:00; Q-246.

Problems in development of occupational competency, achievement tests, standards of achievement, instructional materials, transcription, and the integration of skills.

B. Ed. 200. Administration and Supervision of Business Education (2). 11:00; Q-246. (Patrick.)

Departmental organization, curriculum, equipment, budget making, guidance, placement and follow-up, and audio-visual aids.

For administrators, supervisors, and teachers.

CHILDHOOD EDUCATION

C. Ed. 100. Child Development I: The Preschool Years (3). Eight periods a week. Daily, 9:00; T., W., Th., 11:00; T-103. (McNaughton.)

Growth and development of the preschool child as a basis for understanding child behavior and the type of guidance needed; field trip to well-baby clinic; observation in nursery schools; review of current books.

C. Ed. 101. Child Development II: The Child from Five to Ten Years (2). 12:00; T-103. (McNaughton.)

Development, characteristics, and interests of the middleage child; interpersonal relations as affected by home, school and community.

- C. Ed. 140. Curriculum, Instruction and Observation—Nursery School (3). Five lectures. Daily, 8:00; GG-11. Four hours a week observation in university nursery school (9-12). (Whitney.)
- C. Ed. 148. Teaching Nursery School (4). Daily, morning 9:00-12:00. Conference hours arranged. (Whitney.)

HOME ECONOMICS EDUCATION

H. E. Ed. 202. Trends in the Teaching and Supervision of Home Economics (2-4). Daily, 11:00; R-102. Conferences arranged. (Meshke.)

Study of home economics programs and practices in light of current educational trends. Interpretation and analysis of democratic teaching pro-

cedures, outcomes of instruction, and supervisory practices.

HUMAN DEVELOPMENT EDUCATION

H. D. 112. Scientific Concepts in Human Development (3). Hours to be arranged. (Prescott and Staff.)

NOTE: H. D. Ed. 112 must be taken concurrently with H. D. Ed. 113.

H. D. 113. Laboratory in Behavior Analysis (3). Hours to be arranged. (Prescott and Staff.)

NOTE: H. D. Ed. 113 must be taken concurrently with H. D. Ed. 112.

H. D. Ed. 212. Advanced Scientific Concepts in Human Development (3). Hours to be arranged. (Prescott and Staff.)

NOTE: H. D. Ed. 212 must be taken concurrently with H. D. Ed. 213.

H. D. 213. Advanced Laboratory in Behavior Analysis (3). Hours to be arranged. (Prescott and Staff.)

NOTE: H. D. Ed. 213 must be taken concurrently with H. D. Ed. 212.

INDUSTRIAL EDUCATION

A. Professional Courses

The following five courses are intended for industrial arts teachers and supervisors, for vocational-industrial teachers and supervisors, and for school administrators and others who desire to acquaint themselves with underlying principles, practices and educational contributions of industrial arts and vocational education.

Ind. Ed. 105. General Shop (2). 1:00; R-102. (Brown.)

A course designed to assist in the organization and administration of the general shop and to study instructional methods and materials suited to the general shop plan.

Ind. Ed. 169. Construction of Vocational and Occupational Courses of Study (2). 11:00; R-103. (Wall.)

The course surveys and applies techniques of building and reorganizing courses of study for effective use in vocational and occupational schools.

Ind. Ed. 170. History and Principles of Vocational Education (2). 9:00; R-102. (Wall.)

This course provides an overview of the development of vocational education from primitive times to the present. Vocational education is presented as an integral part of the American program of public education.

Ind. Ed. 220. Organization, Administration, and Supervision of Vocational Education (2). 11:00; H-9. (Brown.)

This course studies objectively the organization, administration, supervision, curricular spread and viewpoint, and the present status of vocational education.

Ind. Ed. 241. Content and Method of Industrial Arts (2). 8:00; R-102. (Hornbake.)

Various procedures used in defining behavioral changes and learning activities are examined and those suited to the field of industrial arts education are applied. Methods of and devices for industrial arts instruction are studied and practiced.

B. Technical Courses

The following courses are offered to persons who are preparing to teach industrial arts at the secondary school level or to teachers already engaged in industrial arts teaching. The courses are comparable in content and presentation to those offered during the regular school term in the industrial arts curriculum. The primary purpose of each course is to have the student develop sufficient skill and technique to instruct secondary school pupils.

Ind. Ed. 1. Mechanical Drawing I (2). 8:00-10:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. (Maley.)

This course constitutes an introduction to orthographic multi-view and isometric projection. Emphasis is placed upon the visualization of an object when it is represented by a multi-view drawing and upon the making of multi-view drawings.

This course carries through auxiliary views, sectional views, dimensioning, conventional representation and single stroke lettering.

Ind. Ed. 21. Mechanical Drawing II (2). 8:00, 9:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. Prerequisite: Ind. Ed. I or equivalent. (Maley.)

This course deals with working drawings, machine design, pattern layouts, tracing and reproduction. Detail and assembly drawings are produced.

Ind. Ed. 41. Architectural Drawing (2). 8:00, 9:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. Prerequisite: Ind. Ed. I or equivalent. (Maley.)

Practical experience is provided in the design and planning of homes and other buildings. Working drawings, specifications and blue prints are featured.

Ind. Ed. 2. Elementary Woodworking (2). 1:00, 2:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. (Wall.)

This is a woodworking course which involves the use of hand tools almost exclusively. The course is developed so that the student uses practically every common woodworking hand tool in one or more situations. There is also included elementary wood finishing, the specifying and storing of lumber, and the care and conditioning of tools used.

Ind. Ed. 22. Machine Woodworking I (2). 1:00, 2:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. Prerequisite: Ind. Ed. 2 or equivalent. (Wall.)

Machine Woodworking I offers initial instruction in the proper operation of the jointer, band saw, variety saw, jig saw, mortiser, shaper, and lathe. The types of jobs which may be performed on each machine and their safe operation are of primary concern. The medium of instruction is school-shop equipment, hobby items, and useful home projects.

Ind. Ed. 28. Electricity I (2). 10:00, 11:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. (Drazek.)

An introductory course in electricity. It deals with basic electrical phenom-

ena and includes such radio and electronic instruction as may be helpful in industrial arts programs at the junior high school level.

Ind. Ed. 69. Machine Shop Practice I (2). 12:00, 1:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. (Hornbake.)

Bench work, turning, planing, milling, and drilling are the basic processes covered.

Ind. Ed. 89. Machine Shop Practice II (2). 12:00, 1:00; Ind. Ed. Bldg. Laboratory fee, \$3.00. Prerequisite: Ind. Ed. 69 or equivalent. (Hornbake.)

Continuation of Ind. Ed. 69.

SCIENCE EDUCATION

Sci. Ed. S1. General Science for the Elementary School. (Crook.)

Section A-2: For Primary Grades (2). 11:00; Q-301. Laboratory fee, \$1.00.

Section B-2: For Upper Elementary Grades (2). 9:00; Q-301. Laboratory fee, \$1.00.

These courses are planned to meet the needs of the elementary school teacher. A point of view consistent with current philosophy in elementary education will be developed. The course will provide background material in selected phases of those sciences which contribute to elementary school work. An interpretation of materials of the local environment with reference to enrichment of the science program will receive attention. As much of the work as is possible will be illustrated with simple materials and apparatus and the material will be professionalized as much as possible.

There are two additional sections of this course, A-1 and B-1, which are given in alternate summers. None of the sections is prerequisite to other sections. Students may receive credit for both Sections A-1 and A-2 or B-1 and B-2. Students should not enroll for both A and B Sections.

Sci. Ed. S2. Activity Materials for Science in the Elementary School (2). T., Th., 1:00-3:30; Q-301. (Crook.) Group and individual conferences to be arranged. Class limited to thirty students. Laboratory fee, \$2.00.

A laboratory course planned to provide grade teachers with the opportunity for becoming acquainted with experiments and preparing materials which are of practical value in their science teaching.

ENGLISH

Eng. 1, 2. Composition and American Literature (3, 3). Eight periods a week. (Staff.)

Eng. 1. Section 1—Daily, 9:00; M., W., F., 8:00; A-18. Section 2—Daily, 9:00; M., W., F., 8:00; A-17. Section 3—Daily, 9:00; M., W., F., 8:00; A-204. Section 4—Daily, 1:00; M., W., F., 2:00; A-17. Section 5—Daily, 1:00; M., W., F., 2:00; A-18. Section 6—Daily, 1:00; M., W., F., 2:00; A-204.

Eng. 2. Section 1-Daily, 9:00; M., W., F., 8:00; A-203.

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Section 2—Daily, 9:00; M., W., F., 8:00; A-209.
Section 3—Daily, 11:00; M., W., F., 1:00; A-133.
Section 4—Daily, 11:00; M., W., F., 1:00; A-203.
Section 5—Daily, 11:00; M., W., F., 1:00; A-209.
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- Eng. 3, 4. Composition and World Literature (3, 3). Eight periods a week. (Staff.)
 - Eng. 3. Section 1—Daily, 9:00; W., W., F., 8:00; A-106. Section 2—Daily, 9:00; M., W., F., 8:00; A-130. Section 3—Daily, 9:00; M., W., F., 8:00; A-228. Section 4—Daily, 9:00; M., W., F., 8:00; A-231.
 - Eng. 4. Section 1—Daily, 10:00; M., W., F., 11:00; A-106. Section 2—Daily, 10:00; M., W., F., 11:00; A-130. Section 3—Daily, 10:00; M., W., F., 11:00; A-228.
- Eng. 5, 6. Composition and English Literature (3, 3). Eight periods a week.
 - Eng. 5. Section 1—Daily, 1:00; M., W., F., 2:00; A-106.
 Section 2—Daily, 1:00; M., W., F., 2:00; A-130.
 Section 3—Daily, 1:00; M., W., F., 2:00; A-228.
 - Eng. 6. Section 1—Daily, 10:00; M., W., F., 11:00; A-17.
 Section 2—Daily, 10:00; M., W., F., 11:00; A-204.
 Section 3—Daily, 10:00; M., W., F., 11:00; A-231.
 Section 4—Daily, 10:00; M., W., F., 11:00; A-10.
- Eng. 8 S. College Grammer (2). 10:00; A-207. Prerequisites, Eng. 1, 2. (Harman.)

An analytical study of Modern English grammar, with lectures on the origin and history of inflectional and derivational forms.

Eng. 10 S. News Reporting I (2). 11:00; A-207. Prerequisites, Eng. 1, 2, and permission of the instructor. (Beall.)

Practice in writing and analyzing simple news stories; fundamentals of journalistic principles.

Eng. 101 S. History of the English Language (2). 12:00; A-207. Prerequisites, Eng. 1, 2 and 3, 4 or 5, 6. (Harman.)

An historical and critical survey of the English language; its nature, origin, and development.

Eng. 102 S. Old English (2). 8:00; A-212. Prerequisites, Eng. 1, 2 and 3, 4 or 5, 6. (Ball.)

Readings in Old English. The sounds, morphology, and syntax of Old English are studied with particular reference to the development of Modern English.

Eng. 134 S. Literature of the Victorian Period (2). 11:00; A-212. Prerequisites, Eng. 1, 2 and 3, 4 or 5, 6. (Mooney.)

The chief writers of prose and poetry of the earlier Victorian period.

Eng. 143 S. Modern Poetry (2). 9:00; A-212. Prerequisites, Eng. 1, 2 and 3, 4 or 5, 6. (Murphy.)

The chief American poets of the twentieth century.

Eng. 151 S. American Literature to 1900 (2). 9:00; R-110. Prerequisites, Eng. 1, 2 and 3, 4 or 5, 6. (Lewis.)

This second half of a year course considers representative American poetry and prose from 1850 to 1900.

Eng. 206 S. Seminar in Renaissance Literature (2). 12:00; A-18. Prerequisite, graduate standing. (Zeeveld.)

Eng. 227 S. Problems in American Literature (2). 11:00; A-18. Prerequisite, graduate standing. (Bode.)

The works of Henry David Thoreau, primarily in relation to their intellectual milieu.

ENTOMOLOGY

Ent. 1. Introductory Entomology (3). Lecture daily 8:00; M-206. Laboratory, M., W., F., 1:00, 2:00; M-206. Fee, \$3.00. (Haviland.)

The position of insects in the animal kingdom, their gross structure, classification into orders and principal families and the general economic status of insects. A collection of common insects is required.

Ent. 110, 111. Special Problems (1, 1). Prerequisites to be determined by instructor. Arranged. (Cory.)

An intensive investigation of some entomological problem, preferably of the student's choice. Required of majors in entomology.

Ent. 201. Advanced Entomology. Credit and prerequisites to be determined by the department. To be arranged. (Cory and Staff.)

Studies of minor problems in morphology, taxonomy and applied entomology, with particular reference to the preparation of the student for individual research.

Ent. 202. Research. Credit depends upon the amount of work done. To be arranged. (Cory and Staff.)

Required of graduate students majoring in Entomology. This course involves research on an approved project. A dissertation suitable for publication must be submitted at the conclusion of the studies as a part of the requirements for an advanced degree.

FOREIGN LANGUAGES AND LITERATURE

The first semester of beginning languages will not be offered. Second-year language (French 4 and 5, German 4 and 5, and Spanish 4 and 5) will be offered in a reading course granting credit for either first or second semester, depending on the student's preparation.

French

Fr. 2. Elementary French (3). Eight periods a week. Daily, 8:00; M., W., F., 10:00; A-14. (Second semester of first-year French). (Howe.)

Elements of grammar; pronunciation and conversation; exercises in composition and translation.

Fr. 4 or 5. Intermediate Literary French (3). Eight periods a week; daily, 9:00; M., W., F., 11:00; A-14. Prerequisite, French 1 and 2 or equivalent. (Howe.)

Translation; conversation; exercises in pronunciation. Reading of texts designed to give some knowledge of French life, thought, and culture.

German

Ger. 2. Elementary German (3). Eight periods a week; daily, 8:00; R-13. M., W., F., 10:00; A-209. (Second semester of first-year German.) (Schweizer.)

Elements of grammar; pronunciation and conversation; exercises in composition and translation.

Ger. 4 or 5. Intermediate Literary German (3). Eight periods a week; daily, 9:00; M., W., F., 11:00; R-202. (Schweizer.)

Reading of narrative prose, grammar review, and oral and written practice.

Ger. 6 or 7. Intermediate Scientific German (3). Eight periods a week; daily, 9:00; A-110; M., W., F., 11:00; R-201. (Wildstosser.)

Reading of technical prose, with some grammar review.

Spanish

Sp. 2. Elementary Spanish (3). Eight periods a week; Daily, 8:00; A-110; M., W., F., 10:00; A-203. (Second semester of first-year Spanish.) (Bingham.)

Elements of grammar; pronunciation and conversation; exercises in composition and translation.

Sp. 4 or 5. Intermediate Spanish (3). Eight periods a week; daily, 9:00; M., W., F., 11:00; A-21. (Bingham.)

Translation, conversation, exercise in pronunciation. Reading of texts designed to give some knowledge of Spanish and Latin-American life, thought and culture.

GOVERNMENT AND POLITICS

G. & P. 1. American Government (3). Eight periods a week.

This course is designed as the basic course in government for the American Civilization program. It comprises a comprehensive study of governments in the United States and their adjustment to changing social and economic conditions.

Section 1—Daily, 10:00; T., W., F., 9:00; A-207. (Burdette.) Section 2—Daily, 11:00; M., W., Th., 12:00; R-113. (Dixon.)

G. & P. 4. State Government and Administration (3). Prerequisite, G. & P. 1. Eight periods a week. Daily, 10:00; T., W., F., 9:00; R-113. (Dixon.)

A study of the organization and functions of state government in the United States, with special emphasis upon the government of Maryland.

G. & P. 10. The Governments of Russia and the Far East (2). Pre-

requisite, G. & P. 1. Five periods a week. Daily, 8:00; A-16. (Steinmeyer.)

A study of the governments of Russia, China, and Japan.

G. & P. 105. Recent Far Eastern Politics (3). Prerequisite, G. & P. 1. Eight periods a week. Daily, 9:00; M., W., F., 10:00; A-16. (Steinmeyer.)

The background and interpretation of recent political events in the Far East and their influence on world politics.

G. & P. 174. Political Parties (3). Prerequisite, G. & P. 1. Eight periods a week. Daily, 11:00; M., Th., F., 12:00; A-16. (Burdette.)

A descriptive and analytical examination of American political parties, nominations, elections, and political leadership.

For Graduates

G. & P. 211. Seminar in Federal-State Relations (3). Hours to be arranged. (Ray.)

Reports on topics assigned for individual research and reading in the field of recent federal-state relations.

HISTORY

- H. 3. History of England (3). Daily, 12:00; M., W., F., 1:00; A-110. (Gordon.)
 - H. 5. History of American Civilization (3). Eight periods a week.

Section 1—Daily, 8:00; M., W., F., 9:00; E-116. (Wellborn.)

Section 2—Daily, 10:00; M., W., F., 11:00; E-116. (Chatelain.)

Section 3—Daily, 12:00; M., W., F., 1:00; E-116. (Hunter.)

Section 4—Daily, 1:00; M., W., F., 2:00; A-14. (Sensenig.)

From the colonial period through the American Civil War. Required of all students for graduation.

H. 6. History of American Civilization (3). Eight periods a week.

Section 1—Daily, 9:00; M., W., F., 10:00; E-131. (Merrill.)

Section 2—Daily, 1:00; M., W., F., 2:00; A-21. (Bates.)

From the American Civil War to the present. Required of all students for graduation.

H. 116 S. The Civil War and Reconstruction (2). 12:00; A-14. (Merrill.)

Military aspects; problems of the Confederacy, political, social, and economic effects of the war upon American society. Post-bellum problems of reconstruction in North and South.

H. 122 S. History of the American Frontier: The Trans-Mississippi West (2). 10:00; A-18. (Gewehr.)

Processes and factors which influenced the settlement and development of the western half of the United States.

H. 130 S. Territorial Dependencies of the United States (2), 9:00; R-103. (Pratt.)

Acquisition of our insular and territorial possessions; political evolution; economic, social and cultural problems; present status and outlook.

H. 141 S. History of Maryland (2). 2:00; A-16. (Chatelain.)

Selected topics illustrative of the political, social and economic factors in the development of Maryland as colony and state.

H. 155. Medieval Civilization (2), 10:00; A-21, (Bauer.)

A survey of medieval life, culture and institutions from the fall of the Roman Empire to the thirteenth century.

H. 171 S. Europe in the Ninteeenth Century (2). 8:00; R-201. (Hunter.)

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

H. 187 S. History of Canada (2). 10:00; A-212. (Gordon.)

A survey of Canadian development with emphasis on the Canadian growth to nationhood, and on Canada's relations with the United States and membership in the British Commonwealth.

H. 191 S. History of Russia (2). 1:00; A-212. (Bauer.)

A history of Russia from the earliest times to the present day.

H. 195 S. The Far East (2). 12:00; A-212. (Gewehr.)

A survey of institutional, cultural and political aspects of the history of China and Japan, and a consideration of present-day problems of the Pacific area.

H. 200. Research (2-4). Credit proportional to amount of work. Arranged. (Staff.)

H. 201 S. Seminar in American History (2). 1:00, 2:00, M., W.; A-207. (Pratt.)

H. 250 S. Seminar in European History (2). Arranged. (Bauer.)

H. 287. Historiography (3). 8:00 and specially arranged individual conferences; R-204. (Sparks.)

Required of all candidates for advanced degrees in history. Readings and occasional lectures on the historical writing, the evolution of critical standards, the rise of auxiliary sciences, and the works of selected masters.

HOME ECONOMICS

Clo. 20a and b.* Clothing Construction (3). 8:00, 9:00; H-132. Laboratory fee, \$3.00. (Wilbur.)

Each student is required to complete a minimum of two garments. The course is planned to develop technical skill in garment construction and to give experience in the selection of fabrics and fashions suited to individual needs.

Clo. 22. Clothing Construction (2). 9:00, 10:00; H-132. Laboratory fee, \$3.00. (Wilbur.)

Continuation of Clo. 20 with emphasis on figure analysis, fitting problems and workmanship.

Clo. 126. Fundamentals of Fashion (2-3). 1:00; H-132. (Wilbur.) Prerequisite: senior standing.

Fashion history; current fashions, how to interpret and evaluate them; fashion show techniques; fashion promotion. The course includes oral and written reports, group projects, panel discussions and field trips.

Tex. & Clo. 231. Research (2-4). Arranged. (Mitchell.)

Tex. & Clo. 232. Economics of Textiles and Clothing (3). Daily 11:00; 3 hours arranged; H-132. (Mitchell.)

Production and retailing methods and problems; textile and clothing legislation; consumer purchases studies; family expenditures for clothing; source materials.

Cr. 2. Simple Crafts (2). 3:00; H-135. Laboratory fee, \$3.00. (Young.)

Creative art expressed in clay modeling, plaster carving, wood burning, thin metal working, paper mache modeling, etc. Emphasis is laid upon inexpensive materials and tools and simple techniques, which can be pursued in the home. Excellent for teachers and directors of recreation centers. Consideration will be given to simple recreation centers in the home and at camp. Enrollment limited.

Cr. 40. Weaving (2). Daily 1:00, 2:00, and time arranged; H-9. Laboratory fee, \$3.00. (Young.)

Hand weaving on table and floor looms. Good color, texture, and general design are stressed. Enrollment limited.

Pr. Art 38. Photography (2). 8:00, 9:00; H-307. Laboratory fee, \$3.00. (Davis.)

Beginning photography adapted to the needs of teachers and school administrators. Emphasis is placed upon good composition and upon propriety in the use of this medium for public relations, visual education, and recreational and occupational activity. Enrollment limited.

Home Mgt. 152. Practice in the Management of a Home (3). Laboratory fee, \$7.00. (Crow.) Prerequisite, Home Mgt. 150, 151.

Residence for the equivalent of one-third semester in the Home Management House. Experience in planning, guiding, directing and coordinating the activities of a household, composed of a faculty member and a small group of students.

Foods 101. Meal Service (2). Lecture, M., W., F., 10:00; Laboratory, T., Th., 10:00, 11:00, 12:00; H-203. (Cornell.)

Planning and serving meals for family groups considering nutritional needs and cost; includes simple entertaining.

Foods 204 S. Recent Advances in Foods (2). 9:00; H-222. (Cornell.)

A study of the recent advances in the manipulation of food materials. Newer methods of processing and packaging. Study of the effect of these methods of processing, packaging and storage on the nutritive value of food. Principles of photography as applied to the preparation and handling of foods for photographic purposes for magazines and newspapers.

Nut. 111. Child Nutrition (2). 8:00; H-222. (LeGrand.)

Principles of nutrition applied to children and adolescents. Methods of applying such information to menus and food for the school lunch. A study of the work of agencies presenting nutrition programs in the community. Visits to clinics, hospitals, to study symptoms of malnutrition. Study of materials, including such visual education aids as films for use in schools, for nutrition work with children.

Nut. 210 S. Readings in Nutrition (2). 9:00; H-9. (LeGrand.)

Reports and discussion of outstanding nutritional research and investigation.

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Foods & Nut. 220. Seminar (1). M., W., F., 9:00; H-9. (LeGrand.)

Reports and discussion of current research in the fields of foods and nutrition.

HORTICULTURE

Hort. 124 S. Tree and Small Fruit Management (1). First three weeks. To be arranged. (Haut and Schrader.)

Primarily designed for vocational agricultural teachers and county agents. Special emphasis will be placed upon new and improved commercial methods of production of the leading tree and small fruit crops. Current problems and their solution will receive special attention.

LIBRARY SCIENCE

L. S. 101 S. School Library Administration (2). 11:00; L-11. (Robinson.)

The organization and maintenance of effective library service in the modern school. Planning and equipping library quarters, purpose of the library in the school, standards, instruction in the use of books and libraries, training student assistants, acquisition of materials, repair of books, publicity, exhibits and other practical problems.

L. S. 103 S. Book Selection for School Libraries (3). Eight periods a week. Daily, 1:00; M., W., F., 2:00; Library Annex. (Robinson.)

Principles of book selection as applied to school libraries. Practice in the effective use of book selection aids and in the preparation of book lists. Evaluation of publishers, editions, translations, format, etc.

MATHEMATICS

Math. 1. Introductory Algebra (0). Eight lectures a week. Daily, 12:00; M., W., F., 1:00; FF-24. Prerequisite, one unit of algebra. Open to students of engineering and required of students who fail in the qualifying examination in Math. 15.

A review of topics covered in a second course in algebra.

Math. 2. Solid Geometry (0). 11:00; GG-11. Prerequisite, plane geometry. Open to students who enter deficient in solid geometry.

Lines, planes, cylinders, cones, the sphere and polyhedra, primary emphasis on mensuration. Intended for engineers and science students.

Math. 6. Mathematics of Finance (3). Four sections. Eight lectures a week.

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Section 1—8:00; M., W., F., 9:00; GG-1.
Section 2—8:00; M., W., F., 9:00; GG-5.
Section 3—10:00; M., W., F., 11:00; GG-1.
Section 4—10:00; M., W., F., 11:00; GG-5.
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Prerequisite, Math. 5 or equivalent. Open to students in the College of Business and Public Administration.

Simple and compound interest, discount, amortization, sinking funds, valuation of bonds, depreciation, annuities, and insurance.

Math. 10. Algebra (3). Eight lectures a week. Daily, 8:00; M., W., F., 9:00; GG-9. Prerequisite, one unit each of algebra and plane geometry. Open to biological, pre-medical, pre-dental, and general Arts and Science students.

Fundamental operations, factoring, fractions, linear equations, exponents and radicals, logarithms, quadratic equations, variation, binomial theorem, theory of equations.

Math. 11. Trigonometry and Analytic Geometry (3). Two sections. Eight lectures a week.

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Section 1—Daily 8:00; M., W., F., 9:00; GG-7. Section 2—Daily 10:00; M., W., F., 11:00; GG-7.
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Prerequisite, Math. 10 or equivalent. Open to biological, pre-medical, predental, and general Arts and Science students. This course is not recommended for students planning to enroll in Math. 20.

Trigonometric functions, identities, addition formulas, solution of triangles, coordinates, locus problems, the straight line and circle, conic sections, graphs.

Math. 14. Plane Trigonometry (2). Four sections.

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Section 1—10:00; FF-17.
Section 2—10:00; FF-18.
Section 3—11:00; FF-17.
Section 4—11:00; FF-18.
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Prerequisite, Math. 15 or concurrent enrollment in Math. 15. Open to students in engineering, education, and the physical sciences.

Trigonometric functions, identities, the radian, graphs, addition formulas, solution of triangles, trigonometric equations.

Math. 15. College Algebra (3). Three sections. Eight lectures a week.

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Section 1—8:00; M., W., F., 9:00; FF-17.
Section 2—8:00; M., W., F., 9:00; FF-18.
Section 3—12:00; M., W., F., 1:00; FF-25.
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Prerequisite, high school algebra completed. Open to students in engineering, education, and the physical sciences.

Fundamental operations, variation, functions and graphs, quadratic equations, theory of equations, binomial theorem, complex numbers, legarithms, determinants, progressions.

Math. 17. Analytic Geometry (4). Five sections. Eight lectures, four drill periods a week.

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Section 1-M., T., W., Th., F., S., 8:00, 9:00; FF-19.
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Section 2-M., T., W., Th., F., S., 8:00, 9:00; FF-20.

Section 3-M., T., W., Th., F., S., 10:00, 11:00; FF-25.

Section 4-M., T., W., Th., F., S., 10:00, 11:00; FF-20.

Section 5-M., T., W., Th., F., S., 10:00, 11:00; GG-9.

Prerequisite, Math. 14, 15, or equivalent. Open to students in engineering, education, and the physical sciences.

Coordinates, locus problems, the straight line and circle, graphs, transformation of coordinates, conic sections, parametric equations, transcendental equations, solid analytic geometry.

Math. 21. Calculus (4). Three sections. Eight lectures, four drill periods a week.

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Section 1-M., T., W., Th., F., S., 8:00, 9:00; FF-24.
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Section 2-M., T., W., Th., F., S., 8:00, 9:00; FF-25.

Section 3-M., T., W., Th., F., S., 10:00, 11:00; FF-24.

Prerequisite, Math. 20 or equivalent. Open to students in engineering, education, and the physical sciences.

Integration with geometric and physical applications, partial derivatives, space geometry, multiple integrals, infinite series.

Math. 64. Differential Equations for Engineers. Eight lectures a week. Daily, 10:00; M., W., F., 11:00; FF-19. Prerequisite, Math. 21 or equivalent. Required of students in mechanical and electrical engineering.

Ordinary and partial differential equations of the first and second order with emphasis on their engineering applications.

Math. 100 S. Higher Algebra (2). 9:00; FF-7. Prerequisite, Math. 20, 21, or equivalent. (Good.)

Advanced college algebra stressing manipulative skill and facility in algebraic technique and solution of problems. Progressions, combinations, permutations, probability.

Math. 124 S. Introduction to Projective Geometry (2). 8:00; FF-7. Prerequisite, two years of college mathematics. (Jackson.)

Projective geometry largely from the synthetic point of view. Topics will include extended space, perspectivities and projectivities, theory of conics, theorems of Pascal and Brianchon.

Math. 201. Modern Algebra (3). Daily, 10:00; M., W., F., 11:00; FF-7. Prerequisite, Math. 200 or consent of instructor. (Good.)

Fields, algebraic numbers, Galois theory.

MUSIC

Mus. 1. Music Appreciation (3). Daily, 8:00; M., W., F., 9:00; B-1. (Randall.)

A study of all types of classical music (not including opera) from the time of Haydn, with a view to developing the ability to listen and enjoy.

Mus. 3. History of American Music (2). 11:00; B-1. (Haslup.)

This course, designed to be an integral part of the American Civilization program, reviews the development of music in the United States from Colonial days to the present time. Our history is divided into three parts: from early Colonial days to 1800, 1800 to the Civil War, and 1865 to the present. Phases of our musical history which are studied include: Early Hymn Writers, Stephen Foster, the Negro Spiritual, and 20th Century Music.

Mus. S 4. Summer School Chorus (1). 12:00; B-1. (Randall.)

Open to all students attending the Summer Session. Work will be directed toward the presentation of a Summer Concert one evening during the 5th or 6th week of the Summer Session.

Mus. 7. Fundamentals of Music (2). 10:00; B-1. (Haslup.)

This course is a prerequisite to Harmony and includes a study of major and minor scales, intervals, basic piano technique, sight singing, simple musical form and theory. A student must have the permission of the instructor to register for this course and must achieve a grade of B in order to continue with the study of harmony.

Mus. 111. Instruments of the Orchestra (2). 1:00; B-1. (Sykora.)

A study of the construction and technique of playing common orchestral instruments. If possible students should bring their own instruments.

Mus. 112. Instrumental and Choral Conducting (2). 12:00; B-1. (Sykora.)

Students will receive instruction in conducting both choral groups and instrumental combinations. Qualities of a good conductor and fundamental principles and techniques of the art of conducting will be stressed here.

Mus. 113. Methods and Materials in Music (2). 1:00; B-1. (Randall.)

Designed especially for those interested in presenting musical assemblies, concerts and programs of all types. Methods of presentation and materials suitable for various occasions will be discussed.

PHILOSOPHY

Phil. 181 S. Aesthetics (2). 10:00; E-121. (Vivas.)

A general introduction to aesthetics with emphasis on current American theory.

Phil. 183 S. Contemporary American Philosophy (2). 11:00; E-121. (Vivas.)

A survey of influential American systems of thought in the twentieth century.

PHYSICAL EDUCATION, HEALTH AND RECREATION

P. E. 116. Rhythmic Activities (2). Three lectures and four laboratory periods per week. T., Th., F., 10:00; M., W., 10:00, 11:00; Field House. Emmett.)

Material and methods. Theory and practice in teaching singing games, modern dance fundamentals, simple and advanced folk and square dances for elementary and secondary schools.

P. E. 120. The Physical Education Curriculum in Secondary School (2). Daily, 8:00; G-201. (Snow.)

Analysis of activities for the secondary school program. Philosophy, principles, and procedures in teaching and planning the physical education curriculum.

Hea. 120. Teaching Health (2). Prerequisite, Hea. 40 or equivalent. Daily, 10:00; G-203. (Snow.)

A study of materials and methods in health education. Planning the health education curriculum.

P. E. 122. Individual Sports (2). Two lectures and six laboratory periods per week. T., Th., 9:00; M., W., F., 8:00, 9:00; G-202. (Snow.)

Theory and practice in the techniques of teaching golf, badminton and archery.

P. E. 140. Therapeutics (3). Eight periods per week. Daily, 9:00; M., W., F., 8:00; G-1. (Emmett.)

A study of common structural abnormalities, corrective exercises and massage. Causes, prevention and correction of postural defects. Testing methods. Theory and practice.

Rec. 140. Observation and Service in Recreation (5). Daily, 2:00, 3:00; A-1. Field trips and Service arranged. (Tompkins.)

Observation of recreation centers, city playgrounds, community and night centers. Leadership practice in these areas and written reports.

P. E. 160. Golf (1). W., 1:00, 2:00, 3:00, 4:00. Arranged. One lecture and three laboratory periods per week. (Cronin.)

Selection of equipment; rules of golf. Techniques of drive, approach and putt. Instruction in golf as a competitive game; intramural and interscholastic.

P. E. 190. Organization and Administration of Health and Physical Education (3). Lectures, daily, 9:00; M., W., F., 8:00; G-203. (Tompkins.)

The problems of coordinating health, physical education and athletics in a school program. Professional responsibilities of the Director and Coach are emphasized. Scheduling, public relations, care and purchase of equipment, etc., are discussed. Theme required.

P. E. 200. Departmental Seminar (1 or 2). Arranged; G-203. (Burnett, Gloss and Field.)

In this Seminar each candidate for the Master's Degree will present to

the group, including departmental and invited authorities, (1) a mimeographed outline of his (or her) thesis topic; (2) a verbally delivered digest; the main thesis problem, sub-problems, and the tentative solutions. This must be presented and defended as to criticism in a manner satisfactory to the faculty and, or authorities present or again repeated in another term.

P. E. 201. Foundations in General Field (3). Lectures and Practice. Daily, 8:00, 9:00; Gymnasium Floor. (Field.)

Foundations in General Field of Physical Education, Health and Recreation. An overall view of the total fields of Health, Physical Education and Recreation; their interrelations and places in education.

P. E. 205. Administration of Athletics (2). Daily, 12:00; G-202. (Tatum.)

Problems and procedures in the administration of school and college athletic competition, the installation and maintenance of indoor and outdoor athletic equipment, special problems of surveys, legislation, property acquisition, finances, inventories and the selection of personnel.

Rec. 215. Philosophy of Recreation (2). Daily, 11:00; G-203. (Gloss.)

The possible implications for social betterment by the proper use of leisure time in a democratic civilization which is constantly increasing the free time of the common man.

Hea. 225. Principles and Practice of Health Education (2). Daily, 10:00; G-201. Practice, arranged. (Burnett.)

Health education and health services in public schools and colleges as supported by endowment funds or by public taxation.

P. E. 250. Survey in the Area of Health, Physical Education and Recreation (6). Arranged; G-102. (Gloss.)

A Library Survey course, covering the total area of Health, Physical Education and Recreation; intensive research on one specific limited problem of which a digest, including a bibliography, is to be submitted.

P. E. 260. Research (1-6). Arranged; G-102. (Gloss, Burnett.)

This course is for advanced students who are capable of doing individual research on some topic other than the thesis or the one chosen in P. E. 250. Approval of the instructors is required.

PHYSICS

Phys. 21. General Physics: Sound, Optics, Magnetism, and Electricity (5). The second half of a course in general physics. Required of all students in the engineering curricula. Prerequisites, Phys. 20. Math. 21 is to be taken concurrently. Laboratory fee, \$5.00.

Lecture-M., T., W., Th., F., 10:00; Room GG-6.

Recitation-M., T., W., Th., F., 8:00; Room E-306.

Laboratory Lecture—T., Th., 12:00; (F., 12:00; 2nd, 4th and 6th weeks); GG-6.

Laboratory—M., W., 1:00, 2:00; (F., 1:00, 2:00, 1st, 3rd and 5th weeks); Q-301.

POULTRY

P. H. 112 S. Poultry Products and Marketing (1). First three weeks. To be arranged. (Quigley and Gwin.)

This course is designed primarily for teachers of vocational agriculture and county agents. It deals with the factors affecting the quality of poutry production and with hatchery management problems, egg and poultry grading, preservation problems and market outlets for Maryland poultry.

PSYCHOLOGY

University Counseling Center. The Department of Psychology maintains a counseling service, provided with a well-trained technical staff and equipped with an excellent stock of standardized tests of aptitude, ability and interest. The services of this center are available to Summer Session students.

Psych. 1 S. Introduction to Psychology (2). 9:00; DD-10. (Hackman.)

A basic introductory course, intended to bring the student into contact with the major problems confronting psychology and the more important attempts at their solution.

Psych, 2 S. Applied Psychology (2), 10:00; DD-10. (Hackman.)

Application of research methods to basic human problems in business and industry, in the professions, and in other practical problems of everyday life.

Psych. 110. Educational Psychology (3). Eight periods a week; daily, 8:00; M., W., F., 9:00; DD-9. (Schaefer.)

Researches on fundamental problems in education; measurement and significance of individual differences, learning, motivation, transfer of training.

Psych. 121 S. Social Psychology (2). 10:00; DD-9. (Schaefer.) Prerequisite, Psych. 1.

Psychological study of human behavior in social situations; influence of others on individual behavior; social conflict and social adjustment, communication and its influence on normal social activity.

Psych, 125 S. Child Psychology (2), 11:00; DD-9. (Cofer.) Prerequisite, Psych 1.

Behavior analysis of normal development and normal socialization of the growing child.

Psych. 130 S. Menta'l Hygiene (2). Lectures, M., T., Th., F., 11:00; EE-8; clinic, W., 2:00-4:00. (Sprowls.) Prerequisite, Psych. 1.

The more common deviations of personality; typical methods of adjustment. The weekly clinic will be held at St. Elizabeth's Hospital.

Psych. 203 S. Seminar (2). Review of Current Technological Researches. Prerequisite consent of instructor. (Staff.)

A continuing survey of the research literature as it develops in terms of reports from the various research centers. This seminar is intended to keep the mature student in touch with new developments of method, fact, and

theory as they occur in current professional journals.

Psych. 216 S. Seminar in Clinical Psychology for Teachers (2). Arranged. (Sprowls.) Prerequisite, consent of instructor.

A systematic consideration of clinical procedures in treating psychological problems of pupils.

Psych. 225 S. Participation in Counseling Clinic (2). Prerequisite, consent of instructor. (Smith.)

Participation under direct supervision in the counseling of current cases in the University's Student Clinic. Cases will be followed through the interview, testing, counseling, recommendations and follow-up.

Psych. 276 S. Field Work in Clinical Psychology (2). Prerequisite, consent of instructor. (Cofer.)

Supervised training in the field of clinical psychology and in testing of the abnormal person. Field work will be done at St. Elizabeth's Hospital or other authorized institutions.

Psych. 299 S. Graduate Research in Psychotechnology (2-4). Arranged. (Hackman.) Prerequisite, consent of instructor. Credit will be appointed to work accomplished.

SOCIOLOGY

Soc, 1 S. Sociology of American Life (3). Eight periods a week.

Section 1—Daily, 8:00; M., W., F., 9:00; E-121. (Ebersole.)

Section 2—Daily, 10:00; M., W., F., 11:00: E-305. (Lejins.)

Section 3—Daily, 9:00; M., W., F., 10:00; E-306. (Hutchinson.)

Section 4—Daily, 1:00; M., W., F., 2:00; A-231. (Fleming.)

Sociological analysis of the American social structure; metropolitan, small town, and rural communities; population distribution, composition and change; social organization.

Soc. 2 S. Principles of Sociology (3). Eight periods a week; daily, 10:00; M., W., F., 11:00; E-307. (Shankweiler.)

The basic forms of human association and interaction; social processes; institutions; culture; human nature and personality.

Soc. 5 S. Anthropology (2). 11:00; E-306. (Hutchinson.)

Introduction to anthropology; origins of man; development and transmission of culture; backgrounds of human institutions.

Soc. 14 S. Urban Sociology (2). 10:00; E-212. (Bailey.)

Urban growth and expansion; characteristics of city populations; urban institutional and personality patterns; relations of city and country.

Soc. 64 S. Marriage and the Family (2). 8:00; E-131. (Shankweiler.)

Functions of the family; marriage and family adjustments; factors affecting mate selection, marital relations, and family stability in contemporary social life.

Soc. 115 S. Industrial Sociology (2). 9:00; E-212. (Imse.)

Social organization of American industry; functions of members of industrial organization; status, social structure, patterns of interaction and relations of industry and society.

Soc. 118 S. Community Organization (2). 11:00; E-131. (Bailey.)

Community organization and its relation to social welfare; analysis of community needs and resources; health, housing, recreation; community centers; neighborhood projects.

Soc. 141 S. Sociology of Personality (2), 11:00; E-212. (Ebersole.)

Development of human nature and personality in contemporary social life; processes of socialization; attitudes, individual differences, and social behavior.

So. 153 S. Juvenile Delinquency (2). 8:00; A-1. (Lejins.)

Juvenile delinquency in relation to the general problem of crime; analysis of factors underlying juvenile delinquency; treatment and prevention.

Soc. 183 S. Social Statistics (3). Daily, 10:00; M., W., F., 11:00; E-213. (Imse.)

Collection, statistical analysis, and interpretation of social data; problems of quantitative measurement of social phenomena.

Soc. 186 S. Sociology Theory (3). Daily 8:00; M., W., F., 9:00; E-213. (Fleming.)

Development of the science of sociology; historical backgrounds; recent theories of society.

SPEECH AND DRAMATIC ART

Speech 1. Public Speaking (2). 8:00; R-101. Fee, \$1.00 (Strausbaugh.)
The preparation and delivery of short original speeches. Outside readings; reports, etc.

Speech 2. Public Speaking (2). Prerequisite, Speech 1.

Section 1-9:00; R-101. (Strausbaugh.)

Section 2-2:00; R-109. (Larson.)

Speech 4. Voice and Diction (3). M., W., F., 8:00, 9:00; T., Th., 9:00; R-201. (Mayer.)

Emphasis upon the improvement of voice, articulation, and phonation.

Speech 7. Public Speaking (2). 10:00; R-101. Fee, \$1.00. (Strausbaugh.)

Limited to freshman engineers. The preparation and delivery of speeches and reports dealing with technical subjects.

Speech 10. Group Discussion (2), 10:00; R-204. (Hendricks.)

A study of the principles, methods, and types of discussion, and their application in the discussion of contemporary problems.

Speech 16. Introduction to the Theatre (3). M., W., F., 10:00, 11:00; T., Th., 11:00; R-202. (Mayer.)

A general survey of the fields of the theatre.

Speech 110. Teacher Problems in Speech (2), 11:00; R-101. (Hendricks.)

Every-day speech problems that confront the teacher.

Speech 113. Play Production (3). M., W., F., 1:00, 2:00; T., Th., 1:00; R-201. (Larson.)

A lecture-laboratory course dealing with the problems confronted by the teacher in directing and producing plays.

ZOOLOGY

Zool. S 1. General Zoology (4). Five lectures and five two-hour laboratory periods a week. Lecture, daily, 8:00; EE-15; Laboratory, 10:00, 11:00; EE-20. Laboratory fee, \$6.00. (Burhoe.)

This course, which is cultural and practical in its aim, deals with the basic principles of animal life. Typical invertebrates and a mammalian form are studied.

Zool. S 2. Fundamentals of Zoology (4). Five lectures and five two-hour laboratory periods a week. Lecture, 10:00; M-107. Laboratory, 8:00, 9:00; M-302. Laboratory fee, \$6.00. (Littleford.)

This course satisfies the freshmen premedical requirements in general biology. Freshmen who intend to choose zoology as a major should register for this course.

A thorough study of the anatomy, classifications, and life histories of representative animals. Emphasis is placed on invertebrate forms.

Zool. S 5. Comparative Vertebrate Morphology (4). Five lectures and five three-hour laboratory periods a week. Prerequisite, one course in zoology. Lecture, 9:00; M-107; Laboratory, 1:00, 2:00, 3:00; M-303. Laboratory fee, \$6.00. (Werner.)

A comparative study of selected organ systems in certain vertebrate groups.

Zool. S 20. Vertebrate Embryology (4). Five lectures and five three-hour laboratory periods a week. Prerequisite, one course in zoology. Lecture, 11:00; M-107; Laboratory, 1:00; EE-16. Laboratory fee, \$6.00. (Negherbon,)

The development of the chick to the end of the fourth day and early mammalian embryology.

Zool. S 114. Field Zoology (4). Five lectures and five three-hour laboratory periods a week. Prerequisite, one year of zoology. Lecture, 1:00; M-107; Laboratory, 2:00, 3:00, 4:00; M-302. Laboratory fee, \$6.00. (Tiller.)

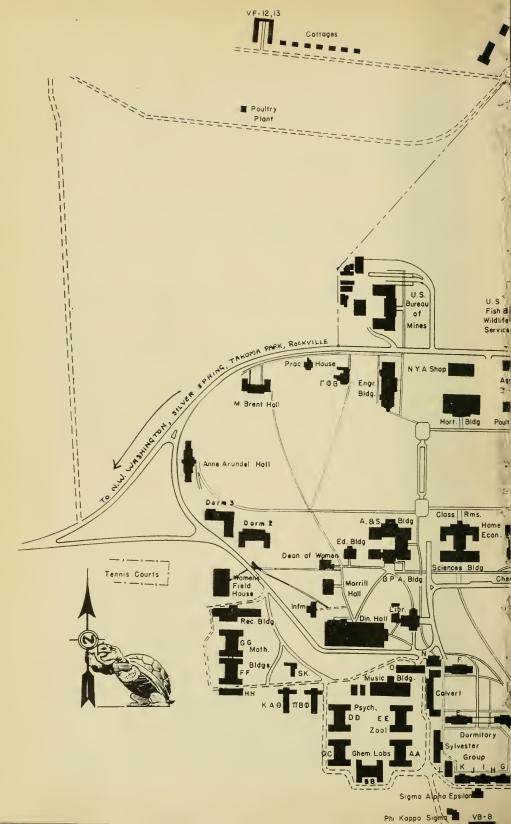
This course consists in collecting and studying both land and aquatic forms of nearby woods, fields, and streams, with emphasis on the higher invertebrates and certain vertebrates, their breeding habits, environment, and modes of living.

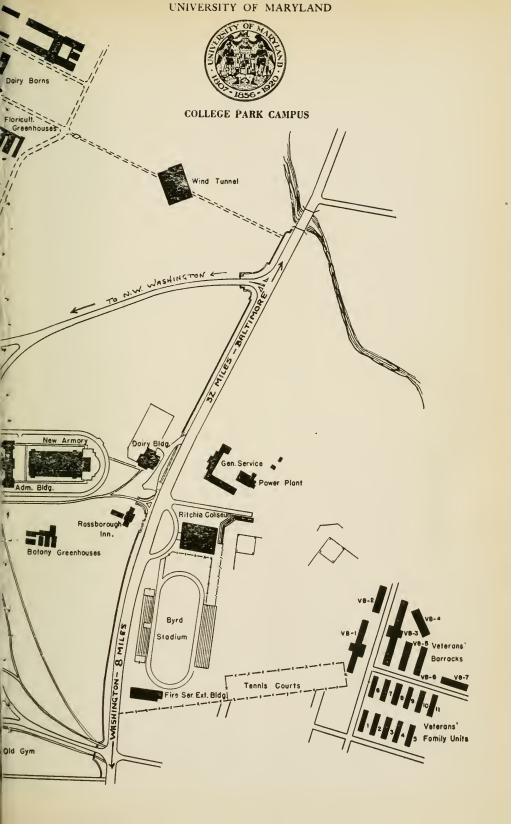
Zool. S 104. Genetics (3). Eight lecture periods a week. Prerequisite, one course in zoology or botany. Recommended for premedical students. Lecture daily, 9:00; M., W., F., 10:00; EE-15. Laboratory fee, \$6.00. (Burhoe.)

A consideration of the basic principles of heredity.

Zool. 206. Research (credit to be arranged.) (Staff.)

Zool. 208. Special Problems in Physiology. Credits and hours arranged. Laboratory fee, \$6.00. (Phillips.)







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