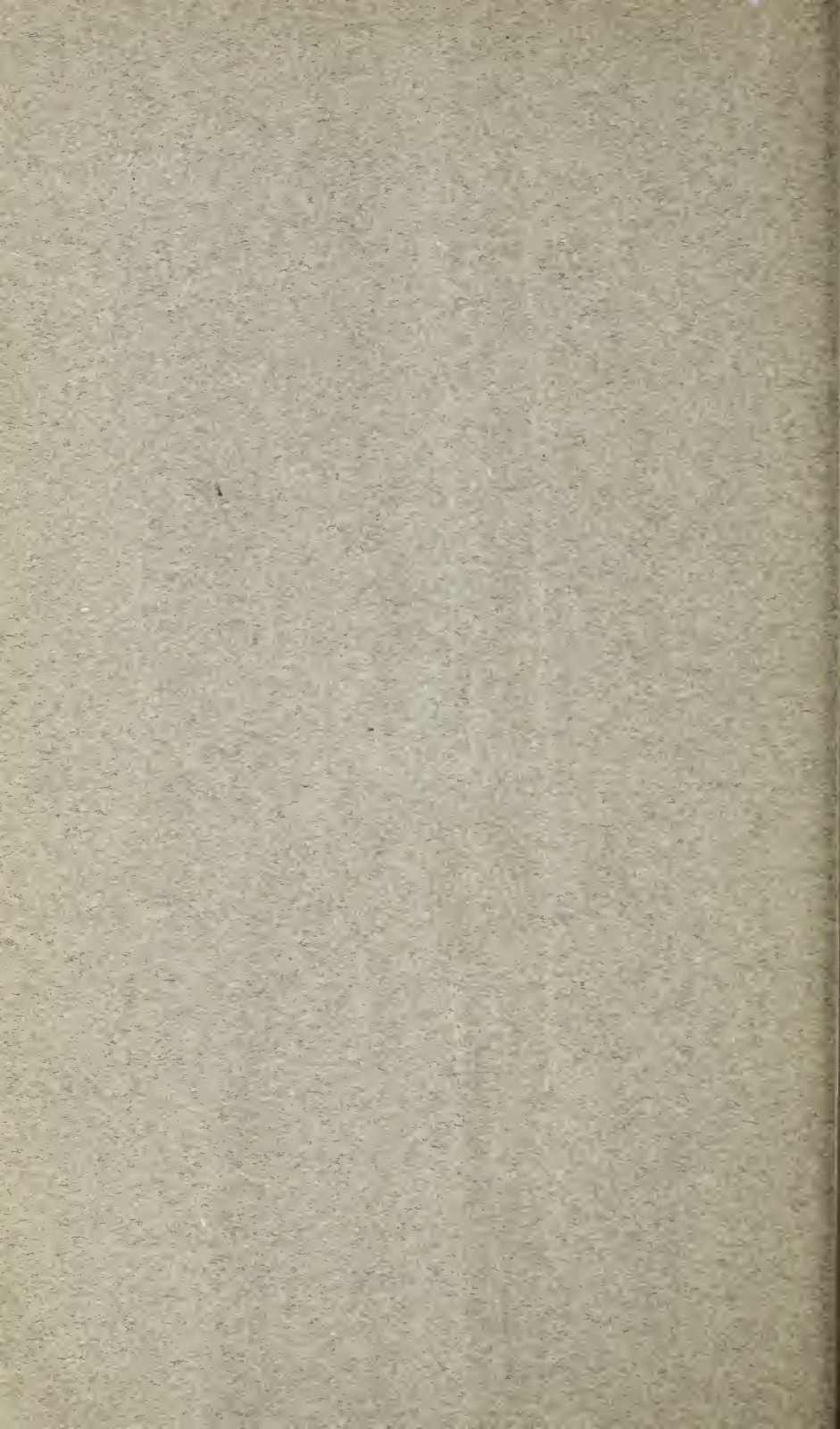


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF EDUCATION BULLETIN (1927) - No. 14

PHYSICAL EDUCATION  
IN AMERICAN COLLEGES  
AND UNIVERSITIES

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DEPARTMENT OF THE INTERIOR  
BUREAU OF EDUCATION

BULLETIN, 1927, No. 14

PHYSICAL EDUCATION  
IN AMERICAN COLLEGES  
AND UNIVERSITIES

By

MARIE M. READY

NATIONAL EDUCATION ASSN.  
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1927

PHYSICAL EDUCATION  
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## LETTER OF TRANSMITTAL

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DEPARTMENT OF THE INTERIOR,  
BUREAU OF EDUCATION,  
*Washington, May 10, 1927.*

SIR: Notwithstanding much agitation for the promotion of physical education in our institutions of higher education, facilities and training along this line are still too much concentrated upon the few students who offer favorable material for the production of university teams in intercollegiate athletic contests. While sports of this kind are to be encouraged, it must not be overlooked that the average student needs and should have due attention paid to his physical welfare. The present status of opportunities afforded the rank and file of students is reviewed in the accompanying bulletin, and I believe that its publication will be a stimulus to many institutions to measure up to their opportunities for the preservation and promotion of sound bodies along with sound minds.

Respectfully submitted.

JNO. J. TIGERT,  
*Commissioner.*

The SECRETARY OF THE INTERIOR.

## FOREWORD

---

A study of the status of physical education, military training, and hygiene in 182 American colleges and universities is presented in this bulletin. The list of institutions chosen for this investigation was used in a series of similar studies dealing with college entrance and graduation requirements. The list is intended to be representative of the different types of colleges and universities in the United States. The information was secured from the catalogues of the institutions. The material collected was recorded on a questionnaire, which was sent to each institution to be corrected or approved. A few institutions failed to return their questionnaires, but where the information required is clearly given in their catalogues, it is included in this study; otherwise it is omitted.



# *Physical Education in American Colleges and Universities*

## *1. Requirements Relative to the Physical Condition of Students at Entrance*

The requirements of colleges and universities relative to the physical condition of the student at entrance may be considered from the following standpoints: Number of institutions requiring a medical examination of the student at entrance; general outline of the medical examination prescribed; detailed analysis of the medical examination prescribed; value of physical efficiency tests, as a part of the examination; value of the medical examination of the student; continuous records of the student's physical condition; corrective gymnastics prescribed, and their credit value; vaccination for small-pox; vaccination for typhoid; unit entrance credit for physical education in secondary schools; and unit entrance credit for military training in the secondary schools.

*Medical examination at entrance.*—The physical condition of the student at entrance is now considered to be of such importance that only a few colleges will accept a health certificate signed by the student's home physician. Medical examination is required at entrance by 55 public and 74 private institutions, about 70 per cent of all those included in this study. In addition, it is required before the end of the first month by 7 public and 5 private institutions.

*General outline of medical examination prescribed for students at college entrance.*—The medical examination prescribed for each student at college entrance varies slightly in different institutions. In general, however, it calls for a brief account of the parental health history, along with the student's precollege health record. It always includes a careful medical examination of all the vital organs of the body. It frequently includes posture tests, the results of which are usually recorded in chart form; and it sometimes includes efficiency tests.

*Health history of parents.*—Information is usually recorded showing the occupation of each parent, the state of health of each, if living, along with a record showing whether either one has ever suffered from tuberculosis, cancer, mental disease, or apoplexy. Goiter is sometimes included in this list.

*Health history of students.*—The precollege health history of the student consists of a record of all the diseases a student has had previous to college entrance, together with a statement of any ill effects which remained with the student after recovery. The student is asked to check this information on a card containing a list of diseases, and to state the age at which he had each one. The following diseases are usually mentioned on these cards: Mumps, whooping cough, chicken pox, scarlet fever, typhoid fever, chorea, neurasthenia, appendicitis, tonsillitis, asthma, skin eruptions, pleurisy, otitis media, tuberculosis, rheumatism, diphtheria, adenoids, enlarged glands, hay fever, and influenza.

*Detailed analysis of medical examinations of students.*—The medical examination prescribed includes a complete examination of the student in order to find out the exact physical condition of the various vital organs of the body, including eyes, ears, nose, throat, heart, and lungs. If any condition is found needing medical attention, it is urged immediately.

*Other information included in the medical examination.*—Most institutions record information concerning health habits of the students, such as the frequency of baths; the use of a cold plunge or shower; the amount of sleep; diet, including the use of tea, coffee, tobacco; and the use of other stimulants or drugs.

A record is also made of the student's previous work in physical education, including athletics; and of his present methods of recreation, along with a statement of the amount of outside work he is doing, if self-supporting while in college.

*Value of physical efficiency tests.*—Sixty-five institutions (27 public and 38 private) include physical efficiency tests as a part of the medical examination required of all students at entrance. Most of these institutions prescribe these tests to enable the physical directors to classify first-year students into classes where they will take part in physical activities suitable to their strength. Considerable difference of opinion exists regarding the value of the tests given and the methods used. The fact that only one-third of the colleges and universities included in this study are doing work of this kind indicates that physical efficiency tests are considered as yet merely in an experimental stage of development.

*Value of medical examination.*—The medical examination given each student is very valuable. Besides discovering physical faults of which he may be unaware, it clears up the student's mind regarding any fears he may have concerning his own physical condition. It is helpful to the instructor, especially in the classification of all first-year students. It shows very clearly those who need corrective gymnastics, likewise those who are especially fitted, on account of

possessing good mechanical use of the body, for more difficult or strenuous exercise.

*Continuous records of students' physical condition.*—Seventy-nine institutions of our list, including 32 public and 47 private, after conducting thorough medical examinations at entrance, have follow-up systems and keep continuous records of the students' physical condition during their entire college course. Three public and three private institutions do likewise until the second year. Five public and five private institutions keep records of special cases or sometimes partial records of all students. One private institution does this for one year only. Altogether, 96 institutions attempt, for a time at least, to keep continuous records regarding the physical condition of students. This policy, which is now becoming generally accepted, is especially beneficial for those overstudious persons who fail to take sufficient care of their physical condition and who frequently at the end of the first or second year begin to suffer a loss of health.

*Corrective gymnastics and their credit value.*—Corrective gymnastics are prescribed and required of students needing same by 70 per cent of the institutions included in this study. Many institutions have this work given by specialists and allow semester hours' credit for it. A few institutions do not grant semester hours' credit value to this subject, but are urging that the secondary schools should attend to this work more carefully, and thereby reduce to a minimum the need for corrective gymnastics to be given by the colleges and universities.

*Vaccination for smallpox.*<sup>1</sup>—Vaccination for smallpox is made a definite requirement by 58 colleges and universities, including 25 public and 34 private institutions. Six other institutions urge or require it in emergencies only, and one requires that it should be done within two years of entrance. In most cases this requirement is a part of the R. O. T. C. regulations.

*Vaccination for typhoid.*<sup>1</sup>—Vaccination for typhoid is required by 13 institutions, including 5 public and 8 private. While 7 other institutions urge this policy, the majority feel that it is necessary only in certain localities or in case of an epidemic.

*Unit entrance credit for high-school physical education.*—The question of allowing any entrance credit for high-school work in physical training is a new problem. Eleven institutions indicate that they would favor giving credit in this subject. Only two of these indicate that they really allow this credit. Louisiana State University allows one unit for high-school physical education in cases where the students obtained such credit toward high-school graduation. The College

<sup>1</sup> See appendix for list of institutions requiring vaccination for smallpox and typhoid for college entrance.



of the City of New York allows one-half unit. Baylor College and South Dakota State College favor this policy. The other institutions favoring this plan include State College of Washington, Colorado Agricultural College, Montana State College, North Dakota Agricultural College, University of North Dakota, Purdue University, and the University of Kentucky.

*Unit entrance credit for military training in secondary schools.*—The question of allowing unit entrance credit for military training given in secondary schools presents a new problem for consideration. Three public institutions—the University of Alabama, the University of California, and Louisiana State University—allow one-half unit for this work. The following institutions approve of giving entrance credit for military training given by the secondary schools: Purdue University, University of Maine, University of Cincinnati, Montana State College, Mississippi Agricultural and Mechanical College.

The private institutions do not seem to favor the policy of giving entrance credit in this subject.

TABLE 1.—Requirements of institutions relative to the physical condition of the student

[For locations of the institutions, see p. 43]

Institution	2	3	4	5	6	7	8	9
	Medical examination at entrance	Medical examination at any other time	Continuous record kept showing physical condition of student	Physical efficiency tests given	Efficiency test determines type of work student is permitted or required to take	Corrective gymnastics given students needing same	Corrective gymnastics directed by specialist	Remarks (value of) concerning corrective gymnastics
<b>1</b>								
<i>Public</i>								
Alabama Polytechnic Institute.....	Yes.....	No.....	No.....	No.....	No.....	Yes.....	Yes.....	Important.
University of Alabama.....	No.....	No.....	No.....	No.....	No.....	Yes.....	Military department.	
University of Arizona.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Arkansas.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of California.....	Yes.....	Each quarter.....	Yes, 2 years.....	Yes.....	Partly.....	Yes.....	Yes.....	
University of Colorado.....	Yes.....	Each quarter.....	Yes, 2 years.....	Yes.....	Partly.....	No.....	No.....	
Colorado Agricultural College.....	No.....	When needed.....	Yes, 2 years.....	No.....	No.....	Yes.....	Yes.....	
Connecticut Agricultural College.....	No.....	When needed.....	Yes.....	No.....	Partly.....	Yes.....	Faculty.....	
University of Florida.....	Yes.....	When needed.....	Yes.....	Yes.....	Partly.....	Yes.....	No.....	
Florida State College for Women.....	No.....	No.....	Yes.....	No.....	Partly.....	Yes.....	No.....	
University of Idaho.....	Yes.....	Yearly.....	Yes.....	No.....	Partly.....	Yes.....	Military department.	
University of Illinois.....	Yes.....	Yearly.....	Yes.....	No.....	Partly.....	Yes.....	Yes.....	
Purdue University.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Iowa State College of Agriculture and Mechanic Arts.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
State University of Iowa.....	Yes.....	Yearly.....	No.....	Swimming test, first month.....	Swimming test, first month.....	Yes.....	Yes.....	Necessary.
University of Kansas.....	No.....	First month.....	Partly.....	Yes.....	Yes.....	Yes.....	Yes.....	
Kansas State Agricultural College.....	Yes.....	First month.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Kentucky.....	Yes.....	Yearly.....	Yes.....	No.....	Partly.....	Yes.....	Yes.....	
Louisiana State University and Agricultural and Mechanical College.....	Yes.....	When necessary.....	Partly.....	No.....	Partly.....	Yes.....	Yes.....	
University of Maine.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Maryland.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Massachusetts Agricultural College.....	Yes.....	No.....	No.....	No.....	No.....	No.....	No.....	
University of Michigan.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	

Footnotes at end of table.



TABLE 1.—Requirements of institutions relative to the physical condition of the student—Continued

Institution	1	2	3	4	5	6	7	8	9
		Medical examination at entrance	Medical examination at any other time	Continuous record kept showing physical condition of student	Physical efficiency tests given	Efficiency test determines type of work student is permitted or required to take	Corrective gymnastics given students needing same	Corrective gymnastics directed by specialist	Remarks (value of) concerning corrective gymnastics
<i>Public—Continued</i>									
Michigan Agricultural College	Yes	Yes	First and third years.	Yes	Yes; also posture in class work.	Yes	Yes <sup>1</sup>	Yes	
University of Minnesota	Yes	Yes	Yes	Yes	In class work.	Yes	Yes	Yes	
Mississippi Agricultural and Mechanical College	No	No	Yes <sup>2</sup>	No	No	No <sup>2</sup>	Yes	No	
University of Missouri	Yes	Yes	No	No	No	Medical examination.	Advice only <sup>2</sup>	Could be.	
Montana State College of Agriculture and Mechanic Arts	Yes	Yes	Optional	Yes, men	Athletics only.	Yes	Yes	Yes	
Montana State University	Yes	Yes	Shortly after	No	Men only.	No	Yes	Yes	
University of Nebraska	Yes	Yes	No	Periodical	No	Yes	Yes	Yes	Important. <sup>3</sup>
University of Nevada	Yes	Yes	No	No	No	No	Yes	Yes	Do.
New Hampshire College of Agriculture and Mechanic Arts	Yes	Yes	Shortly after	Periodical	No	No	Yes	Yes	
University of New Mexico	No	No	No	No	No	No	No	No	
New Mexico College of Agriculture and Mechanic Arts	No	No	No	No	No	No	No	No	
College of the City of New York	Yes	Yes	Yearly	Yes	No	Yes	Yes	Yes	
Hunter College of the City of New York	Yes	Yes	Partial	Partial	No	No	Yes; clinic <sup>1</sup>	Yes	Do.
University of North Carolina	Yes	Yes	Twice yearly	Yes	No	No	Yes	Yes	
North Carolina College for Women	Yes	Yes	Twice yearly	Yes	No	No	Yes <sup>1</sup>	Yes	
North Carolina State College of Agriculture and Engineering	Yes	Yes	Not regularly	No	Yes; second year.	Second year.	Yes	Yes	Do., <sup>10</sup>
North Dakota Agricultural College	Yes	Yes	Not regularly	No	Teams only	Yes	Yes	Yes <sup>4</sup>	(9)
University of North Dakota	Yes	Yes	Not regularly	Yes	Yes	Yes	Yes	No	(1)
University of Akron	Yes	Yes	(11)	No	Army tests.	No	Yes	Yes	
University of Cincinnati	Yes	Yes	(11)	Yes	Schneider's test.	Yes	Women only <sup>11</sup>	Yes	
Ohio State University	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Real value.
Miami University	Yes	Yes	Yearly	Yes	Each semester	Yes	Yes	Yes	Important.
Oklahoma College for Women	Yes	Yes	Yes	No	No	Yes	Yes <sup>1</sup>	Yes	(1)
University of Oklahoma	Yes	Yes	Yes	2 years	Yes	Yes	Yes	Yes	
Oklahoma Agricultural and Mechanical College	Yes	Yes	Yes	2 years	Examination only.	Yes	Yes <sup>1</sup>	Yes	
Oregon State Agricultural College	Yes	Yes	Yearly	Yes	No	No	Yes	Yes	Important.

University of Oregon.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	(19)
Pennsylvania State College.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Rhode Island State College.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	
University of South Carolina.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
South Dakota State College of Agricultural and Mechanical Arts.....	Yes.....	Of some students.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of South Dakota.....	Yes.....	If needed.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	(19)
University of Tennessee.....	Yes.....	Twice yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Texas.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Agricultural and Mechanical College of Texas.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Agricultural College of Utah.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Utah.....	Yes.....	(?).....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Vermont and State Agricultural College.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Virginia Agricultural and Mechanical College and Polytechnic Institute.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Virginia.....	Yes.....	Yes.....	Hospital record only.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
State College of Washington.....	No.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Washington.....	Yes.....	If necessary.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Wisconsin.....	Yes.....	No.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Wyoming.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	(19)
<i>Private</i>													
Birmingham-Southern College.....	No.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Southern California.....	Yes.....	"Follow-up cases,".....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Leland Stanford Junior University.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Colorado College.....	Yes.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	
University of Denver.....	Yes.....	Partially.....	Partially.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Wesleyan University.....	No.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Yale University.....	Yes.....	Yearly and when needed.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Connecticut College for Women.....	Yes.....	Seniors.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
George Washington University.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	
Howard University.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Agnes Scott College.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Emory University.....	Yes.....	Yes, doubtful cases.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Chicago.....	Yes.....	For athletes.....	Not complete.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Northwestern University.....	Yes.....	Yes.....	2 years.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	

Footnotes at end of table.

TABLE I.—Requirements of institutions relative to the physical condition of the student—Continued

Institution	2	3	4	5	6	7	8	9
<i>Private—Continued</i>								
Knox College	Yes	Illness only	O, K'd by health department.	Yes	Yes	Yes	No	
Earlham College	Yes	Yearly	Yes	Yes	Partially	Yes	Yes	Important.
DePauw University	Yes	No	Yes	No	Yes	No	No	Do.
University of Notre Dame	No	Yes	Yes	Yes	Yes	Yes	Yes	
Drake University	Yes	Yes	Yes, women; no, men.	Yes	Yes	Yes	Yes	
Griñnell College	Yes, women; no, men.	Yes	?	Yes	Yes	Yes	Yes	
Cornell College	Yes	As needed	Yes	Yes	Yes	Yes	Yes	
Baker University	Yes	Not regularly	No	No	Yes	Yes	Yes	
Washington College	Yes	Not for all	Yes <sup>10</sup>	Yes	Yes	Yes	Yes	
Bowdoin College	Yes	Special cases	Yes	No	Yes	Yes	Physical education director.	Most effective.
Bates College	Yes	Yes	Yes	No	Yes	Yes	No	
Goucher College	Yes	For athletics	Yes	Yes	Yes	Yes	Yes	Important.
Johns Hopkins University	Yes	Yes	Yes	S a r g o n t strength test	Sometimes	Yes	Yes	
Amherst College	Yes	As needed	No	No	Yes	Yes	Yes	
Slimmons College	Yes	Yes	Yes	No	Yes	Yes	Yes	
Harvard University	Yes	Yes	First year	No	( <sup>9</sup> )	Yes	Yes	Do.
Massachusetts Institute of Technology	Yes	Yearly	Yes	No	No	Yes	Yes	Do.
Radcliffe College	No	No	No	No	Examination does.	No	No	Necessary in prescribing physical work.
Boston College	Yes	If needed	Yes	No	Examination does.	Yes	Yes	( <sup>1</sup> )
Smith College	Yes	Yes	Yes	Yes	Yes	Yes	Yes	( <sup>9</sup> )
Mount Holyoke College	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes.
Tufts College	Yes	2 years	2 years	Yes	Yes	Yes	Yes	
Wellesley College	Yes	No	Yes	Yes	Yes	Yes	Yes	
Williams College	Yes	If needed	Yes	Yes	Yes	Yes	Yes	



	After entrance.	Twice a year.	Yes.	Strength test.	No.	Yes.	Physical director.	(4)	Important.
Clark University	Yes	Mid-year	Yes	No	Yes	Partially	Yes	Yes	
Worcester Polytechnic Institute	Yes	Yearly	Yes	Often for teams	Yes	Yes	Yes	Yes	
Washington University (St. Louis, Mo.)	Yes	Yes	Yes, when defects exist.	Yes	Yes, partly	Yes	Yes	Yes	
Dartmouth College	Yes	Yes	Yes, when defects exist.	Yes	Yes	Yes	Yes	Yes	
Rutgers College	Yes	Sports season	Yes	No	Yes	Yes	Yes	Yes	Do.
Princeton University	Yes	End of first and third years.	Yes	No	Yes	Yes	Yes	Yes	
Wells College	Yes		Yes	No	Yes	Yes	Yes	Yes	Should be given.
University of Buffalo	Yes	In special cases	No	Yes	Yes	Yes	Yes	Yes	
Hamilton College	Yes	Second year	Yes	No	Yes	Yes	No	Yes	
Colgate University	Yes	Yearly	Yes	No	Yes	Yes	No	Yes	
Cornell University	Yes	End first and fourth years.	Yes	No	Yes	Yes	No	Yes	
Barnard College	Yes	Yearly	No	No	Yes	Yes	Yes	Yes	
Columbia University	Yes	No	No	No	Yes	Yes	Yes	Yes	
Fordham University	Yes	3d and 4th years	Yes	Sometimes	No	Yes	Yes	Yes	
New York University	Yes	1st year and when necessary.	Yes	No	(3)	Yes	Yes	Yes	Value for special cases.
Vassar College	No	Yes	Special cases	Yes	Yes	Prescription	Yes	Yes	Great value.
University of Rochester	No	Yes	Not of all students.	No	(3)	only.	Yes	Yes	
Syracuse University	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	
Rensselaer Polytechnic Institute	No	As needed.	No	Yes	Yes	No	Yes	Yes	
Duke University	Yes	Rarely	No	Yes	No	Yes	No	Yes	
Case School of Applied Science	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	
Western Reserve University	Yes	Yes	No	No	"Examinations must be considered."	Yes	Yes	Yes	
Ohio Wesleyan University	Yes	Yes	No	Yes	(3)	Yes	Yes	Yes	First 2 years.
Oberlin College	No	End of each year.	Yes	No	No	Yes	Yes	Yes	(4)
Antioch College	Yes	Annually	No	No	No	Yes	Yes	Yes	
Reed College	Yes	Yearly	Yes	Yes	Yes	Few cases	No	Yes	
Willamette University, Salem	No	2d year	No	No	No	Yes	Yes	Yes	Yes (extra charge).
Lehigh University	Yes	End of 2d year	Yes	No	Yes	Yes	Yes	Yes	
Bryn Mawr College	Yes	Yearly for 2 years	Yes	No	Yes	Yes	Yes	Yes	
Lafayette College	Yes	For years	No	No	No	Available	Yes	Yes	"Limited value."
Haverford College	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	
Temple University	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
University of Pennsylvania	Yes	Yes	No	No	Yes	Yes	Yes	Yes	
University of Pittsburgh	Yes	Yes	Yes	Strength tests	Yes	Yes	Yes	Yes	

Footnotes at end of table.

TABLE 1.—Requirements of institutions relative to the physical condition of the student—Continued

Institution	1	2	3	4	5	6	7	8	9
<i>Private—Continued</i>									
Swarthmore College.....	Yes.....	Yes.....	Yearly.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Washington and Jefferson College.....	Yes.....	Yes.....	End of year.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Brown University.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes, women.....	Yes.....	
Converse College.....	Yes.....	Yes.....	1st, 3d, and 4th year.....	Yes.....	No.....	No.....	Yes.....	Yes.....	
University of Chattanooga.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	Special cases.
Vanderbilt University.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	
University of the South.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	No.....	Yes.....	Yes.....	
Rice Institute.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	
Baylor Institute.....	No.....	No.....	No.....	No.....	No.....	Yes.....	Yes.....	Yes.....	Important.
Washington and Lee University.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
Kandolph-Macon Woman's College.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	
University of Richmond.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....	
Sweet Briar College.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	No.....	Yes.....	Yes.....	
Whitman College.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	No.....	Yes.....	Yes.....	
Beloit College.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	

<sup>1</sup> Semester hour credit is allowed for corrective gymnastics when prescribed instead of the regular required class work.

<sup>2</sup> Athletic teams have special medical examinations.

<sup>3</sup> Medical examination is the basis for classifying students in physical education classes.

<sup>4</sup> Corrective gymnastics are given by the regular staff.

<sup>5</sup> Corrective gymnastics are required of all men excused from military training on account of physical disability.

<sup>6</sup> Standard high school enables a student to enter advanced classes in physical education.

<sup>7</sup> Semester hour credit is allowed in elective or teacher training courses in corrective gymnastics.

<sup>8</sup> No semester hour credit is allowed.

<sup>9</sup> Most important of all branches of physical education, but undeveloped.

<sup>10</sup> Important part of all work in physical education.

<sup>11</sup> Y early in medical college. Two years only in liberal arts college.

<sup>12</sup> Funds for providing this for men are not available.

<sup>13</sup> A person for physically sound may select his own exercise.

<sup>14</sup> Corrective gymnastics are required but not a part of the curriculum.



## 2. Required Work in Physical Education

A large number of institutions require a certain amount of physical education as a part of every undergraduate course leading to a bachelor's degree. There is a general tendency toward requiring this work for two years and allowing four semester hours credit for it. However, there is a difference of opinion regarding this matter and the policies of institutions vary, not only in the number of years physical education is required by the various departments or colleges, in colleges and universities, but also in the number of years prescribed for men and women and the amount of semester hours credit allowed for this work.

Table 2 shows the number of years during which physical education is required of men and women, and the semester hours credit allowed for the work.

TABLE 2.—Requirements regarding physical education and semester hours credit allowed for this work<sup>1</sup>

Institution	Number of years required of—		Semester hours credit allowed		Total semester hours required for a degree		Per cent of total in physical education	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
<i>Public</i>								
Alabama Polytechnic Institute.....	1		0		144		0	
University of Arizona.....		2		4		125		3.2
University of Arkansas.....		2		6		134		2.9
University of California.....	2	2		2	124	124	1.6	1.6
University of Colorado.....	2		2		124		4.2	
Colorado Agricultural College.....	2	3	4		160	160	2.5	3.7
Connecticut Agricultural College <sup>1</sup> .....	2	2	3	3	140	140	2.1	2.1
University of Florida.....	2		2	0	136		1.4	0
Florida State College for Women.....		3		2		124		
University of Idaho.....	2	2	8	4	128		6.2	3.1
University of Illinois.....	4	4	4	4	120	120	0	0
University of Indiana.....		1		0	124		0	0
Iowa State University.....	2	2	0	0	124	124	0	0
Iowa State College of Agriculture and Mechanical Arts <sup>1</sup> .....	2	2	0	2	140	140	0	0.9
University of Kansas.....	2	2	0	0	120	120	0	0
Kansas State Agricultural College <sup>1</sup> .....	2	2	0	4			0	
University of Kentucky.....	2	2	2.8	2.8	127	127	2.2	2.2
Louisiana State University and Agricultural and Mechanical College.....	0	2	0	4		144		2.7
University of Maine.....	4	4	3	3	125	125	2.4	2.4
University of Maryland.....	0	2	0	8		129		6.2
Massachusetts Agricultural College <sup>1, 2</sup> .....	2	2	9	9	158	158	3.7	3.7
University of Michigan.....	1	2	0	0	120	120	0	0
Michigan Agricultural College <sup>1</sup> .....	2		0				0	
University of Minnesota.....	1	2	0	0	120	120	0	0
Mississippi Agricultural and Mechanical College <sup>1</sup> .....	1	0	2	0	160		0	

<sup>1</sup> In general, the requirements of institutions regarding physical education presented in this table refer to the departments or colleges of liberal arts. Inasmuch as several agricultural and mechanical colleges and scientific institutions included in this study do not have departments of liberal arts, the requirements mentioned herein for these institutions refer to departments of agriculture or engineering, and this fact is indicated by footnote 1.

<sup>2</sup> Physical education is required as a substitute for military training only.

TABLE 2.—Requirements regarding physical education and semester hours credit allowed for this work—Continued

Institution	Number of years required of—		Semester hours credit allowed		Total semester hours required for a degree		Per cent of total in physical education	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
<i>Public—Continued</i>								
Mississippi State College for Women.....		4		8		140		8.5
University of Missouri.....		2		4		124		3.2
Montana State University.....	2	2	0	0	120	120	0	0
Montana State College <sup>1</sup> .....	2	2	4	4	128	128	2.7	2.7
University of Nebraska.....		2		4		125		3.2
University of Nevada.....	2	2	3	3	124	124	2.4	2.4
New Hampshire College of Agriculture and Mechanic Arts.....	2	3	3	6	144	144	1.3	2.7
State University of New Mexico.....	2	2	0	0				
New Mexico College of Agriculture and Mechanics Arts.....		2		4		144		1.3
College of the City of New York.....	2		4		134			
Hunter College of the City of New York.....		2		3		125		
University of North Carolina.....	1	1	0	0	120	120	0	0
North Carolina College for Women.....		3		3		126		4.6
North Carolina State College of Agriculture and Engineering.....	2		6				0	
North Dakota Agricultural College.....		2		8		150		5.8
University of North Dakota.....	2	2	3	3	125	125	2.4	2.4
University of Akron.....		1		2		128		1.5
Ohio University.....	1	1	2	2				
University of Cincinnati.....	2	2	4	4	124	124	3.2	3.2
Ohio State University.....	1	2	2	4	120	120	1.5	3.1
Miami University.....	2	2	4	4	124	124	3.2	3.2
Oklahoma College for Women.....		2		4		124		3.2
University of Oklahoma.....	2	2	4	4	124	124		
Oklahoma Agricultural and Mechanical College.....	1	2	3	6	129½	129½	1.4	2.9
Oregon State Agricultural College <sup>1</sup> .....	2	4	3	9	139	139	1.4	4.2
University of Oregon.....	2	2	6	6	124	124	3.2	3.2
Pennsylvania State College.....	2	2	4	4	128	128	3.1	3.1
Rhode Island State College.....	4	4	8	8	160	160	5.5	5.5
University of South Carolina.....	4	4	6	6	138	138	4.3	4.3
South Dakota State College of Agriculture and Mechanic Arts <sup>1</sup> .....		2		4		136		2.9
University of South Dakota.....		2		0		128		0
University of Tennessee.....	2	2	4	6	132	132		4.5
University of Texas.....	2	3	0	0			0	0
College of Industrial Arts.....		2		4		124		2.2
Agricultural and Mechanical College of Texas.....	1		0		144		0	
Agricultural College of Utah.....	3½	3½	6¾	6¾	120	120		
University of Utah.....	1	1	3	3	122	122	1.6	1.6
University of Vermont and State Agricul- tural College.....	2	2	8	8	132	132	6	6
Virginia Agricultural and Mechanical Col- lege and Polytechnic Institute.....	1	0	1½	0	144		.7	
University of Virginia.....	2	2	0	0	120	120	0	0
College of William and Mary.....	1	1	2	2	126	126	1.5	1.5
State College of Washington.....	4	4	4	4	128	128	3.1	3.1
University of Washington.....		2		4		127½		3
University of Wisconsin.....	2	2	8	8	120	120		
University of Wyoming.....	2	2	3	3	126	126	1.1	1.1
<i>Private</i>								
Birmingham-Southern College.....	1	0	4		124		3	
University of Southern California.....	2	2	4	4	124	124	3.2	3.2
Leland Stanford Junior University.....	2	2	4	4	120	120	0	0
Colorado College.....	3	3	6	6	126	126	4.7	4.7
University of Denver.....	2	2	4	4	124	124	3.2	3.2
Trinity College (Hartford, Conn.).....	3	0	0	4	128		0	
Wesleyan University.....	3		3		126		4.7	
Yale University.....	1		0					
Connecticut College for Women.....		4		8		130		6.1
Catholic University of America.....	2		0		152		0	
Howard University.....	4	4	10	10	120	120	16¾	16¾
Trinity College (Washington, D. C.).....		2		0				0
Agnes Scott College.....		3		4		124		
University of Chicago.....	2	2	6	6				
Northwestern University.....	1	2	0	0			0	0

<sup>1</sup> See footnote 1 on page 11.

TABLE 2.—Requirements regarding physical education and semester hours credit allowed for this work—Continued

Institution	Number of years required of—		Semester hours credit allowed		Total semester hours required for a degree		Per cent of total in physical education	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
<i>Private—Continued</i>								
Knox College	2	2	4	4	124	124	3.2	3.2
Earlham College	3		0		120		0	
DePauw University	2	2	4	4	124	124	3.2	3.2
University of Notre Dame	4		0				0	
Drake University	2	2	4	4	124	124	3.2	3.2
Grinnell College	2	3	2	2	120	120	0	0
Cornell College	2	2	4	4	124	124	3.2	3.2
Baker University	3	3	0	0	120	120	0	0
Washburn College	1	1	2	2	124	124	1.5	1.5
Tulane University	1	1	0	0			0	0
Bowdoin College	4		12		101	101	11.8	11.8
Bates College	3	3	9	9	131	131		
Colby College	2	4	0	0	122	122	0	0
Goucher College		3		0				0
Johns Hopkins University	2		0		125		0	
Amherst College	3		0		132		8	
Boston University	2	2	2	2				
Simmons College		1		0				0
Harvard University	1	0					0	
Smith College		2		0		120		0
Mount Holyoke College		2		4				0
Tufts College	2		3		123		2.4	
Wellesley College		2		2		120		1.66
Williams College	2		0				0	
Clark University	4	4	0	0	120	120	0	0
Worcester Polytechnic Institute <sup>3</sup>	2		0				0	
Carlton College	3	3	6	6	124+	124+		
Washington University (St. Louis, Mo.)	2	2	0	0	120	120	0	0
Dartmouth College	2		0		122		0	
Rutgers College	2		0					
Princeton University	1		6				5.4	
Wells College		2		4		124	3.2	
University of Buffalo		1		2		128	1.5	
Hamilton College	4		24		140		10+	
Colgate University	2		2		128		1.5	
Cornell University		2		0		120		0
Barnard College		4		6				
Columbia University	2	2	4	4	124	124	3.2	3.2
New York University <sup>4</sup>		1		0				0
Vassar College		3		6				0
University of Rochester	2	2	4	4	124	124	3.2	3.2
Syracuse University	2	2	4	4	124	124	3.2	3.2
Rensselaer Polytechnic Institute <sup>3</sup>	1	0					0	
Duke University	3	3	6	6	126	126	4.5	4.5
Wake Forest College	3		18		128		0	
Case School of Applied Science <sup>3</sup>	4		7				6	
Western Reserve University	4	2	0	0			0	0
Oberlin College	2	2	2	2	124	124	1	1
Antioch College	4		0				0	
Reed College	4	4	0	0			0	0
Willamette University		4			120		0	
Lehigh University	4		5½		140			
Bryn Mawr College		4		0				0
Lafayette College	2		4		160		2.5	
Haverford College			0				0	
Temple University	2	2	4	4	128	128	3.1	3.1
University of Pennsylvania	4	4	4	4	134	134	3.2	3.2
University of Pittsburgh	2	2	4	4			0	0
Swarthmore College	2	4	0	0	124	124	0	0
Washington and Jefferson College	3		0				0	0
Brown University	2	2	0	0	120	120	0	0
Converse College		3		3		124		3.2
University of Chattanooga	2	2	8	8	126	126	6.3	6.3
Vanderbilt University	3	0	0	0	128	128	0	0
University of the South	1		3		136		3.2	
Rice Institute	1	0						
Baylor University		1		0				0
Washington and Lee University	2		4		124		3.2	
Randolph-Macon Woman's College		3		0				0
University of Richmond		4		0				0
Street Briar College		2		4		124		3.2
Whitman College	2		6					0
Beloit College	2	2	0	0			0	0

<sup>3</sup> Requirements refer to the department of engineering.

<sup>4</sup> These requirements refer to Washington Square College.



*Scope of required work.*—The required courses in physical education usually include special corrective gymnastics (for those students needing this kind of work), light apparatus, calisthenic exercises, folk and gymnastic dances, indoor and outdoor games and sports, track activities, relays, and swimming.

*Swimming.*—One of the most interesting developments in colleges at present is the requirement of ability to pass certain tests in swimming. Nineteen public and twenty-nine private colleges and universities now require swimming for graduation. In the majority of these institutions the student must pass certain tests. Several institutions, however, do not withhold the degree if the student has taken the required instruction and practiced faithfully, but has not passed the tests. Dartmouth College requires all first-year students to pass the swimming test before they can engage in any other activity.

The following public institutions prescribe ability to swim as a requirement for graduation:

University of California, Berkeley; Connecticut Agricultural College, Storrs; Florida State College for Women, Tallahassee; Iowa State College of Agricultural and Mechanical Arts, Ames; University of Kansas, Lawrence; Kansas State Agricultural College, Manhattan; Michigan Agricultural College, East Lansing; University of Minnesota, Minneapolis; Montana State University, Missoula; College of the City of New York, New York; North Carolina State College of Agriculture and Engineering, Raleigh; University of Akron, Akron, Ohio; University of Cincinnati, Ohio; Ohio State University, Columbus; Oklahoma Agricultural and Mechanical College, Stillwater; Oregon State Agricultural College, Corvallis; University of Oregon, Eugene; Agricultural College of Utah, Logan; and University of Wisconsin, Madison.

The following private institutions prescribe ability to swim as a requirement for graduation:

Leland Stanford Junior University, Stanford University, Calif.; Wesleyan University, Middletown, Conn.; Yale University, New Haven, Conn.; Notre Dame University, Notre Dame, Ind.; Cornell College, Mount Vernon, Iowa; Amherst College, Amherst, Mass.; Harvard University, Cambridge, Mass.; Massachusetts Institute of Technology, Cambridge; Radcliffe College, Cambridge, Mass.; Williams College, Williamstown, Mass.; Carleton College, Northfield, Minn.; Washington University, St. Louis, Mo.; Dartmouth College, Hanover, N. H.; Rutgers College, New Brunswick, N. J.; Princeton University, Princeton, N. J.; Wells College, Aurora, N. Y.; Cornell University, Ithaca, N. Y.; Barnard College, New York, N. Y.; University of Rochester, Rochester, N. Y.; Syracuse University, Syracuse, N. Y.; Rensselaer Polytechnic Institute, Troy, N. Y.; Case School of Applied Science, Cleveland, Ohio; Lehigh University, Bethlehem, Pa.; Bryn Mawr College, Bryn Mawr, Pa.; University of Pennsylvania, Philadelphia, Pa.; University of Pittsburgh, Pittsburgh, Pa.; Swarthmore College, Swarthmore, Pa.; Brown University, Providence, R. I.; and Converse College, Spartanburg, S. C.

### 3. *Military Training*

Previous to 1916 few colleges or universities besides the land-grant colleges provided military training as a part of their educational curricula. These latter institutions, though frequently inadequately equipped, had provided a certain amount of military training for their students since the first Morrill law of July 2, 1862, which was supplemented by the act of 1883, the Morrill Act of 1890, and the Nelson amendment of 1907. General Order No. 70, 1913, of the War Department "prescribed the regulations governing the application of those laws for the last three years preceding the establishment of the Reserve Officers' Training Corps and is still applicable to schools that have not entered the Reserve Officers' Training Corps."<sup>1</sup>

Throughout the period from 1862 to 1916, previous to the World War, even the land-grant institutions varied greatly in regard to their policies of providing instruction in military training. Some institutions attempted to fulfill the requirements of the law in detail, while others merely tolerated the work. Although the War Department had been authorized and directed by Congress to provide instructors and some equipment, few institutions were sufficiently equipped to put this work on a basis with other subjects in the curricula.

*Establishment of the Reserve Officers' Training Corps.*—In September, 1916, Congress passed the national defense act which reorganized the Army and among other things created a definite system of civilian military training in preparatory schools and colleges. This act and the amendment of 1920 in establishing the Reserve Officers' Training Corps provided an organization consisting of two main subdivisions, viz, "a senior division to be composed of units of the several arms corps or services established primarily in collegiate institutions and a junior division to be established in other public and private educational institutions."<sup>2</sup>

Previous to the establishing of the Reserve Officers' Training Corps the military training given in colleges lacked variety. Usually this work included merely a part of the work of the Infantry. The Reserve Officers' Training Corps, however, provides "for establishing units corresponding to all the arms, corps, or services of the Army."<sup>3</sup> Its primary object is to provide systematic military training at civil educational institutions for the purpose of qualifying selected stu-

<sup>1</sup> "Military training in land-grant colleges," by C. R. Mann and Col. F. J. Morrow. *In Land-Grant College Education, 1910-1920, Pt. II*, edited by Walton C. John. Department of Interior, Bureau of Education, Bulletin, 1924, No. 37, Chap. IX, p. 58.

<sup>2</sup> *Ibid.*, p. 59.

<sup>3</sup> *Ibid.*, p. 60.



dents of such institutions for appointment as reserve officers in the military forces of the United States. This division is an important agency in a plan for national defense.

The four-year Reserve Officers' Training Corps course of the senior division is divided into the basic course and the advanced course. The basic course covers a period of two years, after which the student may elect the advanced two-year course if recommended by the officer in charge of military instruction and the president of the institution.

Completion of either course shall, when entered upon by a student, be a prerequisite for graduation as regards such student unless in exceptional case he shall be discharged from the Reserve Officers' Training Corps by the professor of military science and tactics for sufficient reason with the approval of the head of the institution.<sup>4</sup>

*Institutions that provide military training.*—Of the 182 institutions included in this study 83 provide instruction in military training as a part of their curricula. Of this number 62 are public and 21 are private colleges and universities. Sixty-six institutions, including 58 public and 8 private, require as a minimum a two-year basic course in military training. Seventeen other institutions, including 4 public and 13 private, provide similar courses, either as elective work or as alternate or optional courses instead of the required physical education work.

Of the 83 institutions which provide courses in military training, 49 are land-grant colleges. All of these institutions provide this work on account of the Morrill law of 1862. All except the University of Wisconsin require it for two years of all male physically fit students. Military training was made an elective course in the University of Wisconsin in 1923 on account of the fact that a State law was passed at this time prohibiting compulsory military training in educational institutions in that State.

*Special regulations of the War Department.*—A few general regulations of the War Department are observed by all institutions in which units of the Reserve Officers' Training Corps are established. For example, the senior commissioned officer of the Regular Army on duty at an educational institution is designated as the professor of military science and tactics. He is accorded the same academic rank which the institution accords to the heads of the other departments.

A minimum of three hours a week of instruction and training is required to be given in the basic course and five hours a week is required for the advanced course, except in medical, dental, and veterinary units, in which only three hours are required.

*Time required for military training.*—A large number of the institutions included in this study require one hour of theory and two

<sup>4</sup> Sec. 7, par. 46. Reserve Officers' Training Corps, Army Regulations No. 145-10, War Department. Dec. 15, 1924.

hours of practice each week in the basic course, making a total of three hours each week. A few institutions, however, require a total of four or five hours each week even in the basic course. (See Table 3, page 18, for requirements of each institution.)

Under special ruling of the War Department, a student engaged in athletics may be excused from the physical training held under the department of military science and tactics during the season in which he is actually engaged in such athletics.

*Academic credit allowed for military training.*—Institutions differ in their policies in regard to the number of semester hours credit allowed for required and elective courses in military training. (See Table 3, p. 18.)

The number of semester hours credit allowed for the required work in military training varies from 2 to 12.

A few institutions allow military training to be taken as a major, minor, group, free, or alternate elective by students in their junior and senior courses.

Eleven institutions, including eight public and three private, allow military training to be taken as a major elective subject in a four-year course leading to a bachelor's degree. Semester hours credit varying from 12 to 32 are allowed for the work.

Ten institutions, including nine public and one private, allow military training to count as a minor elective subject in a four-year course leading to a bachelor's degree. Semester hours credit allowed for this work by these institutions varies from 8 to 16 $\frac{2}{3}$ .

Nine public and two private institutions allow military training to be taken as a group elective. The semester hours credit allowed for this work varies from 10 to 18 credits.

Sixteen public and six private institutions allow military training to be taken as a free elective. Semester hours credit allowed varies from 4 to 16.

Five public institutions and two private institutions allow military training to be taken as an alternate elective. Semester hours credit is allowed varying from 4 to 12.

TABLE 3.—Required and elective work in military training in certain colleges or departments of public and private institutions

[L=Land-grant institution, indicated by an L in column 2]

Institution <sup>1</sup>	Land-grant institutions	Required				Elective				Total required plus elective semester hours credit allowed on a degree			
		Number of semesters required in military training	Total semester hours credit required for a degree	Per cent of total required in military training	Major	Minor	Group	Free	Alter-nate				
											Hours per week	Number of semesters required in military training	Total semester hours credit required for a degree
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>Public</i>													
Alabama Polytechnic Institute <sup>2</sup>	L	2	1	3	8	144	5.5						23%
University of Alabama		2		3	4	128	3.1		8		13%		12
University of Arizona	L	2		3	4	125	3.2				4		8
University of Arkansas	L	2	1	2	6	146	4.4						
University of California	L	2	1	2	6	124	4.7			12			18
Colorado Agricultural College <sup>2</sup>	L	2	(Total, 3 hours)	2	12	160	7.5	20					32
Connecticut Agricultural College <sup>3</sup>	L	2	1	2	6	140	4.2						
University of Delaware	L	4			12								
University of Florida <sup>2</sup>	L	2	2	4	4	136	2.9						( <sup>4</sup> )
Georgia State College of Agriculture and Mechanic Arts	L	2			3								
School of Technology		2	2	2	0	128	6.2	12					20
University of Idaho	L	2	0	3	2								6
University of Illinois	L	2	0	2	2								
University of Indiana	L	2	(Total, 5 hours)	4	4	144	5			14%			21%
Purdue University	L	2			6	140	2.8			18			24
Iowa State College of Agriculture and Mechanic Arts <sup>3</sup>	L	2			4	124	3.2						
State University of Iowa		0			0								15
University of Kansas <sup>6</sup>	L	2			4	135	2.9						
University of Kentucky	L	2		3	5.6	128	4.4	12					17.6
Louisiana State University and Agricultural and Mechanical College	L	2	1-2	3-5	4	144	2%					4	8
University of Maine	L	2	1	2	7	125	5.6			10			17
University of Maryland	L	2			8	129	6.2				12		20
Massachusetts Agricultural College <sup>3</sup>	L	2	2	3	12	158	7.5						
University of Michigan <sup>7</sup>	L	0			12								
Michigan Agricultural College <sup>3</sup>	L	2		3	12	192	6.2			12			24



L	University of Minnesota	2	1	3	0	120	0			12	18
L	Mississippi Agricultural College <sup>3</sup>	2	2	8	0	160					12
L	University of Missouri	2		2	8	124					
L	Montana State College of Agriculture and Mechanic Arts <sup>2</sup>	2	2	4	4	150	2.6			8	14
L	State University of Montana <sup>3</sup>	2	2	4	4	124				10	16
L	University of Nebraska	2	(Total, 4 hours)	6	4	125	3.2			8	14
L	State University of Nevada	2	(Total, 3 hours)	6	6	124	4.1	12		8	18
L	College of the City of New York	2	2	3	4	144	2.7			4	8
L	New Mexico College of Agriculture and Mechanic Arts	2	(Total, 2 hours)	3	3	134	0			8	11
L	North Carolina State College of Agriculture and Engineering	2	1	2	8	150	5.3		18		24
L	North Dakota Agricultural College <sup>6</sup>	2	1	2	4	125	4		16		20
L	University of North Dakota	2	1	3	8	128	6.2	16	12	16	20
L	University of Akron	2	(Total, 5 hours)	5	5	120	3				16
L	Ohio State University	2	3	3	4	124	3.2			12	12
L	University of Oklahoma	2	3	2	4	124	2.8	20			24
L	Oklahoma Agricultural and Mechanical College <sup>3</sup>	2	2	3	4	138	5.7	20	18	6	28
L	Oregon State Agricultural College <sup>4</sup>	2	1	2	4	126	3.2				( <sup>1</sup> )
L	University of Oregon	2	1	2	4	149	2.6				20
L	Pennsylvania State College <sup>5</sup>	2	1	2	8	160	5			14	
L	Rhode Island State College	2	(Total, 3 hours)	6	6	144-160					
L	Olson Agricultural College	2		2	5½	136	2			12	
L	South Dakota State College of Agriculture and Mechanic Arts <sup>2</sup>	2	(Total, 3 hours)	2	0	132+	0				12
L	University of South Dakota	2	2	2	6	132	0			12	18
L	University of Tennessee	2	1	2	2	120	0			16	24
L	Agricultural and Mechanical College of Texas	2	1	2	8						
L	Agricultural College of Utah	2	3	1	4	120	0	15			3-15
L	University of Utah	0	1	2	8		0				
L	University of Vermont and State Agricultural College	2	1	2	4	144	2.8			8	12
L	Virginia Agricultural and Mechanical College and Polytechnic Institute	2	2	4	4	128	3.1			12	16
L	State College of Washington	2	2	4	6½	126½	2.2	28			34½
L	University of Washington <sup>10</sup>	2		0	0	128	0				
L	West Virginia University	2	1	2	6	120	4.2		14		20
L	University of Wisconsin <sup>5</sup>	0				126					
L	University of Wyoming	2	1	2							
<i>Private</i>											
L	Leland Stanford Junior University <sup>5</sup>	6	0		0	120	0	32			32
L	George Washington University	11	0			120	0				6
L	Howard University	3	1	2	16	120	0				
L	Emory University	2	2	2	2		0				12
L	University of Chicago	0					12	15½			15½
L	Northwestern University <sup>5</sup>	0				120					4
L	Knox College <sup>5</sup>	0									13
L	DePaul University	2			4	124	3.2			16	20
L	Bowdoin College <sup>11</sup>	0									4

Footnotes at end of table.

TABLE 3.—Required and elective work in military training in certain colleges or departments of public and private institutions—Continued  
 [L=Land-grant institutions, indicated by an L in column 2]

Institution	Land-grant institutions	Required						Elective				Total plus elective semester hours credit allowed on a degree	
		Num-ber of years re-quired	Hours per week		Num-ber of semes-ter hours required in mili-tary training	Total semester hours credit required for a degree	Per cent of total required in military training	Major	Minor	Group	Free		Alter-nate
			Theory	Prac-tice									
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>Private—Continued</i>													
Johns Hopkins University <sup>1</sup>		0			0			17					17
Massachusetts Institute of Technology	L	2	2	1	0						12		12
Washington University		0			0								0
Rutgers College	L	2			8		6				3		9
Princeton University <sup>11</sup>		0			0		0		(15)	(15)	(15)		(15)
Cornell University	L	2	1	2	0	120	0						0
New York University <sup>7</sup>		2	1	3	4	124	0			12			16
Syracuse University <sup>7</sup>		0	2		6		0						6
Lehigh University		0	2		0	156	0				7		13
Lafayette College		0			0		0				20		20
University of Pennsylvania <sup>5</sup>		0			0		0				4		4
University of Pittsburgh <sup>7</sup>		0			0		0						(7)

1 Some of the agricultural and mechanical colleges included in this study do not have departments or colleges of liberal arts. In such instances statistics given refer to the department of agriculture or of engineering, and this fact is mentioned in a note. Otherwise statistics in this table refer to the department of liberal arts.

<sup>2</sup> Statistics given refer to the department of general science.

<sup>3</sup> Statistics given refer to the department of agriculture.

<sup>4</sup> Military training is allowed as an elective, but information is lacking as to the number of semester hours credit allowed.

<sup>5</sup> Military training may be elected instead of physical education.

<sup>6</sup> Department of education allows 15 hours of elective work in military training.

<sup>7</sup> Military training is allowed as an elective. Information is incomplete as to the number of semester hours credit allowed for it.

<sup>8</sup> Military training is elective in the department of military science.

<sup>9</sup> Military training is not required by the department of liberal arts but is required by the department of engineering of this institution.

<sup>10</sup> Department of business administration *only* allows this elective.

<sup>11</sup> An optional medical unit of the Reserve Officers' Training Corps is maintained.

<sup>12</sup> For complete four-year course in military training, 6½ majors are allowed for the basic and 9 majors for the advanced.

<sup>13</sup> The total 20 elective semester hours credit includes 4 for the basic course and 16 for the advanced course.

<sup>14</sup> Military training is included as a part of the required courses in physical education.

<sup>15</sup> Information is incomplete regarding the number of semester hours credit allowed for the major, minor, group, or free elective.



#### 4. Hygiene

*Scope of hygiene as a college subject.*—Eighty-three institutions, including 36 public and 47 private, require personal hygiene. Thirty-six of these, including 23 public and 13 private, allow semester-hours credit for same varying from one-fourth to two semester-hours credit. (See Table 4).

The methods of instructing students in personal hygiene vary in different colleges and universities. In some institutions this instruction consists of a series of special lectures which all students attend. In other institutions this work is presented in connection with required physiology or biology.

In addition to the foregoing courses in personal hygiene, many institutions provide special lectures on venereal diseases. These lectures are sometimes presented by the students' health service and sometimes by the department of military training.

One hundred and one institutions, including 45 public and 56 private, give courses or special lectures on venereal diseases. Seventy-seven of these, including 35 public and 42 private, make this work compulsory.

These facts show an awakened interest in personal hygiene in American colleges. The ideal of attainment has been clearly stated by Dr. Thomas A. Storey, of the College of the City of New York, as follows:

We hope and plan each year to send out a group of healthier, stronger, more rugged, and more efficient young men who, because of our influence, will be of greater academic, social, moral, economic, and political value as American citizens. We hope and plan to join the other departments of this great college in the development of character and the making of men.<sup>5</sup>

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<sup>5</sup> Department of hygiene of the College of the City of New York, by Dr. T. A. Storey, p. 51. (Copyrighted by the Narragansett Machine Co.)

TABLE 4.—*Institutions requiring personal hygiene of all students*

Institution	Semester-hours credit allowed	Institution	Semester-hours credit allowed
<i>Public</i>		<i>Private</i>	
Alabama Polytechnic Institute.....	.....	University of Southern California.....	2
University of Alabama.....	1	Connecticut College for Women.....	1
University of Arizona.....	$\frac{1}{2}$	Howard University.....	.....
University of California.....	$\left. \begin{array}{l} 1 \\ 1 \\ 2 \end{array} \right\}$	Agnes Scott College.....	.....
University of Colorado.....	.....	Knox College.....	.....
University of Florida.....	1	DePauw University.....	.....
University of Illinois.....	$\frac{1}{2}$	Drake University.....	.....
Indiana University.....	1	Grinnell College.....	.....
Purdue University.....	$\frac{3}{4}$	Cornell College.....	.....
Iowa State College of Agriculture and Mechanic Arts.....	.....	Baker University.....	.....
University of Kansas.....	.....	Washburn College.....	2
University of Kentucky.....	2.6	Bowdoin College.....	1
University of Maine.....	1	Amherst College.....	.....
University of Michigan.....	.....	Harvard University.....	.....
University of Minnesota.....	.....	Radcliffe College.....	.....
Mississippi Agricultural and Mechanical College.....	.....	Smith College.....	.....
Montana State University.....	.....	Mount Holyoke College.....	.....
University of Nevada.....	.....	Tufts College.....	.....
New Hampshire College of Agriculture and Mechanic Arts.....	1	Wellesley College.....	2
College of the City of New York.....	2	Williams College.....	.....
Hunter College of the City of New York.....	2	Worcester Polytechnic Institute.....	.....
North Carolina College for Women.....	2	Dartmouth College.....	1
North Dakota Agricultural College.....	$\frac{1}{2}$ 1.3	Rutgers University.....	.....
Ohio State University.....	1	Princeton University.....	.....
Oklahoma College for Women.....	2	Wells College.....	.....
University of Oklahoma.....	.....	University of Buffalo.....	$\frac{3}{4}$ 1
University of Oregon.....	$\frac{2}{3}$	Colgate University.....	1
Pennsylvania State College.....	1	Cornell University.....	.....
Rhode Island State College.....	$\frac{1}{2}$ 1	Barnard College.....	1
Agricultural College of Utah.....	3	Columbia University.....	2
University of Utah.....	.....	Vassar College.....	1
Virginia Agricultural and Mechanical College and Polytechnic Institute.....	$\frac{4}{9}$	University of Rochester.....	.....
University of Virginia.....	.....	Rensselaer Polytechnic Institute.....	.....
College of William and Mary.....	.....	Antioch College.....	.....
University of Washington.....	$\frac{1}{2}$ 2	Reed College.....	.....
University of Wyoming.....	$\frac{1}{2}$ 1 1	Lehigh University.....	.....
.....	.....	Bryn Mawr College.....	.....
.....	.....	Temple University.....	1
.....	.....	University of Pennsylvania.....	.....
.....	.....	University of Pittsburgh.....	.....
.....	.....	Swarthmore College.....	.....
.....	.....	Converse College.....	.....
.....	.....	Vanderbilt University.....	.....
.....	.....	Washington and Lee University.....	.....
.....	.....	University of Richmond.....	.....
.....	.....	Sweet Briar College.....	2
.....	.....	Beloit College.....	.....

<sup>1</sup> Men.<sup>2</sup> Women.<sup>3</sup> Women only.

## 5. Athletics

This section presents a discussion of the problem of control of intercollegiate athletics for men; the development of intercollegiate athletics for women; and the organization of intramural athletics for men and women.

*Methods of control.*—The methods of handling intercollegiate athletics are as follows: Control by the department of physical education; control by the department of physical education and a faculty advisory committee; control by a director of athletics; control by the president of the institution, the faculty, students, and alumni; control by the faculty; and control by the students.

Until recently the management of intercollegiate activities has been largely controlled by the students, alumni, and the athletic coach who was rarely considered a member of the faculty of the institution. However, with the recent growth of substantial departments of physical education by a large number of institutions, the management of intercollegiate activities has, in a few instances, been transferred to these departments. Oberlin College did this in 1916. Since then 11 other institutions have adopted this method of control. Thirty-three public and 37 private institutions favor the foregoing management of athletics, although they have not been able to establish it in their respective institutions.<sup>6</sup> Forty-six institutions did not report their opinion regarding this method of control and only 10 public and 13 private institutions stated that they opposed it.

Six public and five private institutions favor control of intercollegiate athletics by the department of physical education and a faculty advisory committee. These institutions are: Mississippi Agricultural College; University of Mississippi; College of the City of New York; Hunter College of the City of New York; North Carolina State College of Agriculture; University of Texas; Leland Stanford Junior University; Cornell College, Mount Vernon, Iowa; Hamilton College, Clinton, N. Y.; Western Reserve University, Cleveland, Ohio; and Temple University, Philadelphia, Pa.

Four public institutions favor intercollegiate athletics under control of a director of athletics: University of Florida, University of Michigan, Oregon State Agricultural College, and the College of William and Mary.

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<sup>6</sup> See Table 5 for list of institutions favoring and opposing this method of control for intercollegiate athletics.



Two public institutions, the State University of New Mexico, and Rhode Island State College, favor control of intercollegiate athletics by the president and the faculty.

The State College of Washington, Pullman, favors control of intercollegiate athletics by the president, faculty, students, and alumni.

Baker University, Baldwin City, Kans.; and Baylor University, Waco, Tex., favor control of intercollegiate athletics by the faculty.

Amherst College at the present time is trying out modified student control. Pennsylvania State College favors a cooperative plan between the department of physical education and a department of athletics.

These facts indicate that regardless of what is actually done by American colleges and universities, there is a strong ideal among these institutions that intercollegiate athletics should be under the control of the department of physical education.

*Intercollegiate athletics for women.*—At Mount Holyoke College, between 1837 and 1862, domestic work supplemented by light calisthenic exercises, including quadrilles, furnished healthful exercise for the students. In 1862, this work was supplemented by the Dio Lewis system of gymnastics. Although as early as 1875 girls in this institution played tennis and enjoyed boating, such activities were carried on merely for pleasure, and competitive intercollegiate games were not even thought of.

With the recent emphasis on physical education activities in all educational institutions there arose a tendency for college girls to conduct intercollegiate games. Many heated discussions have taken place regarding this problem. Only 14 public and 17 private institutions permit intercollegiate contests for women. Baker University, Baldwin City, Kans., and Knox College, Galesburg, Ill., however, limit this activity to tennis. For a list of institutions in which intercollegiate sports for women are carried on see Table 5.

A large number of institutions, including many women's colleges, oppose intercollegiate activities for women on the ground that they are unnecessary, are too severe, are usually poorly managed, and require an amount of time far in excess of any real value. Considering the short time in which girls have had opportunities for taking part in any kind of athletic activities, the majority of directors of this work feel that the present need is for more suitable games for girls, for readjustments of boys' rules to suit the girls, and not for keener competition.

*Intramural athletics for men and women.*—Intramural athletics consist of organized competitive games which are carried on entirely within the student body of a single institution. The work is so organized that all students are encouraged to participate and are given opportunity to take part in the sports of their choice. The



relative importance of this system is evident from the fact that 68 institutions, including 33 public and 35 private, provide this system, and 93 institutions, including 44 public and 49 private, provide it for men. (See Table 5.)

In general the value of a system of intramural athletics lies in the fact that it affords opportunity for every student to enjoy the health and recreational and educational benefits to be derived from athletic games. Each student is encouraged to participate in activities suitable for his constitution as well as his disposition. The emphasis of the system is rightly put upon playing, and not upon winning the game.

Table 5 shows the per cent of students in various institutions who take part in intramural athletics.

TABLE 5.—*Intercollegiate and intramural athletics for men and women*

Institution	Do you favor control of intercollegiate athletics for men by a department of physical education?	Does institution have intercollegiate athletics for women?	Per cent of students reported taking part in intramural athletics	
			Men	Women
1	2	3	4	5
<i>Public</i>				
Alabama Polytechnic Institute <sup>1</sup>		Yes		
Alabama Technical Institute			80+	
University of Alabama	No.			
University of Arizona	Yes	Yes		
University of Arkansas		No.		
University of California		No.		24
University of Colorado	Yes	No.	41	30
Colorado Agricultural College		No.		33
Connecticut Agricultural College	Yes	Yes	50	75
* University of Delaware				
University of Florida			90	
Florida State College for Women		No.		50
* University of Georgia				
Georgia School of Technology	No.		50	
University of Idaho	Yes	No.		
University of Illinois	Yes			
* Indiana University				
Purdue University	Yes	No.	56	65
Iowa State College of Agriculture and Mechanic Arts	Yes		65	
State University of Iowa	Yes		33	49
University of Kansas	Yes	No.	34	48
Kansas State Agricultural College <sup>1</sup>	Yes <sup>2</sup>	No.	65	
University of Kentucky	Yes	Yes	41	34
Louisiana State University and Agricultural and Mechanical College	No.	No.		
University of Maine	Yes	Yes	68	64
University of Maryland	Yes			
Massachusetts Agricultural College	Yes	No.	50	70
University of Michigan		No.		
Michigan Agricultural College				
University of Minnesota	Yes		71	
Mississippi Agricultural and Mechanical College			67	
* Mississippi State College for Women				
University of Mississippi			50	
University of Missouri				
Montana State College of Agriculture and Mechanic Arts	Yes	No.	89	75
Montana State University	Yes <sup>2</sup>		100	90

\* Indicates information incomplete.

<sup>1</sup> Depends on enrollment.

<sup>2</sup> The institution now uses this method of control.

TABLE 5.—Intercollegiate and intramural athletics for men and women—Continued

Institution	Do you favor control of intercollegiate athletics for men by a department of physical education?	Does institution have intercollegiate athletics for women?	Per cent of students reported taking part in intramural athletics	
			Men	Women
1	2	3	4	5
<i>Public—Continued.</i>				
University of Nebraska.....	Yes.....			
University of Nevada.....	Yes <sup>1</sup> .....	No.....	55	63
New Hampshire College of Agriculture and Mechanic Arts.....	Yes.....	No.....	58	
University of New Mexico.....	No.....	Yes.....		
New Mexico College of Agriculture and Mechanic Arts.....	No.....	Yes.....		
College of the City of New York.....				
Hunter College of the City of New York.....		Yes.....		
University of North Carolina.....	No.....	No.....	62	
North Carolina College for Women.....		No.....		23
North Carolina State College of Agriculture and Engineering.....				
North Dakota Agricultural College.....	No.....	Yes.....	26	54
University of North Dakota.....		No.....	51	19
University of Akron.....	No.....	No.....		
Ohio University.....	Yes.....	No.....	88	30
University of Cincinnati.....	Yes.....	Yes.....		
Ohio State University.....	Yes.....	No.....	77	21
Miami University.....	Yes.....	No.....	90	90
Oklahoma College for Women.....		No.....		34
University of Oklahoma.....	No.....	No.....		
Oklahoma Agricultural and Mechanical College.....	Yes <sup>1</sup> .....	No.....	89	55
Oregon State Agricultural College.....		Yes.....	66	
University of Oregon.....		No.....	100	78
Pennsylvania State College.....		No.....	100	100
Rhode Island State College.....		Yes.....	100	100
Clemson Agricultural College.....				
University of South Carolina.....	No.....	No.....		
South Dakota State College of Agriculture and Mechanic Arts.....	No.....	No.....	21	
University of South Dakota.....		No.....	36	23
University of Tennessee.....		Yes.....	66	26
University of Texas.....		No.....	30	26
Agricultural and Mechanical College of Texas.....	Yes.....		70	
College of Industrial Arts.....		No.....		61
Agricultural College of Utah.....	Yes.....	No.....	13	8
University of Utah.....	Yes.....	No.....		
University of Vermont.....	Yes.....		75	
Virginia Agricultural and Mechanical College and Polytechnic Institute.....	Yes.....		66	
University of Virginia.....			13	
College of William and Mary.....		Yes.....	59	50
State College of Washington.....			28	
University of Washington.....	Yes.....			
West Virginia University.....				
University of Wisconsin.....	Yes <sup>1</sup> .....		80	49
University of Wyoming.....	Yes.....		40	21
<i>Private</i>				
Birmingham-Southern College.....	No.....	Yes.....	83	10
University of Southern California.....	Yes.....	No.....	44	33
Leland Stanford Junior University.....			74	77
Colorado College.....		No.....		57
University of Denver.....	No.....	No.....		
Trinity College (Hartford, Conn.).....	Yes.....		78	
Wesleyan University.....	Yes <sup>1</sup> .....		98.5	
Yale University.....	No.....		74	
Connecticut College for Women.....		No.....		66
George Washington University.....	Yes.....	Yes.....	24	21
Howard University.....	Yes.....	No.....	56	94
Agnes Scott College.....		No.....		5
University of Chicago.....	Yes.....	No.....	10	11
Northwestern University.....	Yes.....	No.....	15	45
Knox College.....		Yes.....	71	61
Wabash College.....				
Earlham College.....	Yes.....	No.....	44	64
DePauw University.....	Yes.....	No.....	41	
University of Notre Dame.....			32	
Drake University.....	Yes.....	No.....	6	
Grinnell College.....		No.....	90+	90+

<sup>1</sup> Indicates information incomplete.

<sup>2</sup> The institution now uses this method of control.

TABLE 5.—Intercollegiate and intramural athletics for men and women—Continued

Institution	Do you favor control of intercollegiate athletics for men by a department of physical education?	Does institution have intercollegiate athletics for women?	Per cent of students reported taking part in intramural athletics	
			Men	Women
1	2	3	4	5
<i>Private—Continued.</i>				
Cornell College.....		No.....	20	24
Baker University.....		Yes.....		
Washburn College.....	Yes			
Bowdoin College.....	No		81	
Bates College.....	Yes	No		
Colby College.....			61	
Goucher College.....		No		35
Johns Hopkins University.....	Yes <sup>1</sup>		50	
Amherst College.....			82	
Boston University.....		Yes		
Simmons College.....		No		23
Harvard University.....			50	
Massachusetts Institute of Technology.....	Yes			
Radcliffe College.....		Yes		
Boston College.....	No		40	
Mount Holyoke College.....		No		62
Tufts College.....	Yes	Yes	100	100
Wellesley College.....		No		21
Williams College.....	Yes		93.8	
Clark University.....	Yes <sup>1</sup>		54	
Worcester Polytechnic Institute.....	Yes		71	
Carleton College.....	Yes	No		
Washington University (St. Louis, Mo.).....	No	No		
Dartmouth College.....	No			
Rutgers College.....	Yes			
Princeton University.....	Yes		90	
Wells College.....		No		
University of Buffalo.....	Yes	No		59
Hamilton College.....			85	
Colgate University.....			64	
Cornell University.....	No	Yes		
Barnard College.....		No		90
Columbia University.....	No			
Fordham University.....	Yes	Yes	50	
New York University.....		No		
Vassar College.....	Yes	No	50	18
University of Rochester.....	Yes	No		
Union University.....	Yes	No	85	81
Syracuse University.....	Yes			
Rensselaer Polytechnic Institute.....	No			
Duke University.....	No	No		
Wake Forest College.....	Yes		67	
Case School of Applied Science.....		No	100	100
Western Reserve University.....				
Ohio Wesleyan University.....	Yes <sup>1</sup>	No	52	
Oberlin College.....	Yes	Yes	87	70
Antioch College.....		Yes	100	100
Reed College.....	Yes <sup>1</sup>		38	16
Willamette University.....	Yes <sup>1</sup>		77	
Lehigh University.....	Yes	No		
Bryn Mawr College.....		Yes		
Lafayette College.....	No			
Temple University.....	Yes	No	23	14
University of Pennsylvania.....			7	10
Carnegie Institute of Technology.....		Yes		
University of Pittsburgh.....	Yes <sup>1</sup>	No	95	60
Swarthmore College.....	Yes <sup>1</sup>			
Washington and Jefferson College.....	Yes <sup>1</sup>	Yes		
Brown University.....		No		63
Converse College.....		Yes	52	21
University of Chattanooga.....	No	No	47	
Vanderbilt University.....	Yes		76	
University of the South.....	Yes		61	
Washington and Lee University.....				78
Randolph-Macon Woman's College.....		Yes	55	
University of Richmond.....		Yes		
Sweet Briar College.....				
Beloit College.....	Yes		32	55

<sup>1</sup> Indicates information incomplete.<sup>2</sup> The institution now uses this method of control.



## 6. *The Students Health Service*

The students health service is an organization which has grown up very recently for safeguarding the health of students. The majority of American colleges and universities provide such service. Some institutions require all students to visit this department at stated intervals; others, for example, the State University of Ohio, maintain it for advice only. Stanford University furnishes an excellent example of cooperation between the departments of physical education, health, and athletics. The medical adviser and the director of physical education have their offices in the gymnasium. All new students are given a thorough medical examination at entrance. All students taking part in athletics are given special examination of heart and lungs. All excuses from the regular class work in physical education must be handled through this department.<sup>7</sup>

At the present time 130 institutions, including 63 public and 67 private, provide at least one physician for examinations and consultation. One public institution arranges for the city board of health to do this; 121 institutions, including 65 public and 56 private, provide nurses to assist in this work; 115 institutions, including 60 public and 56 private, provide hospitals or infirmaries; 31 institutions, including 23 public and 18 private, provide this service free for the student; while 62 institutions, including 36 public and 26 private, charge a small fee, or let the student pay a small per cent of the costs, especially for hospital care. The fee charged for this service varies from \$1 each semester to \$10 a year.

In some institutions the students health service and the department of physical education are organized separately. In such cases correlation of work is advantageous. A very good explanation of the development of the students health service in colleges and universities has been given by Dr. John Sundwall. Doctor Sundwall feels that the growth of this department has come about as a result of the recent discoveries in nutrition work, preventive medicine, and the realization of the fact that physical education, often placed at a disadvantage on account of the unwieldy situation of intercollegiate athletics, could not possibly control the health situation alone. Doctor Sundwall states that neither the health staff nor the physical education staff could attend to this matter alone, but that they should both agree on the point of promoting the students' health. "On account of the great amount of work to be done in large institutions this work can go on functioning each in its special lines without much duplication, and with little, if any, friction, although this independent arrangement is by no means ideal."<sup>8</sup>

<sup>7</sup> Barrow, W. H. General participation in athletics in the student health program. *Nation's Health*, 6: 528-29.

<sup>8</sup> Interrelationship between physical education and students health service. By John Sundwall, M. D., health officer, University of Michigan. *American Physical Education Review*, April, 1921, page 6.



A report of the president of the University of Illinois for 1924 mentions the splendid growth of the "health service" department. This growth is attributed mainly to an increased interest in hygiene.

The following data, taken from this report, are given as examples of what was accomplished during 1923-24 at this institution: 27,300 visits were made by the students to the health service station; 3,143 physical examinations were made; 1,179 students were given a second examination; 1,985 recommendations were given for temporary excuses from classes; 3,760 calls for first aid and infection were given; 3,814 consultations for advice were given; 2,096 conferences on personal hygiene were held; 3,537 directions in regard to self-care were given; 276 petitions for excuse from military and physical training were considered; 345 vaccinations against smallpox were given; 400 typhoid vaccinations were made; 531 students were referred to specialists; 601 students were admitted to the hospital; 568 students were given attention on account of exposure to disease; and 4,843 follow-up visits were made to students who were ill.

Table 6 contains detailed information regarding the student health service in each institution.

TABLE 6.—*Institutions providing health service*

Institution	Physician	Nurse	Hospital or infirmary	Free service	Remarks
1	2	3	4	5	6
<i>Public</i>					
Alabama Polytechnic Institute	Yes.....	Yes.....	No.....	Yes.....	
Alabama Technical Institute	Yes.....	Yes.....	Yes.....	Yes.....	
University of Alabama	Yes.....	Yes.....	Yes.....	Yes.....	
University of Arizona	Yes.....	Yes.....	Yes.....	No.....	\$5 per semester.
University of Arkansas	Yes.....	Yes.....	Yes.....	No.....	
University of California	Yes.....	Yes.....	Yes.....		Small fee each student.
University of Colorado	Yes.....	Yes.....	Yes.....	No.....	Rates reduced 25 per cent to students.
Colorado Agricultural College	No.....	No.....	No.....		
Connecticut Agricultural College	Yes.....	Yes.....	Yes.....	Partly..	Student pays physician.
University of Delaware	Yes.....	Yes.....	Yes.....	Yes.....	
University of Florida	Yes.....	Yes.....	Yes.....	No.....	\$5 yearly.
Florida State College for Women	Yes.....	Yes.....	Yes.....		Entrance infirmary fee.
University of Georgia	Yes.....	Yes.....	Yes.....	No.....	\$5 yearly.
Georgia School of Technology	No.....	No.....	No.....	No.....	
University of Idaho	No.....	Yes.....	Yes.....	No.....	\$2.50 each semester.
University of Illinois	Yes.....	Yes.....	Yes.....	Yes.....	Hospital care free four weeks a term.
Indiana University	Yes.....	Yes.....	Yes.....	Yes.....	Fee is a small percentage of the cost.
Purdue University	Yes.....	Yes.....	Yes.....	No.....	Fee \$4 yearly; maximum hospital benefit, \$20 per year.
Iowa State College of A. and M. Arts.	Yes.....	Yes.....	Yes.....	No.....	\$2 quarterly.
State University of Iowa	Yes.....	Yes.....	Yes.....	Yes.....	
University of Kansas	Yes.....	Yes.....	Yes.....	Yes.....	\$6 fee at registration.
Kansas State Agricultural College	Yes.....	Yes.....	Yes.....	No.....	\$3 per semester.

TABLE 6.—*Institutions providing health service*—Continued

Institution	Physician	Nurse	Hospital or infirmary	Free service	Remarks
1	2	3	4	5	6
<i>Public</i> —Continued					
University of Kentucky.....	Yes.....	Yes.....	Yes.....	.....	Hospital fee of \$1 each semester; dental clinic available.
Louisiana State University and A. and M. College.	Yes.....	Yes.....	Yes.....	No.....	\$5 for session of 36 weeks, plus cost of prescriptions.
University of Maine.....	Yes.....	Yes.....	Yes.....	.....	
University of Maryland.....	Yes.....	Yes.....	Yes.....	.....	
Massachusetts Agricultural College.	No.....	Yes.....	Yes.....	No.....	Not adequate to provide for all.
University of Michigan.....	Yes.....	Yes.....	Yes.....	Yes.....	A per cent of the students' fees supports this work.
Michigan Agricultural College.	Yes.....	Yes.....	Yes.....	Yes.....	Dispensary in the gymnasium.
University of Minnesota.....	Yes.....	Yes.....	Yes.....	Yes.....	\$2 a quarter; dental treatment given for cost.
Mississippi A. and M. College.	Yes.....	Yes.....	Yes.....	No.....	\$8 a session for all students in college.
University of Mississippi.....	Yes.....	Yes.....	Yes.....	No.....	Fee, \$6.50.
University of Missouri.....	Yes.....	Yes.....	Yes.....	Yes.....	
Montana State College of A. and M. Arts.	No.....	Yes.....	No.....	.....	\$6 yearly.
Montana State University.....	No.....	Yes.....	Yes.....	No.....	\$2.50 quarterly.
University of Nebraska.....	Yes.....	Yes.....	No.....	Yes.....	Hospital for athletic injuries only.
University of Nevada.....	Yes.....	Yes.....	Yes.....	No.....	\$3 each semester.
New Hampshire College of A. and M. Arts.	Yes.....	Yes.....	Yes.....	No.....	\$4.50 per year health fee and \$1 per day at infirmary.
State University of New Mexico.	Yes.....	No.....	.....	Yes.....	
New Mexico College of A. and M. Arts.	No.....	Yes.....	Yes.....	No.....	This institution does not pay physician fees but pays \$2.50 per day for nurse.
College of the City of New York.	Yes, 7.....	No.....	No.....	Yes.....	Only emergency treatment given; two dentists.
Hunter College of the City of New York.	Yes.....	.....	.....	Yes.....	
University of North Carolina..	Yes.....	Yes.....	Yes.....	Yes.....	Charge made for serious operations.
North Carolina College for Women.	Yes.....	Yes.....	Yes.....	Yes.....	
North Carolina State College of A. and Engineering	Yes.....	Yes.....	Yes.....	.....	Fee, \$2.
North Dakota Agricultural College.	Yes.....	Yes.....	Yes.....	Yes.....	Special ward in hospital for women.
University of North Dakota...	Yes.....	Yes.....	Yes.....	Yes.....	
University of Akron.....	.....	.....	.....	.....	City board of health attends to this.
Ohio University.....	.....	Yes.....	Yes.....	Partly.....	
University of Cincinnati.....	Yes.....	No.....	Yes.....	Partly.....	\$3.50 per day in hospital.
Ohio State University.....	Yes.....	Yes.....	No.....	Yes.....	
Miami University.....	Yes.....	Yes.....	Yes.....	No.....	Fee, \$5.
Toledo University.....	No.....	No.....	No.....	No.....	
Oklahoma College for Women.	Yes.....	.....	.....	Yes.....	
University of Oklahoma.....	No.....	Yes.....	Yes.....	No.....	\$2.50 per semester.
Oklahoma A. and M. Arts College.	Yes.....	No.....	No.....	Yes.....	
Oregon State Agricultural College.	Yes.....	Yes.....	Yes.....	No.....	Included in student fee, \$18.50; free hospital service 10 days.
University of Oregon.....	Yes.....	Yes.....	Yes.....	Yes.....	\$2 a term.
Pennsylvania State College..	Yes.....	Yes.....	Yes.....	No.....	\$1 each semester.
Rhode Island State College...	Yes.....	No.....	No.....	Yes.....	
University of South Carolina...	Yes.....	Yes.....	Yes.....	Yes.....	
South Dakota State College of A. and M. Arts.	Limited.....	For women.	No.....	.....	
University of South Dakota...	.....	For girls.....	For girls.....	Yes.....	
University of Tennessee.....	Yes.....	Yes.....	Yes.....	Yes.....	\$5 per year.
University of Texas.....	Yes.....	Yes.....	Yes.....	Yes.....	
Agricultural and Mechanical College of Texas.	Yes.....	Yes.....	Yes.....	No.....	\$10 per session.
Agricultural College of Utah...	Yes.....	Yes.....	No.....	Yes.....	\$6 annually.
University of Utah.....	Yes.....	Yes.....	No.....	Yes.....	

TABLE 6.—*Institutions providing health service*—Continued

Institution	Physician	Nurse	Hospital or infirmary	Free service	Remarks
1	2	3	4	5	6
<i>Public—Continued</i>					
University of Vermont and State Agricultural College.	For women.	Yes.....	Yes.....	No.....	Use hospitals affiliated with medical college. \$4 each quarter.
Virginia A. and M. College and Polytechnic Institute.	Yes.....	Yes.....	Yes.....	No.....	
University of Virginia.....	Yes.....	Yes.....	Yes.....	Yes.....	
State College of Washington...	No.....	Yes.....	Yes.....	.....	\$1 fee; student pays physician and board at hospital.
University of Washington.....	Yes.....	Yes.....	Yes.....	No.....	\$1 all students. \$1.50 infirmary fee.
West Virginia University.....	Yes.....	Yes.....	Yes.....	No.....	\$2.50 each semester; medical attention includes minor surgery from medical school.
University of Wisconsin.....	Yes.....	Yes.....	Yes.....	Yes.....	\$3.50 each semester.
University of Wyoming.....	No.....	No.....	No.....	.....	
<i>Private</i>					
Birmingham-Southern College.	Yes.....	Yes.....	Yes.....	Yes.....	Hospital at rate of \$2 per day, other service free.
University of Southern California.	No.....	No.....	No.....	.....	
Leland Stanford Junior University.	Yes.....	No.....	No.....	Yes.....	\$5 per day. Service free for self-supporting students only.
Colorado College.....	No.....	No.....	No.....	.....	
University of Denver.....	No.....	No.....	No.....	.....	Fee of \$10 charged all students, except day students.
Trinity College (Hartford, Conn.).	Yes.....	No.....	No.....	.....	
Wesleyan College.....	Yes.....	Yes.....	Yes.....	No.....	\$4 per year.
Yale University.....	Yes.....	Yes.....	Yes.....	Partly.....	Nominal expense.
Connecticut College for Women	Yes.....	Yes.....	Yes.....	No.....	
George Washington University.	Yes.....	Yes.....	Yes.....	No.....	Physician only for diagnosis by health department.
Howard University.....	Yes.....	Yes.....	Yes.....	Yes.....	
Trinity College (Washington, D. C.).	.....	.....	Yes.....	.....	Physician gives diagnosis only.
Agnes Scott College.....	Yes.....	Yes.....	Yes.....	Yes.....	
Emory University.....	Yes.....	Yes.....	Yes.....	No.....	Free service except for protracted illness.
University of Chicago.....	Yes.....	Yes.....	No.....	Yes.....	
Northwestern University.....	Yes.....	Yes.....	Yes.....	.....	Pay for physician services required.
Knox College.....	Yes.....	.....	.....	.....	
Wabash College.....	Yes.....	.....	.....	.....	Moderate charge after 3 days.
Earlham College.....	Yes.....	Yes.....	Yes.....	Usually.....	
De Pauw University.....	Yes.....	Yes.....	Yes.....	No.....	\$5 a term.
University of Notre Dame.....	No.....	.....	.....	.....	
Drake University.....	No.....	No.....	No.....	No.....	\$5 a year.
Cornell College.....	No.....	Yes.....	Yes.....	3 days.....	
Baker University.....	No.....	No.....	No.....	.....	Student pays for special nursing.
Washburn College.....	No.....	No.....	No.....	.....	
Tulane University of Louisiana	Yes.....	Yes.....	Yes.....	No.....	Free physician for 1 visit; hospital charge for bed and board.
Bates College.....	Yes.....	Yes.....	Yes.....	No.....	
Colby College.....	.....	.....	.....	.....	All students pay \$7 annually.
Goucher College.....	Yes.....	Yes.....	Yes.....	Partly.....	
Johns Hopkins University.....	Yes.....	Yes.....	Yes.....	Partly.....	Free physician for 1 visit; hospital charge for bed and board.
Amherst College.....	Yes.....	Yes.....	Yes.....	Yes.....	
Boston University.....	No.....	No.....	No.....	.....	All students pay \$7 annually.
Simmons College.....	No.....	No.....	No.....	.....	
Harvard University.....	Yes.....	Yes.....	Yes.....	No.....	All students pay \$7 annually.
Massachusetts Institute of Technology.	Yes.....	Yes.....	.....	.....	



TABLE 6.—*Institutions providing health service—Continued*

Institution	Physician	Nurse	Hospital or infirmary	Free service	Remarks
1	2	3	4	5	6
<i>Private—Continued</i>					
Radcliffe College	No.	Yes	No.		Nurse for dormitory students only.
Boston College	No.	No.	No.		
Smith College	Yes		Yes	No.	\$10 infirmary fee for 2 weeks.
Mount Holyoke College	Yes	Yes	Yes	No.	\$10 annually.
Tufts College	Yes	No.	Yes	Usually	Charge for prolonged illness.
Wellesley College	Yes	Yes	Yes	1 week	\$2.25 per day.
Williams College	Yes	Yes	Yes	No.	
Clark University	Advice	No.	No.	Yes	
Worcester Polytechnic Institute	No.	No.	No.		First aid department in gymnasium free to all.
Carleton College	Yes	Yes	Yes	No.	\$2.50 per day.
Washington University (St. Louis, Mo.)	Yes	Yes	Yes	No.	\$2 health fee, \$6 optional hospital fee.
Dartmouth College	Yes	Yes	Yes	Yes	Free to students unable to pay.
Rutgers College	Yes	No.	No.	Yes	
Princeton University	Yes	Yes	Yes	No.	\$10 annually.
Wells College	No.	Yes	Yes	Partly	Consultation free, infirmary \$1.50 per day.
University of Buffalo	Yes		Yes	Yes	If student can not afford to pay bill
Hamilton College	Yes	Yes	Yes	No.	Regular charge for nurse and physician.
Colgate University	Yes	Yes	Yes	Yes	
Cornell University	Yes	Yes	Yes	No.	\$5 a term.
Barnard College	Yes	Yes	Yes		
Columbia University	Yes				
Fordham University	Yes	Yes	Yes	Yes	
New York University	Yes	Yes	Yes	No.	Free to students who are needy.
Vassar College	Yes	Yes	Yes	No.	General fee, \$10.
University of Rochester	Yes	No.	No.	Yes	
Union University					Not mentioned in catalogue.
Syracuse University	Yes	Yes	Yes	No.	\$8 yearly.
Duke University	Yes	Yes	Yes		Fee included in matriculation fee.
Case School of Applied Science	No.	No.	No.		
Western Reserve University	Yes	No.	No.	Yes	One hospital bed available.
Oberlin College	No.	Yes	Yes	No.	\$2 per day.
Antioch College	Yes	Yes	Yes	No.	\$10 per year.
Reed College	Yes	Yes	No.	No.	\$3 per year.
Willamette University	No.	No.	No.		
Lehigh University	Yes	Yes	No.	No.	\$10 per year.
Bryn Mawr College	Yes	Yes	Yes		
Lafayette College	Yes	Yes		Yes	
Haverford College	Yes	Yes	Yes	Yes	Small fee for infirmary.
Temple University	Yes	Yes	Yes	Yes	
University of Pennsylvania	Yes	Yes	Yes	Not always	According to the circumstances of the student.
Carnegie Institute of Technology.	Yes			Yes	
Swarthmore College	Yes	Yes	Yes	Yes	
Washington and Jefferson College.	No.	No.	No.		
Brown University	Yes	Yes	Yes	Partly	Consultation free, service charged.
Converse College	Yes	Yes	Yes	Yet	Nominal entrance fee.
University of Chattanooga	No.	No.	No.		
Vanderbilt University	No.	No.	No.		
University of the South	Yes	Yes	Yes	No.	\$1.50 per day.
Rice Institute	No.	No.	No.		
Baylor University	No.	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes	
Randolph-Macon College	No.	No.	No.		
Washington and Lee University.	Yes	Yes	Yes	10 days	\$5 per year.
University of Richmond	Yes	Yes	Yes		\$5 medical fee per student.
Sweet Briar College	Yes	Yes	Yes	No.	\$10 fee.
Whitman College					Infirmary fee; student pays physician.
Beloit College	No.				

<sup>1</sup> For girls.



## 7. *Equipment for Physical Activities*

*Gymnasiums.*—The total number of gymnasiums provided by 167 institutions is 222. Of these, 108 are provided by 74 public and 114 by 93 private institutions. Comparing these figures with those given by Dr. Willard S. Small, in an article in the *American Physical Education Review*, May, 1919, it is evident that there has been a steady increase in the number of college gymnasiums. Doctor Small sent questionnaires to 250 institutions; 143 replied and of this number only 110 had gymnasiums.<sup>9</sup>

*Open-air gymnasiums.*—Among the gymnasiums used at present several deserve a passing remark. The University of Missouri has a plat, approximately 200 by 150 feet, which is used for general recreation and gymnasium work. No apparatus is used on this plat, but it is reserved for general class work and competitive games. The University of Oregon built an outdoor gymnasium in 1920, but on account of so much bad weather and storms decided to board up the structure this year in order that it might be used during the long season of bad weather. The North Carolina College for Women has an outdoor gymnasium which has proved more satisfactory than was expected. In this climate the temperature is seldom too cold for outdoor sports, and in the rainy season when the ground is not fit for sports this structure furnishes ample facilities for physical education activities.

*Athletic fields.*—The total number of athletic fields provided by 161 institutions is 232. Of this number, 105 are provided by 70 public institutions and 127 are provided by 91 private institutions. One other institution uses municipal fields for this work. This plan might be used by other institutions where these facilities are available.

*Tennis courts.*—Approximately 972 tennis courts are provided by 148 institutions. Of this number, 293 are provided by 64 public institutions, and 679 by 84 private institutions. Many institutions failed to specify in their reports the number of tennis courts available and many reported that they were planning additional equipment as soon as possible.

*Track.*—The total number of tracks provided by 146 institutions is 175. Of this number, 77 are provided by 66 public institutions, and 98 are provided by 80 private institutions. A large number of these are outdoor tracks.

*Swimming pools.*—The total number of swimming pools provided by 106 institutions is 114. Of this number, 50 are provided by 47

<sup>9</sup> Small, W. S. Physical education in the preparation of teachers. *Amer. Phys. Ed. Rev.*, 24:435-37, Nov., 1919.

public institutions, and 64 are provided by 59 private institutions. Two other private institutions rent outside pools for their students.

*Open-air swimming pools.*—Several institutions, including the University of New Hampshire, Earlham College, and Stanford University, have outdoor swimming pools.

*Stadia.*—The tendency to build immense stadia is recent in American institutions. Previous to the war only a few of the larger institutions had this equipment. During the past five years many institutions have spent large sums of money for building stadia which are used for promoting intramural as well as intercollegiate athletics.

Forty-six public institutions have stadia or grand stands which have seating capacities ranging from 2,000 to 80,000. Three other public institutions are constructing stadia. Forty private institutions have stadia or grand stands, the seating capacity of which ranges from 600 to 60,000. One private institution is building a stadium and another is considering doing this.

*Golf.*—Eighteen public and 18 private institutions provide either whole or partial golf links as a part of their equipment. Three other public and 13 other private institutions arrange for the use of available public or private golf courses by their students.

*Boating.*—Forty-seven institutions, including 17 public and 30 private, have facilities for canoeing or rowing. Of this group, 2 public and 7 private institutions are women's colleges.

*Bowling alleys.*—A total number of 33 bowling alleys are provided by 18 institutions. Of this number, 10 are provided by 4 public and 23 by 14 private institutions.

TABLE 7.—*Equipment in public and private institutions*

Institution	Number of gymnasiums	Size of gymnasiums, in feet	Number of swimming pools	Number of athletic fields	Number of tracks	Golf course	Tennis courts available	Capacity of stadium	Facilities for canoeing and rowing
1	2	3	4	5	6	7	8	9	10
<i>Public</i>									
Alabama Polytechnic Institute.....	1	20 by 60	1	4	1	1	6		
Alabama Technical Institute.....	1	24,500 square feet.	1	1	1	"Available"	5	5,000	
University of Alabama.....	1		1	3	1		2		
University of Arizona.....	1		1	1	1		Yes.		
University of Arkansas.....	2	{200 by 90.	2	1	1		9	80,000	
University of California.....		{100 by 30.							
		{80 by 17.							
		{48 by 80.							
	4	{36 by 50.	1	1	1		Yes.	26,000	
		{20 by 25.						5,000	Yes.
University of Colorado 1.....	1		1	3	1		3		
Colorado Agricultural College.....	1		1						Yes.
Connecticut Agricultural College.....	1		1						
University of Delaware.....	1		1						
University of Florida.....	1		1						
Florida State College for Women.....	3	30 by 60	1	1	1		6		Yes.
University of Georgia.....	1		1	1	1		Yes.	3,600	
Georgia School of Technology.....	1	120 by 64	1	1	1		6	3,000	
University of Idaho.....	1		1	1	1		Yes.	( <sup>c</sup> )	
University of Illinois.....	2	{160 by 80.	1	1	1		6	20,000	Yes.
Indiana State University.....	1	{241 by 102.	1	1	1		Yes.	12,000	
Purdue University.....	2	{80 by 300.	1	1	1		Yes.	25,000	Yes.
Iowa State College of Agriculture and Mechanic Arts.....	1	160 by 180	1	1	1	Yes	15		
State University of Iowa.....	1		1						
University of Kansas.....	1		1	1	1		Yes.	10,000	
Kansas State Agricultural College.....	1	207 by 83	1	1	1		Yes.	12,000	
University of Kentucky.....	1	100 by 183	1	2	1	"Available"	Yes.	10,000	Yes.
Louisiana State University and A. and M. College.....	1	80 by 120	1	1	1		5	2,100	Yes.
University of Maine.....	1	90 by 60	1	1	1		Yes.	( <sup>c</sup> )	
University of Maryland.....	1		1	1	1		2		
Massachusetts Agricultural College.....	1	246 by 90	1	1	1	1	18	45,000	Yes.
University of Michigan.....	1		1	1	1		Yes.	40,000	Yes.
Michigan Agricultural College.....	1	70 by 132	1	4	6		20		
University of Minnesota.....	1		1						

See footnotes at end of table.





University of Oklahoma.....	1	117 by 50.	1	1	1	1	10,000	Yes.	10,000
Oklahoma Agricultural and Mechanical College.....	1	70 by 90.	1	1	1	8,000	8,000	Yes.	8,000
Oregon State Agricultural College.....	2	160 by 100.	1	1	1	21,000	21,000	Yes.	21,000
University of Oregon.....	3	60 by 110.	2	1	1	12,500	12,500	Yes.	12,500
Pennsylvania State College.....	1	120 by 87.	1	1	1	24,000	24,000	Yes.	24,000
Rhode Island State College.....	1	80 by 120.	1	1	1	6,000	6,000	Yes.	6,000
Clemson Agricultural College.....	2	60 by 90.	1	1	1	10 Yes.	10 Yes.	Yes.	8,500
University of South Carolina.....	1	65 by 90.	1	1	1	70,000	70,000	Yes. <sup>11</sup>	70,000
South Dakota State College of Agriculture and Mechanic Arts.....	1	90 by 130.	1	1	1	20,000	20,000	Yes.	20,000
University of South Dakota.....	2	120 by 140.	1	1	1	5,000	5,000	Yes.	5,000
University of Tennessee.....	1	90 by 210.	1	1	1	4,500	4,500	Yes.	4,500
Agricultural and Mechanical College of Texas.....	1	60 by 103.	1	1	1	(1) <sup>1</sup>	(1) <sup>1</sup>	Yes.	(1) <sup>1</sup>
College of Industrial Arts.....	1	60 by 60.	1	1	1	8,000	8,000	Yes.	8,000
Agricultural College of Utah.....	2	100 by 140.	1	1	1	6	6	Yes.	6
University of Utah.....	1	180 by 96.	1	1	1	4	4	Yes.	4
College, Vermont and State Agricultural College.....	1	50 by 30.	1	1	1	4,500	4,500	Yes.	4,500
Virginia Agricultural and Mechanical College and Polytechnic Institute.....	2	100 by 60.	1	1	1	Yes.	Yes.	Yes.	(1) <sup>1</sup>
University of Virginia.....	2	110 by 100.	2	2	2	6	6	Yes.	6
College of William and Mary.....	4	110 by 60.	1	1	1	Yes.	Yes.	Yes.	(1) <sup>1</sup>
State College of Washington.....	1	50 by 30.	1	1	1	10	10	Yes.	10
University of Washington.....	1	100 by 60.	1	1	1	40,000	40,000	Yes.	40,000
West Virginia University.....	1	100 by 100.	1	1	1	53,000	53,000	Yes.	53,000
University of Wisconsin.....	1	110 by 60.	1	1	1	2,000	2,000	Yes.	2,000
University of Wyoming.....	1	50 by 30.	1	1	1	4,000	4,000	Yes.	4,000
	1	45 by 35.	1	1	1	8,200	8,200	Yes.	8,200
	1	80 by 160.	1	1	1	60,000	60,000	Yes.	60,000
	1	90 by 120.	1	1	1	3,000	3,000	Yes.	3,000
	1	50 by 75.	1	1	1	N.O.	N.O.	Yes.	( <sup>1</sup> , 1 <sup>9</sup> )
	1	50 by 45.	1	1	1	13	13	Yes.	13
	1		1	1	1	40	40	Yes.	40
	1		1	1	1	6	6	Yes.	6
	1		1	1	1	Yes.	Yes.	Yes.	Yes.

See footnotes at end of table.

TABLE 7.—*Equipment in public and private institutions—Continued*

Institution	Number of gymnasia	Size of gymnasia, in feet	Number of swimming pools	Number of athletic fields	Number of tracks	Golf course	Tennis courts available	Capacity of stadium	Facilities for canoeing and rowing
1	2	3	4	5	6	7	8	9	10
<i>Private—Continued</i>									
Georgetown University.....	1			(b)	1	Use public links	9		
George Washington University.....	1	35 by 60		1	1		4		
Trinity College (Washington, D. C.).....	1	90 by 70	1	2			5		
Agnes Scott College.....	1		1	1	1		30		
Emory University.....	2	300 by 100	1	1	1		13		
University of Chicago.....	1	100 by 40	(1)	1	3		6	2,000	Yes.
Northwestern University.....	1	120 by 40		1	1	9-hole course	7	5,000	
Wabash College.....	1	100 by 200	1	1	2		3	7,000	Yes.
Earlham College.....	1	160 by 90	1	1	1	Use public links	4	17,000	Yes.
De Pauw University.....	1	230 by 100	1	1	1		8		
University of Notre Dame.....	1	60 by 96		2	1	Use city clubs	Yes	2,400	
Drake University.....	2			1	1	Yes	Yes	(c)	
Grimmell College.....	1	125 by 125	1	1	1	Yes	Yes	10,000	Yes.
Baker University.....	2	60 by 90	1	1	1		Yes	600	
Washington College.....	1		1	1	1		Yes		
Tulane University of Louisiana.....	1	300 by 150		1	1	Yes	Yes		
Bates College.....	2			1	1		Yes		
Colby College.....	3	75 by 36	1	1	1	Use public links	3		
Johns Hopkins University.....	1		1	2	1		Yes	10,000	
Amherst College.....	1	80 by 60		3	1	Use public links	29	7,000	
Boston University.....	1		1	1	1		6		
Simmons College.....	1	60 by 25	1	1	2		75	25,000	Yes.
Harvard University.....	1		1	1	1		8		Yes.
Massachusetts Institute of Technology.....	1		1	1	1		6		Yes.
Radcliffe College.....	1	94 by 44	1	1	1		2		Yes.
Boston College.....	1		1	1	1				Yes.
Smith College.....	1		1	1	1				Yes.
Mount Holyoke College.....	2	80 by 60 140 by 25		1	2	"Available"	9		
Trufts College.....	1			1	1	Yes	Yes	4,000	
Wellesley College.....	1	75 by 100		1	1	Yes	Yes		
Williams College.....	1	40 by 70	1	4	1	Yes	10	4,200	Yes.



Clark University	1	100 by 60	1	1	1	4	Yes.	3,000	4
Worcester Polytechnic Institute	1	128 by 70	1	1	1	6	Yes.	10,000	8
Carleton College	1	128 by 80	1	1	1	10	Yes.	8,000	21
Washington University (St. Louis, Mo.)	1	(*)	1	1	1	Yes.	55,000	Yes.	5
Plymouth College	1		1	1	1	Yes.			4
Princeton University	1		1	1	1	Yes.			4
Rutgers College	2	{ 80 by 100 60 by 100 }	1	1	1	Yes.			4
Wells College	1		1	1	1	Use public links			3
University of Buffalo	1	78 by 39	1	1	1	Yes			9
Hamilton College	1	40 by 70	1	1	1	Yes.			4
Colgate University	1	220 by 80	1	3	1	Yes.			40
Cornell University	1		2	1	1	Yes.			4
Barnard College	3	{ 90 by 110 30 by 25 40 by 30 }	1	1	1				4
Columbia University	1		1	1	1				9
Fordham University	1	200 by 125	1	4	2	Yes.			6
New York University	1		3	1	1	"Available"			6
Vassar College <sup>3</sup>	3	{ 74 by 39 65 by 40 98 by 73 }	1	1	1				15
University of Rochester	2	{ 175 by 40 175 by 40 }	1	1	1				8
Union University	2	{ 100 by 210 50 by 70 }	2	1	1	Use public links			10
Syracuse University	3	{ 127 by 67 84 by 24 66 by 31 }	1	1	1				3
Rensselaer Polytechnic Institute	1	110 by 90	1	1	1				Yes.
DuKE University	1	68 by 78	1	1	1				Yes.
Wake Forest College	1	167 by 90	1	2	1				6,400
Case School of Applied Science	2	{ 36 by 65 36 by 65 }	1	1	1				Yes.
Western Reserve University	2		1	1	1				9
Ohio Wesleyan University	2	60 by 140	1	1	1				6
Oberlin College	1	80 by 50	1	2	1				6
Antioch College	1	50 by 80	1	1	1	Partial course			6
Reed College	1		1	1	1				6
Willamette University	1	100 by 100	1	1	1				2
Lehigh University	1	60 by 90	1	2	1				11
Bryn Mawr College	1	50 by 90	1	1	1				8
Lafayette College	1		2	1	1				(*)
Favorit College	1	60 by 90	1	1	1				(b)
Temple University	1		1	1	1				Yes.
University of Pennsylvania	2	{ 144 by 68 90 by 175 }	1	3	1	"Available"			20
Carnegie Institute of Technology	1		1	1	1	Use public course			6
University of Pittsburgh	1	50 by 95	1	2	1				Yes. <sup>2</sup>
Swarthmore College	1		1	1	1				60,000

See footnotes at end of table.

TABLE 7.—*Equipment in public and private institutions—Continued*

Institution	Number of gymnasiums	Size of gymnasiums, in feet	Number of swimming pools	Number of athletic fields	Number of tracks	Golf course	Tennis courts available	Capacity of stadium	Facilities for canoeing and rowing
1	2	3	4	5	6	7	8	9	10
<i>Private—Continued</i>									
Washington and Jefferson College.....	1	60 by 100.....	1	1	1	"A valuable".....	5	1,500	
Brown University.....	1	100 by 35.....	1	1	1	-----	Yes.	10,000	Yes.
Converse College.....	1	100 by 35.....	1	1	1	-----	5	2,500	
University of Chattanooga.....	1	-----	1	1	-----	-----	3	-----	
Maryville College.....	1	-----	1	1	-----	-----	-----	-----	No.
Pisk University.....	1	97 by 51.....	1	1	2	-----	6	22,000	
Vanderbilt University.....	1	100 by 60.....	1	1	1	Yes.....	6	-----	
University of the South.....	1	-----	1	1	-----	-----	-----	-----	
Rice Institute.....	1	-----	1	1	-----	-----	-----	-----	
Baylor University.....	1	-----	1	1	-----	-----	-----	-----	
Randolph-Macon College.....	1	65 by 130.....	1	1	1	Yes.....	7	3,000	Yes.
Washington and Lee University.....	1	100 by 50.....	1	1	1	-----	4	-----	
Randolph-Macon Woman's College.....	1	-----	1	1	1	-----	Yes.	-----	Yes.
University of Richmond.....	1	-----	1	1	-----	Course available.....	3	-----	Yes, lake.
Sweet Briar College.....	1	58 by 57.....	1	1	-----	-----	-----	-----	
Whitman College.....	1	114 by 62.....	1	1	1	-----	-----	-----	
Beloit College.....	1	105 by 51.....	1	1	1	-----	Yes.....	-----	

1 A recreation camp is maintained by university near Boulder.

2 A natural amphitheater furnishes a stadium.

3 A stadium now being constructed.

4 Stadium will hold 20,000 when completed.

5 Grandstand is provided.

6 College maintains a recreation camp.

7 Two of these are outdoor gymnasiums.

8 The playgrounds cover 100 acres.

9 Use Y. M. C. A. building for athletics.

10 Three miles of a stadium have been erected.

11 A horseboat for camping parties of women also provided.

12 Building one.

13 Floor space of men's gymnasium, 55,070 square feet; of the 4 women's gymnasiums, 14,688 square feet.

14 The institution rents a swimming pool for women.

15 Use city athletic field.

16 Portable seats.

17 Use high-school swimming pool.

18 One and one-half acres.

19 "Projected."

## 8. Summary

Section 1 brings out the fact that a large number of colleges and universities require a medical examination of all students at entrance. This examination is valuable not only in promoting student health, but it is a means of eliminating from entrance to college students who are physically unfit, as well as enabling the director of physical education to classify all first-year students into suitable physical education classes.

While a large number of high schools allow a certain amount of physical education to help fulfill the graduation requirements, only two institutions of higher education allow these credits to be included among the entrance requirements.

Section 2 emphasizes the fact that physical education is now included as a part of the required work of practically every undergraduate course leading to a bachelor's degree. This indicates that physical education is no longer considered something apart from general education, but is directly connected with it as a basic part.

Section 3 contains a brief account of the organization of the senior division of the Reserve Officers' Training Corps in colleges and universities. The detailed study of military training given in the 62 public and 21 private institutions included in this study may be considered representative of the situation as a whole in the United States. Inasmuch as a splendid feeling of cooperation exists between the educational institutions providing military training and the War Department, this policy is probably the best possible means of continually supplying an increasing number of trained men who would be available in case of war.

Section 4 points out the fact that hygiene is now considered an important college course by a large number of institutions. However, institutions have not as yet adopted any standard policy for giving this work. Sometimes it is given by the department of military training, sometimes by the department of physical education, and sometimes in connection with the required biology, physiology, or science courses where it is considered as a part of these courses.

Section 5 points out the recent growth of intramural athletics. It shows that there is a strong tendency among institutions to abolish the old method of joint control by faculty, president, and alumni, and to have intercollegiate athletics managed by the department of physical education. It emphasizes the importance of having all athletic games under careful supervision.



Section 6 presents an account of the students health service. The large number of these organizations proves that good health is considered by the colleges and universities an asset which every student should have, not only for his college life but especially at graduation. The growth of this organization came about as the result of a realization that physical education alone could never entirely safeguard the students' health. There was a need for continuous medical supervision working on a cooperative plan with the physical education department. The students' health service was organized to do this.

Section 7 contains a summary of the equipment for physical activities provided by colleges and universities. It brings out the fact that equipment for swimming is considered very important, and that equipment for tennis can hardly be provided to fill the present demand. It shows a growing tendency to provide either complete or partial golf courses.

In general, it may be stated that the majority of colleges and universities in the United States are providing well-organized, healthful, educational, and recreational physical activities for their students. The programs of activities vary somewhat in different localities on account of the different climatic conditions. Institutions in the Northern States take advantage of opportunities for outdoor winter sports, and those in the Southern States are inclined to carry on outdoor programs during the entire season. The large amount of outdoor equipment provided by all the institutions indicates that the tendency of all institutions is to stress outdoor activities as far as possible.

## *Institutions Included in This Investigation*

### *Public*

- Alabama Polytechnic Institute, Auburn, Ala.  
Alabama Technical Institute, Montevallo, Ala.  
University of Alabama, University, Ala.  
University of Arizona, Tucson, Ariz.  
University of Arkansas, Fayetteville, Ark.  
University of California, Berkeley, Calif.  
University of Colorado, Boulder, Colo.  
Colorado Agricultural College, Fort Collins, Colo.  
Connecticut Agricultural College, Storrs, Conn.  
University of Delaware, Newark, Del.  
University of Florida, Gainesville, Fla.  
Florida State College for Women, Tallahassee, Fla.  
University of Georgia, Athens, Ga.  
Georgia School of Technology, Atlanta, Ga.  
University of Idaho, Moscow, Idaho.  
University of Illinois, Urbana, Ill.  
Indiana University, Bloomington, Ind.  
Purdue University, Lafayette, Ind.  
Iowa State College of Agriculture and Mechanic Arts, Ames, Iowa.  
State University of Iowa, Iowa City, Iowa.  
University of Kansas, Lawrence, Kans.  
Kansas State Agricultural College, Manhattan, Kans.  
University of Kentucky, Lexington, Ky.  
Louisiana State University and Agricultural and Mechanical College, Baton Rouge, La.  
University of Maine, Orono, Me.  
University of Maryland, College Park, Md.  
Massachusetts Agricultural College, Amherst, Mass.  
University of Michigan, Ann Arbor, Mich.  
Michigan Agricultural College, East Lansing, Mich.  
University of Minnesota, Minneapolis, Minn.  
Mississippi Agricultural and Mechanical College, Agricultural College, Miss.  
Mississippi State College for Women, Columbus, Miss.  
University of Mississippi, University, Miss.  
University of Missouri, Columbia, Mo.  
Montana State College of Agriculture and Mechanic Arts, Bozeman, Mont.  
Montana State University, Missoula, Mont.  
University of Nebraska, Lincoln, Nebr.  
University of Nevada, Reno, Nev.  
New Hampshire College of Agriculture and Mechanic Arts, Durham, N. H.  
University of New Mexico, Albuquerque, N. Mex.  
New Mexico College of Agriculture and Mechanic Arts, State College, N. Mex.  
College of the City of New York, New York, N. Y.  
Hunter College of the City of New York, New York, N. Y.  
University of North Carolina, Chapel Hill, N. C.  
North Carolina College for Women, Greensboro, N. C.  
North Carolina State College of Agriculture and Engineering, Raleigh, N. C.

North Dakota Agricultural College, Agricultural College, N. Dak.  
 University of North Dakota, University, N. Dak.  
 University of Akron, Akron, Ohio.  
 Ohio University, Athens, Ohio.  
 University of Cincinnati, Cincinnati, Ohio.  
 Ohio State University, Columbus, Ohio.  
 Miami University, Oxford, Ohio.  
 Toledo University, Toledo, Ohio.  
 Oklahoma College for Women, Chickasha, Okla.  
 University of Oklahoma, Norman, Okla.  
 Oklahoma Agricultural and Mechanical College, Stillwater, Okla.  
 Oregon State Agricultural College, Corvallis, Oreg.  
 University of Oregon, Eugene, Oreg.  
 Pennsylvania State College, State College, Pa.  
 Rhode Island State College, Kingston, R. I.  
 Clemson Agricultural College, Clemson College, S. C.  
 University of South Carolina, Columbia, S. C.  
 South Dakota State College of Agriculture and Mechanic Arts, Brookings, S. Dak.  
 University of South Dakota, Vermilion, S. Dak.  
 University of Tennessee, Knoxville, Tenn.  
 University of Texas, Austin, Tex.  
 Agricultural and Mechanical College of Texas, College Station, Tex.  
 College of Industrial Arts, Denton, Tex.  
 Agricultural College of Utah, Logan, Utah.  
 University of Utah, Salt Lake City, Utah.  
 University of Vermont, Burlington, Vt.  
 Virginia Agricultural and Mechanical College and Polytechnic Institute, Blacksburg, Va.  
 University of Virginia, Charlottesville, Va.  
 College of William and Mary, Williamsburg, Va.  
 State College of Washington, Pullman, Wash.  
 University of Washington, Seattle, Wash.  
 West Virginia University, Morgantown, W. Va.  
 University of Wisconsin, Madison, Wis.  
 University of Wyoming, Laramie, Wyo.

*Private*

Birmingham-Southern College, Birmingham, Ala.  
 University of Southern California, Los Angeles, Calif.  
 Leland Stanford Junior University, Stanford University, Calif.  
 Colorado College, Colorado Springs, Colo.  
 University of Denver, Denver, Colo.  
 Trinity College, Hartford, Conn.  
 Wesleyan University, Middletown, Conn.  
 Yale University, New Haven, Conn.  
 Connecticut College for Women, New London, Conn.  
 Catholic University of America, Washington, D. C.  
 Georgetown University, Washington, D. C.  
 George Washington University, Washington, D. C.  
 Howard University, Washington, D. C.  
 Trinity College, Washington, D. C.  
 Agnes Scott College, Decatur, Ga.  
 Emory University, Emory University, Ga.  
 University of Chicago, Chicago, Ill.



Northwestern University, Evanston, Ill.  
Knox College, Galesburg, Ill.  
Wabash College, Crawfordsville, Ind.  
Earlham College, Earlham, Ind.  
De Pauw University, Greencastle, Ind.  
University of Notre Dame, Notre Dame, Ind.  
Drake University, Des Moines, Iowa.  
Grinnell College, Grinnell, Iowa.  
Cornell College, Mount Vernon, Iowa.  
Baker University, Baldwin City, Kans.  
Washburn College, Topeka, Kans.  
Tulane University of Louisiana, New Orleans, La.  
Bowdoin College, Brunswick, Me.  
Bates College, Lewiston, Me.  
Colby College, Waterville, Me.  
Goucher College, Baltimore, Md.  
Johns Hopkins University, Baltimore, Md.  
Amherst College, Amherst, Mass.  
Boston University, Boston, Mass.  
Simmons College, Boston, Mass.  
Harvard University, Cambridge, Mass.  
Massachusetts Institute of Technology, Cambridge, Mass.  
Radcliffe College, Cambridge, Mass.  
Boston College, Chestnut Hill, Mass.  
Smith College, Northampton, Mass.  
Mount Holyoke College, South Hadley, Mass.  
Tufts College, Tufts College, Mass.  
Wellesley College, Wellesley, Mass.  
Williams College, Williamstown, Mass.  
Clark University, Worcester, Mass.  
Worcester Polytechnic Institute, Worcester, Mass.  
Carleton College, Northfield, Minn.  
Washington University, St. Louis, Mo.  
Dartmouth College, Hanover, N. H.  
Rutgers College, New Brunswick, N. J.  
Princeton University, Princeton, N. J.  
Wells College, Aurora, N. Y.  
University of Buffalo, Buffalo, N. Y.  
Hamilton College, Clinton, N. Y.  
Colgate University, Hamilton, N. Y.  
Cornell University, Ithaca, N. Y.  
Barnard College, New York, N. Y.  
Columbia University, New York, N. Y.  
Fordham University, New York, N. Y.  
New York University, New York, N. Y.  
Vassar College, Poughkeepsie, N. Y.  
University of Rochester, Rochester, N. Y.  
Union University, Schenectady, N. Y.  
Syracuse University, Syracuse, N. Y.  
Rensselaer Polytechnic Institute, Troy, N. Y.  
Duke University (formerly Trinity College), Durham, N. C.  
Wake Forest College, Wake Forest, N. C.  
Case School of Applied Science, Cleveland, Ohio.  
Western Reserve University, Cleveland, Ohio.

Ohio Wesleyan University, Delaware, Ohio.  
Oberlin College, Oberlin, Ohio.  
Antioch College, Yellow Springs, Ohio.  
Reed College, Portland, Oreg.  
Willamette University, Salem, Oreg.  
Lehigh University, Bethlehem, Pa.  
Bryn Mawr College, Bryn Mawr, Pa.  
Lafayette College, Easton, Pa.  
Haverford College, Haverford, Pa.  
Temple University, Philadelphia, Pa.  
University of Pennsylvania, Philadelphia, Pa.  
Carnegie Institute of Technology, Pittsburgh, Pa.  
University of Pittsburgh, Pittsburgh, Pa.  
Swarthmore College, Swarthmore, Pa.  
Washington and Jefferson College, Washington, Pa.  
Brown University, Providence, R. I.  
Converse College, Spartanburg, S. C.  
University of Chattanooga, Chattanooga, Tenn.  
Maryville College, Maryville, Tenn.  
Fisk University, Nashville, Tenn.  
Vanderbilt University, Nashville, Tenn.  
University of the South, Sewanee, Tenn.  
Rice Institute, Houston, Tex.  
Baylor University, Waco, Tex.  
Randolph-Macon College, Ashland, Va.  
Washington and Lee University, Lexington, Va.  
Randolph-Macon Woman's College, Lynchburg, Va.  
University of Richmond, Richmond, Va.  
Sweet Briar College, Sweet Briar, Va.  
Whitman College, Walla Walla, Wash.  
Beloit College, Beloit, Wis.

## Appendix

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The following additional information regarding the status of military training and physical education is herewith presented, in order that the study may be more complete: (1) Institutions requiring and urging vaccination for smallpox and typhoid for college entrance; (2) selected bibliography.

### (1) *Institutions Requiring or Urging Vaccination for Smallpox and Typhoid for College Entrance*

#### *Institutions Requiring Vaccination for Smallpox*<sup>10</sup>

*Public.*—Alabama Polytechnic Institute, University of Alabama, University of Arkansas, University of California, University of Florida, University of Illinois, University of Kansas, University of Michigan, University of North Carolina, North Carolina College for Women, North Carolina State College of Agriculture and Engineering, University of Cincinnati, Ohio State University, Miami University (Ohio), Oklahoma College for Women, University of Oklahoma,<sup>10</sup> Oregon State Agricultural College, Pennsylvania State College, University of South Carolina, South Dakota College of Agriculture and Mechanic Arts,<sup>10</sup> University of Tennessee, University of Texas, Agricultural and Mechanical College of Texas, Virginia Agricultural and Mechanical College and Polytechnic Institute, The College of William and Mary.

*Private.*—Leland Stanford Jr. University, Wesleyan University (Conn.), Yale University, Connecticut College for Women, Agnes Scott College, Emory University, University of Chicago, Northwestern University, Knox College, De Pauw University,<sup>10</sup> University of Notre Dame, Bates College, Goucher College, Harvard University, Mount Holyoke College, Tufts College, Wellesley College, Washington University (St. Louis, Mo.), Rutgers College, Princeton University, Columbia University, Fordham University, University of Rochester.

Antioch College, Temple University, University of Pennsylvania, University of Pittsburgh, Swarthmore College, Washington and Jefferson College, Brown University, Converse College, Vanderbilt University, Baylor Institute, Sweet Briar College.

#### *Institutions Requiring Vaccination for Smallpox in Emergencies Only*

*Public.*—Louisiana State University, Agricultural and Mechanical College, Mississippi Agricultural and Mechanical College.

*Private.*—Reed College.

#### *Institutions Urging Vaccination for Smallpox*

*Public.*—University of Minnesota, State University of New Mexico.

*Private.*—Cornell College.

#### *Institutions Requiring Vaccination for Typhoid*<sup>11</sup>

*Public.*—University of Kansas, University of Michigan, University of Oklahoma, University of South Carolina, Virginia Agricultural and Mechanical College and Polytechnic Institute.

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<sup>10</sup> Vaccination for smallpox is required by the Reserve Officers' Training Corps.

<sup>11</sup> Vaccination for typhoid is one of the Reserve Officers' Training Corps requirements.



*Private.*—Wesleyan University (Conn.), Agnes Scott College, Emory University, Northwestern University, De Pauw University, Massachusetts Institute of Technology, Fordham University, Antioch College.

*Institutions Requiring Vaccination for Typhoid in Emergencies Only*

*Public.*—Louisiana State University and Agricultural and Mechanical College, Mississippi Agricultural and Mechanic Arts College, Oregon State Agricultural College.

*Private.*—Reed College, University of Chattanooga.

*Institutions Urging Vaccination for Typhoid*

*Public.*—Alabama Polytechnic Institute, State University of New Mexico, University of Tennessee.

*Private.*—Wellesley College, Princeton University, Duke University (North Carolina), Converse College (South Carolina).

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