

CORNELL UNIVERSITY

OFFICIAL PUBLICATION

MAY 18, 1953

Independent Divisions and Departments

Division of Extramural Courses
Division of Unclassified Students

The Departments of
Military Science and Tactics
Air Science and Tactics
Naval Science

Physical Education, Men
Physical Education, Women
Clinical and Preventive Medicine



ANNOUNCEMENT FOR 1953-54 SESSIONS

The University Calendar

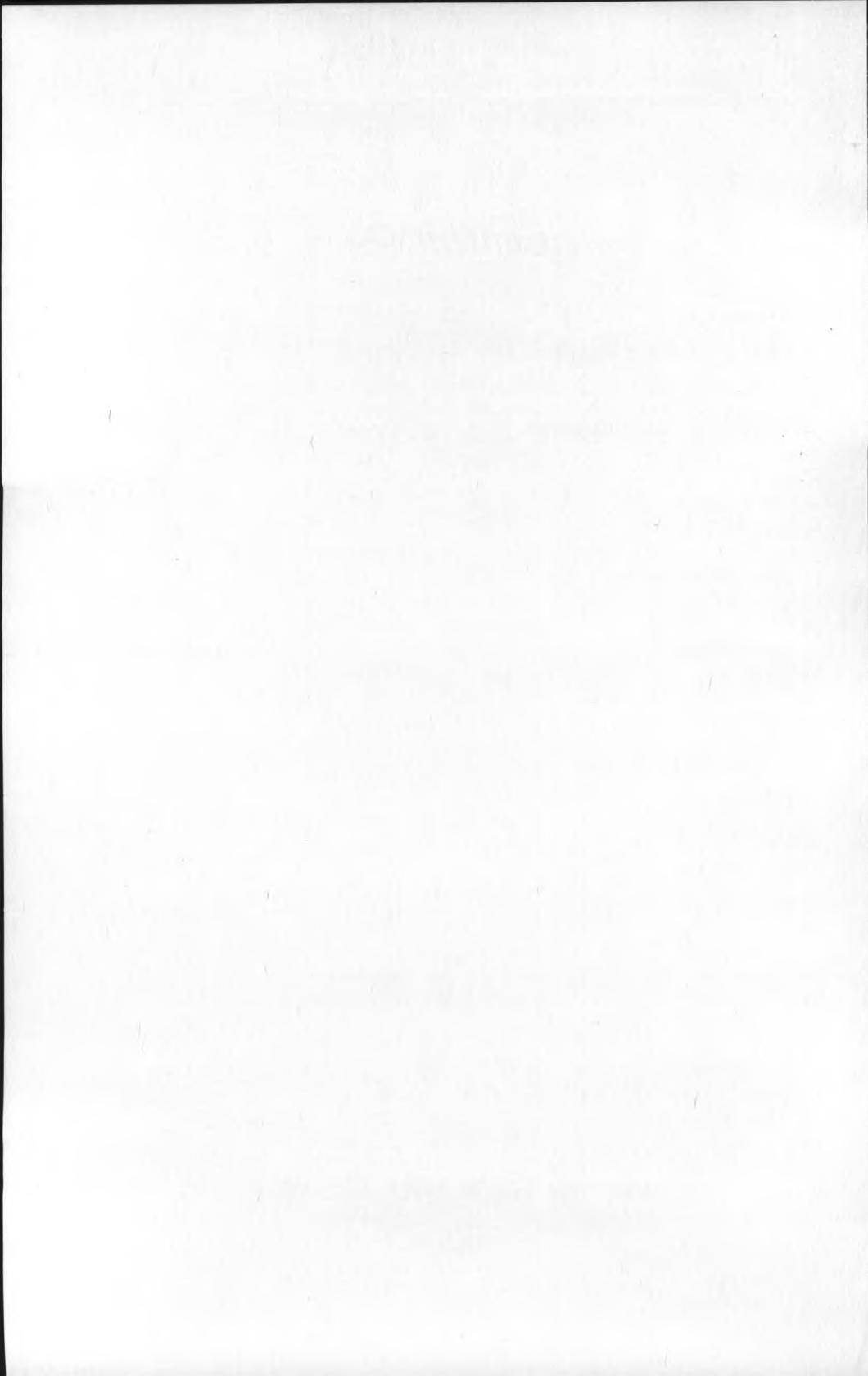
	1953-54	1954-55
Freshman Orientation	Sept. 18, <i>F</i>	Sept. 17, <i>F</i>
Registration	Sept. 21-22, <i>M-T</i>	Sept. 20-21, <i>M-T</i>
Instruction begins	Sept. 23, <i>W</i> , 1 p.m.	Sept. 22, <i>W</i> , 1 p.m.
Midterm grades due	Nov. 11, <i>W</i>	Nov. 10, <i>W</i>
Thanksgiving recess:		
Instruction suspended	Nov. 25, <i>W</i> , 12:50 p.m.	Nov. 24, <i>W</i> , 12:50 p.m.
Instruction resumed	Nov. 30, <i>M</i> , 8 a.m.	Nov. 29, <i>M</i> , 8 a.m.
Christmas recess:		
Instruction suspended	Dec. 19, <i>S</i> , 12:50 p.m.	Dec. 18, <i>S</i> , 12:50 p.m.
Instruction resumed	Jan. 4, <i>M</i> , 8 a.m.	Jan. 3, <i>M</i> , 8 a.m.
Instruction ends	Jan. 23, <i>S</i>	Jan. 22, <i>S</i>
Second-term registration		
for first-term registrants	Jan. 25, <i>M</i>	Jan. 24, <i>M</i>
Examinations begin	Jan. 26, <i>T</i>	Jan. 25, <i>T</i>
Examinations end	Feb. 3, <i>W</i>	Feb. 2, <i>W</i>
Midyear recess	Feb. 4-5, <i>Th-F</i>	Feb. 3-4, <i>Th-F</i>
Registration for those not		
first-term registrants	Feb. 6, <i>S</i>	Feb. 5, <i>S</i>
Instruction begins	Feb. 8, <i>M</i>	Feb. 7, <i>M</i>
Midterm grades due	Mar. 27, <i>S</i>	Mar. 26, <i>S</i>
Spring recess:		
Instruction suspended	Mar. 27, <i>S</i> , 12:50 p.m.	Mar. 26, <i>S</i> , 12:50 p.m.
Instruction resumed	Apr. 5, <i>M</i> , 8 a.m.	Apr. 4, <i>M</i> , 8 a.m.
Instruction ends	May 29, <i>S</i>	May 28, <i>S</i>
Examinations begin	May 31, <i>M</i>	May 30, <i>M</i>
Examinations end	June 8, <i>T</i>	June 7, <i>T</i>
Commencement Day	June 14, <i>M</i>	June 13, <i>M</i>

CORNELL UNIVERSITY OFFICIAL PUBLICATION

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The Independent Divisions

THE DIVISION OF EXTRAMURAL COURSES

CORNELL University offers credit courses through its Division of Extramural Courses for persons who are unable to devote full time as students in any one of the schools or colleges of the University. Persons served in this manner are nonresident in the usual sense of the full-time student, are employed in the professions, in industry, in business, in public service or otherwise, and for such reasons are unable to undertake full-time resident registration.

Courses are made available in off-campus centers located to suit the convenience of a sufficient number of students to warrant the offering, and through the facilities of the regularly scheduled course offerings on campus for the convenience of students who can commute to the campus. All such courses carry regular credit in the University. The credit may be used toward meeting requirements for graduate and undergraduate degrees, subject in any instance to the approval of the particular school or college concerned.

Extramural students may register for any course in the University for which they have adequate preparation and for which they have the instructor's permission to enroll. The maximum registration permitted for a student in any term is two courses totaling not more than seven credit hours.

THE DIVISION OF UNCLASSIFIED STUDENTS

The Division of Unclassified Students is designed to assist the potentially able student whose basic interests and aptitudes lie outside the course in which he originally enrolled. Any student who has been in residence as a candidate for a degree in any of the colleges or schools of the University may apply for admission.

The Division accepts applications for either semester. The student who feels that he is misplaced or is uncertain of his objective should consult the Director as early as possible in his college career. After the sophomore year it is generally very difficult to effect a transfer.

Application should be made at the office of the Director in Day Hall. In addition, the student must notify the Registrar of his desire to transfer. The Administrative Committee prefers that applications be filed at least

three or four weeks before the opening of either semester. At midyear, the student who makes application after he has been dropped is not in a position to make a strong case for himself.

Each student admitted to the Division is assigned a Faculty adviser who will normally but not necessarily be a member of the Administrative Committee of the Division. As far as possible the adviser will be a member of the Faculty of the school or college in which the student hopes to register. An unclassified student may, with the approval of his adviser, elect courses for which he is qualified in any division of the University, subject, however, to the usual limitations on enrollment.

A student registered in the Division may apply for admission to any college or school of the University. In considering his application, the admissions committee of the school or college to which he applies will consult with the Director of the Division and the student's adviser and will take into consideration their recommendations and the quality of the work which the student has done during his registration in the Division. If at the end of two terms, he has not been accepted as a candidate for a degree in a school or college of the University, he may not be permitted to reregister in the Division except by special action of the Administrative Committee.

The Administrative Committee has the same authority to admit students, drop them, place them on probation, or remove them from probation that is exercised by a special Faculty with respect to the students of its college. Students in the Division are regular students in the University; if in good standing they may participate, like any other students, in extracurricular activities.

The Independent Departments

THE FOLLOWING information concerns the courses of instruction offered by the Departments of Military Science and Tactics, Air Science and Tactics, Naval Science, Physical Education, and Clinical and Preventive Medicine. These departments are similar in that they serve the entire University and are not divisions of any school or college.

CREDITS . . . In the course descriptions that follow, the academic credit indicated will be recorded by the University Registrar for the successful completion of each course. Whether or not credit thus recorded will be counted by a college or school in satisfaction of its requirements for a particular degree is determined, however, by the Faculty of the school or college concerned. For this information, the student should consult the Announcement of the academic division in which he is enrolled.

UNIVERSITY FACULTY REQUIREMENTS

The University Faculty has established certain requirements for a baccalaureate degree in addition to those prescribed by the Faculty of the school or college which administers the degree. These requirements are administered by the Committee on Requirements for Graduation. Any student who wishes to consult the Committee concerning his status should first consult the member of the Committee who represents the school or college in which he is enrolled. The Committee consists of the following:

- W. H. Farnham, Dean of the University Faculty, *Chairman*
- Professor S. M. Barnette (College of Architecture)
- Director A. W. Gibson (College of Agriculture)
- Professor C. A. Hanson (School of Industrial and Labor Relations)
- Director H. J. Loberg (College of Engineering)
- Director H. B. Meek (School of Hotel Administration)
- Professor Peter Olafson (Veterinary College)
- Professor R. L. Perry (College of Arts and Sciences)
- Director B. L. Rideout (Division of Unclassified Students)
- Professor Esther Stocks (College of Home Economics)

THE REQUIREMENT IN PHYSICAL TRAINING . . . The University Faculty has established the following requirements in physical training for all students:

1. All undergraduate students must complete four terms of work, three hours a week, in physical training.

2. The requirement in physical training is a requirement of the first four terms, and postponements are to be allowed only by consent of the University Faculty Committee on Requirements for Graduation.

3. Exemptions from the requirement may be made by the Committee on Requirements for Graduation when recommended by the Medical Office or by the Department of Physical Education, or because of unusual conditions of age, residence, or outside responsibilities. An exemption recommended by the Department of Physical Education shall be given only to students who meet standards of physical condition established by the Department of Physical Education and approved by the Committee on Requirements for Graduation. Students who have been discharged from the armed forces may be exempted.

4. For students entering with advanced standing, the number of terms of physical training required is to be reduced by the number of terms which the student has satisfactorily completed (not necessarily including physical training) in a college of recognized standing.

5. Responsibility for the interpretation of the requirement and for its application in individual cases is placed upon the Committee on Requirements for Graduation.

The University requirement in physical training may be satisfied by four terms of work in the Department of Physical Education. For this purpose Physical Education 1, 2, 3, and 4 are available to men and Physical Education 51, 52, 53, and 54, to women.

THE REQUIREMENT IN MILITARY TRAINING . . . The University Faculty has established the following requirement in military training for male students.

1. "All undergraduate men students must complete four terms of work, three hours a week, in military training."

2. "The requirement in military training is a requirement of the first four terms, and postponements are to be allowed only with the consent of the University Faculty Committee on Requirements for Graduation."

3. "Students who are unable to meet the minimum physical standards established by the armed forces for admission to the basic courses in military training or who are ineligible for such courses under other regulations of the armed forces shall be exempt. In the discretion of the Committee on Requirements for Graduation, exemptions from the requirements may be granted to aliens and conscientious objectors. It is recognized, moreover, that some other conditions, such as those of age, residence, or unusual outside responsibilities, may be accepted by the Committee as bases for exemption."

4. "The requirement may be offset by work taken in military science in institutions of recognized collegiate standing and in military schools

approved in this regard by the Department of the Army or the Department of the Air Force."

5. "For students entering with advanced standing, the number of terms of military training required is to be reduced by the number of terms which the student has satisfactorily completed (not necessarily including military science) in a college of recognized standing."

6. "Responsibility for the interpretation of the requirement and for its application in individual cases is placed upon the Committee on Requirements for Graduation."

7. "Students who have been enrolled in the armed services are exempted from the requirement in military training by virtue of such service."

8. "A special student admitted for a period of less than two years is exempted from the requirement in military training during that period."

9. "Any student who is enrolled in a regularly constituted reserve component of the armed forces and who is pursuing a training program approved by the Committee on Requirements for Graduation may be allowed to postpone the satisfaction of the military training requirement while he is so enrolled and any student who satisfactorily completes twelve months in such a program shall have thereby satisfied two terms of the University military training requirement."

10. "Any student who has satisfactorily completed four terms of the NROTC Program will have satisfied the University requirement in military training, and any student registered in the NROTC Program may postpone the military training requirement for the term in which he is so registered."

11. "Any student registered in the Big Red Band may postpone the military training requirement for the term in which he is so registered and any student who satisfactorily completes a term of work in the Big Red Band shall be deemed to have satisfied one term of the University military training requirement."

The University Faculty requirement in military training may be satisfied by work taken in any one of three departments: the Department of Military Science and Tactics, the Department of Air Science and Tactics, or the Department of Naval Science. Each department offers a four-year course, the first two years of which satisfy the University requirement. An entering student will be assigned to one of these divisions prior to his registration in the University. This assignment will be made on the basis of his personal choice subject to quota limitations.

Specifically, the requirement may be satisfied:

(a) by four terms of work in the Department of Military Science and Tactics (Military Science 1, 2, and one of the following pairs: 23,24; 33,34; 43,44 or 53,54); or

(b) by four terms of work in the Department of Air Science and Tac-

tics (Air Science 1,2,3,4); or

(c) by four terms of academic work (Naval Science 101, 102, 201, and 202) in the Department of Naval Science. (According to their respective contractual agreements with the Navy, Regular and Contract NROTC students are committed to continue in the NROTC program for four years.)

MILITARY SCIENCE AND TACTICS

The four-year course presented by the Department of Military Science and Tactics has two objectives. The first is to promote national defense by laying the foundation of a citizenship which is cognizant and capable of its military responsibilities to the country. The second is to produce junior officers who have the attributes and knowledge essential to their continued development in the U.S. Army.

The first two years of this course, Basic ROTC, are part of the University requirements for a baccalaureate degree unless the student satisfies this requirement by other means. The third and fourth years, Advanced ROTC, are elective and qualify a student for appointment in the Officers' Reserve Corps, U.S. Army, or the Regular Army.

Specialized training is offered during the last three years of the course in four branches of the Army; Artillery Ordnance, Quartermaster, and the Signal Corps; and for four years in the Veterinary Corps. The choice of one of these branches will be made prior to or upon enrolling in Basic ROTC, based on the student's personal election and subject to quota limitations. The Ordnance and Signal Units give preference to students enrolled in the Schools of Engineering or students from other colleges majoring in science. Pre-Veterinary students will comply with University requirements for Basic ROTC. Veterinary ROTC students take one hour of ROTC work per week throughout their four-year course. In the other Army branches, the Basic Course students take one hour of drill and two hours of classroom or laboratory work per week; and the Advanced Course students take one hour of drill and four hours of classroom or laboratory work per week.

1. *BASIC ROTC*. Fall term. Credit two hours. Hours: lectures or laboratories M W 8, 9, 10, 11, or 12; T Th 8, 9, 10, 11, or 12; drill M, T, W, Th, or F 2. Examinations M 7 p.m. when appropriate.

Two hours a week of lecture and practical application in military organization, military problems, and policy of the U.S., map reading, and first aid and hygiene.

2. *BASIC ROTC*. Spring term. Credit two hours. Prerequisite, M.S. 1. Hours: lectures or laboratories M W 8, 9, 10, 11, or 12; T Th 8, 9, 10, 11, or 12; drill M T W Th or F 2. Examinations M 7 p.m. when appropriate.

Two hours a week of lecture and practical application in weapons and marksmanship, combat formations, and tactics of rifle squad.

23. *ARTILLERY BASIC ROTC*. Fall term. Credit two hours. Prerequisite, M.S. 2. Hours: lectures or laboratories M W 8, 11, 10 or 12; T Th 8-11; drill M T W Th or F 2. Examinations T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in artillery organization, materiel, motors and transportation, and instruments.

24. *ARTILLERY BASIC ROTC*. Spring term. Credit two hours. Prerequisite, M.S. 23. Hours: lectures or laboratories M W 8, 10 or 12; T Th 8, 11; drill M T W Th or F 2. Examination T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in service of the pieces, communications, map reading and antiaircraft artillery.

25. *ARTILLERY ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 24. Hours: lectures or laboratories M W F 8, 10, or 11; T Th S 9 or 12; and common class M T W Th or F 3; drill M T W Th or F 2. Examination Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in communications, surveying, map reading, and gunnery.

26. *ARTILLERY ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 25. Hours: lectures or laboratories M W F 8, 10, or 11; T Th S 9 or 12; common class M T W Th or F 3; drill M T W Th or F 2. Examinations Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in gunnery, FA tactics and AAA tactics.

27. *ARTILLERY ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 26. Hours: lectures or laboratories M W F 9 or 12; T Th S 10 or 11, and common class M T W Th or F 3; drill M T W Th or F 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in military administration, military law, geographic foundations, command and staff, psychological warfare, and military teaching methods.

28. *ARTILLERY ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 27. Hours: lectures or laboratories M W F 9 or 12; T Th S 10 or 11; and common class M T W Th or F 3; drill M T W Th or F 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in combat intelligence, the military team, new developments, FA and AAA tactics, gunnery, and map reading.

33. *ORDNANCE BASIC ROTC*. Fall term. Credit two hours. Prerequisite, M.S. 2. Hours: lectures or laboratories M W 10 or 11; T Th 8 or 11; drill M W or F 2. Examinations T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in the role of ordnance, automotive materiel, and small arms materiel.

34. *ORDNANCE BASIC ROTC*. Spring term. Credit two hours. Prerequisite, M.S. 3. Hours: lectures or laboratories M W 10 or 11, T Th 8 or 11; drill M W or F 2. Examination T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in ammunition materiel, artillery materiel, and fire control materiel.

35. *ORDNANCE ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 34. Hours: lectures or laboratories T Th S at 9 or 12; and common class M W or F 3; drill M W or F 2. Examination Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in functional organization of Ordnance Corps, small arms materiel, ammunition materiel, artillery materiel and fire control materiel.

36. *ORDNANCE ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 35. Hours: lectures or laboratories T Th S 9 or 12; and common class M W or F 3; drill M W or F 2. Examination Th 7 p.m. when appropriate.

Four hours of lecture and practical application in ammunition supply, automotive materiel, individual weapons and marksmanship, and tactics of the rifle squad.

37. *ORDNANCE ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 36. Hours: lectures or laboratories M W F 9 or T Th S 10, and common class M W or F 3; drill M W or F 2. Examination W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in command and staff,

combat intelligence, military administration, military law, geographic foundations, military teaching, and psychological warfare.

38. *ORDNANCE ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 37. Hours: lectures and laboratories M W F 9 or T Th S 10; and common class M W or F 3; drill M W or F 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in military specialty project and maintenance and supply.

43. *SIGNAL CORPS BASIC ROTC*. Fall term. Credit two hours. Prerequisite, M.S. 2. Hours: lectures and laboratories M W 10; T Th 11; drill T or Th 2. Examinations T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in introduction to basic signal communications and organization and mission of Signal Corps.

44. *SIGNAL CORPS BASIC ROTC*. Spring term. Credit two hours. Prerequisite, M.S. 43. Hours: lectures and laboratories M W 10; T Th 11; drill T or Th 2. Examinations T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in organization and signal communication practices of the combat arms.

45. *SIGNAL CORPS ADVANCED ROTC*. Fall term. Prerequisite, M.S. 44. Hours: lectures and laboratories T Th S 9 or 12; common class T or Th 3; drill T or Th 2. Examinations Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in field wire communications, field radio communications, and signal supply and repair.

46. *SIGNAL CORPS ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 45. Hours: lectures or laboratories T Th S 9 or 12; common class T or Th 3; drill T or Th 2. Examinations Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in applied signal communications, communication center, career guidance, weapons and marksmanship, tactics of the rifle squad, signal orders and communication security.

47. *SIGNAL CORPS ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 46. Hours: lectures and laboratories M W F 9 or T Th S 10; common class T or Th 3; drill T or Th 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in command and staff, combat intelligence, military administration, military law, geographic foundations, military teaching methods, psychological warfare.

48. *SIGNAL CORPS ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 47. Hours: lectures and laboratories M W F 9 or T Th S 10 and common class, T or Th 3; drill T or Th 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in higher echelon signal communication and equipment, career guidance, darkroom technique and photographic practices, radio and wire communication materiel.

53. *QUARTERMASTER BASIC ROTC*. Fall term. Credit two hours. Prerequisite, M.S. 2. Hours: lectures or laboratories M W 10 or 12; T Th 8, 11, or 12; drill M T W Th or F 2. Examinations T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in supply in the Army, organization of QM, classification of QM supplies, accountability and responsibility of property, and research and development of supplies in QMC.

54. *QUARTERMASTER BASIC ROTC*. Spring term. Credit two hours. Prerequisite, M.S. 53. Hours: lectures or laboratories M W 10 or 12; T Th 8 or 11 or 12; drill M T W Th or F 2. Examination T 7 p.m. when appropriate.

Two hours a week of lecture and practical application in organization, functions, and operation of QM units, unit and organizational supply.

55. *QUARTERMASTER ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 54. Hours: lectures or laboratories M W F 8 or 11; T Th S 9 or 12; common class M T W Th or F 3; drill M T W Th or F 2. Examinations Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in station supply, depot supply, petroleum products, laundry and bakery operations, graves registration, and food service.

56. *QUARTERMASTER ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 55. Hours: lectures or laboratories M W F 8 or 11; T Th S 9 or 12; common class M T W Th or F 3; drill M T W Th or F 2. Examinations Th 7 p.m. when appropriate.

Four hours a week of lecture and practical application in commissary operations, salvage operations and procedure, maintenance and reclamation of QM supplies, individual weapons and marksmanship, tactics of the infantry squad, and storage, warehousing and materiel handling.

57. *QUARTERMASTER ADVANCED ROTC*. Fall term. Credit three hours. Prerequisite, M.S. 56. Hours: lectures or laboratories M W F 9, 11, or 12; T Th S 10; common class M T W Th or F 3; drill M T W Th or F 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in command and staff, combat intelligence, military administration, military law, geographic foundations, military teaching, and psychological warfare.

58. *QUARTERMASTER ADVANCED ROTC*. Spring term. Credit three hours. Prerequisite, M.S. 57. Hours: lectures or laboratories M W F 9, 11, or 12; T Th S 10; common class M T W Th or F 3; drill M T W Th or F 2. Examinations W 7 p.m. when appropriate.

Four hours a week of lecture and practical application in organization and functions of the technical services, combat arms, QM operations in the zone of the interior, and QM operations in the theater of operations, fiscal and procurement procedures and technical intelligence.

61. *VETERINARY BASIC ROTC*. Fall term. Credit one hour. Hours: as scheduled by the Veterinary College.

One hour of lecture and/or recitation a week in military policy of the United States, National Defense Act, and ROTC, organization of the Departments of the Army and Air Force and the medical services of each, courtesies and customs of the Service, veterinary military history, military obligations of citizenship, duties of the veterinarian.

62. *VETERINARY BASIC ROTC*. Spring term. Credit one hour. Hours: as scheduled by the Veterinary College. Prerequisite, M.S. 61.

One hour of lecture and/or recitation a week in map and aerial photograph reading, general military administration, military law, personnel management, general consideration of Army and Air Force Veterinary Services, military leadership and mobilization.

63. *VETERINARY BASIC ROTC*. Fall term. Credit one hour. Hours: as scheduled by the Veterinary College. Prerequisite, M.S. 62.

One hour of lecture and/or recitation a week in medical supply procedures, veterinary administration, map and aerial photograph reading, military leadership.

64. *VETERINARY BASIC ROTC*. Spring term. Credit one hour. Hours: as scheduled by the Veterinary College. Prerequisite, M.S. 63.

One hour of lecture and/or recitation a week in Army and Air Force Veterinary

Services in the zone of the interior and theater of operations, veterinary research and development, organization and employment of medical service of a field army, animal management.

65. *VETERINARY ADVANCED ROTC*. Fall term. Credit one hour. Hours: as scheduled by the Veterinary College. Prerequisite, M.S. 64.

One hour of lecture and/or recitation a week in Army and Air Force as a career, techniques of instructing, military leadership, subsistence procurement, physical examination of animals.

66. *VETERINARY ADVANCED ROTC*. Spring term. Credit one hour. Hours: as scheduled by the Veterinary College. Prerequisite, M.S. 65.

One hour of lecture and/or recitation a week on veterinary food inspection service.

67. *VETERINARY ADVANCED ROTC*. Fall term. Credit one hour. Hours: as scheduled by the Veterinary College. Prerequisite, M.S. 66.

One hour of lecture and/or recitation a week in transportation of animals, military leadership, veterinary preventive medicine, veterinary aspects of atomic warfare, veterinary aspects of chemical warfare.

68. *VETERINARY ADVANCED ROTC*. Spring term. Credit one hour. Hours as scheduled by the Veterinary College. Prerequisite, M.S. 67.

One hour of lecture and/or recitation a week in food products inspection.

AIR SCIENCE AND TACTICS

The students enrolled in courses in the Department of Air Science and Tactics constitute the Cornell Unit of the Air Force Reserve Officers' Training Corps.

The course of study is divided into the basic course covering the first two years and the advanced course covering the junior year, Summer Camp, and senior year in that order. The course consists of blocks of instruction totaling 480 hours, allocated as follows: freshman and sophomore years—90 hours each; junior and senior years—150 hours each. In addition, the Summer Camp provides 232 hours.

This course is designed to fulfill required academic standards in order that cadets may receive credit in proportion to their academic load; to provide that fundamental training, both personal and professional, which will best fit the cadet to become a well-rounded junior Air Force officer possessing a high growth potential.

The basic course was designed with two additional objectives in mind: first, to interest the cadet in continuing in Air Force ROTC, and, second, to prepare him along lines that will prove of long range value to the Air Force whether he returns to civil life or becomes a member of the U.S. Air Force.

1. *BASIC AIR FORCE ROTC*. Fall term. Credit two hours. Hours: M W 8, 9, 10, 11, 12, or 2; T Th 8, 9, 10, 11, 12, or 2; and, in addition, M T W Th or F at 3.

Two hours a week of instruction in introduction to aviation, fundamentals of global geography, and one hour a week of basic military training.

2. *BASIC AIR FORCE ROTC*. Spring term. Credit two hours. Prerequisite, Basic Air Force ROTC 1. Hours: M W 8, 9, 10, 11, 12 or 2; T Th 8, 9, 10, 11, 12, or 2; and, in addition, M T W Th or F at 3.

Two hours a week of instruction in international tensions and security organizations, instruments of national military security and one hour a week of basic military training.

3. *BASIC AIR FORCE ROTC*. Fall term. Credit two hours. Prerequisite, Basic Air Force ROTC 2. Hours: M W 8, 9, 10, 11, 12, or 2; T Th 8, 9, 10, 11, 12, or 2; and, in addition, M T W Th or F at 3.

Two hours a week of instruction in elements of aerial warfare to include targets, weapons, and aircraft. One hour a week of leadership laboratory.

4. *BASIC AIR FORCE ROTC*. Spring term. Credit two hours. Prerequisite, Basic Air Force ROTC 3. Hours: M W 8, 9, 10, 11, 12, or 2; T Th 8, 9, 10, 11, 12, or 2; and, in addition, M T W Th or F at 3.

Two hours a week of instruction in elements of aerial warfare to include the air, ocean, bases, forces. One hour a week of leadership laboratory.

5. *ADVANCED AIR FORCE ROTC*. Fall term. Credit three hours. Prerequisite, Basic Air Force ROTC 4. Hours: M W F at 10 or 11, and M T W Th or F 2-4; or T Th S at 9 or 12, and M T W Th or F 2-4.

Four hours a week of instruction of AF command and staff, problem-solving techniques, communications process and Air Force correspondence, and military law, courts, and boards. One hour a week of instruction in the leadership laboratory.

6. *ADVANCED AIR FORCE ROTC*. Spring term. Credit three hours. Prerequisite, Advanced Air Force ROTC 5. Hours: M W F at 10 or 11, and M T W Th or F 2-4; or T Th S at 9 or 12, and M T W Th or F 2-4.

Four hours a week of instruction in elements of aerial warfare, and careers in the USAF. One hour a week of instruction in the leadership laboratory.

7. *ADVANCED AIR FORCE ROTC*. Fall term. Credit three hours. Prerequisite Advanced Air Force ROTC 6. Hours: M W F 9 or 12 and M T W Th or F 2-4; or T Th S 10 and M T W Th or F 2-4.

Four hours a week of instruction in elements of aerial warfare, and careers in the USAF. One hour a week of instruction in the leadership laboratory.

8. *ADVANCED AIR FORCE ROTC*. Spring term. Credit three hours. Prerequisite, Advanced Air Force ROTC 7. Hours: M W F 9 or 12 and M T W Th or F 2-4; or T Th Sat at 10 and M T W Th or F 2-4.

Four hours a week of instruction in "Air Force commander and his staff," problem-solving techniques, communications process and Air Force Correspondence, military law, courts, and boards.

NAVAL SCIENCE

The mission of the Naval Reserve Officers Training Corps is to provide, by a permanent system of training and instruction in essential naval subjects at civil educational institutions, a source from which qualified officers may be obtained for the Navy and the Marine Corps, and the Naval Reserve and the Marine Corps Reserve. This mission is accomplished by:

(a) Qualification of students for appointment as Ensigns in the Regular Navy and the Naval Reserve, or Second Lieutenants in the Marine Corps and the Marine Corps Reserve, thus assisting in meeting the needs for commissioned personnel.

(b) Increased dissemination of knowledge concerning the Navy and Marine Corps, their purpose, ideals, achievements, and handicaps, thereby gaining and holding increased public interest in the maintenance of adequate naval preparedness.

The Department of Naval Science offers an integrated four-year course which normally requires three classroom hours a week plus certain laboratory periods. Since all men enrolled in the NROTC are officer candidates, the Department of the Navy also requires summer cruises or tours of duty at shore establishments for training purposes. The number and length of such assignments depends on whether the student is classified as Regular or Contract.

Entry as Regular NROTC students is attained through nationwide competitive examinations held each fall at a time announced by the Department of the Navy. Candidates who pass the examination with an acceptable score are given a physical examination. Those still eligible are interviewed by Naval officers and rated by state selection committees. Successful candidates are assigned to NROTC units, if possible at the college or university of their first choice. Regular students matriculating in the College of Agriculture, the School of Hotel Administration, or the School of Industrial and Labor Relations should investigate the summer practice requirements for the particular school, with the object of acquiring some practice points prior to entry. Otherwise Navy summer cruise requirements may present difficulties.

For Regular students the government provides free tuition, fees, books, uniforms, and retainer pay at the rate of \$50 a month for four years. They are appointed Midshipmen U.S.N.R. and in addition to Naval Science courses are required to spend six to eight weeks during three summers on cruises or aviation/amphibious training. On graduation, they are commissioned Ensigns in the Regular Navy or Second Lieutenants in the Marine Corps and are required to serve on active duty up to three years. They may apply for retention in the Regular Navy or Marine Corps, and, if selected, they will continue in the service as career officers. If they elect to terminate their Regular status, they will be placed on in-

active duty in the Reserve Component until their commissioned service (Regular and Reserve) totals eight years.

The Department of the Navy assigns a quota of Contract students to each unit. Entry as a Contract student is attained by application to the Professor of Naval Science, who makes final selection to fill the quota. Selections are made at the beginning of the academic year. All application papers must be received, complete in every respect, not later than September 18, 1953, after which date no further applications will be considered.

Contract students pursue the same Naval Science courses as the Regular NROTC students but are required to participate in only one summer cruise not to exceed 6 weeks, normally between the junior and senior years. The government provides uniforms and naval science textbooks, and to third- and fourth-year Contract students the government pays the commuted value of one ration a day, currently 90 cents or approximately \$27 a month. Contract students agree to accept a commission in the Naval Reserve or in the Marine Corps Reserve and may be ordered to active duty for two years. If they are not assigned to active duty, they will be placed in an inactive status but are obligated to serve a total of eight years (active and inactive) as commissioned officers.

A candidate for Regular or Contract status must be a male citizen of the United States and must have reached his seventeenth birthday and not have passed his twenty-first birthday, on July 1 of the entering year, except that a student matriculating in a five-year course shall not have passed his twentieth birthday on July 1. A candidate must be unmarried, must never have been married, and must agree to remain unmarried until commissioned. A student enrolled in a course requiring 5 years for the completion of a baccalaureate degree is placed in a leave status, with respect to the NROTC program (deferment continues), during one of the five years.

The physical requirements for the NROTC are exactly the same as those required of candidates for entry into the U.S. Naval Academy. The general requirements are that the candidate be physically sound, well formed, and of robust constitution. Vision must be 20/20 uncorrected in *each* eye. Good color perception is required. Heart, lungs, and hearing must be normal. The candidate must have at least twenty vital, serviceable teeth with good occlusion and no cavities. Weight must be in proportion to height and general build. The limits of height are 66 to 74 inches for persons under 18 years of age and 66 to 76 for those over 18 years of age.

For further information write to the Professor of Naval Science, Naval ROTC Unit, Cornell University, Ithaca, New York.

101. *NAVAL HISTORY AND ORIENTATION*. Fall term. Credit three hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9, 10, or 11; laboratory W or Th 2-4.

A study of American sea power as related to the growth of the United States from the Revolution through World War II; a study of the organization of the Department of Defense, the customs, and the traditions of the Navy, and naval leadership. Required of all first-term Naval ROTC students.

102. *NAVAL HISTORY AND ORIENTATION*. Spring term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9, 10, or 11; laboratory W or Th 2-4.

A study of naval organization, seamanship, maritime rules of the nautical road, leadership, and communications. Required of all second-term Naval ROTC students.

201. *NAVAL WEAPONS*. Fall term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9, 10, or 11; laboratory W or Th 2-4.

A study of naval weapons and explosives. Required of all third-term Naval ROTC students.

202. *NAVAL WEAPONS*. Spring term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9, 10, or 11; laboratory W or Th 2-4.

A study of fire control systems, radar, sonar, and guided missiles. Required of all fourth-term Naval ROTC students.

301. *NAVIGATION*. Fall term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9 or 10; laboratory W or Th 2-4.

A study of the theory and technique of surface navigation. Covers dead reckoning, piloting, and maneuvering board. Required of all fifth-term Naval ROTC students except Marine Corps candidates.

301M. *EVOLUTION OF THE ART OF WAR*. Fall term. Credit 3 hours. Lecture/recitation 3 hours a week as arranged; laboratory W or Th 2-4.

This course is designed to survey the historical development of weapons, tactics, and material and to illustrate the classic principles of war by a study of selected battles and campaigns. Required of all fifth-term Naval ROTC students who are candidates for Marine Corps commissions.

302. *NAVIGATION*. Spring term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9 or 10; laboratory W or Th 2-4.

A continued study of the theory and technique of surface navigation to include meteorology and celestial navigation. Required of all sixth-term Naval ROTC students except Marine Corps candidates.

302M. *MODERN BASIC STRATEGY AND TACTICS*. Spring term. Credit 3 hours. Lecture recitation 3 hours a week as arranged; laboratory W or Th 2-4.

This course is designed to survey modern strategical and tactical principles, using contemporary historical events as illustrative material. Required of all sixth-term Naval ROTC students who are candidates for Marine Corps commissions.

401. *NAVAL MACHINERY*. Fall term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9 or 10; laboratory W or Th 2-4.

A study of the different types of naval engineering propulsion plants. Required of all seventh-term Naval ROTC students except Marine Corps candidates.

401M. *AMPHIBIOUS WARFARE*, Part I. Fall term. Credit 3 hours. Lecture/recitation 3 hours a week as arranged; laboratory W or Th 2-4.

A detailed study of the technique and history of amphibious warfare. Required of all seventh-term Naval ROTC students who are candidates for Marine Corps commissions.

402. *SHIP STABILITY, NAVAL JUSTICE, AND LEADERSHIP*. Spring term. Credit 3 hours. Lecture/recitation M W F 9, 10, or 11; T Th S 9 or 10; laboratory W or Th 2-4.

A study of the principles of ship stability and buoyancy in the practices of damage control. A study of the procedures for and the responsibility of an officer in the administration of naval justice. A study to assist in the understanding of the psychology of leadership. Required of all eighth term Naval ROTC students except Marine Corps candidates.

402M. *AMPHIBIOUS WARFARE, PART II; LEADERSHIP AND NAVAL JUSTICE*. Spring term. Credit 3 hours. Lecture/recitation 3 hours a week as arranged; laboratory W or Th 2-4.

A continued study of the techniques of amphibious warfare. A study of the procedures for and the responsibility of an officer in the administration of naval justice. A study to assist in the understanding of the psychology of leadership. Required of all eighth-term Naval ROTC students who are candidates for Marine Corps commissions.

INDEPENDENT DEPARTMENTS
 PHYSICAL EDUCATION
 COURSES FOR MEN

All entering students are given a preregistration physical examination by their family physician. The Department of Clinical and Preventive Medicine prescribes individual work in corrective physical education when the need is evident.

All entering students are required to take a swimming test—to jump into deep water and swim 50 yards. Those who do not successfully complete the test will be assigned to Swimming Instruction. Those who pass the test will be assigned to regular physical education classes.

The program for the first year includes physical conditioning and an emphasis upon introducing students to a broad field of activities, particularly carry-over sports. In the second year the student will have an opportunity to participate in an activity program, selected from individual or team sports, intramurals, or physical education classes.

SPECIFIC COURSES

1. *INDIVIDUAL CORRECTIVES*. Either term. Credit one hour. Open only to students assigned to Correctives by the Department of Clinical and Preventive Medicine. Three to five periods a week as assigned, M through F 2 to 5. OLD ARMORY.

Under the personal scrutiny of the Remedial Instructor, with weekly checks by the Department of Clinical and Preventive Medicine, each student here assigned receives individual attention according to his needs. Minor, as well as major, physical defects are treated. Marked development and improvement through this physical and recreational therapy enables students to transcend physical barriers.

2. *BASIC PROGRAM*. Either term. Credit one hour. Open to all students in the first year. Three periods a week as assigned. M through F 9 to 1 and 2 to 5. S 9, 10, and 11. OLD ARMORY.

3. *SPORTS PROGRAM*. Either term. Credit one hour. Open only to those students who have passed two terms of the Basic Program. Hours and site of class assigned according to activity selected.

A choice of activity is given to each student. Offerings according to seasonal activities are as follows: advanced swimming, badminton, basketball, bowling, boxing, golf (indoor and outdoor), riding, soccer, tennis, volleyball, touch football, weight lifting, wrestling.

Intramurals. Regular attendance in intramurals may be elected as an activity for the second year. *Fall term*: touch football and basketball. *Spring term*: basketball and softball; or volleyball and softball.

4. *VARSITY SPORTS*. Regular attendance at team practices may be substituted for class work in physical education. This includes freshmen, 150-pound, and JV teams. Sports offered: baseball, basketball, crew, cross-country, fencing, football, golf, lacrosse, pistol, polo, rifle, skiing, soccer, swimming, tennis, track, wrestling.

5. *SWIMMING PROGRAM*. It should be noted that successful completion of the swimming test is a requirement of the Physical Education Department. Course offerings are as follows:

Corrective Swimming. Open only to students assigned by the Department of Clinical and Preventive Medicine. M through F at 12.

Beginners' Swimming. Open only to nonswimmers. M through F. Hours to be assigned.

Advanced Swimming. Open only to students who have passed the basic program. M through F. Hours to be assigned.

Open Swimming. Open to all University students subject to pool regulations. M through F. Hours to be assigned.

A.R.C. Life Saving and Water Safety Instructors' Course. Monday evening, 7:30, throughout second term. Prerequisite, A.R.C. Senior Certificate. Registration limited.

A.R.C. Life Saving—Water Safety Senior Course. Daily Monday through Friday, 4:30. Begins the week following spring recess. Registration limited.

A.R.C. Instructors' Refresher Course. Dates to be announced.

All tests and classes are given in the OLD ARMORY swimming pool.

COURSES FOR WOMEN

An orthopedic examination and motor ability tests are required of all freshman and sophomore transfers during the first week of the fall term.

All students, with the exception of those classified under (a) or (b) below are required to take *Physical Education 51* during the fall or spring term of the freshman year.

(a) Those whose physical, orthopedic, or motor ability examinations indicate a need for individual instruction or restricted activity are assigned to Physical Education 53 or to specially designated activities in Physical Education 54.

(b) Those who receive an exceptionally high rating in the orthopedic and motor ability examinations may exempt Physical Education 51 and register for Physical Education 52 the fall or spring term of the freshman year.

Physical Education 52 is required of all physically qualified students immediately following the completion of Physical Education 51. During the remainder of the two-year requirement any of the activities offered may be selected. Juniors and seniors may register without credit for activities of their choice.

At the end of the second term or any subsequent term students may be excused from the balance of the requirement by the Committee on Requirements for Graduation upon the recommendation of the Department of Physical Education.

51. *FUNDAMENTALS.* Either term. Credit one hour. Three periods a week as arranged.

Nine weeks of indoor work and six weeks of an outdoor sport selected from Physical Education 54. The indoor work is devoted to exercises for improving body control and discussion of the role of exercise, correct use of the body, and health habits in maintaining physical fitness.

52. *ELEMENTARY DANCE*. Either term. Credit one hour. Prerequisite, Physical Education 51. Three periods a week as arranged.

A study of a rhythmic basis for elementary movement with emphasis on body control. It is the aim to extend the student's natural movement facility and to stimulate a better understanding of dance as an art form through discussion, the presentation of dance in concert, lecture, and films.

53. *INDIVIDUAL GYMNASTICS (CORRECTIVES)*. Either term. Credit one hour. Open only to students recommended by the Medical or Physical Education staff. Three periods a week as arranged.

Nine weeks of indoor work consisting of prescribed exercises adapted to the individual student's needs and six weeks of an outdoor sport.

54. *ACTIVITIES*. Either term. Credit one hour. Three periods a week as arranged.

Nine weeks devoted to an indoor activity and six weeks to an outdoor activity.

Outdoor: Fall term—archery, golf, hockey, tennis. Spring term—archery, canoeing, golf, softball, tennis, Senior Life Saving.

Indoor: Fall term—badminton, basketball, bowling, golf, square and folk dancing. Spring term—badminton, bowling, golf, Instructors' Life Saving, square and folk dancing, volleyball.

Throughout the term (15 weeks): intermediate dance (prerequisite, Physical Education 52), riding.

100. *CAMP COUNSELOR TRAINING*. Spring term. Credit two hours. Lectures and laboratory F 2-4:30.

A study of the aims and value of camping; types, organization, and administration of camps; qualifications and responsibilities of the counselors; laboratory instruction in campcraft. Consent of instructor required.

THE DANCE. The following courses are designed to offer background in the history of the dance, experience in composition of dance forms and in technique of dance movement. In addition to the assigned meetings, there is a rehearsal schedule to meet production demands throughout the term.

200. *PRECLASSIC DANCE FORMS*. Either term. Credit three hours. Consent of the instructor. M 4:30, T 4:30, Th 7:30. Miss ATHERTON and Staff.

201. *MODERN DANCE FORMS*. Either term. Credit three hours. Prerequisite, Dance 200. M 4:30, T 4:30, Th 7:30. Miss ATHERTON and Staff.

202. *CHOREOGRAPHY FOR SOLO AND GROUP*. Either term. Credit three hours. Prerequisite, Dance 201. M 4:30, T 4:30, Th 7:30. Miss ATHERTON and Staff.

203-204. *INFORMAL STUDY*. Either term or throughout the year. Credit three hours. Open only to exceptionally qualified students. Prerequisite, Dance 202 and consent of the instructor. Hours to be arranged. Miss ATHERTON.

CLINICAL AND PREVENTIVE MEDICINE

The Department of Clinical and Preventive Medicine, besides offering clinical services for students who are ill, contributes to their total educational experience by offering academic courses. These courses are designed to give instruction in matters of health. They range in scope from nutritional subjects to problems of mental health. Both the individual and public health aspects are considered.

376. *PUBLIC HEALTH NUTRITION TECHNIQUES*. Spring term. Credit one hour. Registration by consent of instructor. Hours to be arranged. SAVAGE HALL. Mrs. BERRESFORD.

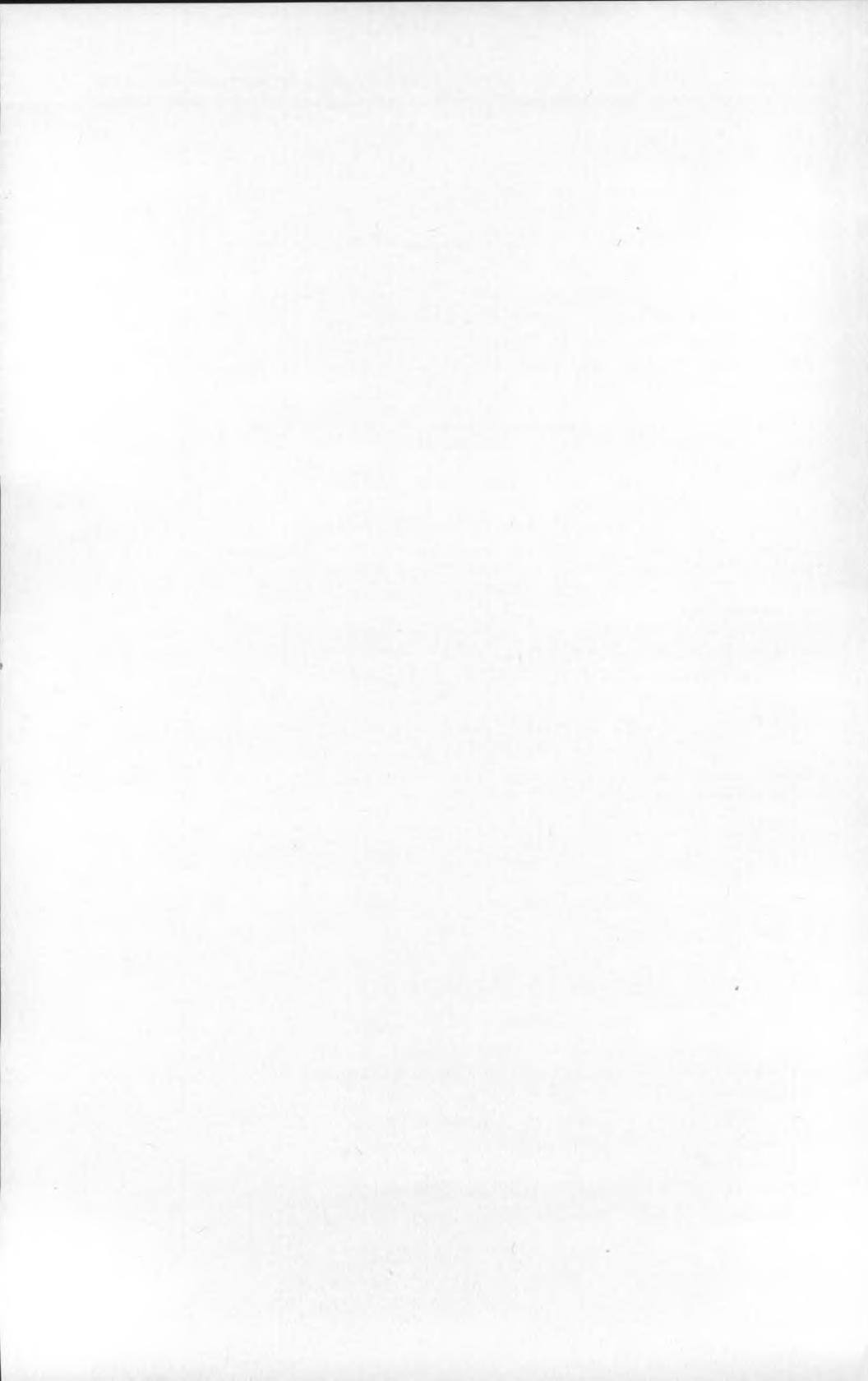
A discussion of the function of the public health nutritionist in official and voluntary agencies at the national, state, and local levels and a study of various techniques employed in executing a nutrition program, such as low-cost budgeting, racial diet patterns, interviewing, evaluation and preparation of educational materials and visual aids, clinic procedures, consultation to institutions, and nutrition education in schools.

381-382. *FIELD OBSERVATION AND EXPERIENCE IN COMMUNITY NUTRITION*. Given throughout the year, either or both terms. Credit two hours per term. Prerequisite or parallel, C.P.M. 376. Registration by consent of the instructor. For School of Nutrition and Graduate School students. Two half-days a week as arranged. Mrs. BERRESFORD.

Supervised observation and experience in the community nutrition program of a county health unit. Supervision is provided by a qualified nutritionist.

392. *CLINICAL AND PUBLIC HEALTH NUTRITION*. Spring term. Credit two hours. Prerequisites, a course in nutrition, in physiology, and in biochemistry. Registration by permission of instructor. For School of Nutrition and Graduate School students. T Th 12. SAVAGE HALL 145. Miss YOUNG and members of the medical staff.

This course is designed to familiarize the student with some of the applications of nutrition to clinical and public health problems.



Faculty

Deane W. Malott, A.B., M.B.A., LL.D., *President of the University.*
William Hursh Farnham, A.B., LL.B., S.J.D., *Dean of the Faculty and
Chairman of the Committee on Requirements for Graduation.*

DIVISION OF EXTRAMURAL COURSES

William Arthur Smith, Ph.D., *Director of the Division.*

DIVISION OF UNCLASSIFIED STUDENTS

Blanchard Livingstone Rideout, Ph.D., *Director of the Division.*

ADMINISTRATIVE COMMITTEE

Thomas W. Mackesey, B.Arch., M.C.P., *Dean of the College of Architecture and Professor of Regional Planning.* Term expires June 30, 1955.
Chandler Morse, M.A., *Associate Professor of Economics.* Term expires June 30, 1955.
Howard Merrill Giff, B.S., M.S., C.E., *Professor of Sanitary Engineering.* Term expires June 30, 1954.
LeRoy Leshner Barnes, Ph.D., *Professor of Biophysics.* Term expires June 30, 1954.
Cedric Hay Guise, M.F., *Professor of Forestry.* Term expires June 30, 1953.

DEPARTMENT OF MILITARY SCIENCE AND TACTICS

Colonel George S. Smith, *Artillery, U.S. Army, Co-ordinator of the Military Departments, Professor of Military Science and Tactics, and Commanding Officer of the Army ROTC.*

ASSISTANT PROFESSORS

Lt. Colonel Alexander T. McElroy, *Artillery, U.S. Army.*
Lt. Colonel Kermit W. Campbell, *Quartermaster Corps, U.S. Army.*
Major Edwin J. Sunderville, *Veterinary Corps, U.S. Army.*
Major George G. Holochwost, *Artillery, U.S. Army.*
Major Walter B. McCord, *Artillery, U.S. Army.*
Major David R. Lyon, *Artillery, U.S. Army.*
Major Daniel T. Delaney, *Quartermaster Corps, U.S. Army.*
Major Frederick P. Davis, *Ordnance Corps, U.S. Army.*

Major Frank A. Dwyer, *Quartermaster Corps, U.S. Army.*
 Major Myron H. Dakin, *Signal Corps, U.S. Army.*
 Major George Sargis, *Artillery, U.S. Army.*
 Captain Bruce E. Dahrling, *Ordnance Corps, U.S. Army.*
 Captain Hugh M. Garner, *Signal Corps, U.S. Army.*
 Captain Edward R. Hutchins, *Artillery, U.S. Army.*
 Captain Charles F. Frock, *Ordnance Corps, U.S. Army.*
 Captain James W. Johnson, *Quartermaster Corps, U.S. Army.*

INSTRUCTOR

First Lt. Robert A. Whitfield, *Quartermaster Corps, U.S. Army.*

DEPARTMENT OF AIR SCIENCE AND TACTICS

PROFESSOR

Colonel ———, *U.S. Air Force.*

ASSOCIATE PROFESSOR

Lt. Colonel Joseph W. McDermott, *U.S. Air Force.*

ASSISTANT PROFESSORS

Lt. Colonel Belvie R. Lowrance, *U.S. Air Force.*
 Major Phil M. DiPiero, *U.S. Air Force.*
 Major James H. Searle, *U.S. Air Force.*
 Major Paul T. Dupell, *U.S. Air Force.*
 Major John J. Grant, *U.S. Air Force.*
 Major Paul K. Jones, *U.S. Air Force.*
 Captain Millard G. DuBois, *U.S. Air Force.*
 Captain Howard G. Roberts, *U.S. Air Force.*

INSTRUCTOR

First Lt. Wilbur H. Biedenkapp.

DEPARTMENT OF NAVAL SCIENCE

Colonel John G. Bouker, *U.S. Marine Corps, Professor of Naval Science and Commanding Officer of the Naval ROTC.*

ASSISTANT PROFESSORS

Commander John P. Howatt, *U.S. Navy.*
 Lt. Comdr. R. G. Redmond, *U.S. Navy.*
 Major V. Di Giambattista, *USMCR.*
 Lieutenant William W. Morton, *U.S. Navy.*
 Lieutenant William H. Kneuveu, *U.S. Navy.*
 Lieutenant Ernest Natke, *U.S. Navy.*

INSTRUCTOR

Lieutenant (j.g.) Charles W. Jones, *U.S. Navy.*

DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS

Robert J. Kane, B.S., *Director of Athletics.*

Ross H. Smith, M.Ed., *Director of Physical Education for Men.*

Miss Dorothy H. Bateman, *Director of Physical Education for Women.*

C. V. P. Young, A.B., *Professor of Physical Education, Emeritus.*

INSTRUCTORS FOR MEN

L. J. Adesso.

W. G. Bruska, B.S.

Georges L. Cointe, A.B.

R. L. Cullen, B.S.

J. DeLibero.

P. J. Filley, B.S.

J. A. Freeman, M.S.

R. C. Greene, B.S.

G. L. Hall.

F. J. Kavanagh.

C. B. Lent, M.S.

Richard Lewis, A.B.

G. S. Little.

T. J. McGory, Jr.

E. J. Miller, Jr., B.S.

L. C. Montgomery, B.P.E.

George D. Patte, B.S.

Edward G. Ratkoski, B.S.

R. H. Sanford, A.B.

L. W. Schoel, M.Ed.

Hanley Staley, M.S.

D. B. Williams, M.Ed.

INSTRUCTORS FOR WOMEN

Miss May Atherton

Mrs. Kerstin Baird, M.A.

Miss Judith Hodge, B.A.

Miss Iris Carnell, M.S.

*Miss Mary Stewart, M.S.

Mr. Joseph Zeilic.

*On leave, 1953-54.

DEPARTMENT OF CLINICAL AND PREVENTIVE MEDICINE

Norman S. Moore, M.D. *Head of Department of Clinical and Preventive Medicine* J. W. Hirshfeld, M.D., *Research Associate*

Ralph Alexander, M.D.

Jeffrey H. Freyer, M.D.

A. H. Leighton, M.D.

Kathleen Berresford, M.S.

Ethel E. Little, M.D.

Temple Burling, M.D.

Frances McCormick, A.B., B.N.

C. Douglas Darling, M.D.

Alexius Rachun, M.D.

Paul Darsie, M.D.

Edward C. Showacre, M.D.

Helen Elston, M.D., *Research Associate*

John Summerskill, Ph.D.

Henry B. Wightman, M.D.

Jennette Evans, M.D.

Harold H. Williams, Ph.D., *Research Associate*

Grace Fiala, A.B., *Research Associate*

Jocelyn Woodman, M.D., *Research Associate*

Betty Jean Greer, M.N.S., *Research Associate*

Charlotte Young, Ph.D.