CATALOG

OF THE

UNIVERSITY OF MAINE

1919 - 1920

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CATALOG OF THE
UNIVERSITY OF MAINE
1919-20
ORONO, MAINE
THE UNIVERSITY PRESS
ORONO, MAINE
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Calendar

FALL SEMESTER, 1919

September 12-16, Arrearage and entrance examinations.
September 16, Tuesday, Registration 8 A. M. to 5 P. M.
September 17, Wednesday, Registration 8 A. M. to 5 P. M. First Chapel, 11 A. M.
September 18, Thursday, Classes begin 8 A. M.
October 13, Monday, Columbus Day (October 12), a holiday.
November 27, Thursday, Thanksgiving Day, a holiday.
December 19, Friday, Christmas Recess begins 5.05 P. M.

1920

January 5, Monday, Christmas Recess ends 8 A. M.
January 30, Friday, Fall Semester ends 5.05 P. M.

SPRING SEMESTER

January 31, Saturday, Registration 8 A. M. to 5 P. M.
February 2, Monday, Spring Semester begins 8 A. M.
February 23, Monday, Washington's Birthday (February 22), a holiday
March 24, Wednesday, Spring Recess begins 5.05 P. M.
April 1, Thursday, Spring Recess ends 8 A. M.
April 19, Monday, Patriot's Day, a holiday
May 31, Monday, Memorial Day (May 30), a holiday
June 2-5, Entrance examinations
June 5, Saturday, Alumni Day, Class Day
June 6, Sunday, Baccalaureate address
June 7, Monday, Commencement, 9.30 A. M.

FALL SEMESTER

September 14, Tuesday, Registration 8 A. M. to 5 P. M.
September 15, Wednesday, Registration 8 A. M. to 5 P. M. First Chapel, 11 A. M.
Board of Trustees

Hon. Samuel Wadsworth Gould, B. S., President
Term expires April 16, 1921
Skowhegan

Thomas Vincent Doherty, A. B., Clerk
Term expires May 7, 1920
Houlton

Edwin James Haskell, B. S.
Term expires April 25, 1920
Westbrook

Hon. William Henry Looney
Term expires September 30, 1921
Portland

Hon. Frederick Hastings Strickland
Term expires April 28, 1922
Bangor

Hon. Frank Edward Guernsey
Term expires May 31, 1924
Dover

Ora Gilpatrick
Term expires June 19, 1925
Houlton

Charles Swan Bickford, B. S.
Term expires October 1, 1926
Belfast

Executive Committee: Gould, Strickland, Looney
Farm Committee: Bickford, Gilpatrick, and Guernsey
Maine Agriculture Experiment
Station Council

Robert Judson Aley, Ph. D., LL.D.  
Charles Dayton Woods, Sc. D.  
Ora Gilpatrick, Houlton
Frank Edward Guernsey, Dover
Charles Swan Bickford, B. S., Belfast
Leon Stephen Merrill, M. D., Dean of the College of Agriculture
John Albert Roberts, M. A., Norway
Eugene Harvey Libby, Auburn
Wilson Hiram Conant, Buckfield
Frank Samuel Adams, Bowdoinham
William George Hunton, Cherryfield
Leonard Clement Holston, Cornish

President  
Secretary  
Committee  
of  
Trustees  
Commissioner of Agriculture  
State Grange  
State Pomological Society  
State Dairymen’s Association  
Maine Seed Improvement Association  
Maine Livestock Breeders' Association

James Monroe Bartlett, M. S.  
Edith Marion Patch, Ph. D.  
Warner Jackson Morse, Ph. D.  
John Whittemore Gowen, Ph. D.  

Members  
of the  
Station Staff
Officers of Administration

OF THE UNIVERSITY

Robert Judson Aley, President. 2A Alumni Hall, Campus
James Norris Hart, Dean. 5 Alumni Hall, 130 College Street
Charles John Dunn, Treasurer. 4 Alumni Hall, 51 Bennoch Street
James Adrian Gannett, Registrar. 2 Alumni Hall, 166 Main Street
Addie Matilda Weed, Assistant Registrar. 2 Alumni Hall, Veazie

OF THE COLLEGES AND EXPERIMENT STATION

Leon Stephen Merrill, Dean of the College of Agriculture. 16 Winslow Hall, Campus
James Stacy Stevens, Dean of the College of Arts and Sciences. 200 Aubert Hall, 175 Main Street
Charles Dayton Woods, Director of the Maine Agricultural Experiment Station. Holmes Hall, 133 Main Street
Harold Sherburne Boardman, Dean of the College of Law

OF THE DEPARTMENTS

Agronomy. Professor Simmons, 26 Winslow Hall, 4 Gilbert Street
Ancient History and Art. Professor Huddilston, 28 Library, 193 Main Street
Agricultural Education. Professor Hill, 38 Winslow Hall, 162 College Street
Animal Industry. Professor Corbett, 14 Winslow Hall, Campus
Bacteriology and Veterinary Science. Professor Russell, 13 Winslow Hall, 132 College Street
Biological and Agricultural Chemistry. Professor Merrill, 15 Winslow Hall, 178 Main Street
Biology. Professor Chrysler, 24 Coburn Hall, 370 College Street
Chemistry. Professor Brautlecht, 211 Aubert Hall, 167 Main Street
Chemistry (Agricultural Experiment Station). Professor Bartlett, Holmes Hall, 148 College Street
OFFICERS OF ADMINISTRATION

CIVIL ENGINEERING. Professor Sprague, 25 Wingate Hall, University Inn
ECONOMICS AND SOCIOLOGY. Professor Ashworth, 10 Coburn Hall, 94 North Main Street
EDUCATION. President Aley, 2A Alumni Hall, Campus
ELECTRICAL ENGINEERING. Professor Barrows, 21 Lord Hall, 36 Myrtle Street
ENGLISH. Professor Ellis, 10 Estabrooke Hall, 356 College Street
ENTOMOLOGY (AGRICULTURAL EXPERIMENT STATION). Professor Patch, Holmes Hall, College Street
FARM MANAGEMENT. Professor Simmons, 26 Winslow Hall, 4 Gilbert Street
FORESTRY. Professor Briscoe, 24 Winslow Hall, 380 College Street
FRENCH. Professor Segall, 14 Fernald Hall, 50 Maine Street
GEOLoGY. Professor Merrill, 15 Winslow Hall, 178 Main Street
GERMAN. Professor Drummond, 14 Fernald Hall, 61 Bennoch Street
HISTORY. Professor Colvin, 11 Coburn Hall, University Inn
HOME ECONOMICS. Professor Freeman, 4 The Maples, North Hall
HORTICULTURE. Associate Professor Sweetser, 34 Winslow Hall, 80 Forest Avenue
LATIN. Professor Chase, 15 Wingate Hall, 143 Main Street
LAW. Professor Peabody, The Library, 115 Main Street
MATHEMATICS AND ASTRONOMY. Professor Hart, 5 Alumni Hall, 130 College Street
MECHANICAL ENGINEERING. Professor Sweetser, 20 Lord Hall, 184 Main Street
MECHANICS AND DRAWING. Professor Weston, 15 Wingate Hall, 130 College Street
MILITARY SCIENCE. Captain James, Alumni Hall, University Inn
MUSIC. Director Sprague, 15 Wingate Hall, 217 Union Street. Bangor
PHILOSOPHY. Professor Craig, 23 Wingate Hall, 32 College Street
PLANT PATHOLOGY (AGRICULTURAL EXPERIMENT STATION). Professor Morse, Holmes Hall, 51 North Main Street
PHYSICAL EDUCATION. Professor Rider, Alumni Hall, 29 Main Street
PHYSICS. Professor Stevens, 200 Aubert Hall, 175 Main Street
POULTRY HUSBANDRY. Professor Corbett, 14 Winslow Hall, Campus
PUBLIC SPEAKING. Associate Professor Harriman, 1 Estabrooke Hall, 180 Main Street
SPANISH AND ITALIAN. Professor Peterson, 11 Fernald Hall, 104 North Main Street
OF THE DORMITORIES

Kate Clark Estabrooke, Superintendent of Mt. Vernon House
Josephine Gilbert Hills, Superintendent of Balentine Hall
Susan Phillips, Superintendent of Annex to Mt. Vernon House
*Faculty of Instruction*

ROBERT JUDSON ALEY, President and Acting Head of the Department of Education.
B. S., Valparaiso, 1882; A. B., Indiana, 1888; A. M., 1890; Ph. D., Pennsylvania, 1897; LL. D., Franklin, 1909; Pennsylvania, 1917

LUCIUS HERBERT MERRILL, Professor of Biological and Agricultural Chemistry.
B. S., Maine, 1883; Sc. D., 1908

JAMES NORRIS HART, Dean of the University and Professor of Mathematics and Astronomy.
B. C. E., Maine, 1885; C. E., 1890; M. S., Chicago, 1897; Sc. D., Maine, 1908

FREMONT LINCOLN RUSSELL, Professor of Bacteriology and Veterinary Science.
B. S., Maine, 1885; V. S., New York College of Veterinary Surgeons, 1886

JAMES STACY STEVENS, Dean of the College of Arts and Sciences and Professor of Physics.
B. S., Rochester, 1885; M. S., 1888, and Syracuse, 1889; LL. D., Rochester, 1907

JOHN HOMER HUDDILSTON, Professor of Ancient History and Art.
A. B., Baldwin, 1890 and Harvard, 1893; Ph. D., Munich, 1897

JACOB BERNARD SEGALL, Professor of French.
B. S. and B. L., Yassy, 1884; Ph. D., Columbia, 1893

HAROLD SHERBURNE BOARDMAN, Dean of the College of Technology and Head of the Department of Civil Engineering.
B. C. E., Maine, 1895; C. E., 1898

GEORGE DAVIS CHASE, Professor of Latin.
A. B., Harvard, 1889; A. M., 1895; Ph. D., 1897

CAROLINE COLVIN, Professor of History.
A. B., Indiana, 1893; Ph. D., Pennsylvania, 1901

CHARLES PARTRIDGE WESTON, Professor of Mechanics and Drawing.
B. C. E., Maine, 1896; C. E., 1899; A. M., Columbia, 1902

*Arranged in groups in order of seniority of appointment*
Wallace Craig, Professor of Philosophy.
B. S., Illinois, 1898; M. S., 1901; Ph. D., Chicago, 1908

Guy Andrew Thompson, Professor of English Literature.
A. B., Illinois, 1898, and Harvard, 1900; A. M., 1901; Ph. D., Chicago, 1912

Mintin Asbury Chrysler, Professor of Biology.
B. A., Toronto, 1894; Ph. D., Chicago, 1904

John Manvers Briscoe, Professor of Forestry.
M. F., Yale, 1909

Leon Stephen Merrill, Dean of the College of Agriculture and Director of Agricultural Extension Service.
M. D., Bowdoin, 1889

George Edward Simmons, Professor of Agronomy.
B. S., Ohio Northern, 1902; M. S., 1905; B. Sc., Ohio State, 1909

William Edward Barrows, Jr., Professor of Electrical Engineering.
B. S., Maine, 1902; E. E., 1908

Lamert Seymour Corbett, Professor of Animal Industry.
B. Sc., Massachusetts Agricultural College, 1909; M. S., Kentucky, 1913

Frances Rowland Freeman, Professor of Home Economics.
B. Sc., Ohio State, 1910; M. Sc., 1911

William Jordan Sweetser, Professor of Mechanical Engineering.
S. B., Massachusetts Institute of Technology, 1901

Clarence Webster Peabody, Professor of Law.
A. B., Bowdoin, 1893; LL. B., Harvard, 1896

Roy Merle Peterson, Professor of Spanish and Italian.
A. B., Coe College, 1906; A. M., Harvard, 1910; Ph. D., 1912

Robert Rutherford Drummond, Professor of German.
B. S., Maine, 1905; Ph. D., Pennsylvania, 1909

Herbert Staples Hill, Professor of Agricultural Education.
A. B., Bowdoin, 1905

Harley Richard Willard, Professor of Mathematics.
B. A., Dartmouth, 1899; M. A., 1902; M. A., Yale, 1910; Ph. D., 1912

John H. Ashworth, Professor of Economics and Sociology.
B. A., Emory and Henry College, 1906; Ph. D., Johns Hopkins, 1914

Charles Andrew Brautlecht, Professor of Chemistry.
Ph. B., Yale, 1906; Ph. D., 1912
HAROLD MILTON ELLIS, Professor of English.
B. A., Maine, 1907; M. A., 1908; M. A., Harvard, 1909; Ph. D., 1913

LUTHER RICE JAMES, Professor of Military Science and Tactics.
Captain, United States Army

STACY CLIFFORD LANPHER, Professor of Law.
A. B., Maine, 1908; LL. B., 1916; LL. M., 1917

GEORGE LESSING RIDER, Professor of Physical Education and Director of Athletics.
A. B., Olivet College, 1914
______  ______, Dean of the College of Law
______  ______, Professor of Education

JAMES ADRIAN GANNETT, Registrar.
B. S., Maine, 1908

ARCHER LEWIS GROVER, Associate Professor of Drawing.
B. M. E., Maine, 1889; B. S., 1902

EMBERT HIRAM SPRAGUE, Associate Professor of Civil Engineering.
B. S., Dartmouth, 1900

IRVING HILL BLAKE, Associate Professor of Biology.
A. B., Bates College, 1911; A. M., Brown University, 1912

BENJAMIN CALVIN KENT, Associate Professor of Mechanical Engineering.
B. S., Maine, 1912

ARTHUR ST. JOHN HILL, Associate Professor of Electrical Engineering.
E. E., Polytechnic Institute of Brooklyn, 1911

ALPHEUS CROSBY LYON, Associate Professor of Civil Engineering.
B. S., Maine, 1902; S. B., Massachusetts Institute of Technology, 1904; C. E., Maine, 1913

BERTRAND FRENCH BRANN, Associate Professor of Chemistry.
B. S., Maine, 1909; M. S., 1911; M. S., Massachusetts Institute of Technology, 1912

AVA HARRIET CHADBOWNE, Acting Associate Professor of Education.
B. A., Maine, 1915; M. A., 1918

HERMAN PITTE SWEETS, Associate Professor of Horticulture.
B. S., Maine, 1910

MYRON OWEN TRIPP, Associate Professor of Mathematics.
A. B., Indiana, 1901; Ph. D., Columbia, 1909

ALBERT LEWIS FITCH, Associate Professor of Physics.
A. B., Albion College, 1911; M. A., 1912; Ph. D., Michigan, 1916
Willis Warren Harriman, Associate Professor of Public Speaking.
(In charge of the Department.)
Ph. B., Brown, 1903; M. A., 1918

J Howard Toelle, Associate Professor of Economics and Sociology.
A. B., Indiana, 1913; LL. B., 1914; A. M., 1916

Harry Woodbury Smith, Assistant Professor of Bacteriology.
B. S., Maine, 1909
*Ralph Maynard Holmes, Assistant Professor of Physics.
B. A., Maine, 1911; M. A., Wesleyan, 1913

François Joseph Kueny, Assistant Professor of French.
B. é è L., University of Paris, 1897; L. è è L., Besançon, 1901

Albert Ames Whitmore, Assistant Professor of History.
B. S., Maine, 1906

Dorothea Beach, Assistant Professor of Home Economics.
B. S., Simmons, 1917

Charles Howard Bacheleder, Assistant Professor of Zoology.
A. B., New Hampshire State College, 1913; M. S., 1915

Harold Walter Leavitt, Assistant Professor of Civil Engineering.
B. S., Maine, 1915; C. E., 1918

Adelbert Wells Sprague, Director of Music.
B. S., Maine, 1905; A. M., Harvard, 1907

Richard Theodore Muller, Assistant Professor of Horticulture.
B. S., Cornell, 1916

Laura Anderson, Assistant Professor of Home Economics.
B. S., Montana, 1916

Llewellyn Morse Dorsey, Assistant Professor of Animal Industry.
B. S., Maine, 1916

Arthur Griffin Hildreth, Assistant Professor of Physics.
B. S., Bowdoin, 1915

Roy Frank Thomas, Assistant Professor of Agricultural Education.
B. S., Maine, 1917

Everett Clair Bancroft, Assistant Professor of Economics and Sociology.
A. B., Acadia College, 1914; Yale, 1915

Charles Matthew Curl, Assistant Professor of Drawing.
B. S., Massachusetts Institute of Technology, 1907

*On leave of absence without pay
### FACULTY

- **Ben Coe Helmick**, Assistant Professor of Agronomy.
  - B. S., Iowa, 1914; M. S., Cornell, 1915

- **Edward Frederic Rathjen**, Assistant Professor of Chemistry.
  - A. B., Wisconsin, 1905; A. M., 1906; Ph. D., Cornell, 1910

---

- **Everett Willard Davee**, Instructor in Wood and Iron Work.
- **Esther McGinnis**, Instructor in Home Economics.
  - B. Sc., Ohio State, 1915

- **Maynard Fred Jordan**, Instructor in Mathematics.
  - B. A., Maine, 1916

- **Walter Davis Emerson**, Instructor in Mechanical Engineering.
  - B. S., Maine, 1916

- **Edith Susan Whitaker**, Instructor in Biology.

- **Mary Alice Wyman**, Instructor in English.
  - A. B., Wellesley, 1912; M. A., Columbia, 1918

- **Howard Bagnall Meek**, Instructor in Mathematics.
  - B. S., Boston, 1917

- **Allan Sherman**, Instructor in Law.
  - A. B., Dartmouth, 1915; LL. B., Maine, 1918; LL. M., 1919

- **Norman Herbert Anning**, Instructor in Mathematics.
  - A. B., Queen's University, 1905; A. M., 1906

- **John Perry Ballantine**, Instructor in Mathematics and Physics.
  - A. B., Harvard, 1918

- **Forest LeRoy Buckley**, Instructor in Civil Engineering.
  - B. S., Maine, 1916

- **Marian Stephanie Busell**, Instructor in French.
  - B. A., Maine, 1914; M. A., 1916

- **Alta Irene Carswell**, Instructor in Spanish.
  - B. A., Wellesley, 1916

- **Chauncey Wallace Lord Chapman**, Instructor in Forestry.
  - B. S., Maine, 1914

- **Walter Joseph Creamer**, Instructor in Drawing.
  - B. S., Maine, 1918

- **John Newell Crombie**, Instructor in Chemistry.
  - B. Chem., Pittsburgh, 1916

- **Carle Byron Crosby**, Instructor in Electrical Engineering.
  - B. S., Maine, 1918

- **Washington Irving Crowley**, Instructor in Spanish.
  - A. B., Cumberland, 1916
NORMAN FITZHUGH EBERMAN, Instructor in Chemistry.
    B. S., Franklin and Marshall, 1919
RUSSELL LEROY FORBES, Instructor in English.
    A. B., Westminster, 1918; A. M., Colorado College, 1919
BERNARD FREYD, Instructor in Economics and History.
    A. B., Washington, 1916; A. M., 1918
HARMON LESLIE HOFFMAN, Instructor in English.
    A. B., Trinity College, N. C., 1919
BRYANT LEALAND HOPKINS, Instructor in Civil Engineering.
    B. S., Maine, 1917
FLOYD EAST JARVIS, Instructor in English.
    A. B., Michigan, 1916
LESLIE ARTHUR KEEGAN, Instructor in Agronomy.
    B. S., Rhode Island, 1919
PLATT ASHLEY PEARSOILD, Instructor in Chemistry.
    B. S., Virginia Polytechnic Institute, 1915
PORTER GALE PERRIN, Instructor in English.
    A. B., Dartmouth, 1917
SUSAN PHILLIPS, Instructor in Physical Education.
    B. L. I. (to be awarded in 1920)
    Emerson School of Oratory
ALBERT SANGER PRATT, Instructor in Mathematics.
    A. B., Brown, 1918
THOMAS BENJAMIN RUSSELL, Instructor in Machine Shop Practice.
ERNEST AUGUST SHIMLEY, Instructor in French.
    B. A., Dartmouth, 1893
WILLARD CASE SISSON, Instructor in Animal Industry.
    B. S., Maine, 1919
CHILTON RUPERT STEARNS, Instructor in Spanish.
    A. B., Michigan, 1897; A. M., Toronto, 1898
WALTER WHITE STEFFEY, Instructor in Physics.
    A. B., Emory and Henry College, 1913
LEON REYNOLDS STREETER, Instructor in Chemistry.
    B. S., Colgate, 1919
PHOEBE LEUHR TRIPP, Instructor in German.
    B. L., Western Reserve, 1900; A. M., 1901; Ph. D., Heidelberg, 1908
WILFRED ARTHUR WYLDE, Instructor in Chemical Engineering.
    B. S., Massachusetts Institute of Technology, 1916

ETHEL GERTRUDE WIGMORE, Assistant in the Library. (In charge)
    A. B., Acadia, 1914
MADELINE MOORE, Assistant in the Library.
HAZEL MAY DE RHODES, Assistant in the Library.
    B. A., Western, 1911; B. S., Simmons, 1917
DOROTHY MABEL HUTCHINSON, Assistant in Biology.
    B. S., Middlebury, 1919
RAYMOND LOWELL MERRITT, Assistant in Biology.
    B. S., Maine, 1918

LUCILIUS ALONZO EMERY, Lecturer on Roman and Probate Law.
    A. B., Bowdoin, 1861; A. M., 1864; LL. D., 1898
LOUIS CARVER SOUTHWARD, Lecturer on Medico-Legal Relations.
    B. S., Maine, 1875; M. S., 1892; LL. D., 1904
EDWARD HARWARD BLAKE, Lecturer on Admiralty.
    LL. B., Albany Law School, 1878; LL. D., Maine, 1910
ISAAC WATSON DYER, Lecturer on Federal Jurisdiction and Procedure,
    and on Private Corporations.
    A. B., Bowdoin, 1878
JOHN ROGERS MASON, Lecturer in Bankruptcy Law.
    A. B., Harvard, 1869; A. M., LL. B., 1872
HENRY BURT MONTAGUE, Lecturer on Practice and History of Law.
    LL. B., Cornell, 1895; LL. M., Maine, 1910

Faculty of Investigation
(THE MAINE AGRICULTURAL EXPERIMENT STATION)

CHARLES DAYTON WOODS, Director.
    B. S., Wesleyan, 1880; Sc. D., Maine, 1905
ALICE WOODS AVERILL, Laboratory Assistant.
JAMES MONROE BARTLETT, Chemist.
    B. S., Maine, 1880; M. S., 1883
MILDRED REBECCA COVELL, Clerk in Biology.
WALTER EDSON CURTIS, Superintendent, Aroostook Farm.
DONALD FOLSON, Assistant Plant Pathologist.
    A. B., Nebraska, 1912; A. M., Minnesota, 1914; Ph. D., 1917
ESTELLE MARCHO GOGGIN, Clerk.
JOHN WHITTEMORE GOWEN, Assistant Biologist.
    B. S., Maine, 1914; M. S., 1915; Ph. D., Columbia, 1917
ROYDON LINDSAY HAMMOND, Seed Analyst and Photographer.
CHARLES CLYDE INMAN, Clerk.
HUGH CURTIS MCPHEE, Scientific Aid.
   B. S., Maine, 1918
VIOLA LOUISE MORTIS, Laboratory Assistant.
WARNER JACKSON MORSE, Plant Pathologist.
   B. S., Vermont, 1898; M. S., 1903; Ph. D., Wisconsin, 1912
EDITH MARION PATCH, Entomologist.
   B. S., Minnesota, 1901; M. S., Maine, 1910; Ph. D., Cornell, 1911
RAYMOND PEARL, Collaborating Biologist.
   A. B., Dartmouth, 1899; Ph. D. Michigan, 1902; LL. D., Maine, 1919; D. Sc., Dartmouth, 1919
HELEN ARLINE RING, Laboratory Assistant.
EDGAR RAYMOND RING, Scientific Aid.
   A. B., Maine, 1918
WELLINGTON SINCLAIR, Superintendent of Highmoor Farm.
ELMER ROBERT TOBEY, Assistant Chemist.
   B. S., Maine, 1911; M. S., 1917
CHARLES HARRY WHITE, Assistant Chemist.
   Ph. C., Maine, 1897
JACOB ZINN, Assistant Biologist.
   Agronomist with Diploma, Hochschule für Bodenkultur, 1913; Agr. D., 1914
Faculty of Extension Service
(COLLEGE OF AGRICULTURE)

Leon Stephen Merrill, Director.
M. D., Bowdoin, 1889
Joseph Henry Bodwell, County Agricultural Agent, Piscataquis County.
B. S., Maine, 1915
Ruth Fern Caney, Home Demonstration Agent, Cumberland County.
Leonard Sherman Cleafes, Extension Specialist in Sheep Husbandry.
D. V. S., McGill, 1895.
Charles Edward Crossland, Executive Secretary to Director of Extension Service.
B. S., Maine, 1917
Abraham Lincoln Tasker Cummings, Agricultural Editor.
Clarence Albert Day, County Agricultural Agent, Washington County.
Arthur Lowell Deering, County Agricultural Agent, Kennebec County.
B. S., Maine, 1912
Richard Boulsby Dodge, County Agricultural Agent, Penobscot County.
B. S., Maine, 1917
Norman Sylvester Donahue, County Agricultural Agent, Waldo County.
B. S., Maine, 1915
Alfreda Ellis, Assistant in Charge of Girls' Clubs.
B. S., Maine, 1917
Albert Kinsman Gardner, County Agricultural Agent, Franklin County.
B. S., Maine, 1910
Roger Locke Gowell, County Agricultural Agent, Knox, and Lincoln Counties.
B. S., Maine, 1916
William Melvin Gray, County Agricultural Agent, York County.
B. S., Maine, 1912
Rosalind May Jewett, Extension Instructor in Home Economics.
B. S., Colby, 1910
Maurice Daniel Jones, Farm Management Demonstrator.
B. S., Maine, 1912
Helen Lyman, Home Demonstration Agent, Kennebec County.
Ralph Pike Mitchell, State Leader of Boys' and Girls' Agricultural and Home Economics Clubs.
PAUL WHEELER MONOHON, County Agent Leader.
B. S., Maine, 1914

EDWARD WATTS MORTON, County Agricultural Agent, Cumberland County.
B. S., Maine, 1909

JOHN HARVEY PHILBRICK, Assistant County Agricultural Agent, Aroostook County.
B. S., Maine, 1915

CATHARINE NORTON PLATTS, State Leader of Home Demonstration Work.
B. S., Simmons, 1915

JOHN LESLIE SCRIBNER, County Agricultural Agent, Aroostook County.
B. S., Maine, 1917

HAROLD JOSEPH SHAW, County Agricultural Agent, Androscoggin and Sagadahoc Counties.

HELEN SPAULDING, Home Demonstration Agent, York County.
B. S., Simmons, 1913

CLAYTON ALTON STORER, County Agricultural Agent, Somerset County.
B. S., Maine, 1918

OSCAR MILTON WILBUR, Extension Specialist in Poultry Husbandry.
M. S., Maine, 1917

GEORGE NEWTON WORDEN, County Agricultural Agent, Hancock County.
B. S., Maine, 1913

GEORGE ALBERT YEATON, County Agricultural Agent, Oxford County.

MARTHA ROBERTS YORK, Home Demonstration Agent, Androscoggin and Sagadahoc Counties.
COMMITTEES OF THE FACULTY

ADMINISTRATION—The President and the Deans

ALUMNI RELATIONS—Gannett, Chadbourne, Hart, Monohon, Towner

ATHLETICS—Grover, Gannett, Lyon, Rider, Sprague, (E. H.)

AUDITING—Merrill (L. H.), Helmick, Hildreth, Kueny

CHAPEL—Huddleston, Barrows, Drummond, Sprague (A. W.)

GRADUATE STUDY—Chase, Brautlecht, Colvin, Corbett, Craig, Morse, Segall, Willard

HEALTH—Chrysler, Freeman, Russell

HONORS—Sweetser (H. P.), Anderson, Kent, Tripp

LIBRARY—The President, Ashworth, Simmons, Thompson

MILITARY—James, Boardman, Dorsey

RULES—Peterson, Fitch, Smith

SCHEDULE—Weston, Gannett, the Deans

SOCIAL AFFAIRS—Briscoe, Batchelder, Beach, Colvin

STUDENT ACTIVITIES—(NON-ATHLETIC)—Sweetser, (W. J.)
   Dramatics—Harriman, Blake, Muller
   Music—Sprague (A. W.), Hill, (H. S.)
   Public Speaking—Harriman, Leavitt, Peabody
   Student Publications—Ellis, Bancroft, Thomas
   Miscellaneous—Brann, Hill (A. S.), Whitmore
General Information

HISTORY

The University of Maine is a part of the public educational system of the State. It was established as a result of the Morrill Act approved by President Lincoln, July 2, 1862. The State of Maine accepted the conditions of this act in 1863. In 1865 the State created a corporation to administer the affairs of the college. The original name of the institution was the State College of Agriculture and the Mechanic Arts. The name was changed to the University of Maine in 1897.

The first Board of Trustees was composed of 16 members, each county delegation in the Legislature selecting one member. Various changes have occurred in the appointment of Board members. At the present time seven members of the Board are appointed by the Governor of the State, with the advice and consent of the Council, for a term of seven years. One member is appointed for three years by the Governor upon the nomination of the Alumni Association.

The institution opened September 21, 1868, with a class of 12 members and a faculty of two teachers. By 1871 four curricula had been arranged.—Agriculture, Civil Engineering, Mechanical Engineering, and Elective. By gradual growth these curricula developed into the College of Agriculture, the College of Technology, and the College of Arts and Sciences.

The Maine Agricultural Experiment Station was established as a division of the university by act of the Legislature of 1887, as a result of the passage by Congress of the Hatch Act. It succeeded the Maine Fertilizer Control and Agricultural Experiment Station which had been established in 1885.

The College of Law was opened in 1898. It is an integral part of the institution and until the year 1917 occupied quarters at the corner of Union and Second streets in Bangor. It is located temporarily on the campus at Orono.

Graduate instruction has been given by various departments for many years. The first Master's degree was conferred in 1881. There is no provision for graduate work in advance of that required for the Master's degrees.
Beginning with 1902, a Summer Term has been held annually, consisting at first of five weeks, but now of six. It is designed for teachers in secondary schools and for college students who desire to take advantage of its opportunities, and it also gives some courses for those who seek an opportunity to make up entrance credits. The departments usually offering courses are Chemistry, Economics and Sociology, Education, English, French, German, History, Latin, Mathematics and Astronomy, Physics, and Spanish and Italian.

The university is coeducational, women having been admitted since 1872, in compliance with special legal enactment.

LOCATION

The university is located in Orono, an attractive town of 3,500 population, with good schools and three churches. The campus of 370 acres borders the Stillwater River, a branch of the Penobscot, and is of great beauty.

Orono is on the main line of the Maine Central Railroad, eight miles east of Bangor, half way between Kittery, the most southerly town in the State on the Maine Central Railroad, and Fort Kent, the most northerly town in the State on the Bangor and Aroostook Railroad. It is not far from the center of population of the State. In addition to steam railroad connection, there is half-hour trolley service to Bangor, nine miles, and Old Town, three miles from the campus. Bangor is the third city of the State in population and an important business center. The location of the university gives students who care to do so an opportunity to take advantage of its social, religious, and other advantages. Old Town is a prosperous manufacturing city with about 7,000 inhabitants.

BUILDINGS AND THEIR EQUIPMENT

Balentine Hall.—The Legislature of 1913 made an appropriation for the erection of one wing of a women's dormitory. This was completed September 1, 1914. The Legislature of 1915 made an appropriation for completing the building. The name was given in honor of Elizabeth Abbott Balentine, Secretary and Registrar of the university from 1895 to 1913. It contains accommodations for 110 women. The entire building was ready for occupancy September 1, 1916.
Hannibal Hamlin Hall.—This is a men’s dormitory completed in 1911. It contains four stories and a concrete basement. It was named for the Honorable Hannibal Hamlin, of Hampden and Bangor, the first president of the Board of Trustees. It will accommodate 156 students.

Mount Vernon House.—This is a wooden building, remodeled in 1898, and is a dormitory for women. It is a three story building and will accommodate 36 students.

North Hall.—This building is used by the Home Economics Department for a Practice House as required under the Smith-Hughes law for teacher training. It is a two story frame house located on the campus. The faculty and seniors of the department reside here during the academic year.

Oak Hall.—This building was named for the Honorable Lyndon Oak, of Garland, a long-time member and president of the Board of Trustees. It is a four story building erected in 1871 and has 48 rooms for students.

University Inn.—This is a wooden building, located in the village of Orono, which the university has leased for a term of years. It is occupied chiefly by instructors and has accommodations for fifty persons.

Alumni Hall.—This building was erected in 1900 and was given its name because part of the funds required for its erection were subscribed by the alumni of the university. It contains the gymnasium, chapel, and administrative offices.

Aubert Hall.—This is a four story building including a high basement. It was named in honor of the late Alfred Bellamy Aubert, Professor of Chemistry from 1874 to 1910. It is used by the Departments of Chemistry and Physics.

Coburn Hall.—This building contains the Department of Biology and the museum and has recitation rooms for the Departments of History and Economics and Sociology. It was named for ex-Governor Abner Coburn, of Skowhegan, a former president of the Board of Trustees, and the chief individual benefactor of the university.

Estabrooke Hall.—This building is used for the Departments of English and Public Speaking, and was named for the late Horace M. Estabrooke, Professor of English from 1891 to 1908. It contains four recitation rooms, rooms for consultation purposes, and offices for the members of the departments.
**Fernald Hall.**—This is the oldest building on the campus and was erected for the Department of Chemistry. It now contains the Departments of French, Spanish and Italian, Education, Mathematics, and the University Store. It was named in honor of ex-President Merritt C. Fernald.

**Holmes Hall.**—This building contains the offices and laboratories of the Maine Agricultural Experiment Station. It is a two story building in addition to a basement. It was named for Dr. Ezekiel Holmes, of Winthrop.

**Library Building.**—The Library Building is of stone, two stories above a basement and surmounted by a dome. For its erection and furnishing, Mr. Andrew Carnegie gave $55,000, and the Hallowell Granite Works furnished the granite at a price that was equivalent to a gift of several thousand dollars. The stacks, which are in the rear of the main building, contain shelf room for 60,000 volumes.

**Lord Hall.**—This building was erected for the Departments of Electrical Engineering and Mechanical Engineering. It is two stories in height and contains recitation rooms, laboratories, shops, drawing rooms, and offices for the members of these departments. It was named for the Honorable Henry Lord, of Bangor, a former president of the Board of Trustees.

**Stewart Hall.**—This building is situated in Bangor and contains offices and recitation rooms of the College of Law. It is three stories in height and was named for Honorable D. D. Stewart, of St. Albans, Maine, who has been a generous benefactor of this college.

**Wingate Hall.**—This building contains three stories and a basement. It is used by the Departments of Civil Engineering and Mechanics and Drawing, and includes recitation rooms and offices for the Departments of Latin, Philosophy, and Music.

**Winslow Hall.**—This is a four story building including the basement. It contains offices, laboratories, and recitation rooms for the various departments of the College of Agriculture. It was named in honor of Honorable Edward B. Winslow, of Portland, a former president of the Board of Trustees. In the rear of this building is located the stock judging pavilion, which is an octagonal structure, having a seating capacity of 600.

**Dairy Building.**—This building contains various rooms appropriate for the Department of Dairy Husbandry. It is supplied with neces-
sary appliances for teaching methods of handling milk, cream, butter, and cheese.

**Farm Buildings.**—These comprise two large dairy barns, a horse barn, a hay storage barn, two tool houses, and a piggery. The farm of the university is composed of parcels of land aggregating 473 acres, of which 120 acres are under cultivation.

**Horticultural Building.**—This includes a set of greenhouses east of Holmes Hall and furnishes opportunity for demonstration of the practical culture of flowers and vegetables under glass.

**Infirmary.**—This building is used in caring for cases of infectious diseases that may appear among the students. It is located in the rear of Hannibal Hamlin Hall.

**Observatory.**—The astronomical observatory stands on a slight elevation east of Alumni Hall. It contains equipment for work in descriptive and practical astronomy.

**Poultry Plant.**—The part of the plant that belongs to the College of Agriculture consists of a two and one half story building to which are attached brooder houses. The plant which belongs to the Agricultural Experiment Station contains an incubator house with tenement above, two poultry houses, a two story house, a building containing a hospital for hens, and rooms for digestion experiments.

**Athletic Field.**—Alumni Field, so called because funds required for its construction were contributed by the Alumni Association, is located at the northern end of the campus. It contains a quarter-mile cinder track, with a 220-yard straightaway, and is graded and laid out for football, baseball, and track and field athletics. It contains a grandstand with a seating capacity of 2,100. There is also an out-door board running track 390 feet long by 12 feet wide.

**Central Heating Plant.**—The Central Heating Plant is located on low ground so that the buildings drain by gravity to the plant. It contains five 150 h. p. boilers, two Worthington duplex return pumps, and scales for weighing coal.

**Fraternity Houses.**—The local chapters of Beta Theta Pi, Delta Tau Delta, Kappa Sigma, Phi Gamma Delta, Phi Kappa Sigma, Sigma Alpha Epsilon, Theta Chi, Sigma Nu, and the Phi Eta Kappa Society have houses on the campus. The local chapter of Lambda Chi Alpha owns a house adjoining the campus on College Street, and the local chapters of Alpha Tau Omega and Sigma Chi own houses on North Main
Street. The Phi Epsilon Pi Fraternity owns a house on Park Street. These houses accommodate from 25 to 50 students each.

Power House.—This building is located north of Alumni Hall and contains five boilers, three engines, and two dynamos with operating switchboard.

Print Shop.—The University Press is located in a wooden building north of Aubert Hall. It contains a modern outfit for the printing required by the university.

Other Buildings.—In addition to the buildings already described, there are several others devoted to various purposes. Among these are the President's house and five residences occupied by members of the faculty.

THE LIBRARIES

The university libraries contain (June 30, 1919) about 66,050 volumes, of which about 55,700 are in the general library, 4,750 in the Agricultural Experiment Station library, and 5,600 in the law library. In addition, President R. J. Aley has given his mathematical library, consisting of over seven hundred volumes, to the university library. Over five hundred volumes, relating chiefly to English literature and philology, from the library of the late Professor H. M. Estabrooke, and over a hundred volumes belonging to the Christian Association and the Menorah Society, are deposited in the library. The growth for the last ten years has averaged over three thousand volumes annually.

The general library is a good working collection. It has been acquired largely by purchase, the books bought having been selected by heads of departments to meet the needs of students and faculty. It includes a large and useful collection of public documents of the United States and of the State of Maine and is a designated depository for government publications. The most valuable gift received from an individual is the horticultural library of the late Professor W. M. Munson, bequeathed by him to the university. The general library is open daily during the academic year from 8.00 a. m. to 5.30 p. m. and from 7.00 to 9.30 p. m., Friday and Saturday evenings, Sundays and holidays excepted. It is open Sundays from 2.30 to 5.30 p. m., and holidays from 8.00 a. m. to 12.00 m.

About 250 general, literary, scientific, and technical periodicals, American and foreign, are subscribed for by the general library and over 150 others are received as gifts. The current numbers of most of these
are on file in the periodical room on the first floor of the library building, but the daily and weekly newspapers are in a newspaper room in the basement, and the technical engineering journals are in the office of the Dean of the College of Technology where they are available for general use.

The Agricultural Experiment Station Library, with the exception of volumes needed for almost constant reference by members of the Station staff, is shelved with the general library and is available for consultation but not for general circulation. It contains many valuable sets of scientific journals. About 75 periodicals are subscribed for, and a considerable number of others are received in exchange for Station publications, current volumes being on file in Holmes Hall.

The law library has been moved from Stewart Hall, in Bangor, to the university library and is for reference only. It includes complete sets of the reports of the United States and of all the New England and some other states, the English Reports and English Ruling Cases, and all the important reports and encyclopedias, together with an excellent collection of text books. The important law journals are received currently. The law library is open throughout the academic year during the same hours as the general library.

The libraries are classified by the Dewey decimal system, modified for certain classes. A card catalog in the general library shows books by author, subject, and title, and includes all volumes in the general, Agricultural Experiment Station, and law libraries, and also those in the Aley, Estabrooke, Christian Association, and Menorah Society collection, but does not include cards for the publications of the United States Department of Agriculture and the agricultural experiment stations of the various states, as these are filed in a special catalog in the agriculture seminar room.

About nine hundred volumes, withdrawn from the general library, are kept in Aubert Hall as a reference library for the Department of Physics, subject to recall at any time if needed for other use. Other departments borrow books required for current needs, subject to recall if needed elsewhere.

Students may borrow three volumes at a time from the general library, to be retained three weeks; if more are desired or if need exists to retain them for a longer period, application should be made to the Librarian. A fine of two cents a day is collected for overdue books. Reference books do not circulate and special regulations are made for books reserved at the request of instructors. Unbound periodicals may be borrowed over night upon application to the desk assistant. Mem-
bers of the faculty may borrow any reasonable number of volumes without time limit, but all books must be returned nine days before Commencement. Books will be loaned to other libraries, to schools, and to residents of the State when it can be done without interference with local needs, the borrower paying transportation charges in both directions.

MUSEUM OF NATURAL HISTORY

MINTIN ASBURY CHRYSLER
Curator of the Botanical and Zoological Collections

LUCIUS HERBERT MERRILL
Curator of the Geological Collections

The museum occupies the wing of Coburn Hall and adjoining rooms in the main part of the building.

ZOOLOGICAL COLLECTIONS.—These collections occupy the lower floor of the wing of Coburn Hall. Some of the alcoholic and formalin material is placed in wall cases in the biological laboratories. The collections consist of a number of the larger mammals of the State; a small set of exotic mammals; a more complete working collection of native birds, birds’ nests, and eggs; an illustrative collection of the other groups of vertebrates; a rather large collection of the shells of native and exotic molluscs; and illustrative collections of the other groups, dry, alcoholic, and prepared as microscopic objects.

BOTANICAL COLLECTIONS.—These collections are situated in rooms on the second and third floors. The herbarium includes several collections of considerable value, the most important of which is the one made by the late Rev. Joseph Blake and presented to the university by Mr. Jonathan G. Clark, of Bangor. It contains more than 7,000 species of both flowering and flowerless plants, and represents more especially the flora of Maine and other New England States, but includes many forms from the Western United States, Mexico, and the West Indies, and a number from many of the European and Asiatic countries, and from Africa and Australia. The late Professor F. L. Harvey left to the herbarium the general collections accumulated during his connection with the university, and his special collection of the weeds and forage plants of Maine, comprising 300 species. Other important collections are Collins's

Collections other than the herbarium include exhibits illustrating the manufacture of paper and cocoa, the wood and bark features of the timber trees of Maine, conifers mounted in jars, plants used in pharmacy, commercial fibres, and artificial silk. A valuable collection of fossil plants was presented by Professor Harvey.

Geological Collections.—These collections, occupying the upper floor of Coburn Hall, are accessible daily during the college year, except on Saturdays and Sundays. They include the more important fragmental, crystalline, and volcanic rocks; a collection of building stones; a series designed to illustrate the rocks of the State; a general collection of more common minerals; a collection of economic minerals furnished by the United States National Museum; an educational series of rocks furnished by the United States Geological Survey; and a small collection of plant and animal fossils.

The part of the museum illustrating the mineral resources of the State may be made of great value, both from the scientific and economic standpoint. Students and others residing in the State are urged to contribute specimens from their home localities.

ART COLLECTION

This collection consist of photographs, prints, engravings, polychrome reproductions, and plaster casts. Many of the large reproductions are framed and the entire collection has found a fitting home in the Library Building, the gallery of which is well adapted to the exhibition of many of the plaster-cast reliefs and the larger framed works. The collection is distributed on the first and second floors, in the lecture room, and a seminar room. In the latter is a specially constructed cabinet for mounted photographs.

The entire collection numbers upwards of 4,000 reproductions of various sorts covering the fields of Classical and Renaissance architecture, sculpture, and painting. The illustrations for the Greek, Florentine, and Venetian schools are particularly representative. For much of the most important work the photographs are supplemented by lantern slides.

The university possesses many of the famous polychrome prints published by the Arundel Society. These and many other colored re-
productions covering nearly all the great masters of Italian painting have been framed; and in the case of the *Madonna della sedia* and the *Sistine Madonna* the reproductions were imported in the frames, which are stucco copies of the originals in Dresden and Florence.

The lecture room in the Library Building contains examples of the work of the chief Florentine and Umbrian masters of the 14th and 15th centuries, arranged on the walls in historical sequence. The gallery of the second floor is devoted to masters of the High Renaissance.

For the study of Greek and Roman antiquity the Departments of Greek and Latin have a large collection of photographs and lantern slides.

**ORGANIZATIONS**

**Agricultural Club.**—This organization is composed of students taking agricultural courses. Meetings are held throughout the college year, at which important agricultural topics are discussed by members of the club, and also by prominent speakers from this and other states.

**American Chemical Society.**—The Maine Section of the American Chemical Society has its headquarters at Orono. Some students in the Department of Chemistry are members, and all are welcome to its meetings.

**American Institute of Electrical Engineers.**—This is an organization for the promotion of the student's interest in electrical engineering work, and to keep him in touch with the latest developments in this branch of engineering activity. Membership in the branch is extended to members of the Electrical Engineering faculty, students pursuing the Electrical Engineering curriculum, and to members and associate members of the Institute.

**American Society of Mechanical Engineers.**—A regularly organized branch of this society holds regular meetings for the presentation and discussion of engineering papers by members and by visiting engineers.

**University of Maine Society of Civil Engineers.**—This society is composed of the students who are enrolled in the Curriculum in Civil Engineering. The object of the society is to investigate by reading and discussion the various engineering topics of the day. Monthly lectures are given under the direction of the society by members of the faculties of this and other institutions and by practicing engineers.
The affairs of the society are controlled by the students under the advice of the department.

**Cercle Français.**—The object of the Cercle Français is to cultivate the spoken French language and arouse and stimulate an interest in the intellectual life of France. The work is carried on in French. Papers are read and discussed and addresses delivered by the members. Plays are studied with a view toward production in French. The Cercle meets once in two weeks.

**Forestry Club.**—All students majoring in the curriculum in Forestry are eligible for membership in the Forestry Club. The purpose of the club is to give an opportunity for presenting informal discussions and technical papers on forestry subjects, and to promote cooperation and general good fellowship among the forestry students. The meetings are held monthly.

**Mathematics Club.**—All students majoring in mathematics and others who are interested in the study of the subject are eligible for membership in the Mathematics Club. The purpose of this club is to stimulate interest in the study of mathematics and to give to mathematics students the opportunity to present papers and take part in discussions. Meetings are held monthly.

**Maine Masque.**—This is a dramatic club which aims to make a practical study of the acted drama, and to present each year before the public one or more representative plays. Membership is determined by competitive trials to which all men undergraduates are eligible.

**Menorah Association.**—An intercollegiate organization for the study and advancement of Jewish culture and ideals.

**Speakers' Club.**—A local honorary society, open to all students who acquire a sufficiently high standing in public debate and oratory. The object of the club is to promote interest in public speaking at the university. It is in active cooperation with the Department of Public Speaking, and superintends some of the minor activities in oratory and debate.

**Christian Association.**—The Christian Association, composed of men students, has for its object the promotion of Christian fellowship and aggressive Christian work. Religious services are held in the chapel every Sunday and classes for the study of the Bible are conducted during the week.
YOUNG WOMEN'S CHRISTIAN ASSOCIATION.—This is an organization for religious work composed of women students.

ALPHA CHI SIGMA.—Alpha Chi Sigma is a professional fraternity with chapters in various American colleges and universities. The members are elected from those whose major work is in the Department of Chemistry.

ALPHA ZETA.—The Maine chapter of Alpha Zeta, the national agricultural fraternity, was organized at the university in 1905. Chapters exist in twenty four other universities. Membership is honorary and is restricted to students attaining high class standing or to graduates who have shown marked ability along the lines of agricultural study and research.

PHI KAPPA PHI.—The Phi Kappa Phi is an honor society. Early in the fall semester of the senior year the seven members of the class having the highest standing are elected members, and during the spring semester the ten next highest may be elected, two of whom are from the College of Law.

SCABBARD AND BLADE.—Scabbard and Blade is an honorary military fraternity. Active membership is restricted to cadet officers of high moral and scholastic standing. Honorary members may be elected from commissioned officers of the United States Army; also non-military persons deemed worthy of the honor. The University of Maine company (Co. D., 2nd Reg't.) was organized in 1916. Companies exist in seventeen other colleges and universities.

SIGMA DELTA CHI.—This is an honor fraternity open to sophomores, juniors, and seniors who have shown unusual ability in the various courses in journalism, and who propose to enter upon journalism as a profession.

TAU BETA PI.—Tau Beta Pi is an honor fraternity for engineers and has chapters in leading universities and technical schools. Elections are made from those juniors and seniors in engineering who have shown high mental and moral qualifications.

UNIVERSITY BAND.—This is a military and concert organization attached to the Cadet Corps. It is composed of students in the Military department, and rehearsals are conducted by the director of music as regular class work, for which the men receive credit. The band plays
for various university functions and games and makes concert trips to nearby cities and towns.

University Chorus and Orchestra.—These bodies are organized from students, faculty, and outside assisting talent, and are conducted by the director of music. A varied repertoire of classic and lighter numbers are studied and performed at concerts and other occasions. Chorus members are admitted to the Maine Festival Chorus, and orchestra members of talent and proper training are given consideration whenever vacancies occur in the Bangor Symphony Orchestra, a semi-professional organization.

Musical Clubs.—Glee and mandolin clubs are maintained by both men and women students and concert trips are taken at intervals during the college year.

UNIVERSITY PUBLICATIONS

University of Maine Studies.—These are occasional publications containing reports of investigations or researches made by university officers or alumni.

Maine Bulletin.—This is a publication issued monthly during the academic year, to give information to the alumni and the general public. It includes the Annual Report and the Annual Catalog.

The Maine Alumnus.—This is published five times during the academic year by the General Alumni Association and is sent free to all former students of the university.

Annual Report of the Agricultural Experiment Station and the Agricultural Experiment Station Bulletins.—These give complete results of the work of investigation of the station. The Bulletins and Official Inspections are sent free on request to any resident of Maine.

Official Inspections.—These are published by the Agricultural Experiment Station, and contain the result of the work of inspection of agricultural seeds, commercial feeding stuffs, commercial fertilizers, drugs, foods, fungicides, and insecticides.

Maine Campus.—This is a paper published weekly during the academic year by an association of the students.

Prism.—The Prism is an illustrated annual, published by the junior class.
PRACTICAL HUSBANDRY.—This is a monthly magazine published under the direction of the Agricultural Club. It is devoted to practical and technical agriculture.

MAINE LAW REVIEW.—This is a magazine published under the direction of the students of the College of Law. It is devoted to a discussion of law cases and other current legal problems.

TECHNOLOGY EXPERIMENT STATION BULLETINS.—These are published monthly, and contain the results of the researches made in the engineering laboratories.

PUBLIC WORSHIP

A short assembly is held in the chapel every day except Saturday and Sunday. All undergraduate students are required to be present. Students receive a cordial welcome at all services in the churches of Orono. Voluntary religious services are held each week under the direction of the Christian Association and the Young Women's Christian Association.

STUDENT REGULATIONS

It is assumed that all students entering the university are willing to subscribe to the following: A student is expected to show, both within and without the university, respect for order, morality, and the rights of others, and such sense of personal honor as is demanded of good citizens and gentlemen.

Special information for the guidance of students may be obtained from the Registrar.

The quota of regular studies for each student varies from a minimum of fourteen hours to a maximum of eighteen hours in the College of Arts and Sciences, and from a minimum of seventeen hours to a maximum of twenty-two hours in the College of Agriculture and the College of Technology. The registration in the College of Law is a prescribed curriculum. In the application of this rule, two or three hours of laboratory work count as one hour.

Each student is expected to be present at every college exercise for which he is registered, including each chapel exercise.

SCHOLARSHIP HONORS

Scholarship honors are awarded to students who attain an average grade of B, or above, throughout their course. The names of students winning these honors are printed in the catalog.
DEGREES

Bachelors' Degrees

The degree of Bachelor of Arts (B. A.), with specification of the major subject, is conferred upon all students who complete a curriculum in the College of Arts and Sciences.

The degree of Bachelor of Science (B. S.) in the curriculum pursued is conferred upon students who complete the prescribed work of four years in the Colleges of Agriculture or Technology.

The degree of Bachelor of Pedagogy (B. Pd.) is conferred upon students in the College of Arts and Sciences who have completed a course in an approved high school, a course in a normal school, and two years under prescribed conditions at the university.

The degree of Bachelor of Laws (LL. B.) is conferred upon students who complete the prescribed work in the College of Law.

A minimum residence of one year is required for the attainment of any bachelor's degree.

Advanced Degrees

Graduate students, whether candidates for a degree or not, are required to register at the office of the university at the beginning of each semester or summer term. They must have their course of study approved by the Committee on Graduate Study at the beginning of their work. Those entering the university after that date must obtain the consent of the Committee on Graduate Study before they can count a full year's work.

Each candidate for the master's degree shall report before registering at the beginning of each semester or the summer term to the chairman of the committee or to some member representing a field of work nearly related to his own. Candidates for the degree of Master of Arts, Master of Science, or Master of Laws must have received the corresponding bachelor's degree from this institution or from one granting a fully equivalent degree.

Candidates who are graduates of other institutions are required to present at registration credentials covering the courses pursued and the standing attained.

At least one year must elapse between the conferring of the bachelor's and the master's degree.

No work done before the recommending of the bachelor's degree shall be counted towards the master's degree.
The candidate shall devote at least one year to graduate resident study and shall complete work amounting to fifteen hours per week throughout the college year.

A registration fee of $5 is charged, and an additional fee of $15 for examinations and diploma is payable upon the completion of the work. One registration fee only is required of graduate students.

The curriculum shall include work in one major department or subject in which the candidate has already pursued undergraduate study for at least two years, and work in not more than two minor subjects which bears a distinct relation to the general plan or purpose of the major subject.

At least three-fifths of the work must be done in the major subject. In special cases all the work may be done in one department. All of the work must be of advanced character and must be tested by examinations which the candidate shall pass with distinction. Final written examinations for all regular courses completed, together with a copy of the questions set, shall be deposited with the secretary of the committee.

The candidate shall prepare as a part of his curriculum a satisfactory thesis on some topic connected with the major subject. The thesis must be deposited in completed form with the Dean of the University on or before the date set for the oral examination.

At the end of the course of study for the master's degree, the candidate will be required to pass an oral examination covering his work, including the thesis work. This examination shall be open to all voting members of the faculty of the university. The time for such examinations will be arranged by the Dean of the University to accord, so far as possible, with the convenience of the candidate and the major instructor, between the dates of May 15 and June 1; but no student will be admitted to an oral examination until his thesis has been accepted. On May 15, the Dean of the University will notify the heads of all departments of the university of the dates set for the public oral examinations of all candidates of the year. While the examination will in each case, as a matter of course, be conducted chiefly by the members of the department in which the work has been done, any member of the faculty present at the examination has the privilege of questioning the candidate. The Committee on Graduate Study will be represented at each examination.

The professional degrees of Chemical Engineer (Ch. E.), Civil Engineer (C. E.), Electrical Engineer (E. E.), and Mechanical Engineer (M. E.) may be conferred upon graduates in the curricula in Chemistry,
Chemical Engineering, Electrical Engineering, and Mechanical Engineering respectively, upon the presentation of satisfactory theses, after at least three years of professional work subsequent to graduation. During at least two of the years after graduation the candidate must have occupied a position of responsibility. Candidates are expected to be present in person to receive their degrees.

**THESES**

Theses shall be printed, or typewritten in black record, unless the subject matter prevents, and the paper used shall be a standard thesis paper, 8 x 10 1-2 inches, which may be procured at the University Store. Care should be taken to have a margin of one inch on the inner edge, at least one-half inch on the outer edge, one and one-half inches at the top, and one inch at the bottom of the page.

If drawings accompany the thesis, they may be bound in with the rest of the pages or placed in a pocket on the inside of the book cover; or if too many for this, they may be bound separately according to personal instructions of the head of the department.

An outline of all undergraduate theses must be passed to the major instructor before May 1.

Complete instructions may be found in a pamphlet entitled "Degrees and Theses."

**STUDENT EXPENSES**

The estimates are prepared upon the basis of students living in university halls.

**Estimate of Annual Expenses**

<table>
<thead>
<tr>
<th></th>
<th>Students from within the State</th>
<th>Students from without the State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration ..........</td>
<td>$10 00</td>
<td>$10 00</td>
</tr>
<tr>
<td>Incidental ............</td>
<td>30 00</td>
<td>30 00</td>
</tr>
<tr>
<td>Tuition ...............</td>
<td>30 00</td>
<td>100 00</td>
</tr>
<tr>
<td>Laboratory fees.......</td>
<td>10 00 to 25 00</td>
<td>10 00 to $25 00</td>
</tr>
<tr>
<td>Text-books ............</td>
<td>10 00 to 30 00</td>
<td>10 00 to 30 00</td>
</tr>
<tr>
<td>Board 36 weeks @ $5.00</td>
<td>180 00</td>
<td>180 00</td>
</tr>
<tr>
<td>Room in a dormitory</td>
<td>36 00</td>
<td>36 00</td>
</tr>
<tr>
<td></td>
<td>$306 00 to $341 00</td>
<td>$376 00 to $411 00</td>
</tr>
</tbody>
</table>
EXCEPTIONS

By legislative enactment, students in agricultural and home economics curricula are exempted from the payment of tuition charges. This applies only to students from within the State. For such students the above estimates should be reduced by an amount equal to the tuition charge.

DETAILS OF LABORATORY FEES

The laboratory charges indicated above are made to cover cost of material used by the students. These charges vary with the subject and length of the course. They are as follows: Agronomy, per course, $1.00 to $1.50; Animal Industry, per course, $1.00 to $4.00; Bacteriology, per course, $3.00; Biological Chemistry, per course, $3.00 to $4.00; Biology, per course, $2.00 to $3.00; Chemistry, per course, $2.00 to $5.00; Civil Engineering, per course, $2.00 to $5.00; Electrical Engineering, per course, $5.00; Home Economics, from $1.00 to $12.00 per semester; Horticulture, per course, $1.00 to $2.00; Mechanical Engineering, per course, $5.00; Mineralogy, per course, $2.00; Pharmacy, about $5.00 per semester; Physics, per course, $2.50 to $3.50; Shop Work, per course, $4.00 to $5.00.

SPECIAL CHARGES

A fee of $2.00 is charged a student for each special examination. Students registering after the prescribed day of registration for the fall or spring semester shall pay an additional fee of two dollars.

A fee of $5.00 is required at the time of registration for a professional degree, and a fee of $10.00 is required upon presentation of the thesis.

ROOMS

The rooms in the Mt. Vernon House, Balentine Hall, Oak Hall, and the middle section of Hannibal Hamlin Hall accommodate two students each. All other rooms accommodate four students each.

Dormitory charges include steam heat and electric lights. The rooms in the dormitories for men are furnished with beds, mattresses, chiffoniers, desks, and chairs. Each resident in the dormitory has bed linen and three towels laundered each week without extra charge.
Women students not living at home are required to live in one of the women's dormitories. In exceptional cases women students are allowed to live at some boarding house approved by the President. To secure the reservation of a room in a university dormitory, application, accompanied by a deposit of $5.00, should be made to the Registrar.

**Deposits to Cover Expenses**

The amount indicated below must be paid in advance at the beginning of each semester.

**Students from Within the State**

<table>
<thead>
<tr>
<th></th>
<th>Registration</th>
<th>Tuition</th>
<th>Incidents</th>
<th>Board and Room</th>
<th>To apply on Laboratory Fees</th>
<th>Key Deposit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in Agriculture</td>
<td>$5.00</td>
<td></td>
<td>$15.00</td>
<td>$100.00</td>
<td>$5.00</td>
<td>$5.00</td>
<td>$180.00</td>
</tr>
<tr>
<td>Students in Home Economics</td>
<td>5.00</td>
<td>20.00</td>
<td>15.00</td>
<td>100.00</td>
<td>5.00</td>
<td>6.00</td>
<td>175.00</td>
</tr>
<tr>
<td>Students in College of Law</td>
<td>5.00</td>
<td>20.00</td>
<td>15.00</td>
<td></td>
<td></td>
<td>0.00</td>
<td>42.00</td>
</tr>
<tr>
<td>Students in all other courses</td>
<td>5.00</td>
<td>15.00</td>
<td>15.00</td>
<td>100.00</td>
<td>5.00</td>
<td>5.00</td>
<td>145.00</td>
</tr>
</tbody>
</table>

For a student not living in a university dormitory the above deposits are reduced by $100.00.

**Communications**

Communications with reference to financial affairs of students should be addressed to the Treasurer of the University of Maine.
KITTRIDGE LOAN FUND

This fund, amounting to nearly one thousand dollars, was established by Nehemiah Kittridge, of Bangor. It is in the control of the President and the Treasurer of the University, by whom it is loaned to needy students in the three upper classes. In the deed of gift it was prescribed that no security but personal notes bearing interest at the prevailing rate should be required. Loans are made on the conditions that the interest be paid promptly, and that the principal be returned from the first earnings after graduation. Individual loans are limited to $50.00.

SCHOLARSHIPS AND PRIZES

The Kidder Scholarship, thirty dollars, was endowed by Frank E. Kidder, Ph. D., Denver, Colorado, a graduate of the university of the class of 1879, and is awarded to a member of the junior class to be selected by the President and the faculty.

New York Alumni Association Scholarships, thirty dollars, are awarded upon conditions to be determined by the Board of Trustees.

Pittsburg Alumni Association Scholarship, tuition for one year, is awarded to a member of the junior class in the College of Technology, to be selected by the President and the professors of that college.

Western Alumni Association Scholarship, tuition for the sophomore year, is awarded a student pursuing a regular curriculum whose deportment is satisfactory and who makes good progress in his studies during his freshman year.

The Elizabeth Abbott Balentine Scholarship was endowed by the Gamma chapter of Alpha Omicron Pi for a woman member of the sophomore class to be determined by the President and the faculty. This scholarship will be at least thirty dollars. Both scholarship and individual need are to be considered in the award.

The Phi Mu Scholarship, thirty dollars, will be awarded each year to a woman student whose scholarship and conduct are deserving and who is in need of financial assistance. The selection will be made by the President of the university, the President of the sorority, and the faculty committee on honors.

The Joseph Rider Farrington Scholarship, a gift of Arthur M., Edward H., Oliver C., Horace P., and Wallace R. Farrington, all gradu-
uates of the University of Maine and sons of Mr. and Mrs. Joseph Rider Farrington. The gift amounts to $1000 and provides a scholarship under conditions mentioned by the donors.

Stanley Plummer Scholarship. Colonel Stanley Plummer of Dexter, Maine, provided a scholarship as set forth in the following paragraph from his will:

I give and bequeath to the corporation of the University of Maine, Orono, Maine, the sum of One Thousand Dollars, the income thereof to be given to needy and deserving students in said University, to be selected by the Trustees of the University, who shall have full control of said fund, which shall be known as the "Stanley Plummer Scholarship." Students born in Dexter, Maine, shall have the preference; but, if there are none such, any needy and deserving students may be selected.

Junior Exhibition Prizes of fifteen dollars each are awarded to the members of the junior class who deliver the best orations at the junior exhibition. One prize is awarded to the man receiving the first rank in competition with the men of the junior class, and one prize awarded to the woman receiving first rank in competition with the women of the junior class. In the award of these prizes regard is given to thought, style, and delivery. Copies of these orations must be deposited with the Registrar before February 1.

Sophomore Essay Prizes, two of fifteen dollars each, one for men and one for women, are awarded to members of the sophomore class for excellence in composition. These essays must be presented by May 1.

Walter Balentine Prize, fifteen dollars, the gift of Whitman H. Jordan, Sc. D., LL. D., Geneva, N. Y., a graduate of the university of the class of 1875, is awarded to that student who excels in biological chemistry.

Franklin Danforth Prize, ten dollars, the gift of the Hon. Edward F. Danforth, Skowhegan, a graduate of the university of the class of 1877, in memory of his father, Franklin Danforth, is awarded to that member of the senior class in an agricultural curriculum who attains the highest standing.

Father Harrington Prize, twenty dollars, established by Rev. John M. Harrington, pastor of St. Mary's Church, Orono, is given to that student who writes the best essay upon modern literature. It may treat of German, English, French, Spanish, or Italian literature. The essay may be limited to any one of these literatures or to a comparative study
of any number of them. This is open to any student in the university. These essays must be deposited with the Registrar before May 1.

Holt Prizes, the gift of Dr. Erastus Eugene Holt, of Portland, are given to the three students of the senior class who show the greatest improvement in their physical rating. The rating will be determined from deductions made from the gymnasium and class records of the students at the beginning and end of their college course by the mathematical formula for the normal earning ability of the body devised by Dr. Holt.

The Menorah Prize, $10.00, the gift of the Maine Menorah Association is awarded to the student who presents the best essay on any Jewish subject.

The Callaghan and Company Prize, consisting of the Cyclopedic Law Dictionary, is given to the student in the College of Law who has obtained the highest general average for his junior year.

Class of 1908 Commencement Cup is awarded to the fraternity, the largest percentage of whose alumni register during Commencement week.

Fraternity Scholarship Cup, presented to the university by the 1910 Senior Skull Society, is awarded at Commencement to that fraternity having the highest standing in scholarship for the preceding calendar year. The cup is to be awarded for eleven years, 1910 to 1920 inclusive, and the fraternity to which it is awarded the greatest number of times is to be its permanent owner.

Freshman Scholarship Cup, presented by the Junior Mask Society, is awarded at Commencement to the fraternity whose freshman delegation has the highest standing in scholarship for the first semester.

ADMISSION

General Requirements.—Candidates for admission should apply to the Registrar for an application card. They must present satisfactory certificates of fitness, or pass the required examinations, and make a cash deposit covering the bills of one semester. The university admits men and women, both residents of Maine and non-residents.

Admission to Advanced Standing.—Candidates for advanced standing are examined in the preparatory studies, and in those previously pursued by the classes they wish to enter, or in other equivalent studies.
A rank of B must be attained in order to pass any course without class attendance. Certificates from approved schools are accepted for the preparatory work, but certificates are not accepted for any part of the college work, unless such work has been done in a college. Students transferring from another college must present a letter of honorable dismissal.

**Special Students.**—Persons 21 years of age, not candidates for a degree, may be admitted as special students if they give satisfactory evidence that they are prepared to take the desired subjects.

**Admission to Short Courses**

Candidates for admission to the two-year School Course in Agriculture must be over fifteen years of age and prepared for advanced grammar or high school work.

**Admission by Examinations**

Entrance examinations are held at Orono, beginning four days before the opening of the fall semester, and on Wednesday, Thursday, Friday, and Saturday preceding Commencement. To save expense to candidates, examination papers will be sent to any satisfactory person who will consent to conduct examinations on the days appointed in June. If possible, these examinations should be in charge of the principal of the school. Papers will not be sent at any other time. The questions are to be submitted under the usual restrictions of a written examination, and the answers returned to the university immediately, accompanied by the endorsement of the examiner. The examination must be given on the days appointed in the schedule. Applications for such examinations must be made out on blanks to be obtained from the Registrar. Candidates for admission by examination, particularly those examined at Orono in September, should present statements from their school principals regarding their fitness to take the examinations and to undertake college work.

The examinations given by the College Entrance Examination Board will be accepted by the university. These examinations will be held during the week June 21-26, 1920. All applications for these examinations must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of
the Board upon application. Applications must be made before May 31 and must be accompanied by the examination fee of $6.00.

A candidate who wishes to be examined on part of his work in advance of the year in which he proposes to enter the university may receive credit for such examination, provided he has completed not less than one-half of his preparatory work. It is advised that candidates avail themselves of this privilege as far as possible. Examinations on subjects which are to be continued in college should not be taken more than one year in advance.

**Admission of Graduates From Class A Schools in Maine**

Graduates from Maine high schools and academies placed by the State Superintendent of Schools in Class A may be admitted upon their school records, provided they have pursued a course of study including all the subjects required for admission to the curriculum that they propose to follow and a sufficient number of the elective subjects to make a total of fourteen and a half units.

The school record of the candidates must be certified by the principal, upon blanks furnished by the university, and should be submitted before August 1.

**Admission by Certificate From Schools Outside of Maine**

Principals of schools situated outside of Maine who desire the certificate privilege must make application to the Dean of the University, and must furnish satisfactory evidence that the course of study in the school meets the requirements for admission. Blank forms for this purpose will be supplied on request.

Certificates will not be accepted for non-graduates except in unusual cases, and then only provided the candidate is expressly recommended for admission by the principal of the high school from which he comes. Certificates must be made out on blanks furnished by the university.

Certificates issued by the Regents of the University of the State of New York are accepted for any of the subjects in which we give admission credit and which are certified as having been passed with a mark of 60% or more.
ENTRANCE REQUIREMENTS

To gain admission to any of the curricula leading to the degree of Bachelor of Arts or Bachelor of Science, 14½ units must be offered by the candidate, according to the following schedules (to count one unit, a subject must be pursued for one school year, with five recitation periods a week).

REQUIRED SUBJECTS

College of Arts and Sciences

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Foreign languages (four years of one or two in each of two)</td>
<td>4</td>
</tr>
<tr>
<td>History</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics (Algebra and Plane Geometry)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

College of Agriculture

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>One foreign language</td>
<td>2</td>
</tr>
<tr>
<td>Algebra</td>
<td>1</td>
</tr>
<tr>
<td>Plane Geometry</td>
<td>1</td>
</tr>
<tr>
<td>Science (including laboratory note-book)</td>
<td>1</td>
</tr>
<tr>
<td>History</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

College of Technology

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>One foreign Language</td>
<td>2</td>
</tr>
<tr>
<td>Algebra</td>
<td>2</td>
</tr>
<tr>
<td>Plane and Solid Geometry</td>
<td>1½</td>
</tr>
<tr>
<td>History</td>
<td>1</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10½</strong></td>
</tr>
</tbody>
</table>
The required units and the units that may be accepted in various subjects in the respective colleges are shown in tabular form.

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>Units Accepted</th>
<th>Arts and Sciences</th>
<th>Agriculture</th>
<th>Technology</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>French</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2, 3, or 4</td>
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<tr>
<td>German</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2, 3, or 4</td>
</tr>
<tr>
<td>Greek</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2, 3, or 4</td>
</tr>
<tr>
<td>Latin</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2, 3, or 4</td>
</tr>
<tr>
<td>Spanish</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1, 2, or 3</td>
</tr>
<tr>
<td>Algebra (Elem.)</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1, 2, or 1</td>
</tr>
<tr>
<td>Plane geometry</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Solid geometry</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Algebra (Adv.)</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2 or 1</td>
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<tr>
<td>History</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1, 2, or 4</td>
<td>1, 2, or 4</td>
</tr>
<tr>
<td>Civics</td>
<td>1/2</td>
<td>1</td>
<td>1/2</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Economics</td>
<td>1/2</td>
<td>1</td>
<td>1/2</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Biology</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Botany</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry</td>
<td>11</td>
<td>2</td>
<td>1 or 2</td>
<td>1 or 2</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Physics</td>
<td>11</td>
<td>2</td>
<td>1 or 2</td>
<td>1 or 2</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Physiography</td>
<td>1/2</td>
<td>1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Physiology</td>
<td>1/2</td>
<td>1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Zoology</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture and Art</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Drawing</td>
<td>11</td>
<td>2</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Manual Training</td>
<td>1/2</td>
<td>1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Commercial Subjects</td>
<td>1/2</td>
<td>1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Music</td>
<td>1/2</td>
<td>1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
<tr>
<td>Bible Study</td>
<td>1/2</td>
<td>1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
<td>1/2 or 1</td>
</tr>
</tbody>
</table>
Candidates for Agriculture and Technology who meet the requirement in one language may have credit for a single year of another language.

**To receive two units credit in elementary algebra, the candidate must have two full years including senior review.**

†The work in these subjects must include laboratory work with note-book, as specified in the detailed statement.

‡Credit for these subjects and for bookkeeping and typewriting is at the rate of one-half unit for a subject taken five forty-five minute periods per week for a year.

**COLLEGE OF LAW**

*Regular Students.* Students who enter as candidates for degrees must present credentials showing the completion of at least two full years of work in an approved college or university. An approved college or university will be understood to mean a college or university which requires at least 14 Carnegie units for entrance, which offers facilities for good college work, and which maintains acceptable standards.

*Special Students.* Special students will be admitted only when they satisfy the following requirements: They must be at least 21 years of age; they must appear personally before the committee on administration, and satisfy this committee that they have the maturity and mental training that will qualify them to do acceptably the work required of regular students.

**REQUIREMENTS IN DETAIL**

*Languages*

**English.**—The entrance examination in English presupposes courses in composition and English literature pursued in the high school during four years. Prospective students are warned against attempting to prepare the required work in less time. Progress in composition particularly is of slow growth and requires almost daily cultivation during a long period of time. Books, to be thoroughly enjoyed and appreciated, should be read leisurely and under favorable circumstances.

**Rhetoric.**—Candidates are expected to have had practice in composition for at least three days a week during the whole four years of the high school, and to have included in the latter part of their course such
work in the elements of rhetoric as, for example, is contained in Carpenter's Rhetoric and Composition.

**Grammar.**—The examination will include questions on the syntax of sentences, and on general grammatical principles.

**Weight of Composition.**—The examination is mainly designed to test the candidate's ability to express his thought correctly and clearly. It is quite possible to answer all questions on the literature correctly, and yet fail on the examination as a whole because of crude and ungrammatical English. Prospective candidates are advised to give especial attention to spelling, punctuation, grammatical correctness, idiomatic words and phrases, sentences and paragraph formation.

**Subjects.**—Subjects for short compositions will be taken from a prescribed list of books; also from the candidate's general knowledge and experience.

The prescribed books are those adopted by the Conference on Uniform Entrance Requirements. There is a list for general reading and a list for study. They will be furnished upon application to the university.

**French.**—The admission requirements in elementary and intermediate French are those recommended by the Modern Language Association of America.

I. **Elementary French.**—At the end of the second year the pupil should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below.

The first year's work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the pronouns, common adverbs, prepositions, and conjunctions; order of words in the sentences, and elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in memory the forms and principles of grammar, but also to cultivate readiness in reproducing natural forms of expression; (4) the reading of 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.
The second year's work should comprise: (1) the reading of 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Suitable texts for the second year are: About, le Roi des montagnes; Bruno, le Tour de la France; Daudet, Easier Short Tales; De la Bédollière, la Mère Michel et son chat; Erckmann-Chatrian, Novels; Foa, Contes biographiques and le Petit Robinson de Paris; Foncin, le Pays de France; Labiche et Martin, la Poudre aux yeux and le Voyage de M. Perrichon; Legouvé et Labiche, la Cigale chez les fourmis; Malot, Sans famille; Maitre, la Tâche du petit Pierre; Mérimée, Colomba; Extracts from Michelet; Sarcey, le Siège de Paris; Verne's Stories.

II. Intermediate French.—At the end of the third year the pupil should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

This should comprise the reading of 400 to 600 pages of French of ordinary difficulty, a portion to be the dramatic form; constant practice in giving French paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate proportions; writing from dictation.

Suitable texts are: About, Novels; Augier et Sandeau, le Gendre de M. Poirier; Béranger, Poems; Corneille, le Cid and Horace; Coppée, Poems; Daudet, la Belle Nivernaise; la Brête, Mon oncle et mon curé; Madame de Sévigné, Letters; Victor Hugo, Hernani and la Chute; Labiche, Plays; Loti, Pêcheur d'Islande; Mignet, Historical Writings; Racine, Andromaque and Esther; George Sand, Novels; Sandeau, Mademoiselle de la Seiglière; Scribe, Plays; Thierry, Récits; Vigny, la Canne de jonc; Voltaire, Historical Writings.

At the end of the fourth year the pupils should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the
works read; to put into French a passage of easy English prose, and to carry on a simple conversation in French.

This should comprise the reading of from 600 to 1,000 pages of standard French, classical and modern, only difficult passages being explained in the class; the writing of numerous short themes in French; the study of syntax.

Suitable reading matter will be: Beaumarchais, *le Barbier de Séville*; Corneille, Dramas; Dumas père, Prose Writings; Dumas fils, *la Question d’argent*; Victor Hugo, *Ruy Blas*, Lyrics, and Novels; La Fontaine, *Fables*; Larmartine, *Graziella*; Marivaux, Plays; Molière, Plays; Musset, Plays and Poems; Pellissier, *le Mouvemment littéraire au XIX siècle*; Renan, *Souvenirs d’enfance et de jeunesse*; Rousseau, Writings; Sainte-Beuve, Essays; Selections from Zola, Maupassant, and Balzac.

The examination of the College Entrance Certificate Board in elementary French will be accepted for two units, and that in intermediate French for one additional unit.

**GERMAN.**—The admission requirements in elementary and advanced German are those recommended by the Modern Language Association of America.

1. *Elementary German.*—The first year’s work should comprise: (1) careful drill upon pronunciation; (2) memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar; that is, upon the inflection of the articles, of such nouns as belong to the language of every-day life, of adjectives, pronouns, weak verbs, and the more unusual strong verbs; also in the use of the more common prepositions, the simpler uses of the modal auxiliaries, and the elementary rules of syntax and word order; (4) abundant easy exercises designed not only to fix in mind the forms and principles of grammar but also to cultivate readiness in reproducing natural forms of expression; (5) the reading of 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in reproducing from memory sentences previously read.

The second year’s work should comprise: (1) the reading of 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in translating into German easy variations upon the matter read, also in the off-hand reproductions, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill in the rudiments of gram-
mar, to enable the pupil first, to use his knowledge with facility in forming sentences, and secondly, to state his knowledge correctly in the technical language of grammar.

Stories suitable for the elementary course can be selected from the following list: Anderson, Märchen and Bilderbuch ohne Bilder; Baum-bach, Die Nonna and Der Schwiegerson; Gerstacker, Germelshausen; Heyse, L’Arrabbiata, Das Mädchen von Treppi, and Anfang und Ende; Hillern, Höher als die Kirche; Jensen, Die braune Erica; Leander, Träumercien and Kleine Geschichten; Seidel, Märchen; Stokl, Unter dem Christbaum; Storm, Immensee and Geschichten aus der Tonne; Zschokke, Der zerbrochene Krug.

The best shorter plays available are: Benedix, Der Prozess, Der Weiberfeind, and Günstige Vorzeichen; Elz, Er ist nicht eifersüchtig; Wichert, An der Majorseecke; Wilhelmi, Einer muss heiraten. Only one of these plays needs be read and the narrative style should predominate. A good selection of reading matter for the second year would be Andersen, Märchen or Bilderbuch, or Leander, Träumercien, to the extent of about forty pages. Afterward, such a story as Das kalte Herz, or Der zerbrochene Krug; then Höher als die Kirche, or Immensee; next a good story by Heyse, Baumbach, or Seidel, last Der Prozess.

II. Advanced German.—The work should comprise, in addition to the elementary course, the reading of about 400 pages of moderately difficult prose and poetry, with constant practice in giving, sometimes orally and sometimes in writing, paraphrases, abstracts, or reproductions from memory of selected portions of the matter read, also grammatical drill in the less usual strong verbs, the use of articles, cases, auxiliaries of all kinds, tenses and modes (with especial reference to the infinitive and subjunctive), and likewise in word order and word formation. To do this work two school years are usually required.

Suitable reading matter for the third year may be selected from such work as the following: Ebner-Eschenbach, Die Freiherren von Gemperlein; Freytag, Die Journalisten and Bilder aus der deutschen Vergangenheit, Karl der Grosse, Aus den Kreuzzügen, Doktor Luther, Aus dem Staat Friedrichs des Grossen; Fouqué, Undine; Gerstäcker, Irrfahrten; Goethe, Hermann und Dorothea and Iphigenie; Heine's Poems and Reisebilder; Hoffman, Historische Erzählungen; Lessing Minna von Barnhelm; Meyer, Gustav Adolfs Page; Moser, Der Bibliothekar; Riehl, Novellen, Burg Neideck, Der Fluch der Schönheit, Der Stumme Ratsherr, Das Spielmannskind; Rosegger, Waldheimat; Schil-
The examinations of the College Entrance Certificate Board in elementary German will be accepted for two units, and that in advanced German for one additional unit.

SPANISH.—The admission requirements in Spanish are those of the College Entrance Examination Board.

Elementary Spanish.—At the end of the second year of the elementary course the pupil should be able to pronounce Spanish accurately, to read at sight easy Spanish prose, to put into Spanish simple English sentences taken from the language of everyday life or based upon a portion of the Spanish text read, and to answer questions on the rudiments of the grammar, as indicated below.

The first year's work should comprise: (1) Careful drill in pronunciation; (2) the rudiments of grammar, including the conjugation of the regular and the more common irregular verbs, the inflection of nouns, adjectives, and pronouns, and the elementary rules of syntax; (3) exercises containing illustrations of the principles of grammar; (4) the careful reading and accurate rendering into good English of about 100 pages of easy prose and verse, with translation into Spanish of easy variations of the sentences read; (5) writing Spanish from dictation.

The second year's work should comprise: (1) The reading of about 200 pages of prose and verse; (2) practice in translating Spanish into English, and English variations of the text into Spanish; (3) continued study of the elements of grammar and syntax; (4) mastery of all but the rare irregular verb forms and of the simpler uses of the modes and the tenses; (5) writing Spanish from dictation; (6) memorizing of easy short poems.

The emphasis should be placed on careful thorough work with much repetition rather than upon rapid reading. The reading should be selected from the following: A collection of easy short stories and lyrics, carefully graded; Juan Valera, El pájaro verde; Pérez Escrich, Fortuna; Ramos Carrión and Vital Aza, Zaragüeta; Palacio Valdés, José; Pedro de Alarcón, El Capitán Veneno; the selected short stories of Pedro de Alarcón or Antonio de Trueba.
LATIN.—The entrance examination in Latin will consist of four parts as follows:

1. An examination on the elements of Latin grammar and easy translations.

2a. An examination in sight translation of Latin prose suited to test the ability of a candidate who has read from Cæsar (Gallic War and Civil War) and Nepos (Lives) an amount not less than Cæsar, Gallic War, I-IV.

b. Questions on the ordinary forms and constructions of Latin grammar and the translation of easy English sentences into Latin.

3a. An examination on Cicero, speeches for the Manilian Law and for Archias, with questions on subject matter, literary and historical allusions, and grammar.

b. An examination in sight translation of Latin prose adapted to candidates who have read from Cicero (speeches, letters, and De Senectute) and Sallust (Catiline and Jugurthine War) an amount not less than Cicero, speeches against Catiline I-IV, for the Manilian Law, and for Archias.

c. A test in writing simple Latin prose which shall demand a thorough knowledge of all regular inflections, all common irregular forms, and the ordinary syntax and vocabulary of the prose authors read in school.

4a. An examination on Vergil, Æneid, I, II, and either IV or VI at the option of the candidate, with questions on subject matter, literary and historical allusions, and prosody.

b. An examination in sight translation of Latin poetry adapted to candidates who have read from Vergil (Bucolics, Georgics, and Æneid) and Ovid (Metamorphoses, Fasti, and Tristia) an amount not less than Vergil, Æneid, I-VI.

A candidate may obtain separate credit for each part except in the College of Arts and Sciences. Each represents a year’s work and entrance credit for one unit.

In parts 3 and 4 candidates must deal satisfactorily with both the sight and set passages, or they will not be given credit for either.

GREEK.—The grammar, including prosody; Xenophon’s Anabasis, books I-IV; Homer’s Iliad, books I-III; the sight translation of easy passages from Xenophon; the translation into Greek of easy passages based on the required books of the Anabasis. For the last a vocabulary of less usual words will be furnished. Equivalent readings will be accepted in place of those prescribed.
History

Ancient History.—A year's work as given in the average high school.

English History.—A course such as is given in the average high school.

Medieval and Modern.—A year's work as given in the average high school.

Mathematics

Algebra.—The four fundamental operations for rational algebraic expressions; factoring, determination of highest common factor and least common multiple by factoring; fractions, including complex fractions, and ratio and proportion; linear equations, both numerical and literal, containing one or more unknown quantities; problems depending on linear equations; radicals, including the extraction of the square root of polynomials and of numbers; exponents, including fractional and negative; quadratic equations, both numerical and literal; simple cases of equations with one or more unknown quantities, that may be solved by the methods of linear or quadratic equations; problems depending on quadratic equations; the binomial theorem for positive integral exponents; the formulas for the nth term and the sum of the terms of arithmetical and geometrical progressions, with applications.

It is assumed that pupils are required throughout the course to solve numerous problems which involve putting questions into equations. Some of the problems should be chosen from mensuration, from physics, and from commercial life. The use of graphical methods and illustrations, particularly in connection with the solution of equations, is also expected.

Plane Geometry.—The usual theorems and constructions of good text-books, including the general properties of plane rectilinear figures; the circle and the measurement of angles; similar polygons; areas; regular polygons and the measurement of the circle.

Solid Geometry.—The usual theorems and constructions of good text-books, including the relations of planes and lines in space; the properties and measurement of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle.

Trigonometry.—Definitions and relations of the six trigonometric functions as ratios; circular measurement of angles; proofs of principal formulas; in particular for the sine, cosine, and tangent of the sum
and the difference of two angles, of the double angle and the half angle; the product expressions for the sum or the difference of two sines or of two cosines, etc.; the transformation of trigonometric expressions by means of these formulas; solution of trigonometric equations of a simple character; theory and use of logarithms (without the introduction of work involving infinite series); the solution of right and oblique triangles, and practical applications.

**Advanced Algebra.**—Permutations and combinations, limited to simple cases; complex numbers, with graphical representation of sums and differences; determinants, chiefly of the second, third, and fourth orders, including the use of minors and the solution of linear equations; numerical equations of higher degree, and so much of the theory of equations, with graphical methods, as is necessary for their treatment, including Descartes's rule of signs and Horner's method, but not Sturm's functions or multiple roots.

**Sciences**

*Biology.*—This may consist of a continuous course for one year dealing with the problems of general biology, including the study of the structure, functions, and habits of both plants and animals; a course for one year in botany alone; a course for one year in zoology alone; or a course for one-half year in human physiology. The human physiology may be arranged to form a part of the general biology, or of the zoology; but in such cases it must be treated as an integral part of the subject under consideration.

*Chemistry.*—The necessary ground is covered by the following text-books: Brownlee and others, Hessler and Smith, McPherson and Henderson, Newell.

**Physical Geography (Physiography).**—A satisfactory preparation may be obtained from either Appleton's or Tarr's Physical Geography.

*Physics.*—The work usually covered in one year in a good fitting school.

The requirements in botany and zoology are the same as those of the College Entrance Examination Board, and are outlined in the syllabus.

*The work in these sciences must include certified note-books exhibiting the results of experimental work performed by the student. In physics forty exercises are required and in chemistry fifty exercises. These note-books should be presented at the examination. In the case of students certified in the sciences, the principal is expected to pass upon the quality of the note-book rather than send them to the university.
bus of the board. The note-book should include properly labeled drawings, and descriptions of experiments, representing as much of the work in this syllabus as may be practicable, and should be the record of a year's laboratory work in the subject. The making of an herbarium is optional.
Organization of the University

The university is divided for purposes of administration into the Colleges of Agriculture, Arts and Sciences, Law, and Technology, and the Maine Agricultural Experiment Station. The policies of the university as a unit are determined by the Board of Trustees and the general faculty, but each division regulates those affairs which concern itself alone.

College of Agriculture


School Course in Agriculture (two years).
Short courses; Farmers’ Week; Correspondence and Lecture Courses; Demonstration Work; Extension Schools.

College of Arts and Sciences

Major subjects may be selected in Biology, Chemistry, Economics and Sociology, Education, English, French, History, Latin, Mathematics and Astronomy, Philosophy, Physics, and Spanish and Italian.

College of Law

This College offers a prescribed curriculum leading to the degree of Bachelor of Laws.

College of Technology

Curricula in Chemical Engineering, Chemistry, Civil Engineering, Electrical Engineering, and Mechanical Engineering.

Maine Agricultural Experiment Station

Offices and principal laboratories at Orono; Highmoor Farm at Monmouth; Aroostook Farm at Presque Isle.
Graduate Courses leading to the Master's degree have been organized. These courses are administered by the Committee on Graduate Study.

A Summer Term of six weeks is maintained by the university.

The college year is divided equally into a fall semester and a spring semester. The minimum regular work for a semester in the College of Arts and Sciences is fourteen hours a week (exclusive of physical training and military science). In the College of Agriculture and the College of Technology the minimum is seventeen hours a week (exclusive of physical training and military science). Thirty hours in the major subject represent the minimum requirement for a degree.
College of Agriculture

FACULTY OF INSTRUCTION

Leon Stephen Merrill, M. D., Dean and Director of Agricultural Extension Service
Lucius Herbert Merrill, Sc. D., Professor of Biological and Agricultural Chemistry
Fremont Lincoln Russell, B. S., V. S., Professor of Bacteriology and Veterinary Science
Mintin Asbury Chrysler, Ph. D., Professor of Biology
John Manvers Briscoe, M. F., Professor of Forestry
George Edward Simmons, M. S., Professor of Agronomy
Lamert Seymour Corbett, M. S., Professor of Animal Industry
Frances Rowland Freeman, M. S., Professor of Home Economics
Herbert Staples Hill, A. B., Professor of Agricultural Education
Irving Hill Blake, A. M., Associate Professor of Biology
Herman Pitte Sweetser, B. S., Associate Professor of Horticulture
Harry Woodbury Smith, B. S., Assistant Professor of Bacteriology
Dorothea Beach, B. S., Assistant Professor of Home Economics
Charles Howard Bachelder, A. B., M. S., Assistant Professor of Zoology
Richard Theodore Muller, B. S., Assistant Professor of Horticulture
Laura Anderson, B. S., Assistant Professor of Home Economics
Llewellyn Morse Dorsey, B. S., Assistant Professor of Animal Husbandry
Roy Frank Thomas, B. S., Assistant Professor of Agricultural Education
Ben Coe Helmick, M. S., Assistant Professor of Agronomy
Esther McGinnis, B. Sc., Instructor in Home Economics
Edith Susan Whitaker, A. M., Instructor in Biology
Chauncey Wallace Lord Chapman, B. S., Instructor in Forestry
Leslie Arthur Keegan, B. S., Instructor in Agronomy
Willard Case Sisson, B. S., Instructor in Animal Industry
Dorothy Mabel Hutchinson, B. S., Assistant in Biology
Raymond Lowell Merritt, B. S., Assistant in Biology
FACULTY OF EXTENSION SERVICE

JOSEPH BODWELL, B. S., County Agricultural Agent, Piscataquis County
RUTH FERN CANEY, Home Demonstration Agent, Cumberland County
LEONARD SHERMAN CLEAVES, D. V. S., Extension Specialist in Sheep Husbandry
CHARLES EDWARD CROSSLAND, B. S., Executive Secretary to Director of Extension Service
ABRAHAM LINCOLN TASKER CUMMINGS, Agricultural Editor
CLARENCE ALBERT DAY, County Agricultural Agent, Washington County
ARTHUR LOWELL DEERING, B. S., County Agricultural Agent, Kennebec County
RICHARD BOULSBY DODGE, B. S., County Agricultural Agent, Penobscot County
NORMAN SYLVESTER DONAHUE, B. S., County Agricultural Agent, Waldo County
ALFREDA ELLIS, B. S., Assistant in Charge of Girls' Clubs
ALBERT KINSMAN GARDNER, B. S., County Agricultural Agent, Franklin County
ROGER LOCKE GOWELL, B. S., County Agricultural Agent, Knox and Lincoln Counties
WILLIAM MELVIN GRAY, B. S., County Agricultural Agent, York County
ROSALIND MAY JEWETT, B. S., Extension Instructor in Home Economics
MAURICE DANIEL JONES, B. S., Farm Management Demonstrator
HELEN LYMAN, Home Demonstration Agent, Kennebec County
RALPH PIKE MITCHELL, State Leader of Boys' and Girls' Agricultural and Home Economics Clubs
PAUL WHEELER MONOHON, B. S., County Agent Leader
EDWARD WATTS MORTON, B. S., County Agricultural Agent, Cumberland County
JOHN HARVEY PHILBRICK, B. S., Assistant County Agricultural Agent, Aroostook County
CATHARINE NORTON PLATTS, B. S., State Leader of Home Demonstration Work
JOHN LESLIE SCRIBNER, B. S., County Agricultural Agent, Aroostook County
HAROLD JOSEPH SHAW, County Agricultural Agent, Androscoggin and Sagadahoc Counties
HELEN CONSTANCE SPAULDING, B. S., Home Demonstration Agent, York County
CLAYTON ALTON STORER, B. S., County Agricultural Agent, Somerset
GENERAL INFORMATION

The College of Agriculture comprises the departments of Agricultural Education, Agronomy, Animal Industry, Biological and Agricultural Chemistry, Biology, Farm Management and Agricultural Engineering, Forestry, Home Economics, Horticulture, Veterinary Science and Bacteriology, and Agricultural Extension. The aim of this college is to train young men for service as farmers, teachers of agriculture and the allied sciences in schools and colleges, investigators in agricultural experiment stations, and foresters; and to prepare young women to become teachers of home economics and to comprehend the problems of administration in the home and in public institutions. On entering either a four years’ curriculum or the two years’ School Course in Agriculture a student is required to fill out a practical experience blank. Those who have not had experience in general farming are required to work during at least one summer vacation on some farm approved by the faculty of the college.

The college curricula are designed for those who wish to follow general farming, animal husbandry, dairy husbandry, poultry husbandry, horticulture, home economics, chemistry as related to experiment station work, biological chemistry, bacteriology and veterinary science, biology, farm management, and forestry either as a business or as a profession.

The courses of instruction are organized as follows:

1. Regular Curricula

   The four year general curricula in Agricultural Education, Agronomy, Animal Husbandry, Biology, Dairy Husbandry, Forestry, Home Economics, Horticulture, and Poultry Husbandry
2. Short Courses
   The two-year School Course in Agriculture
   The short winter courses in General Agriculture, Dairying, Horticulture, and Poultry Management
   Farmers' Week

3. Extension Courses
   The correspondence courses
   The lecture courses
   Movable or extension schools

One of the following curricula, embracing 150 college hours each, is required for the students pursuing a four-year curriculum in the College of Agriculture.

CURRICULA IN AGRICULTURE

Certain studies are fundamental to all work in agricultural lines. As many as possible of these subjects are offered in the first two years, during which the student is necessarily given no choice of subjects. By the beginning of the junior year each student must decide whether he is to specialize in Agricultural Education, Agronomy, Animal Husbandry, Dairying Husbandry, Poultry Husbandry, Horticulture, or Biology. To specialize in any one of these lines, he must during his junior and senior years take the studies given in the schedules which follow.

Students in agriculture who contemplate entering experiment station work should elect the course offered by the department of agricultural chemistry covering the qualitative and quantitative chemical analysis of fodders, fertilizers, and dairy products. They should also elect a preparatory course in quantitative chemical analysis.

The elective subjects are selected with the advice of the major instructor.

Before receiving their degrees candidates must satisfy the faculty that they are familiar with the methods of conducting operations incident to general farming. This does not apply to students who major in Biology, Forestry, and Home Economics.
## Curriculum for the First Two Years for All Students Taking Four-year Curricula in Agriculture

### Freshman Year

<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
<th>Subject</th>
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<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
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<td><strong>Spring Semester</strong></td>
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<tr>
<td>Agronomy 11, 2 ⅔</td>
<td>3</td>
<td>Animal Industry 2</td>
<td>2</td>
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<tr>
<td>Chemistry 1 or 3</td>
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<td>Animal Industry 4, ⅔</td>
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</tr>
<tr>
<td>Chemistry 5, ⅔</td>
<td>2</td>
<td>Botany 2, 2 ⅔</td>
<td>4</td>
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<tr>
<td>Drawing 9, *3</td>
<td>1</td>
<td>Chemistry 2 or 4</td>
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<tr>
<td>English 5</td>
<td>2</td>
<td>Chemistry 6, ⅔</td>
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<tr>
<td>Public Speaking 3</td>
<td>1</td>
<td>Drawing 10, *3</td>
<td>1</td>
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<tr>
<td>Military 1, *3</td>
<td>1</td>
<td>English 6</td>
<td>2</td>
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<tr>
<td>Poultry Husbandry 1, 2 ⅔</td>
<td>3</td>
<td>Public Speaking 4</td>
<td>1</td>
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<tr>
<td>Zoology 1, 2 ⅔</td>
<td>4</td>
<td>Military 2, *3</td>
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<tr>
<td>Physical Training 1, *3</td>
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<td>Poultry Husbandry 2, 1 ⅔</td>
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### Sophomore Year

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<tbody>
<tr>
<td>Agronomy 1, 2 *3</td>
<td>3</td>
<td>Agricultural Chemistry 6</td>
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<tr>
<td>Animal Industry 3</td>
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<td>Horticulture 20, 2 ⅔</td>
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<td>Biochemistry 2, 3 ⅔</td>
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<td>Horticulture 2, 2 *3</td>
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<td>Mathematics 12</td>
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<tr>
<td>Military 3, *3</td>
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Curriculum for Students Specializing in Agricultural Education

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>Subject</td>
<td>Hours</td>
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<tr>
<td>Agricultural Education 1</td>
<td>3</td>
</tr>
<tr>
<td>Agronomy 13, 1</td>
<td>2</td>
</tr>
<tr>
<td>Bacteriology 1, 1</td>
<td>3</td>
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<tr>
<td>Bacteriology 3</td>
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<td>English 15</td>
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<tr>
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<tr>
<td>Horticulture 9, 2</td>
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SENIOR YEAR

<table>
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Curriculum for Students Specializing in Agronomy

JUNIOR YEAR

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<td>Agronomy 16, 1</td>
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* If not already taken in the sophomore year.
SENIOR YEAR

Fall Semester

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<td>Farm Management 71, 2 *3†</td>
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Spring Semester

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<tbody>
<tr>
<td>Farm Management 2, †4†</td>
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<td>Farm Management 72, 2 *3†</td>
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<td>Farm Management 74, 2 *3†</td>
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Curricula for Students Specializing in Animal Industry

ANIMAL HUSBANDRY

JUNIOR YEAR

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<tbody>
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<td>*Animal Industry 7, 2 †4†</td>
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<tr>
<td>Bacteriology 1, †6†</td>
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<tr>
<td>Bacteriology 3</td>
<td>2</td>
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<tr>
<td>Biology 51, 2 †4†</td>
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<tr>
<td>English 15</td>
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<td>Elective</td>
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<table>
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<tbody>
<tr>
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<td>Animal Industry 6</td>
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<tr>
<td>Animal Industry 52, †2†</td>
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<td>Bacteriology 52, †6†</td>
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<tr>
<td>Biology 52, 2 †4†</td>
<td>4</td>
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<td>Veterinary Science 14</td>
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SENIOR YEAR

<table>
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<tbody>
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<tr>
<td>Animal Industry 53</td>
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<td>Farm Management 71, 2 *3†</td>
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<tr>
<td>Veterinary Science 15</td>
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<td>Veterinary Science 19</td>
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<table>
<thead>
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<tbody>
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<td>Farm Management 2, †4†</td>
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<td>Farm Management 72, 2 *3†</td>
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* If not already taken in the sophomore year.
### DAIRY HUSBANDRY

#### JUNIOR YEAR

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<tr>
<td>Bacteriology 1, †6</td>
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<td>Bacteriology 3</td>
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**SENIOR YEAR**

- Agronomy 3 ............... 2
- Animal Industry 9, 2 *6..... 4
- Animal Industry 51.......... 3
- Farm Management 71, 2 *3... 3
- Veterinary Science 15 ........ 2
- Veterinary Science 17....... 1
- Elective .................... 3
- Bacteriology 54, †4 or †6..2 or 3
- Farm Management 2, †4..... 2
- Farm Management 72, 2 *3.. 3
- Elective.................... 10 or 9

#### POULTRY HUSBANDRY

**JUNIOR YEAR**

- *Animal Industry 7, 2 †4..... 4
- Bacteriology 1, †6............ 3
- Bacteriology 3 ................. 2
- Biology 51, 2 †4............ 4
- English 15..................... 2
- Poultry Husbandry 3, 1 †2... 2
- Elective ...................... 2

- *Agricultural Chemistry 6..... 2
- Animal Industry 6............. 2
- Biology 52, 2 †4............... 4
- Poultry Husbandry 4........... 2
- Elective ...................... 9

* If not already taken in the sophomore year.
### SENIOR YEAR

#### Fall Semester

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<tbody>
<tr>
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<td>Farm Management 71, 2 *3...</td>
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<tr>
<td>Poultry Husbandry 5............</td>
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<tr>
<td>Poultry Husbandry 7, 2 †2...</td>
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#### Spring Semester

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<td>Farm Management 72, 2 *3...</td>
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<tr>
<td>Poultry Husbandry 6, 3 †2...</td>
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<td>Veterinary Science 12............</td>
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### Curriculum in Biology

#### JUNIOR YEAR

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<tr>
<td>English 15</td>
<td>2</td>
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<tr>
<td>Geology 5</td>
<td>3</td>
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<td>Modern Language</td>
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<tr>
<td>Plant Histology 61</td>
<td>4</td>
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<tr>
<td>or Vertebrate Anatomy 51</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>4</td>
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<tr>
<td>or Plant Physiology 62...</td>
<td>4</td>
</tr>
<tr>
<td>or Plant Pathology 66</td>
<td>3</td>
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<tr>
<td>or Elective</td>
<td>4</td>
</tr>
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<td>Biology Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Thesis or Elective</td>
<td>3</td>
</tr>
<tr>
<td>Vertebrate Anatomy 51...</td>
<td>4</td>
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<tr>
<td>or Plant Pathology 66</td>
<td>3 or 4</td>
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<td>or Elective</td>
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#### SENIOR YEAR

<table>
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<td>or Plant Taxonomy and Morphology 63....</td>
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<td>Thesis or Elective</td>
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<tr>
<td>Vertebrate Anatomy 51...</td>
<td>4</td>
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<tr>
<td>or Plant Pathology 66</td>
<td>3 or 4</td>
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<td>or Elective</td>
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* If not already taken in the sophomore year.
The Forestry Curriculum

A complete undergraduate curriculum is arranged which will serve as the basis not only for practical work in forestry, but also for a liberal education. During the first two years much attention is given to biology and civil engineering, both of which are important fundamental subjects upon which are built the technical forestry courses. A knowledge of the principles of forestry in its different branches is gained by the student, and considerable practical work is done in the forest. The woodlands belonging to the university, together with adjacent lands covered by young forest, furnish a field for the study of many forest problems. Field trips are made and demonstration thinnings and plantings made at various places throughout the State.

The instruction in this department consists of lectures, recitations, laboratory, and field work; the latter consumes a considerable portion of the scheduled time during the junior and senior years.

Curriculum in Forestry

FRESHMAN YEAR

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<thead>
<tr>
<th>Subject</th>
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<th>Spring Semester</th>
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<td>Botany 2, 2, †4</td>
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<td>Chemistry 2 or 4</td>
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<td>Drawing 1, *6</td>
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<td>Drawing 2, *6</td>
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<td>English 5</td>
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<td>Forestry 1</td>
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<td>Mathematics 11</td>
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SOPHOMORE YEAR

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<td>Biology 8, 2 †4</td>
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<td>Biology 67, 2 †4</td>
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<td>Biology 68, 2 †4</td>
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<td>1</td>
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<td>Military 2, *3</td>
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<td>Modern Language</td>
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JUNIOR YEAR

Fall Semester

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<td>Civil Engineering 23</td>
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<td>Forestry 13, *6</td>
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<td>Horticulture 5, 2 †2</td>
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Spring Semester

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<td>Civil Engineering 24</td>
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<td>Forestry 6</td>
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<td>Forestry 28</td>
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<td>Modern Language</td>
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SENIOR YEAR

<table>
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<td>Forestry 15</td>
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<td>Forestry 18, *6</td>
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<td>Elective</td>
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Curriculum in Home Economics

This curriculum leads to the degree of Bachelor of Science (in Home Economics). In addition to the prescribed studies, elective courses are offered for those who plan to teach.

Students desiring to follow this curriculum must meet the regular university requirements.

Laboratory fees are as follows: Courses 1, 2, 7, 8, 12, 13, 17, each $1 a semester. Courses 5, 6, 10, 11, each $6 a semester. All materials for garment making must be provided by the students.

Students taking courses 5, 6, 10, and 11 are required to wear in the laboratory white tailored waists, high collars, washable ties, caps, shoes with rubber heels, and white aprons with bibs. They must also be provided with small white hand towels.
### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fall Semester</th>
<th>Hours</th>
<th>Subject</th>
<th>Spring Semester</th>
<th>Hours</th>
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<tbody>
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<td>Chemistry 2 or 4</td>
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### SOPHOMORE YEAR

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<tr>
<th>Subject</th>
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<tbody>
<tr>
<td>Art 3</td>
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<td>Art 4</td>
<td>2</td>
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<tr>
<td>Biochemistry 9, 2 †2</td>
<td>3</td>
<td>Food Analysis 8, 1 †6</td>
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<tr>
<td>Elementary Physiology 5, 2 †4</td>
<td>4</td>
<td>Botany 2, 2 †4</td>
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<td>English 29</td>
<td>3</td>
<td>English 30</td>
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<tr>
<td>Home Economics 5, 2 †4</td>
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<td>Psychology 51</td>
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<tr>
<td>Physical Training</td>
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### JUNIOR YEAR

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<tbody>
<tr>
<td>Bacteriology 1, †6</td>
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<td>Physics 8, 4 †2</td>
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<tr>
<td>Bacteriology 3</td>
<td>2</td>
<td>Home Economics 8, †6</td>
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<tr>
<td>Biochemistry 7, 3 †4</td>
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<td>Home Economics 10, 3 †4</td>
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<td>Home Economics 7, 2 †4</td>
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<td>Home Economics 14</td>
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<td>Home Economics 9</td>
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### SENIOR YEAR

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<th>Subject</th>
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<tr>
<td>Home Economics 17, 1 †4</td>
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<td>Home Economics 12</td>
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<td>Sociology 55</td>
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<td>Home Economics 18, 1 †4</td>
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<td>Economics 1b</td>
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<td>Sociology</td>
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Home Economics 21 or 22, *9—3 credit hours required in either fall or spring semester.

Electives—14 credit hours for the year.

Students desiring to prepare for teaching under the Vocational Education requirements must complete 15 hours of education as fol-
Students desiring to secure the Professional Secondary Certificate must complete 12 hours of education as follows: Education 51, 52, 77 and one of the following courses, Education 84, 71, 75 or 76.

### Curriculum in Horticulture

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Bacteriology 3</td>
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<tr>
<td>Biology 9, 2 †6</td>
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<tr>
<td>English 15</td>
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<tr>
<td>*Horticulture 1, 2 †2</td>
<td></td>
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<tr>
<td>Horticulture 7, 2 †2</td>
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<tr>
<td>Horticulture 9, 2 †2</td>
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<thead>
<tr>
<th>Subject</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>Agricultural Chemistry 6</td>
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<tr>
<td>Animal Industry 6</td>
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<td>2</td>
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<tr>
<td>Bacteriology 2, †6</td>
<td></td>
<td>3</td>
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<tr>
<td>Biology 10, 2 †6</td>
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<td>5</td>
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<tr>
<td>*Horticulture 20, 2 †2</td>
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<tr>
<td>Horticulture 50</td>
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<tr>
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#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Subject</th>
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<tbody>
<tr>
<td>Agronomy 3</td>
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<tr>
<td>Farm Management 71, 2 *3</td>
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<tr>
<td>Horticulture 3, 2 †2</td>
<td>3</td>
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<tr>
<td>Horticulture 5, 2 †2</td>
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<tr>
<td>**Horticulture 21, 2 †2</td>
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<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Farm Management 2 †4</td>
<td>2</td>
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<tr>
<td>Horticulture 4, 2 †2</td>
<td>3</td>
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<tr>
<td>Horticulture 8, 2 †2</td>
<td>3</td>
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<tr>
<td>Horticulture 52</td>
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<tr>
<td>Elective</td>
<td>12</td>
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* If not already taken in the sophomore year.
** Must be taken the semester following Horticulture 20.

#### Special Courses in Agriculture and Home Economics

The Special Courses in Agriculture and Home Economics are designed for young men and women who cannot well spend four years in preparation, but who desire to secure special training in this line. No fixed schedule of studies is prescribed, but students may elect along the line of horticulture, dairying, poultry management, veterinary science, agricultural chemistry, bacteriology, farm management, general agriculture, or home economics.
Persons not candidates for a degree who desire to take special studies may be permitted to do so, if, upon examination, they give satisfactory evidence that they are prepared to pursue them. This privilege is intended for students of unusual maturity or previous advancement in particular subjects, and not for those who are incompetent to pursue a regular course. If they subsequently desire to become candidates for a degree, they will be required to meet all the entrance requirements.

The annual expenses for courses of one year or more are the same as those for students in the four-year curricula. Tuition is free to residents of Maine except in Forestry and Biology.

**Two-year School Course in Agriculture**

This is a course designed to train young men and women who wish to become practical farmers, farm superintendents, dairymen, poultrymen, or gardeners, but who cannot devote time to high school or college training.

The same equipment is used as in the four-year curricula, but the work is of a more elementary nature. All the classes are separate and distinct from the four-year classes, and in no case will college credit be allowed for work done in the School Course.

There are no entrance examinations required of those who desire to enter the School Course. Students over fifteen years of age who are prepared for advanced grammar or high school work are eligible for registration. No tuition is charged in this course, but the same registration and incidental fees of fifteen dollars a semester, or thirty dollars a year, are charged School Course in Agriculture students as are charged all others attending the university. Fees amounting to four dollars are charged in each of the carpentry and blacksmithing courses to cover cost of material used. Fees are also charged in several agricultural laboratories.

The practical side of this work is strongly emphasized, and since students are expected to be able to do work and handle men, those taking this course are required to spend the summer vacation between the first and second years in work either at the college or on some farm approved by the faculty.

On completion of the course a certificate is awarded those who have satisfactorily done the work.
## First Year

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<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Animal Husbandry, 3 ‡2</td>
<td>4</td>
<td>Dairy Husbandry 3 *3</td>
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<tr>
<td>Business Arithmetic and Farm Accounts</td>
<td>2</td>
<td>English</td>
<td>3</td>
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<tr>
<td>Carpentry *3</td>
<td>1</td>
<td>Farm Botany</td>
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<tr>
<td>English</td>
<td>3</td>
<td>Forge Work *3</td>
<td>1</td>
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<tr>
<td>Farm Crops 3 *3</td>
<td>4</td>
<td>Fruit Growing 3 *3</td>
<td>4</td>
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<tr>
<td>Fruit Handling 3 *3</td>
<td>4</td>
<td>Poultry Husbandry 2 ‡2</td>
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<tr>
<td>Poultry Husbandry</td>
<td>2</td>
<td>Soils and Fertilizers 3 *3</td>
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## Second Year

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<thead>
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<th>Subject</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Animal Husbandry 3 ‡2</td>
<td>4</td>
<td>Animal Husbandry 3 ‡2</td>
<td>4</td>
</tr>
<tr>
<td>English</td>
<td>2</td>
<td>English</td>
<td>2</td>
</tr>
<tr>
<td>Farm Chemistry</td>
<td>3</td>
<td>Farm Management 3 *3</td>
<td>4</td>
</tr>
<tr>
<td>Farm Crops</td>
<td>2</td>
<td>Forestry</td>
<td>2</td>
</tr>
<tr>
<td>Farm Engineering and Mechanics 1 *3</td>
<td>2</td>
<td>Insects</td>
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<tr>
<td>Poultry Husbandry</td>
<td>2</td>
<td>Poultry Husbandry</td>
<td>2</td>
</tr>
<tr>
<td>Vegetable Gardening 3 *3</td>
<td>4</td>
<td>Small Fruit Culture and Plant</td>
<td></td>
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<tr>
<td>Veterinary Science</td>
<td>3</td>
<td>Propagation 3 *3</td>
<td>4</td>
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</tbody>
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## Short Winter Courses in General Agriculture, Dairying, Horticulture, and Poultry Management

The short courses in general agriculture deal especially with farm crops. Special attention is given to the potato, corn, oat, and hay crops,—the preparation of seed bed, selection of seed, seeding, fertilization, culture, and harvesting. Such general subjects as drainage, maintenance of soil fertility, rotation of crops, control of weeds, etc., are considered. Potato, corn, and grain judging is made a prominent feature.

The short course in dairying is designed to meet the requirements of creamery assistants, practical farmers, herdsman, and others who desire to learn milk testing, butter making, the principles of animal nutrition, and practices of feeding, breeding, judging stock, and the diseases of farm animals.
The short course in horticulture is offered for those who wish to acquaint themselves with the most approved methods of orchard management. Special attention will be given to such subjects as the selection of orchard sites, selecting and obtaining nursery stock, pruning, cultivation, spraying, packing, and cooperation in the fruit business. Opportunity will be given for the laboratory study of spraying, packing, planting, pruning, and grafting. An effort is made to show where money is lost and made in the fruit business.

The short course in poultry management is given each year to aid persons who wish to gain a practical knowledge of the handling of incubators and brooders, the feeding and rearing of young chicks, the general management of mature fowls, scoring, judging, killing, and marketing. For purposes of instruction the College of Agriculture keeps representatives of leading breeds of fowls.

Very few text-books are used in any of the courses and the expenses for board and room, which are the only other expenses, are moderate. Circulars giving the dates and programs of these courses are published each year and will be sent upon application to the College of Agriculture.

Farmers' Week

There are a large number of people who cannot come to the college for a great length of time, but who desire a few days of practical instruction. To reach and accommodate these, "Farmers' Week" is held. Lectures on practical agricultural subjects are given morning, afternoon, and evening. Practical demonstrations occupy a part of each afternoon. Besides the practical subjects discussed, one or more sessions are given up to problems of rural betterment. A section is arranged where home economics for farmers' wives is taught. Dates and programs may be secured each year by addressing the College of Agriculture.

Department of Agricultural Extension

This department offers correspondence courses, lecture courses, demonstration work, cooperative experiments, and extension schools in agriculture.

This work is intended to give direct help to those on the farm and in the home; to aid those who desire definite instructions in practical agriculture, animal and dairy husbandry, poultry husbandry, home eco-
nomics, forestry, and horticulture. It supplements the teaching and experimenting of the College of Agriculture and the Agricultural Experiment Station. It is professedly a popular work because it endeavors to aid the farmer to solve the practical problems of the farm, to quicken agricultural work, and to inspire greater interest in country life.

Correspondence Courses

These courses are given by means of text-books and publications of the college, the U. S. Department of Agriculture, or the various experiment stations. The text-books are furnished at publishers' prices. The courses are free and may be taken by individuals, granges, reading circles, or other organizations. A certificate will be given to students completing any of these courses with satisfactory standing.

The following courses are offered:

Course 1—Farm Crops and Crop Production
Course 2—Farm Management
Course 3—Feeding and Breeding of Farm Animals and Dairying
Course 4—Poultry Keeping
Course 5—Fruit Growing
Course 7—Elementary Agriculture
Course 8—Home Economics
Course 9—Vegetable Gardening
Course 10—The Business of Dairying

Lecture Courses

Lectures in these courses are given under the auspices of granges, clubs, societies, and other gatherings by the members of the agricultural faculty.

A complete list of the lectures will be forwarded on request.

Demonstration Work

For this work members of the agricultural faculty will make demonstrations, showing, as well as telling, how to solve many practical farm problems. These demonstrations are made on the farms and are offered under the same conditions as the lectures.

The following is a practical list of the demonstrations that may be secured: home mixing of fertilizers; milk testing (use of Babcock
tester); stock judging; corn and small grain judging and breeding; potato judging, breeding, and spraying; orchard spraying, pruning, and grafting; apple packing; method of killing and dressing poultry; method of determining the age of horses; methods of giving medicine to domestic animals. All demonstrations are accompanied by lectures.

Farm Demonstration Work

This form of extension service consists of practical demonstrations of farming operations, of the values of various projects, and of proper equipment in the farming business.

The demonstration work is now established in every county in the State.

Boys' and Girls' Agricultural Clubs

The organization of junior agricultural and home economics clubs was begun in 1913, under the direction of the Extension Department, with state leaders in active charge of the field work. The club work is conducted very largely in cooperation with the schools, granges, and the Y. M. C. A. county work. It will be extended throughout the State as rapidly as possible. Local exhibits will be held the present year and the winners at these exhibits will compete later in a state contest to be held at the College of Agriculture.

Extension Schools in Agriculture

To extend the advantages of agricultural instruction to persons actively engaged in agriculture, the Extension Department will conduct a limited number of three-day schools in various parts of the State.

Correspondence

Besides the Demonstration, Correspondence, and Lecture Courses, the College of Agriculture welcomes correspondence on practical farm topics. If information is desired along lines relating to crops, fertilizers, dairy work, feeding, or orcharding and gardening, the various instructors are ready to give such assistance as they are able.

A free "Extension Bulletin," dealing with agricultural and home economics subjects, is issued at frequent intervals throughout the year. This bulletin is sent to all persons whose names appear on the bulletin mailing list and to such other persons as may apply for it.

Circulars giving full information upon these subjects will be sent upon request.
Departments of Instruction

Note.—A star (*) before the time designated for a course indicates that three hours of actual work are required to obtain credit for one hour; a dagger (†) indicates that two hours are required to obtain this credit; a double dagger (‡) indicates that two and one-half hours are required. Courses having an odd number are given in the fall semester and those having an even number in the spring semester.

If the student so elects, he may prepare a thesis upon some subject related to his major work. The subject should be selected and approved by the head of the department before the close of the junior year.

Courses numbered 1-50 are for undergraduates only; courses numbered 50-100 are for graduates and undergraduates; courses numbered 100 and above are primarily for graduates.

AGRICULTURAL EDUCATION

Professor Hill; Assistant Professor Thomas

(Note.—The courses in Agricultural Education are open only to those who are taking the work designed to prepare teachers of vocational agriculture, or home economics, under the Smith-Hughes Act.)

1. Introduction to Education.—This course aims to touch briefly the most important things usually given in such courses as history of education; school administration; and principles of secondary education. Among other things, the following topics will be considered: Schools of other countries, early history of our own schools; school finances, buildings, equipment, hygiene, supervision; high school curriculum, teacher, pupil, discipline, examinations, grading, promotions. Three hours a week.

2. Methods of High School Teaching.—Some of the things to be given in this course are: Purpose of high school instruction; economy in class room management; selection and arrangement of subject matter, acquiring motor control; reflective thinking; self activity and apperception; differences in capacity; supervised study; conversational methods; laboratory methods; art of questioning; measuring results of teaching. Two hours a week.
3. **Special Methods in Agriculture.**—The following topics are given consideration: The Smith-Hughes Act; principles underlying vocational agricultural education; the agricultural curriculum; seasonal sequence of topics; lesson plans; supervised study; laboratory work; field trips; room and equipment; library; community service; home projects; substitutes for home projects; records. *Three hours a week.*

4. **Practice Teaching.**—During the first six weeks of the spring semester the seniors will be expected to do directed teaching in an approved school. They will hand in daily lesson plans and will report on how these work out. While engaged in this work they will be given an allowance to pay for their traveling expenses and board. *Four hours credit.*

6. **Vocational Education.**—This course deals with the development of industrial education; part time, trade and continuation schools; vocational guidance; the principles underlying vocational education; and a special consideration of agricultural education. *Two hours credit.*

8. **Seminar.**—Each student will choose some phase of agricultural education for special investigation. *One hour credit.*

**AGRONOMY**

**Professor Simmons; Assistant Professor Helmick; Mr. Keegan**

**Soils**

1. Lectures and recitations on the origin, types, physical properties, moisture content, and distribution of soils, and their relation to crop production. The fundamental principles underlying soil management for soil conservation and improvement will be studied. Class room, *two hours a week*; laboratory, *three hours a week.*

3. **Soil Fertility.**—This course deals with stable manures, green manures, commercial fertilizers, and soil amendments; also a study of soil organisms as affecting the plant food in the soil. *Two hours a week.*

52. **Soil Surveying and Mapping.**—A study is made of soil types, the principles of correlation and methods of soil surveying and mapping. Class room, *two hours a week*; laboratory, *three hours a week.*

54. **Soil Fertility.**—Soil improvement investigation. A review of the experimental work in this country and abroad. The application of these results to soil improvement and crop production problems. Pre-requisites, Courses 1 and 3. *Two hours a week.*
Crops

11. Field Crops.—A laboratory course in seed and grain identification, improvement by grading, testing, selecting, and preparing seed for planting. A collection of weeds and their seeds will be required. †Four hours a week.

12. Field Crops.—A general course including a study of the most important cereal, grass, forage, and root crops, their adaptation to systems of rotation, culture and uses, with special reference to New England conditions. Class room, two hours a week; laboratory, †two hours a week.

13. Field Crops. Judging and Commercial Grading.—Comparative judging of corn, small grains, and potatoes, according to standards. A study of market grade requirements. Class room, one hour a week; laboratory, †two hours a week.

14. Field Crops. Corn.—A course dealing with the production of corn and the care and marketing of the crop. Types and varieties of both field and sweet corn will be considered in this course. Class room, one hour a week; laboratory, †two hours a week.

15. Field Crops. Roots and Tubers.—A course dealing with the production, storage, and marketing of roots and tubers. Class room, one hour a week; laboratory, †two hours a week.

16. Field Crops. Grasses and Forage Crops.—Lectures and laboratory work dealing with the grasses and forage plants. A study of the hay crop and markets; soil ing systems, and their adaptation to local conditions. Class room, one hour a week; laboratory, †two hours a week.

18. Field Crops. Crop Improvement.—A study of the principles and methods involved in field crop improvement. The work of experiment stations in this country and abroad is reviewed. Prerequisites, Courses 11 and 12. Two hours a week.

62. Systematic Field Crops.—A course designed for advanced or graduate students preparing for experimental work, teaching, or plant breeding. Students will be expected to grow and collect material under the supervision of the department during the summer months. Prerequisite, adequate training in botany and field crops. Time must be arranged with the instructor not later than the middle of the junior year. Two or more hours a week.
63. **Systematic Field Crops.**—A continuation of Course 62. *Two or more hours a week.*

65. **Seminar.**—A study of recent literature, problems, and experiments pertaining to agronomy and farm management. *One hour a week.*

66. **Seminar.**—A continuation of Course 65. *One hour a week.*

67, 68. **Thesis.**—*Three hours a week.*

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**ANIMAL INDUSTRY**

**Professor Corbett; Assistant Professor Dorsey; Mr. Sisson**

**Animal and Dairy Husbandry**

2. **Types and Breeds of Farm Animals.**—A study of the types and breeds of farm animals. A course covering the history, development, and characteristics of farm animals. *Two hours a week.*

3. **Care, Feed, and Management of Live Stock.**—A course dealing with the selection, breeding, growing, and maintenance of horses, cattle, sheep, and swine. Prerequisites, Courses 2 and 4. *Two hours a week.*

4. **Live Stock Judging.**—This course is designed to acquaint the students with the types and breed characteristics of farm animals, by use of the score card, comparative judging, and the selection of breeding stock. To be taken in connection with Course 2. †*Two hours a week.*

5. **Live Stock Judging.**—A continuation of Course 4. †*Two hours a week.*

6. **Live Stock Feeding.**—A study of the general principles of nutrition as applied to live stock, composition of feed stuffs, comparison and use of feeding standards, calculating rations, methods of feeding for economic production. Prerequisites, Course 3, Biochemistry 1 and 2. *Two hours a week.*

7. **General Dairying.**—Given by lectures, assigned reading, recitations, and laboratory practice. Milk; its secretion, composition, properties, pasteurization, separation; dairy practices in handling milk and cream, dairy equipment, use of common dairy machinery; preparation of starters; test of dairy products for fat (Babcock method), acidity,
total solids, common adulterations, and preservatives. Class room, two hours a week; laboratory, four hours a week.

8. BUTTER MAKING.—Lectures and laboratory practice in starter making, cream ripening, churning, and preparing butter for market. Prerequisite, Course 7. Class room, one hour a week; laboratory, six hours a week.

9. CHEESE MAKING.—Lectures, recitations, and laboratory practice in the manufacture and curing of various types of cheese, including Cheddar and soft cheeses adapted to the New England trade. The laboratory work requires six consecutive hours. Prerequisite, Course 7. Class room, two hours a week; laboratory, six hours a week.

51. DAIRY TECHNOLOGY.—A study of dairy products; dairy by-products; factory machinery and operations; certified milk; markets and marketing; educational work with dairymen. Given by lectures, recitations, assigned readings, and round table conferences. Prerequisite, Course 7. Three hours a week.

52. ADVANCED LIVE STOCK JUDGING AND MANAGEMENT.—A laboratory course in which the individual student gets experience in handling live stock and preparation of stock for the show ring and market. As far as possible, visits will be made to live stock farms. Two hours a week.

53. ADVANCED LIVE STOCK FEEDING AND MANAGEMENT.—Nutrition and feeding experiments, as well as the methods and practices of the most successful feeders in the production of milk, meat, and the rearing of horses, are studied. Two hours a week.

54. ADVANCED ANIMAL BREEDING.—Principles and theories of breeding as applied to the live stock industry; study of pedigrees and records by the use of the different herd books; an economic study of the generative systems of domestic animals. Prerequisites, Course 3, and Veterinary Science 6. Two hours a week.

55, 56. THESIS.—Three hours a week.

58. ICE CREAM MAKING.—Lectures and recitations on the history and methods of the manufacture of ice cream and ices. Laboratory practice in the manufacture of ice cream and ices. Prerequisite, Course 51. Class room, one hour a week; laboratory, three hours a week.
Poultry Husbandry

1. **Types, Breeds, and Management of Poultry.**—Lectures and recitations on the origin and development of the types, breeds, and varieties of fowl, ducks, geese, and turkeys; the general care, feed, and management of farm poultry; and the marketing of poultry products. Laboratory exercises include practice in poultry management, poultry judging, and the preparation of poultry products for market. Class room, *two hours a week*; laboratory, †*two hours a week*.

2. **Types, Breeds, and Management of Poultry.**—A continuation of Course 1. Class room, *one hour a week*; laboratory, †*two hours*.

3. **Commercial Poultry Farming.**—Lectures and recitations on the business of poultry farming; the systems and operations in use on large poultry farms; the planning of specialized poultry farms. Class room, *one hour a week*; laboratory, †*two hours a week*.

4. **Poultry Feeding.**—Lectures and recitations on the general principles of nutrition as applied to poultry; poultry feeds; calculating rations; estimating cost of feeds and feeding, and methods of feeding for economical production. Prerequisites, Courses 1 and 2. Class room, *two hours a week*.

5. **Poultry Literature.**—A study of experimental data on poultry management. Prerequisites, Courses 1, 2, and 4. Class room, *two hours a week*.

6. **Incubation and Brooding.**—Lectures and recitations on the principles of incubation and brooding. Laboratory practice in incubator and brooder management. Prerequisites, Courses 1 and 2. Class room *three hours a week*; laboratory, †*two hours a week*.

7. **Poultry Breeding.**—Lectures and recitations on the principles of breeding as applied to poultry; the inheritance of egg productivity; systems of breeding; mating of utility and exhibition poultry and care of breeding stock. Prerequisites, Courses 1, 2, and 4. Class room, *two hours a week*; laboratory, †*two hours a week*.

51, 52. **Thesis.**—*Three hours a week*.

**Bacteriology and Veterinary Science**

**Professor Russell; Assistant Professor Smith**

1. **Bacteriology.**—A laboratory course in general bacteriology. Open to all students. The work includes the preparation of the usual culture
media and the study of the morphological and biological characteristics of typical bacteria. Some outside reading will be required. Required of students taking major work in Agriculture. †Six hours a week.

2. Bacteriology.—Similar to Bacteriology 1. Offered for students in the College of Technology and others who may elect it. †Six hours a week.

3. Bacteriology.—A lecture course open to all students. It should be elected by students taking Course 1 as well as by students not taking a laboratory course. Subjects considered will include the history of bacteriology; classification and biological characteristics of bacteria, bacteria in air, water, soil, and dairy products; the relation of bacteria to health and disease; immunity. Two hours a week.

12. Veterinary Science.—This course deals with the anatomy, physiology, and diseases of poultry. Two hours a week.

14. Veterinary Science.—A combined lecture and laboratory course dealing with the anatomy and physiology of our domestic animals, and their treatment to preserve and restore health. Three hours a week.

15. Veterinary Science.—A continuation of Course 14. Prerequisite Course 14. Two hours a week.

16, 17. Veterinary Science.—A clinic open to all students studying veterinary science. One hour a week.

19. Veterinary Science.—Veterinary materia medica and pharmacy. Two hours a week.

52. Bacteriology.—A study of the physiology of bacteria; bacteriological analysis of water; and investigation into the sources of milk bacteria. Prerequisite, Course 1 or 2. Class room, one hour a week; laboratory; four hours a week.

53. Bacteriology.—A study of the physiology of bacteria; bacteriological analysis of water; and a study of soil bacteria. Prerequisite, Course 1 or 2. Class room, one hour a week; laboratory, †four hours a week.

54. Bacteriology.—A course which will consider such dairy experiments as the effect of pasteurization on milk bacteria; quantitative bacterial determination of butter and cheese; study of typical milk bacteria; use of special biochemic tests for quality of milk; study of effect of separators, clarifiers, coolers, etc., on the bacterial content of milk and cream. Prerequisite, Course 52. †Four to six hours a week.
55. Bacteriology.—An experimental consideration of ammonification, nitrification, and denitrification in the soil; study of relation of bacteria to soil fertility; symbiosis. Prerequisite, Course 52. †Four to six hours a week.

56. Bacteriology.—Lectures and reference work upon various problems, relating to different phases of sanitary milk production; relation of microorganisms to butter and cheese; discussion of the effect of various dairy operations upon quality of dairy products. Open only to students taking Course 54. Prerequisite, Course 52. Two hours a week.

57. Bacteriology.—Lectures and reference work upon various problems relating to bacteria and soil fertility; discussion of ammonification, nitrification, and denitrification in the soil; a consideration of symbiosis. Open only to students taking Course 55. Prerequisite, Course 53. Two hours a week.

101-102. Bacteriology.—This is a laboratory course for students who desire to pursue some particular line of bacteriological investigation. Open only to students who have done considerable work in bacteriology. The kind of work and the time will be arranged to suit individual students.

Biological and Agricultural Chemistry

Professor Merrill; Assistant Professor Smith

1. Biochemistry.—Lectures and recitations on the composition of the plant; the source, nature and assimilation of plant food; fermentation, its nature, effects, and control. Two hours a week.

2. Biochemistry.—A continuation of Course 1. The composition of the animal body and of food materials; the adaptation of food to animal requirements; the chemical changes involved in the digestion and assimilation of foods; respiration; absorption and liberation of energy. Class room, three hours a week; laboratory, †four hours a week.

3. Economic Geology.—A course in applied geology, including a general survey of our mineral resources, with special reference to the mineral fuels; the distribution and manner of occurrence of the more useful metals; the economically important nonmetallic minerals; and a study of the rocks and their uses as building stone, as road material, and as sources of lime and cement. Two hours a week.
5. **GEOLOGY.**—A study of the earth's history and development, with especial attention to dynamical, structural, and physiographical geology. *Three hours a week.*

6. **Agricultural Chemistry.**—This course includes a study of the origin and composition of soils; the source and composition of fertilizing materials; the fixation of atmospheric nitrogen; the composition of insecticides and fungicides; the chemistry of milk and other dairy products. Prerequisite, Course 1. *Two hours a week.*

7. **Biochemistry.**—An abridged course, including a study of the protein, fats, and carbohydrates, the digestive enzymes and processes, the tissues and secretions of the body. Class room, *three hours a week*; laboratory, *four hours a week.*

8. **Food Analysis.**—A brief introduction to quantitative analysis, with laboratory practice in the analysis of foods; lectures on food adulteration and methods for its detection. Class room, *one hour a week*; laboratory, *six hours a week.*

9. **Organic Chemistry.**—A brief course designed for students in Agriculture and Home Economics. Class room, two hours a week; laboratory, *two hours a week.*

51. **Biochemistry.**—Lectures and recitations on the composition of the plant; the source, nature, and assimilation of plant food; the composition of the animal body and of food materials; the adaptation of food to the animal requirements; the chemical changes involved in the digestion and assimilation of foods; respiration; absorption and liberation of energy; general metabolism; the chemical processes and methods of investigation by which these subjects are studied. Prerequisite, Chemistry 52. *Five hours a week.*

52. **Laboratory Biochemistry.**—A study of the carbohydrates, fats, and protein bodies; the digestive enzymes; the blood, muscles, bones, and other tissues of the body; milk, bile, and other secretions. A continuation of the preceding course. *Four hours a week.*

60. **Agricultural Analysis.**—A course in the qualitative analysis of fodders, fertilizers, milk, butter, and other dairy products. The course is designed for students desiring to take up experiment station and inspection work. Prerequisites, Chemistry 53 and 60. *Eight hours a week.*
Biology

The courses in this department are described under the College of Arts and Sciences.

FARM MANAGEMENT AND AGRICULTURAL ENGINEERING

Professor Simmons

For undergraduates only

2. Farm Accounting. (a) Farm Mathematics.—Instruction in this subject consists in the application of its principles to all kinds of farm problems where measurements of material, extension, capacity, etc., are required.

(b) Farm Records and Accounts.—A system of records of the various operations of the farm, such as records of field labor, crop yields, milk production in the dairy, etc., a system of accounts showing the receipts and expenditures of the farm. †Four hours a week.

71. Agricultural Engineering and Rural Architecture.

(a) Agricultural Engineering.—Farm surveying and leveling; the plotting of farms and measurements of land; a study of drainage; estimating the investment and returns from a system of drainage; the making of roads; road materials.

(b) Rural Architecture.—The planning, designing, location, and construction of farm buildings, water systems, sewerage, and concrete construction. Class room, two hours a week; laboratory, *three hours a week.

72. Farm Mechanics and Machinery. (a) Farm Mechanics.—A study of the simpler laws of mechanics as applied to farm implements and farm machinery.

(b) Farm Machinery.—A study of machinery used on the farm, farm power, etc. Demonstrations and tests are made with various machines and implements. Class room, two hours a week; laboratory, *three hours a week.

73. History and Economics of Agriculture. (a) History of Agriculture.—A history of agriculture from early times to the present day; the beginning of British agriculture, and the development of mod-
ern agriculture; the agriculture of the United States, its influence on social conditions; the importance of our leading products, and their effect on the world's commercial life; the agriculture of different sections; the development of farm machinery; progress in agricultural education. Lectures supplemented by illustrative material and slides.

(b) Economics.—The factors of agricultural production, and their economic properties; organization of the farm; rent of farm land and the law of diminishing returns from the land; systems of distribution; a study of life in the rural communities; schools and other rural organizations. Class room, *two hours a week; laboratory, †two hours a week.

74. Farm Management.—A study of the various types of farming, with comparison of investment and returns from each. A study will be made of the conditions under which extensive, intensive, and mixed systems of farming prosper or fail; laying out of fields and rotations of crops; investigation of cost of different farming operations; management of men and teams; markets and marketing. Farm surveys, with a detailed study of the conditions on different farms, will be made. Farm plans will be outlined to suit various conditions. Class room, *two hours a week; laboratory, †three hours a week.

FORESTRY

Professor Briscoe; Mr. Chapman

1. Economics of Forestry.—The importance and scope of the subject; the influence of forests on the conservation and distribution of water; influence on soils, topography, and public health; the relation to agriculture; stock raising, mining, railroads, manufactures, and industries in general; the character, extent and distribution of forest resources, national, state, and private. Required of all freshmen majoring in forestry, and open to all students. *Two hours a week.

2. Woodlot Forestry.—The general principles of forestry, with special application to the farm woodlots in this region. Lectures and text-book work in elementary systems of cutting, reforesting, protection, and estimating. Open to all students. *Two hours a week.

3. Wood Identification and Uses.—The identification and classification of the economic woods of the United States, based on simple
lens inspection; the technical qualities of various species, and their uses in the arts and trades; their commercial production. *Two hours a week.*

4. **Wood Preservation.**—Durability and seasoning of native woods; preservatives in commercial use; methods of operation and equipment of preserving plants. Special attention given to ties, posts, poles, paving-blocks, and timbers. Second half of semester. *Two hours a week.*

5. **History of Forestry.**—The development of forestry in European countries and in the United States. Second half of semester. *Two hours a week.*

6. **Forest Mensuration.**—Continuation of study of estimating methods taken up in Course 11; study of age, growth, yield, and taper; form factors and volume tables. *Two hours a week.*

8. **Forest Mensuration Field Work.**—To be taken in connection with Course 6. Use of instruments, scaling, and estimating. *Six hours a week.*

9. **Forest Products.**—Dealing with forest products other than logs and lumber, such as pulp wood, veneers, shingles, lath, tight and slack cooperage, hoops and headings, excelsior, vehicle woods, boxboards, spool stock turpentine, tannin, gums, syrups, dye woods, and charcoal; methods of utilization, markets and values. First half of semester. *Two hours a week.*

10. **Forest Protection.**—Systems of fire protection practiced by the federal government, state governments, and individuals or associations; protection against atmospheric agencies, insect damages, grazing and animals, parasite plants and weeds. *One hour a week.*

11. **Forest Mensuration.**—Lectures and recitations. Instructions in the theory and application of forest measurements. Calculations and computations from data obtained in the field work. *Two hours a week.*

12. **Practice of Forestry.**—Applied systems of silviculture and management considered in relation to the commercially important species and types of forest in the United States; discussions of management as practiced in Europe, and the adaptation of these systems to conditions in this country. Open to forestry seniors only. *Two hours a week.*

13. **Forest Mensuration Field Work.**—To be taken in connection with Course 11. Collection of data for the study of age, growth, yield, taper, and volume; determination of form factors; survey and forest map of an assigned tract. *Six hours a week.*
14. **Forest Management.**—Construction of a working plan for a large area of forest land; map making, timber estimating, and growth studies, in connection with plans for the same. Open to seniors only. *Six hours a week.*

15. **Silviculture.**—A study of the factors concerning forest growth and the relation of trees to external environment; study of the forest as a whole; characteristics of the forest and of forest regions of the United States. Prerequisites, Biology 61, 62, 67, and 68. *Two hours a week.*

16. **Silviculture.**—Cultural measures in the forest; thinnings, cuttings, methods of reproduction both natural and artificial; planting. *Two hours a week.*

17. **Silviculture Field Work.**—Special studies and practical work in the forest; preparation of a type map and detailed reports in silvicultural problems. To be taken in connection with Course 15. *Six hours a week.*

18. **Nursery Practice.**—To be taken in connection with Course 16. Tests of the germinating qualities of seeds of forest trees and a study of seedlings; problems in planting and practical work in the State Forest Nursery; practice in field planting. *Six hours a week.*

19. **Lumbering.**—The lumber industry in the United States considered from the economic standpoint; an account of the methods of logging and manufacture in different regions. Text books and lectures. *Two hours a week.*

20. **Forest Finance.**—Business principles applied to forest management. The theory of the normal forest; calculations for sustained yield and continuous revenue. Lectures, recitations, and problems. *Two hours a week.*

21. **Lumbering Field Work.**—To be taken with Course 19. Inspection of lumber and pulp mills in the vicinity, during the first half of the semester. Inspection, detailed study and report of an assigned operation. In this work the student is expected to spend at least six ten-hour days actual work on a lumbering job in the woods. *Six hours a week.*

22. **Current Forestry Literature.**—A continuation of Course 23. *One hour a week.*

23. **Current Forestry Literature.**—Reviews of periodicals and current forestry literature; preparation of a card index under subject and author headings. Forestry seniors only. *One hour a week.*
24. **Forest Policy.**—National and state forest policy and administration; relation of government, corporations and individuals in regard to forest policies and applied forest management. Forestry seniors only. Second half of semester. *Two hours a week.*

25, 26. **Thesis.**—Credit of from 2 to 6 hours will be allowed students desiring to elect thesis work in forestry. Work on original problems and investigations may be undertaken with the approval of the department. Time to be arranged.

28. **Forestry Laws.**—Laws of the federal government and of the several states concerning forests and forestry. Given in 1916-17 and alternate years. *Two hours a week.*

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**HOME ECONOMICS**

**Professor Freeman; Assistant Professor Beach; Assistant Professor Anderson; Miss McGinnis**

1, 2. **Textiles and Clothing.**—A study of fibers and fabrics from a historic, economic, and social standpoint. The laboratory work consists of the making of plain garments, involving drafting and design, and selection of materials. Class room, *one hour a week*; laboratory, †*four hours a week*.

3, 4. **Design and Color.**—The object is to develop the appreciation of harmony of line, space, and color. Class room, *one hour a week*; laboratory, †*two hours a week*.

5, 6. **Foods.**—A study of food composition, cost, and the principles involved in preparation. The laboratory work consists in the preparation of the various types of foods. Prerequisites, Chemistry 1 or 3, 5, 2 or 4, and 6. Class room, *two hours a week*; laboratory, †*four hours a week*.

7. **Dress.**—Economics, hygiene, design, and color are studied in their relation to dress. The laboratory work consists in designing and drafting of pattern, selection of materials, and the making of dresses. Prerequisites, Courses 1, 2, 3, and 4. Class room, *two hours a week*; laboratory, †*four hours a week*.

8. **Dress.**—A continuation of Course 7. Laboratory, †*six hours a week.*
9. **Sanitation.**—The situation of the house regarding general surroundings; sanitary conditions in and around the house, ventilation, water supply, heating, and plumbing; the householder's interest in public sanitation and hygiene. Prerequisites, Bacteriology 1 and 3. Class room, *three hours a week*.

10. **Dietetics.**—The chemical, economic, and physiological principles of human nutrition are studied. Prerequisites, Courses 5 and 6, and Biochemistry 7. Class room, *three hours a week*; laboratory, *four hours a week*.

11. **Foods.**—Problems in the preparation and serving of foods. A continuation of courses 5 and 6. Class room, *one hour a week*; laboratory, *four hours a week*.

12. **Household Management.**—A study of economic and social principles of the household; organization of the household; division of income, labor, household processes; care of the household. Open to seniors. Class room, *three hours a week*; laboratory, *two hours a week*.

13. **Handwork.**—Historical and social development of textile industry from primitive man to modern times. Prerequisites, Courses 1 and 2. Laboratory, *four hours a week*.

14. **Nursing.**—Personal hygiene; the practical application of bacteriology and physiology in health and disease; the care of the baby; first aid to the injured. Prerequisites, Bacteriology 1 and 3, and Biology 5. *Two hours a week*.

15. **Teachers' Course.**—Methods of presenting the work and its correlation with other subjects. Practice in planning courses of study and equipment. Open to seniors. *Three hours a week*.

16. **House Construction and Furnishing.**—The evolution of the house, of house furnishings, their color, design, and cost. The laboratory work consists in the planning of the house, making plans and estimates for house furnishings, and visiting shops. Also the designing and making of accessories in furnishing and decorating the house. Prerequisites, Courses 1, 2, 3, and 4. Class room, *one hour a week*; laboratory, *four hours a week*.

17. **House Construction and Furnishing.**—A continuation of Course 7. Class room, *one hour a week*; laboratory, *four hours a week*.

18. **Thesis.**—Different phases of home economics. Individual problems. Open to seniors. *Two to four hours a week*. 
HORTICULTURE

ASSOCIATE PROFESSOR SWEETSER; ASSISTANT PROFESSOR MULLER

1. COMMERCIAL POMOLOGY.—A course in methods of picking, grading, packing, storing, and marketing fruit. The laboratory work of this course will acquaint the student with the more important varieties of fruit in this State. Class room, two hours a week; laboratory, two hours a week.

2. PRACTICAL POMOLOGY.—A study of orchard sites and soils, methods of propagating, setting, cultivating, fertilizing, pruning, and spraying. Class room, two hours a week; laboratory, thrice hours a week.

3. SYSTEMATIC POMOLOGY.—A systematic study of the types and varieties of the leading groups of fruits, their evolution and adaptation to environment; also distribution of varieties in the State. Prerequisites, Courses 1 and 2. Class room, two hours a week; laboratory, two hours a week.

4. VEGETABLE GARDENING.—A course in practical vegetable growing, dealing with the production of vegetables for home use or market. Handling hot beds and cold frames will be included. Class room, two hours a week; laboratory, two hours a week.

5. LANDSCAPE GARDENING.—A study of the principles of landscape art and of the materials used in making landscape pictures. Special attention is given to the improvement of the home grounds. Class room, two hours a week; laboratory, two hours a week.

7. GENERAL FLORICULTURE.—A study of the culture, propagation, management, and care of flowers for commercial purposes. Methods of producing, shipping, marketing, and designing, will be considered. Class room, two hours a week; laboratory, two hours a week.

8. GREENHOUSE CONSTRUCTION.—A study of the various types of greenhouses and the methods of construction. Estimates and plans are made for houses suitable for conservatories, private estates, and commercial floriculture. Cost and methods of installing heating systems, show rooms, and storage houses are also considered. Class room, two hours a week; laboratory, two hours a week.

9. SMALL FRUIT CULTURE.—A study of the bush and vine fruits, including strawberries; adapted varieties; methods of propagation, cul-
ture, harvesting, and marketing. Class room, \textit{two hours a week}; laboratory, \textit{\textdagger two hours a week}.

11, 12. Thesis.—\textit{Three hours a week}.


21. Commercial Olericulture.—This course is designed to include harvesting, marketing, and systematic study of types and varieties of vegetables; also storage and care of vegetables for seed production. Prerequisite, Course 20. Class room, \textit{two hours a week}; laboratory, \textit{\textdagger two hours a week}.

50. Plant Breeding.—A course in plant breeding, as applied to variation, selection and hybridization, adapted to garden and fruit crops. Prerequisite, Biology 7. \textit{Two hours a week}.

51, 52. Seminar.—Preparation and discussion of papers dealing with the recent problems and experiments in horticulture. Required of students taking major work in horticulture. Prerequisites, Courses 1 and 2. \textit{One hour a week}.

54. Floriculture.—A course designed to give practical knowledge of the propagation and culture of annuals, herbaceous perennials, bulbs, roses, bedding plants, and other garden plants, with especial reference to care of public parks and private estates. Class room, \textit{two hours a week}; laboratory, \textit{\textdagger two hours a week}.

55. Fruits and Vegetables Under Glass.—A study of the various fruits and vegetables that are grown under glass. A course suited to the needs of either commercial work or private estates. Prerequisite, Course 1. Class room, \textit{two hours a week}.

56. Plant Disease Control.—A course designed to acquaint the student with the various kinds and types of spray machinery, and with the preparation and application of the various sprays used in disease control. Prerequisites, Courses 1 and 2. Class room, \textit{one hour a week}; laboratory, \textit{\textdagger two hours a week}. 
College of Arts and Sciences

FACULTY OF INSTRUCTION

James Stacy Stevens, M. S., LL. D., Dean and Professor of Physics
Lucius Herbert Merrill, Sc. D., Professor of Biological and Agricultural Chemistry
James Norris Hart, C. E., M. S., Sc. D., Professor of Mathematics and Astronomy
John Homer Huddilston, Ph. D., Professor of Ancient History and Art
Jacob Bernard Segall, Ph. D., Professor of French
George Davis Chase, Ph. D., Professor of Latin
Caroline Colvin, Ph. D., Professor of History
Wallace Craig, Ph. D., Professor of Philosophy
Guy Andrew Thompson, Ph. D., Professor of English Literature
Mintin Asbury Chrysler, Ph. D., Professor of Biology
Roy Merle Peterson, Ph. D., Professor of Spanish and Italian
Robert Rutherford Drummond, Ph. D., Professor of German
Harley Richard Willard, Ph. D., Professor of Mathematics
John H Ashworth, Ph. D., Professor of Economics and Sociology
Charles Andrew Brautlecht, Ph. D., Professor of Chemistry
Harold Milton Ellis, Ph. D., Professor of English
Irving Hill Blake, A. M., Associate Professor of Biology
Bertrand French Brann, M. S., Associate Professor of Chemistry
Ava Harriet Chadbourne, M. A., Acting Associate Professor of Education
Myron Owen Tripp, Ph. D., Associate Professor of Mathematics
Albert Lewis Fitch, Ph. D., Associate Professor of Physics
Willis Warren Harriman, M. A., Associate Professor of Public Speaking. (In charge of the Department)
J Howard Toelle, A. M., Associate Professor of Economics and Sociology

*Ralph Maynard Holmes, M. A., Assistant Professor of Physics
Francois Joseph Kueny, L. es L., Assistant Professor of French
Albert Ames Whitmore, B. S., Assistant Professor of History
The College of Arts and Sciences offers a course of liberal training equivalent to that of the standard New England college. It designs particularly to meet the needs of three classes of students:
1. Men and women who desire to pursue a cultural college course.
2. Men and women who desire to enter professional schools.
3. Men and women who plan to fit themselves for the profession of teachers in secondary schools, or for school superintendents.

ADMISSION

The requirements for admission are given in full elsewhere in the catalog. They are practically the same as for other New England colleges and may be met by a four-year preparatory course in a good high school or academy.

FRESHMAN STUDIES

The character of the work of the first year is conditioned somewhat upon the subjects offered for admission.

It is recommended that all students in this college register for as much of the required work as practicable in their freshman year, and they are expected to complete the whole of this work by the end of their sophomore year.

MAJOR SUBJECT

During the freshman year the student does not select a major subject and the registration is largely prescribed.

Beginning with the sophomore year each student must select, in some one department, work to be pursued three or four years, on the average of five recitations a week. Any one of the following departments may be chosen for major work: Biology, (including Zoology, Botany, Physiology, and Entomology), Chemistry, Economics and Sociology, Education, English, French, German, History, Latin, Mathematics and Astronomy, Philosophy, Physics, Spanish and Italian.

The major subject must include work counting not less than thirty nor more than fifty hours. In the case of departments in which less work is offered than amounts to thirty hours, this must be made up from such other related departments as the professor under whose direction the major subject is taken may prescribe. The remainder of the student's work may be selected from any department or departments of the university. This must be done with the approval of the head of the department in which the student has chosen his major subject and must bear some useful relation to his other work.
The head of the department in which the student has chosen his major subject becomes his major instructor, and during the remainder of the course this instructor acts as chief adviser in all matters relating to the curriculum, and is the representative of the student before the faculty.

GRADUATION REQUIREMENTS

The College of Arts and Sciences has the following graduation requirements:

Every candidate for the Bachelor of Arts degree is required to complete the following amount of work in college: (a) eight hours prescribed in English; (b) ten or sixteen hours elected in Group 1, of which six or ten hours must be in foreign languages; (c) ten hours elected in Group 2; (d) ten hours elected in Group 3; (e) military science and tactics, two years, three hours a week; (f) physical training, one year, three hours a week.

A student who enters college with a minimum of four units in foreign languages is required to elect sixteen hours in Group 1, of which at least ten hours shall be in foreign language. A student who enters with more than the minimum of four units credit is required to elect at least ten hours in Group 1, of which at least six hours shall be in foreign language.

1. LANGUAGE GROUP.—This is composed of courses in language and literature, including all the courses offered in the departments of English, Public Speaking, French, Spanish and Italian, and such courses offered by the departments of Greek and Latin as deal with the Greek and Latin languages and literatures, or presume some knowledge of these languages.

2. SCIENCE AND MATHEMATICS GROUP.—This is composed of the courses offered in mathematics and the biological and physical sciences, including all the courses offered by the Departments of Mathematics, Biology, Chemistry, Biological Chemistry, and Physics.

3. SOCIAL SCIENCE GROUP.—This is composed of the courses offered in the Departments of History, Economics and Sociology, Philosophy, Education; and the courses in Bibliography, History, Archeology, Fine Arts, Music, and Biblical Literature offered in other departments and not included in the first group.

4. MILITARY SCIENCE AND TACTICS, two years, three hours a week.

5. PHYSICAL TRAINING, one year, three hours a week.
GENERAL LECTURE COURSE

A course of weekly lectures is given in the College of Arts and Sciences each semester. Attendance is open to all, and credit is granted when the course is completed.

INFORMATION CLUB

This is a club composed of students in the College of Arts and Sciences who are willing to spend an hour a week in the discussion of some topic of general interest. Leaders are selected from the faculty of this college. The attendance is voluntary and no credit is given for this work.

PROGRAM FOR SECONDARY SCHOOL TEACHERS LEADING TO A STATE CERTIFICATE

The College of Arts and Sciences of the University of Maine has arranged a program for the professional training of secondary school teachers, which will entitle those who complete it to a professional state certificate for secondary school teachers. The program has been arranged in conference with the State Superintendent of Public Schools and has his endorsement.

In addition to fulfilling the general requirements leading to the degree of Bachelor of Arts, the student is expected to complete six hours in Psychology in the sophomore year as a prerequisite to twelve hours work in Education in the junior and senior years, thirty hours in a major subject, and from ten to twenty hours in a minor subject. The prescribed work in Education includes three hours in the History of Education, three hours in the Principles of Secondary Education, three hours in Technique of Teaching, and three hours to be elected from the three following subjects: Adolescence, Pedagogy and Psychology of High School Subjects, and Practice Teaching.

The selection of a major subject to which the student devotes 30 hours and a minor subject to which he devotes from 10 to 20 hours is designed to equip him for teaching two subjects related to high school. Usual combinations of high school subjects are English and history, Latin and history, English and Latin, Latin and modern languages, mathematics and physics, physics and chemistry. For the completion of this course a high standard of scholarship is required. All the prescribed
work must be of C grade or above. Upon completing this course the student will receive a Professional Secondary Certificate from the State Department of Public Instruction which will designate the major and minor subjects which he has pursued. A special certificate will also be issued by the university which will give a detailed outline of the student's record.

BACHELOR OF ARTS CURRICULA

The work in the College of Arts and Sciences leads to the degree of Bachelor of Arts (B. A.). The curricula demand 125 hours and are regularly completed in four years, but a student of exceptional preparation and application may complete the requirements in three years by attending one or more summer terms. Students fitting themselves for professional or technical schools are often encouraged to do this, but prospective teachers are recommended to spend four years in college.

No outlines of the curricula in the College of Arts and Sciences are given in the catalog, but students may have an outline presented to them by applying to the professor in charge of the department in which they are interested. Groups of studies are made up which would be desirable for students intending to prepare for teaching, or to enter upon the study of law, medicine, or theology.

In this college, 95 out of the 125 required hours must be made with a grade of C or above.

BACHELOR OF PEDAGOGY CURRICULA

Graduates of the Maine normal schools who have completed a course in a Class A high school, and who have had one year of successful experience in teaching, are admitted to the university as candidates for the degree of Bachelor of Pedagogy. Such students are required to complete, with high grade, seventy-five semester hours, of which twelve shall be in the Department of Education, and a sufficient number of the remaining hours shall be devoted to some one department to give them a satisfactory equipment for high school teaching.

COMBINED ARTS AND LAW CURRICULA

Students who have completed the junior year in the College of Arts and Sciences are permitted to enter the College of Law and are given
the degree of B. A. after one year, and LL. B. after two additional years' work. Such students are required to conform to the Arts requirements in English, modern languages, and science; to take 30 hours in the Social Science group; and to complete 15 hours in some definite subject.

While a student who has satisfactorily completed two years in any college of the university or an equivalent in any standard college will be admitted to the College of Law, students looking forward to the study of law are strongly advised to follow the preparatory curriculum outlined below. Such students should register as pre-legal students in the college of Arts and Sciences. The courses are planned for three years for the convenience of those who are able to extend their studies. The desirability of completing three or four years in the College of Arts and Sciences, if possible, should be considered by the student.

### FRESHMAN YEAR

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### SOPHOMORE YEAR

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JUNIOR YEAR

Fall Semester

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Spring Semester

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COMBINED ARTS AND MEDICAL CURRICULA

The marked increase in the number of pre-medical students in attendance at the university has led to the establishment of definite programs of work for such students. Owing to the work of the American Medical Association, two years pre-medical work in an Arts college has become the standard requirement for admission to class A medical schools, and with this in view the two-year course has been arranged. The three-year course has been arranged in connection with an agreement with certain medical schools, which provides that a student who completes three years at this institution may enter the medical school, and receive his bachelor's degree here at the completion of his first year at the medical school. A four-year course will be arranged to meet the need of students who wish a broader academic training before beginning their distinctly medical studies. Three or four years of academic work are strongly recommended to the prospective student.

Two-year Course

FIRST YEAR

Fall Semester

<table>
<thead>
<tr>
<th>Subject</th>
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Spring Semester

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## SECOND YEAR

### Fall Semester

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### Spring Semester

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<td>General Physics</td>
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## Three-year Course

### FIRST YEAR

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### SECOND YEAR

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<td>Qualitative Analysis</td>
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<td>General Physics</td>
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### THIRD YEAR

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<td>English</td>
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<tr>
<td>Genetics</td>
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Ancient History

The Department of Ancient History is arranged with the idea of presenting the several phases of the ancient civilizations. Such courses are offered as will prove serviceable to the student of average interests, who not having studied the ancient languages in the fitting school, may desire to include in his college curriculum some work bearing on the permanent contributions of early peoples to the civilization of ancient and modern times.

1, 2. Ancient Civilization.—This course has little in common with the ancient history of the preparatory schools. It is rather the achievements of the Greeks and Romans in laying the foundations of so much that is the basis of our modern day life and thought to which attention is directed. Some examination is made of Egyptian and Eastern civilization as the historic background on which developed Classical life and action. An important part of the course lies in the emphasis that is given to the Greek thought and Roman rule in the midst of which Christianity sprang up.
Students who take Courses 53 and 54 after this course will get the projection of Classical civilization, especially literature and philosophy, as it culminated in the Renaissance of Italy, France, and England. While especially the needs of freshmen are kept to the front in this course, it is open to all students.

Instruction is entirely by lectures and each student is required to keep a note-book, and also have as parallel reading Breasted's Ancient Times. *Three hours a week.*

3. **Private Life of the Greeks and Romans.**—Text-book; lectures, illustrated with lantern slides and photographs; assigned reading. *Two hours a week.*

4. **Early Religion.**—A study of the religious conceptions of the ancient Egyptians, Persians, Greeks, and Romans and their relation to art and literature; lectures and assigned reading; investigation of special topics by members of the class. *Two hours a week.*

51. **Greek Literature.**—The history of poetry,—epic, lyric, and dramatic. Types and standards of verse composition established by the ancient Greeks, and some consideration of the Greek influence upon later poetry, particularly the epic. Lectures and readings from English translations. Each student will be expected to make a special study of some one author, and in the treatment of Aeschylus, Sophocles, and Euripides, at least one play of each will be read in class, members of the class taking the several parts. This course, as well as the next on prose literature, is intended to be foundational for students majoring in classics or in modern languages. *Three hours a week.*

52. **Greek Literature.**—The history of prose literature in ancient Greece. History, oratory, and philosophy will be traced in succession. Students will be expected to do parallel reading, especially in Thucydides, Demosthenes, and Plato. This course may be taken only in connection with Course 51, and like the latter is intended to place the student in touch with the forces of lasting value in Greek letters. *Three hours a week.*

53, 54. **Classical Civilization.**—A seminar course throughout the year, open only to those who have taken Courses 1, 2 and intended to develop the classical heritage of the Middle Ages and to follow Greece in the revival of learning. Lectures, discussion by members of the class, and written and oral reports. *Two hours a week.* Given on arrangement with the instructor.
55, 56. **History of the Near East.**—It is with the conviction that the present Near East can be understood only by the past Near East that this course is given. The early national traditions of the Near East are traced from the Greek age down thru Roman and Byzantine epochs. The brilliant periods of Balkan history are discussed with the spread of Ottoman power and the relation of Turkey to the affairs of Modern Europe. Obviously this course can be given only in the light of the Great War and the recent order of events in the Near East. Lectures and special assignments. *Three hours a week.*

**Art**

9. **Art.**—Ancient art in its fundamental relations to human evolution; the influence of art as a dominant force in Greece and the effects of Greek culture upon Rome; the passing of Greek art to Latin soil; the notable national monuments of Rome. The existing remains in the European museums as well as the monuments still *in situ* in Italy, Sicily, Greece, and Asia Minor will be gone over with the photographs. Each student will be expected to acquire some ability in estimating the styles of the various epochs. Lectures. *Three hours a week.*

10. **Renaissance.**—This period is studied particularly in Italian paintings of the fifteenth and sixteenth centuries. Lectures; study of pictures; special subjects for individual investigation. *Three hours a week.*

11, 12. **General Art History.**—From the Greek age down to the time of the French Revolution. Main emphasis will be laid on the architecture and sculpture of the ancients and the painting of the Renaissance and later times. This course is intended for a rapid survey of the subject and is presented with the idea of accommodating such students as can not afford the time required by Courses 9 and 10. Instruction will be given by lectures, with a text-book for occasional quiz. *Two hours a week.*

**ASTRONOMY**

**Professor Hart; Mr. Jordan**

10. **Descriptive Astronomy.**—An elementary course. The text-book is supplemented by informal lectures, illustrated by lantern slides,
drawings of celestial objects, and work in the observatory. Open to all students. *Three hours a week.*

15, 16. **General Astronomy.**—Designed for general culture and for students in mathematics and physics. Recitations, lectures, solutions of problems, observations with instruments in the observatory. Open to sophomores, juniors, and seniors who have had Mathematics 1. *Three hours a week.* Given in 1920-21 and alternate years.

57. **Practical Astronomy.**—A course arranged to meet the needs of engineering students, and consisting mainly of problems in the conversion of time, the determination of terrestrial latitudes, and the establishment of meridian lines. The data for these problems are taken largely from the students’ own observations, and the course is intended to emphasize the necessity of careful work in the field, as well as accurate and well arranged computations. The instruments employed are the sextant, artificial horizon, portable chronometer, theodolite, vertical circle, astronomical transit, and zenith telescope. Open to students who have taken Mathematics 1, 3, and Astronomy 10. *Two hours of recitations or lectures and two hours of observatory work a week.*

59, 60. **Practical Astronomy.**—The theory and use of the sextant, universal instrument, zenith telescope, transit, and equatorial. Open to students who have taken Mathematics 6, 7, 8, and Astronomy 10. *Three hours a week.* Given in 1919-20 and alternate years.

62. **History of Astronomy.**—Lectures and recitations. *Two hours a week.* Given in 1920-21 and alternate years.

**BIOLOGY**

**Professor Chrysler; Associate Professor Blake; Assistant Professor Batchelder; Miss Whitaker; Miss Hutchinson; Mr. Merritt**

**General Biology.**—Course 1, General Zoology, together with Course 2, General Botany, comprise a year’s work in General Biology. After completing Courses 1 and 2 a student may specialize on either the botanical or the zoological side of Biology. The science requirement in the College of Arts and Sciences may be met by taking Courses 1, 2 and 7.
1. General Zoology.—The fundamental principles of animal life, illustrated by examples from the principal groups, and including some work on the anatomy and physiology of higher animals. Required of students taking the Curricula in Agriculture and Forestry, and Pre-medical work. Class room, *two hours a week*; laboratory, *four hours a week*.

2. General Botany.—The fundamental principles of plant life, illustrated by examples from the various groups, with special attention to the seed plans. Required of students taking the Curricula in Agriculture, Forestry, and Home Economics, and Pre-medical work. Prerequisite, Course 1. Class room, *two hours a week*; laboratory, *four hours a week*.

5. Elementary Physiology.—The anatomy, physiology, and hygiene of higher animals, especially applied to man. Required of students taking the Curriculum in Home Economics. Class room, *two hours a week*; laboratory, *four hours a week*.

7. Genetics.—A general treatment of the facts which form the basis of our knowledge of inheritance. Prerequisite, Courses 1 and 2. *Two hours a week*.

8. Entomology.—A study of the structure, life-histories, and classification of insects, illustrated by common farm and forest species; the special insect pests of field, garden, orchard, and forest, and of domestic animals; methods of control. Some work on animal parasites other than insects is included. Prerequisites, Courses 1 and 2. Class room, *two hours a week*; laboratory, *four hours a week*.

9. Plant Taxonomy and Histology. 10. Plant Physiology and Pathology.—A combined course for one year for students in Agriculture, consisting of: practice in the identification of the higher plants; microscopic work on the cell, tissues, and organs of the higher plants; a study of the functions of plants, including nutrition, growth, and response; a study of the diseases of plants, especially those caused by fungi. Prerequisites, Courses 1 and 2. Class room, *two hours a week*; laboratory, *six hours a week*.

11. Plant Diseases.—A non-technical view of the subject designed for students who have had only General Biology. Class room, *two hours a week*; laboratory, *two hours a week*.

17. Wood Identification.—The identification of the various commercial woods by means of the unaided eye and the microscope. Open
to students in Chemical Engineering, and to others by permission. **†Four hours a week** (counts one credit hour). Second half of fall semester.

51. **Vertebrate Anatomy.**—A comparative study of the organ systems of vertebrates, with the dissection of the cat and fowl. Prerequisites, Courses 1 and 2. Class room, *two hours a week*; laboratory, †*four hours a week*.

52. **Animal Embryology.**—A study of the fundamental principles of development, and the formation of organ systems and tissues in vertebrates. Laboratory work on fish, frog, and chick. Prerequisite, Course 51. Class room, *two hours a week*; laboratory, †*four hours a week*.

53. **Advanced Animal Physiology.**—A study of the activities of cells and organ systems, with experimental work on the muscles, nerves, circulation, etc., in frog and man. Prerequisite, Course 51. Class room, *two hours a week*; laboratory, †*four hours a week*.

54. **Animal Histology.**—A study of the structure of protoplasm, cells, and tissues; practice in microscopical technique. Prerequisite, Course 51. Class room, *two hours a week*; laboratory, †*four hours a week*.

56. **Vertebrate Anatomy.**—A continuation of Course 51, with special reference to other vertebrate types, especially dogfish and a reptile. Prerequisite, Course 51. Laboratory, †*four to †eight hours a week*.

57, 58. **Economic Entomology.**—A further study of economic insects and entomological problems, varying according to the needs of the students. Prerequisite, Course 8. Laboratory, †*four to †eight hours a week*.

61. **Plant Histology.**—The microscopic structure of the higher plants; the cell; the various tissues; the root, stem, leaf, and spore-bearing organs; the adaptations of plants to external conditions, considered from the standpoint of structure; killing, sectioning, staining, and mounting of plant tissues. Prerequisites, Courses 1 and 2. Class room, *two hours a week*; laboratory, †*four hours a week*.

62. **Plant Physiology.**—The plant is considered from the standpoint of its activities; absorption and transport of raw material; manufacture, transport, and storage of food; growth; movement in response to stimuli. Prerequisite, Course 61. Class room, *two hours a week*; laboratory, †*four hours a week*.

63. **Plant Taxonomy and Morphology.**—The identification of seed-plants by the use of a manual; the structure and relationships of vascular plants from the evolutionary standpoint. Prerequisite, Course
61. Class room, field, and laboratory work; time to be arranged, giving four units.

64. **Plant Ecology.**—Presents briefly two aspects of the subject: (1) physiographic ecology studied in the field as far as the season permits; (2) structural ecology, viz., the histological features characteristic of plants growing in extreme habitats, and of those having special modes of nutrition. Prerequisite, Course 9 or 61. Class room, *one hour a week*; laboratory, *four hours a week*. Given in 1921 and alternate years.

66. **Forest Pathology.**—The diseases of trees, especially those caused by fungi; destruction of timber by fungi; methods of combating plant diseases. Prerequisite, Course 61. Class room, *two hours a week*; laboratory, *two hours a week*. Given in 1921 and alternate years.

67, 68. **Forest Botany.**—A systematic study of the trees of North America. Prerequisites, Courses 1 and 2. Class room, *two hours a week*; laboratory, *four hours a week*.

71, 72. **Biological Seminar.**—Preparation and discussion of papers dealing with recent advances in zoology and botany. Open to seniors and graduate students. *One hour a week*.

73, 74. **Thesis.**—Students in the College of Agriculture specializing in biology may prepare a thesis on some subject approved by the head of the department. *Time varies*.

75, 76. **Advanced Zoology.**—This course offers an opportunity for special zoological work along lines suited to the future plans of the student. It may consist of field work, laboratory work, or reading, or a combination of all three. In general each student is given a problem for investigation and encouraged to devise methods for its solution. *The time varies* and the work may be continued a number of semesters.

77, 78. **Advanced Botany.**—This course offers an opportunity for special work in botany along lines best suited to the future plans of the student. It may consist of laboratory work, field work, or reading, or a combination of all three. *The time varies* and the work may be continued a number of semesters.
ECONOMICS AND SOCIOLOGY

Professor Ashworth; Associate Professor Toelle; Assistant Professor Bancroft; Mr. Freyd

I. Economics

1a. Elementary Principles of Economics.—An introductory course dealing with the general principles and problems of modern economic activity. It is the purpose of this course to lay the foundation for further study in economics and to give the students who do not take other courses in the subject an understanding of the economic structure of society and a knowledge of politico-economic problems which every educated person is supposed to have. For students in the College of Arts and Sciences this course is prerequisite for other courses in economics except that those who register for this course may register at the same time for Courses 7 and 9. Not open to freshmen. Three hours a week.

1b. Elementary Principles of Economics.—Similar to Course 1a except that no extended study is made of practical economic problems. For technical and agricultural students this course is prerequisite for other courses in economics unless Course 1a be taken. Students who register for this course may register at the same time for Courses 7 and 9. Not open to freshmen. Two hours a week.

2a. Money and Banking.—A study of the history and principles of the currency and banking systems of the United States and the other leading countries of the world. Three hours a week.

2b. Modern Economic Problems.—A continuation of Course 1b. Banking, insurance, the tariff, taxation, wage system, and industrial organization. Two hours a week.

7. Geography and Industry.—A brief study of the resources of the countries of the world: agricultural, mining, forestry, fishing, and animal industries; means of transportation and communication; emphasis upon resources and production in the United States. Two hours a week.

8. American Commerce.—The commercial relations of the United States with foreign countries: theory of foreign trade and tariff policies; modern organization and practices; credit and banking facilities; commercial treaties; special attention to trade with South American countries. Two hours a week.
9. Accounting.—This course aims to give the student that general knowledge of the principles of accounting which every business person should possess. Since this course does not presume any knowledge of bookkeeping a considerable part of the work is devoted to double entry bookkeeping. Three hours a week.

10. Accounting.—A continuation of Course 9. Partnership and corporation accounting; balance and income sheets; depreciation, reserve, sinking fund, and investment accounting; advanced forms of final statements; realization and liquidation. Three hours a week.

11. Business Organization and Management.—The promotion, structure, functions, and financing of business undertakings; significance of large scale production; economic and legal aspects of business combinations; business methods, system and efficiency; problems of business management. Juniors and seniors only. Three hours a week.

12. Business Law.—The legal principles of modern business; contracts, agency, corporations, partnerships, bailments, guaranty and insurance. Juniors and seniors only. Three hours a week.

51. Corporation Finance.—The promotion, financing, incorporation, and capitalization of industrial corporations in the United States; the relations of stockholders and directors; stock speculation; receiverships and reorganizations. Juniors and seniors only. Two hours a week.

52. Public Finance.—Government activities and public revenue; tax systems with emphasis on existing systems and proposed reforms; government expenditures with emphasis on the budget system; the Maine system of taxation. Juniors and seniors only. Two hours a week.

59. Insurance.—The relation of insurance and risks to modern business organization; principles of life and property insurance; types of companies and policies; rate making; investment of insurance companies; legislation for the protection of policy holders. Juniors and seniors only. Three hours a week.

60. Transportation.—The historical development of transportation in the United States; railway organization and combination; financing and rate making; federal and state regulation; government ownership and operation; railway policies of leading European countries. Juniors and seniors only. Three hours a week.

71. Rural Economics.—A study of economic problems of peculiar interest to rural communities; cooperative credit, insurance, buying, and selling; the land problem: ownership and tenancy; size of farms; land speculation. Three hours a week.
72. Labor Problems.—The industrial revolution and the development of the modern conflict between capital and labor; history, aims, policies, and methods of trade unions; present day industrial problems: woman and child labor, immigration, wages, hours of labor, workingmen's insurance, and agencies of industrial peace. Juniors and seniors only. Three hours a week.

91. Economic Theory.—A critical study of economic theories with stress upon theories of value, price, and the distribution of wealth. Required of seniors majoring in economics. Two hours a week.

92. Journal Club.—Readings in journals and books outlined and directed for those qualified for the work. Readings assigned with reference to current economic and social problems. Restricted to those majoring in economics and sociology. Two hours a week.

II. Sociology

55. General Sociology.—Human life and its organization; the evolution of institutions; the laws and forces which are fundamental in society; some psychological phases of the subject. Prerequisite to other courses in sociology. Not open to freshmen. Three hours a week.

56. Social Pathology.—Application of sociological principles in the study of poverty and relief; criminality and its prevention; care of dependents and defectives. Three hours a week.

81. The Family.—An historical consideration of the origin and development of the family; the legal and economic relations of its members; its significance as an institution; its pathological manifestations. Two hours a week.

82. Rural Sociology.—The social problems of country life: isolation of rural communities; movement of the people to the city; social activities; agencies for the improvement of rural life: the school, the church, and other institutions and organizations. Open to students of the College of Agriculture without the usual prerequisite. Two hours a week.

97. Immigration and Americanization.—A history of immigration into the United States; the social, economic, and political aspects of immigration; agencies and methods of Americanizing the immigrant. Students who have had Economics 1 may by permission of the head of the department take this course without having had Course 55. Juniors and seniors only. Two hours a week.
98. **Socialism and Other Social Reform Programs.**—An analysis of Marxian doctrines; the spread of socialistic ideas; the modern socialists: their political and economic influence, chief exponents, and importance in the United States and foreign countries; history of other movements aimed to transform the social order: communism, syndicalism, etc.; recent events in their relation to the subjects considered. Students who have had Economics 1 may by permission of the head of the department take this course without having had Course 55. Juniors and seniors only. *Two hours a week.*

### III. Political Science

61. **American Government.**—The principles and interpretation of the federal government; emphasis on present day political problems which relate to fundamental principles of the American government. Prerequisite to other courses in political science. Not open to freshmen. *Three hours a week.*

62. **Governments of Europe.**—A comparative study of the modern governments of the principal countries of Europe; party development and current problems national and local. Prerequisite to Courses 87 and 89. *Three hours a week.*

63. **State and Local Governments.**—Powers, rights, and obligations of the states in the Federal union; formation and admission of states; development of the state constitutions; organization of state and local governments; brief survey of the newer problems connected with state governments. *Three hours a week.*

64. **Political Parties.**—Origin, principles, organization, functions, and activities of political parties, primarily in the United States. *Three hours a week.*

87. **American Diplomacy.**—The Department of State; diplomatic service; the treaty making power; the foreign policy of the United States; diplomatic controversies with foreign powers; the United States as a world power. Juniors and seniors only. *Three hours a week.*

88. **International Law.**—Development, nature, source, and present status; development of internationalism. Juniors and seniors only. *Three hours a week.*
EDUCATION

PRESIDENT ALEY; ASSOCIATE PROFESSOR CHADBOURNE

The Courses in Education are arranged to begin the junior year. Courses in Philosophy 51 and 52 taken during the sophomore year are a prerequisite to all courses in education, which are taken to secure credit for the professional secondary certificate. By special permission the beginning courses in education may be taken in connection with the beginning work in philosophy. Education courses 51, 52, and 77 or 78 are constant requirements for the professional secondary certificate. In addition, to secure this certificate it is necessary for the student to elect one of the following courses: Education 75 or 76, Education 84, or Education 71.

51. HISTORY OF EDUCATION.—A general survey of the development of education from primitive times to the present. The relation of the industrial, social, religious, and political conditions to educational ideals and practices, and the changing conceptions of the relation of the state to the individual are constantly emphasized. The following topics are studied: Education among the Greeks, Romans, and Jews; early Christian education; education during the Middle Ages; the Renaissance and Reformation as related to educational thought and practice; humanism, realism, formal discipline; development of the modern systems; influence of psychology; influence of the development of science and discovery; the growth of education in the Colonies with special attention to secondary and higher education. This course is required for the state secondary professional certificate for teachers. Lectures, readings, and discussions: Three hours a week.

52. HISTORY AND PRINCIPLES OF SECONDARY EDUCATION.—Especial attention will be given to the development of secondary schools from the Greeks to the present, emphasizing the American grammar schools, academies, and the growth of public high schools. The fundamental conception of the aims of secondary education; its articulation with elementary and higher education; relation of the high school to the community; organization and control of the high school; curricula making; extra curricula activities and their control; supervised study; educational and vocational guidance. Three hours a week.

53, 54. CONTEMPORARY MOVEMENTS IN EDUCATION.—A critical examination of the principles and movements influencing present educational thought and practice. The following topics are suggested: modern educational aims; state control of education; professional supervision in
city and rural districts; manual training, household arts, and commercial courses; the kindergarten movement; recent problems growing out of secondary education; education of exceptional children; experimental education; application of measurement to educational progress and standards; recent emphasis on vocational education; teacher training; educational problems growing out of the war. Lectures, readings, and special reports. Two hours a week.

58. School Hygiene.—This course consists of three main divisions: (1) The hygiene and sanitation of the school building, lighting, heating, ventilation, seating, duties of janitor, hygiene of utensils and books. (2) A study of the school child from the standpoint of health, growth, and defects; medical inspection of schools; contagious and other diseases which affect school children, including the administrative problems involved. (3) The hygiene of instruction, including the best mental and physical conditions for work of school children. Two hours a week.

61, 62. Administration and Supervision of Education.—This course is designed for superintendents and principals. Its purpose is to present the fundamental problems of organization and development of school systems; relation of the state to education; state, county, township, and district organizations; powers and duties of superintendents, status of school boards; valuation of curricula and courses of study; relation of schools to the social needs of the community and individual needs of child life; efficiency of school systems as indicated by the execution of the curriculum, holding power of the schools, age and grade variations of school children, promotion, retardation, and elimination; school finances and reports; school expenditures and apportionments of school funds, selection and tenure of teachers. Three hours a week.

71. The Pedagogy and Psychology of High School Subjects.—A study of the principles underlying the methods of instruction in the various high school subjects. Each subject will be treated with reference to the reasons given for keeping it in high school; the psychological principles involved in methods to realize these ideals; traits of high school pupils; supervision and control of study; relation of the subject to educational and vocational guidance. Lectures, readings, and special reports. Three hours a week.

75, 76. Practice Teaching.—Arrangements may be made to do practice teaching in junior and senior high school work in Orono and Old Town. Special conferences and supervision are given the students who elect this work. Education 71 or 77 are prerequisites. Students
are required to make out lesson plans for each day and to meet once a week for discussion. All students who expect to teach are advised to elect at least one term of practice work and those who wish to qualify for teaching under the Smith-Hughes Law either in Home Economics or Agriculture are required to take the course. Provision for agriculture will be made in the short course work and in Home Economics at Old Town. *Five hours of class periods a week* gives four hours credit; *three hours*, two hours credit.

77, 78. **Technique of Teaching.**—This course will include a study of the principles of classroom management and methods of teaching. The following topics will be treated: elements entering into the learning process; methods of drill; methods of testing; questioning, choice of material, and lesson plans; economy of time and purposes of the recitation; types of lessons and their development; supervised study; measuring the results of class work; classroom observation and discussion of the points gained from the observation. *Three hours a week.*

84. **Mental and Physical Traits of High School Pupils.**—The course is designed to give the high school teacher a knowledge of the mental and physical characteristics and motives of the high school youth, including the intellectual and physical changes of this age, social and group life, sexual differences, variation in ability, criminal tendencies, moral and religious ideals, and differences in physical and mental age and its bearing on education. Various high school activities will be evaluated from the status of the adolescent boy and girl: athletic organizations, intellectual interests, genetic significance of play and group life. Stress will be laid on mental and physical hygiene of adolescent development and the characteristic differences between boys and girls. *Three hours a week.*

86. **Pedagogy and Psychology of Common School Branches.**—This course is similar to Course 71 except that the application is made to common school grades. It is designed for superintendents. *Three hours a week.*

87, 88. **School Administration.**—This course deals with the theory and practice of statistical measurements as applied to educational problems. Practice will be given in collecting, arranging, and tabulating data, and graphing results. Open to graduates and undergraduates who have had sufficient preparation to do the work. *Two hours a week.*

101, 102. **Seminar in Education.**—This course will deal with practical problems that meet the needs of the class. Each member of the class is required to work out some particular problem and contrib-
ute the results to the class. A choice of one of the following problems is suggested for 1919-20: The junior high school; statistical measurements as applied to education; state control of education; vocational education; rural education problems. Three hours a week.

103, 104. SEMINAR IN EDUCATION.—Methods of testing and measuring children, including the practical use of mental tests, physical measurements, hygienic tests and their application in discovering waste in education; the physiological age, mental age, pedagogical and chronological age of school children will be compared. Each student is expected to take a definite problem and work it out in connection with the schools of Old Town and Orono. The course is designed for superintendents and others who wish to get an insight into the abilities of school children. Two hours credit. Given in 1916-17 and alternate years.

ENGLISH

PROFESSOR ELLIS; PROFESSOR THOMPSON; MISS WYMAN; MR. FORBES; MR. HOFFMAN; MR. JARVIS; MR. PERRIN; MISS PHILLIPS

1, 2. COMPOSITION AND RHETORIC.—The object of this course is to give training in writing clear and correct English, with attention also to oral expression. The theoretical work includes the study of the fundamental principles of good usage in writing and of the expository and narrative forms of composition, with some attention to description and argumentation, and practice in making outlines. Model prose selections are studied. Weekly themes and longer essays are required, with conferences. This course is prescribed for all freshmen. Two hours a week.

3, 4. HISTORY OF ENGLISH LITERATURE.—A survey of the literature from its beginning to the end of the nineteenth century. Lectures and recitations based upon the direct study of selections from the chief English poetry and prose. Written reports on assigned topics. Recommended for all sophomores in Arts and Sciences and in Home Economics and prerequisite for all advanced courses in English literature. Three hours a week.

5, 6. TECHNICAL COMPOSITION.—This course supplements the work of the freshman year by more specific training in technical writing, correspondence, reports and summaries of investigation, and preparation of manuscript for theses and technical journals. The study of model prose selections is included. This course is required of all stu-
students in the Colleges of Agriculture and Technology except students in Home Economics. *Two hours a week*, first or second semester.

7, 8. **Advanced Composition.**—A course designed to meet the needs of students who have shown some degree of proficiency in English 1, 2 and who desire to continue practice in writing, for literary, journalistic, or practical purposes. *Two hours a week.*

9, 10. **Modern Literature.**—This course consists of a study of representative works, mainly prose, of the nineteenth and twentieth centuries, with the design to cultivate the appreciation and enjoyment of good literature. Short-stories, novels, and essays, and if time permits, plays and poems, are included. Reports and criticisms of the works read are written. Required of sophomores in forestry in the first semester and open to other students in the Colleges of Agriculture and Technology who have completed English 1, 2. *Two hours a week.*

23, 24. **Journalistic Composition.**—This course gives training and practice in the fundamentals of journalistic writing, such as the seeing of stories that have unique interest, developing news and feature stories, and cultivating an effective journalistic style. *Two hours a week.*

27, 28. **Practical Journalism.**—This course consists of practical work in connection with student publications. *Two hours a week.*

31. **The Eighteenth Century Essay.**—Among the writers studied will be Addison, Swift, Johnson, Goldsmith, and Burke. *Two hours a week.*

32. **The Nineteenth Century Essay.**—Among the writers studied will be Lamb, De Quincey, Macaulay, Carlyle, Ruskin, Arnold, and Stevenson. *Two hours a week.*

37, 38. **Victorian Poets.**—Chiefly Tennyson, Browning, and Arnold. A study of selected poems, with extensive assigned reading in the poets. *Two hours a week.*

43, 44. **American Literature.**—A historical outline. Lectures, recitations, and assigned reading. *Three hours a week.*

47, 48. **History of English Prose Fiction.**—This course traces the development of the novel and the short-story in English. Lectures, recitations, and a considerable amount of reading of notable works of both types. *Two hours a week.*

51. **Anglo-Saxon.**—A study of Anglo-Saxon grammar and reading of easy prose and poetry. Lectures on the literature of the Anglo-Saxon period. This course is recommended for those intending to
teach English or to proceed to graduate study in the subject. *Three hours a week.* Given in 1919-20 and alternate years.

52. Beowulf.—This course supplements English 51 with a study of the earliest English epic. Attention is given to the meter, literary qualities, and historical background. *Three hours a week.* Given in 1920-21 and alternate years.

53, 54. Chaucer.—A study of the *Canterbury Tales* and the chief minor poems, stressing the reading of Chaucer as poetry, his literary range and qualities, and the picture of his time given in his works. *Three hours a week.* Given in 1920-21 and alternate years.

55, 56. Nineteenth Century Poetry.—In the first half the poetry of the English Romantic movement is chiefly considered; in the second the poetry of the Victorian Age and the later period. *Three hours a week.* Given in 1919-20 and alternate years.

57, 58. Shakespeare.—A brief consideration of the English drama prior to Shakespeare, followed by a careful study of several of his most important plays and the reading of others. Some attention is given to Elizabethan stage conditions and the dramatic work of his chief contemporaries. *Three hours a week.*

59. English Literature from 1790 to 1830.—A study of the literature of the romantic and revolutionary movements, the early realistic reaction, the rise of periodical literature, and the social and political influences which affected the writers of the first quarter of the nineteenth century. *Three hours a week.* Given in 1920-21 and alternate years.

60. English Literature from 1830 to 1870.—The literary and scientific movements of the era, the Victorian novelists, tractarianism, pre-Raphaelitism, the greater poets, imperialism, and the later realists and romancers. *Three hours a week.* Given in 1920-21 and alternate years.

61, 62. History of the English Drama.—The development of the drama in England from the miracle and mystery plays through the Elizabethan period, and the later tendencies in the Restoration drama, the eighteenth century, the nineteenth century closet drama, and the revival of the acting play in England, Ireland, and America. *Three hours a week.*

63. Sixteenth Century Literature.—Non-dramatic poetry and prose, including selected writings from the works of Wyatt, Surrey, Gascoigne, Lyly, Spenser, Shakespeare, Ben Jonson, and others. *Two hours a week.*
64. **Seventeenth Century Literature.**—This course follows Course 63 and deals with writings from the works of Bacon; Cavalier and Puritan poets; Herrick, Milton, and Bunyan. *Two hours a week.*

65. **Restoration Literature.**—The temper of the Restoration period as reflected in the literature; the Restoration drama; the significance of Dryden's work; political satire; the rise of modern prose; the standards of classicism in poetry. *Three hours a week.* Given in 1920-21 and alternate years.

66. **Eighteenth Century Literature.**—The school of Pope and the beginnings of romanticism; the rise of the essay and the beginnings of periodical literature; the rise of the novel; the political, social, and religious influences; the poetry of Burns. *Three hours a week.* Given in 1920-21 and alternate years.

67. **Outline History of the English Language.**—The descent and relationships of the English language; the successive periods of foreign influence; the sources and character of the English vocabulary; speech habits and changes; modern English and its dialects. Recommended for prospective teachers of English. *Two hours a week.*

68. **Forms and Types of English Poetry.**—A study of the different metrical forms in English verse and of the ballad, sonnet, lyric, and other common types. *Two hours a week.*

101, 102. **Seminar.**—The subject is determined by the needs of students in attendance.

**FRENCH**

**Professor Segall; Assistant Professor Kueny; Mr. Shimley; Miss Bussell**

1, 2. **Elementary French.**—Grammar, pronunciation, composition, conversation, translation. *Five hours a week.*

3, 4. **Intermediate French.**—Grammar, pronunciation, composition, conversation, translation. Open to students who have taken Courses 1 and 2, or an equivalent. *Three hours a week.*

3a. **Intermediate French.**—Equivalent of Courses 3 and 4. Open to students who have taken Courses 1 and 2, or an equivalent. *Five hours a week.*

5, 6. Advanced French.—Pronunciation, composition, conversation; rapid reading of modern authors. Open to students who have taken Courses 3 and 4, or an equivalent. *Three hours a week.*

7, 8. Elementary Conversation and Composition.—Open to students who have taken Courses 1 and 2, or an equivalent. *Two hours a week.*

9, 10. Advanced Conversation and Composition.—Open to students who have taken Courses 7 and 8, or an equivalent. *Two hours a week.*


55. The Drama in the Nineteenth Century.—The Romantic Period: Dumas père, Victor Hugo, Alfred de Vigny, Alfred de Musset, Scribe. Lectures, recitations, themes. Open to students who have taken Courses 5 and 6. *Two hours a week.* Given in 1919-20 and alternate years.


57, 58. How to Teach French.—A teachers’ course. Lectures, recitations, practical exercises. Open to students who have taken Courses 9 and 10, or an equivalent. *Two hours a week.* Given in 1920-21 and alternate years.

59, 60. How to Write French.—An advanced course in French composition. Open to students who have taken Courses 9 and 10, or an equivalent. *Two hours a week.* Given in 1919-20 and alternate years.

61. History and Criticism in the Nineteenth Century.—Romantic Period: Madame de Staël, Chateaubriand, Thierry, Guizot,
Tocqueville, Michelet, Thiers. Lectures, recitations, themes. Open to students who have taken Courses 5 and 6. *Two hours a week.* Given in 1919-20 and alternate years.


107, 108. **The Seventeenth Century.**—The theatre in close relationship to the literary, social, and political environment. The Précieux and Classic movements. The historic development of the tragedy and comedy before Corneille. Corneille, Racine, Molière. Lectures, recitations, themes. Open to students who have taken two courses in French literature. *Two hours a week.* Given in 1920-21 and alternate years.

109, 110. **The Eighteenth Century.**—Memoirs and history; poetry; the theatre; the novel. Beyle, Fontenelle. Montesquieu, Vauvenargues, Voltaire, Diderot and the Encyclopedia, philosophers, economists, critics. Buffon, Rousseau, Bernardin de Saint-Pierre, Beaumar-
chais, André Chénier. The Revolution. Lectures, recitations, themes. Open to students who have taken two courses in French literature. *Two hours a week.* Given in 1920-21 and alternate years.


**GERMAN**

**Professor Drummond; Doctor Tripp**

1, 2. **FIRST YEAR GERMAN.**—A course for beginners. Grammar, composition, translation, conversation. *Five hours a week.*

3, 4. **SECOND YEAR GERMAN.**—For students who have had Courses 1, 2 or equivalent. Translation, composition, grammar review. *Three hours a week.*

5, 6. **THIRD YEAR GERMAN.**—For students who have had Courses 3, 4 or equivalent. A course in German literature including the reading of texts of the eighteenth and nineteenth centuries and lectures. *Three hours a week.*

7, 8. **FOURTH YEAR GERMAN.**—For students who have had Courses 7, 8 or equivalent. Critical reading of standard works, principally from the nineteenth century literature, lectures, essays. *Three hours a week.*

9, 10. **TEACHERS’ COURSE.**—For those who intend to teach German. Discussion of methods of teaching, the value of different texts, preparation of the lesson, class-room work, pronunciation, word-derivation, historical grammar. *Two hours a week.*

13, 14. **ELEMENTARY GERMAN COMPOSITION AND CONVERSATION.**—For students who have had Courses 3, 4 or equivalent. *Two hours a week.*

15, 16. **SCIENTIFIC GERMAN.**—Open only to students whose previous study of German will enable them to read scientific German with profit. *Two hours a week.*
17, 18. Advanced German Conversation and Composition.—For students who have had Courses 13, 14. Two hours a week.

51, 52. Studies in Eighteenth Century Literature.—Special attention is given to the life and work of Klopstock, Lessing, Wieland, Goethe, Schiller. Translation, lectures, discussions. Two hours a week. Given in 1919-20 and alternate years.

53, 54. Faust.—The history and development of the Faust legend, the influence of the Faust idea, critical study of Goethe's Faust. Two hours a week. Given in 1920-21 and alternate years.

55, 56. Studies in Nineteenth Century Literature.—The various literary movements; lectures, translation. Two hours a week.

101, 102. Gothic Introduction to the Study of Germanic Philology.—Historical grammar, word-derivation, translation. Two hours a week. Given in 1919-20 and alternate years.

103, 104. Old High German.—A study of the grammar and translation from the different dialects of this period; word development in relation to present-day language; discussion of sound changes. Two hours a week. Given in 1920-21 and alternate years.

105, 106. Middle High German.—A study of the grammar and its relation to modern German grammar; reading of such texts as Nibelungenlied, Walther von der Vogelweide, Hartmann von Aue; lectures on the literature of this period. Two hours a week.

107, 108. Seminar.—A study of some special topic in German literature. Two hours a week.

HISTORY

Professor Colvin; Assistant Professor Whitmore; Mr. Freyd

1. Medieval History.—A general course covering the period from 395 to 1500 A. D. The disintegration of the Roman Empire; ecclesiastical institutions; feudalism; struggle between the papacy and the empire; rise of modern nations. Required of major students in history. Not open to freshmen. Three hours a week.

2. Modern History.—Continuation of Course 1 to the present time. A rapid survey of the Reformation; the absolute monarchy in France; the French Revolution; the Napoleonic era; Europe in the nineteenth century. Not open to freshmen. Three hours a week.
3. History of England.—From early times to the beginning of the Stuart period. Especial attention is given to social and industrial conditions. Not open to freshmen. Two hours a week.

4. History of England.—Continuation of Course 3. From the beginning of the Stuart period to the present. Not open to freshmen. Two hours a week.

5. History of the United States.—A general course from 1848 to the present time. Not open to freshmen. Two hours a week.

6. Recent History.—This course deals mainly with the 20th century. A special study is made of some of the most important events in the year in which the course is given. Not open to freshmen. Two hours a week.

7, 8. United States History and Government.—This course is open to freshmen only, and credit will not be given except for a full year's work. Two hours a week.

9. History of the United States.—The period from 1783 to 1848. This course will begin with a brief study of Colonial history from 1750. Not open to freshmen. Two hours a week.

10. History of the United States.—A continuation of Course 9, from 1848 to the present time. Not open to freshmen. Three hours a week.

51. The Renaissance.—This course takes up the Renaissance as an intellectual and social movement in Italy and its expansion into France, England, and Germany. Three hours a week.

52. The Reformation.—This course is primarily a study of the Protestant revolt, but an introductory study will be made of Waldo, St. Francis of Assisi, and religious conditions during the Renaissance. Three hours a week.

53. Modern Continental Europe.—The period from the Peace of Utrecht to 1789. Three hours a week.

54. Modern Continental Europe.—Period of the French Revolution and Napoleon I. Three hours a week.

55. Modern Continental Europe.—The period since 1815. Three hours a week.

56, 57. Industrial and Social History of England.—The medieval manor town, guild, and foreign trade; Black Death and Peasants' Rebellion; breaking up of the medieval system; expansion of England; the industrial revolution; government control in the nineteenth century; and the growth of voluntary association. This course is continuous
for the year and during the later half is carried over into Colonial and United States social and industrial history.

58, 59. **Historical Construction and Criticism.—One hour a week.**

**Latin**

Professor Chase

1. **Livy.—**Selections from Livy, History of Rome. *Three hours a week.*

2. **Cicero and Horace.—**Cicero, De Senectute; Horace, Odes and Epodes. *Three hours a week.*

3. **Latin Composition, with Review of Latin Syntax.** *One hour a week.*

4. **Latin Composition.—**A continuation of 3. *One hour a week.*

5. **Tacitus.—**Reading and discussion of the Agricola and Germany. *Three hours a week.*

6. **Terence and Plautus.—**The Phormio of Terence; the Captivi and Trinummus of Plautus; study of early Latin and the development of Roman comedy. *Three hours a week.*

7. **Teachers' Course.—**Discussions of topics connected with the teaching of Latin in secondary schools. Study of selected passages of Cæsar, Cicero, and Vergil. *Two hours a week.* Given in 1917-18 and alternate years.

8. **Cicero.—**Speeches against Catiline, for the Manilian Law, and Archias. Open to students who have completed two years' study of Latin in high school. *Five hours a week.*

9. **Vergil.—**Aeneid, books i-vi. Open to students who have had less than four years of high school training. *Five hours a week.*

51. **Latin Composition.—**Practice in writing Latin; study of Latin syntax. *One hour a week.*

52. **Latin Composition.—**Practice in writing Latin; study of Latin rhetoric. *One hour a week.*

53. **The Younger Pliny.—**Reading of selected letters of Pliny; the Roman Empire. *Three hours a week.*

54. **Horace and Juvenal.—**Reading of selections from the great satirists; study of Roman satire and social life. *Three hours a week.* Given in alternate years.
55. Tacitus.—Reading of the Annales and study of the reign of Tiberius. *Three hours a week.* Given in alternate years.

56. The Roman Elegaic Poets.—Selections from Catullus, Tibullus, Propertius, and Ovid; study of elegaic poetry. *Three hours a week.* Given in 1917-18 and alternate years.

57, 58. Roman Philosophy.—Reading from Cicero's philosophical writings and from Lucretius; discussion of the leading schools of ancient philosophy. *Three hours a week.* Given in alternate years.

59, 60. Roman Rhetoric and Oratory.—Quintilian (selections from the Institutio Oratoria); Tacitus (Dialogus de Oratoribus); Cicero (selections from the Brutus, De Oratore, and Orator). Open to students who have taken Courses 1-4. *Three hours a week.* Given in 1917-18 and alternate years.

103, 104. The Latin Language.—A discussion of the fundamental principles of linguistic growth and change and of the relationship of Latin to other languages; Latin phonetics; the development of inflectional forms in Latin. Lectures and recitations. *One hour a week.* Given in alternate years.

105. Roman Numismatics.—Practice in the use of coins as original sources for the study of history, mythology, archeology, etc. *One hour a week.* Given on sufficient demand.

107. Sanskrit.—An elementary course in the classical language of India, with especial reference to the light it throws upon the history and grammar of the languages of Europe. *Two hours a week.* Given when asked for by a sufficient number of students.

108. Sanskrit.—A continuation of Course 107, with more attention to the classical literature of India. *Two hours a week.*

**MATHEMATICS**

Professor Hart; Professor Willard; Associate Professor Tripp; Mr. Jordan; Mr. Meek; Mr. Anning; Mr. Pratt; Mr. Ballantine

Students electing mathematics as a major subject are expected to take Courses 1, 2, 3, 5, 6, 7, 8, and are expected to elect other courses to a total of forty semester hours. Courses in Astronomy 9, 15, 16, and 57, and Mechanics 51 and 52 may be taken as mathematics electives. Students majoring in mathematics and intending to teach are also advised to take several courses in physics.
1. **Trigonometry.**—The trigonometric functions; radian measure; functions of two or more angles; logarithms; solution of right and oblique triangles; trigonometric equations; inverse functions. *Five hours a week.* First ten weeks.

2. **Solid Geometry.**—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. *Three hours a week.* Open to all freshmen who did not offer it for admission.

3. **College Algebra.**—A brief review of radicals, the theory of exponents, quadratic equations, and the binomial theorem; determinants; theory of equations. *Five hours a week.* Last eight weeks.

4. **Spherical Trigonometry.**—The elements of this subject with problems and applications to spherical astronomy. *Two hours a week.*

5. **Advanced Algebra.**—Topics in college algebra not covered in Course 3. Open to students who have taken Courses 1, 2, and 3, and to other students with especially good high school preparation. *Three hours a week.*

6. **Analytic Geometry.**—The point, line, circle, and conic sections; higher plane curves; elements of solid analytic geometry. Open to students who have had Courses 1 and 3 and the equivalent of Course 2. *Five hours a week.*

[During the college year 1919-20 Courses 1, 3, and 6 are being given as a combined course under the title Freshman Mathematics. *Five hours per week throughout the year.*]

7. **Calculus.**—Differentiation of the elementary forms of algebraic and transcendental functions; successive differentiation; differentials; rates; maxima and minima. Open to students who have taken Courses 1, 2, 3, and 6. *Five hours a week.*

8. **Calculus.**—A continuation of Course 7. Integration of the elementary forms; integration as a summation; various methods of integration. Applications of differential and integral calculus. *Five hours a week.*

9. **Trigonometry for Agricultural Students.**—A course essentially equivalent to Course 1. *Three hours a week.*

10. **Applications of Trigonometry.**—A course given for students in Agriculture and Forestry, and open to others who have taken Course 1 or 11. Further practice in the solution of problems with applications to plane surveying. *Two hours a week.*
13. **Differential and Integral Calculus.**—A course given for students in Chemistry and for those in the College of Arts and Sciences who desire only a brief course in this subject. *Three hours a week.*


51. **Advanced Analytic Geometry.**—A course for students who have completed Courses 5, 6, 7, and 8. *Three hours a week.* Given in 1920-21 and alternate years.

52. **Solid Analytic Geometry.**—*Three hours a week.* Given in 1920-21 and alternate years.

53. **Advanced Calculus.**—This course is varied from time to time by using different texts. Open to students who have taken Courses 6, 7, and 8. *Three hours a week.* Given in 1919-20 and alternate years.

54. **Advanced Integral Calculus.**—A continuation of Course 53. *Three hours a week.* Given in 1919-20 and alternate years.

56. **Differential Equations.**—Open to students who have taken Courses 7, 8. *Two hours a week.*

61. **History of Mathematics.**—Lectures and recitations. *Two hours a week.* Given in 1920-21 and alternate years.

63. **Teachers' Course in Mathematics.**—*Three hours per week.*

64. **Modern Synthetic Geometry.**—*Three hours per week.*

65. **Theory of Equations.**—*Three hours per week.*

101. **Theory of Functions of a Complex Variable.**—An elementary course in the treatment of analytic functions. The course includes a consideration of infinite series, both single and double, infinite products, conformal representation, and a brief application of the theory to Fourier's series, the gamma, beta, and Bessel functions, and spherical harmonics. *Three hours a week.* Not given in 1919-20.


103. **Modern Analytic Geometry.**—Homogeneous coordinates, ideal elements, principle of duality, and an analytic treatment of the straight line and the conics. *Three hours a week.*

104. **Modern Analytic Geometry.**—A continuation of Course 103. *Three hours a week.*

105. **Thermodynamics.**—The subject is considered more from a mathematical than from a physical standpoint. The subject is developed
from fundamental principles, and is extended to systems of a more general character than those usually considered. *Three hours a week.* Not given in 1919-20.


110. **Hydrodynamics.**—The subject is treated in such a way as not to require the use of spherical harmonics. The course includes a brief treatment of some of the problems of motion in a fluid, including wave motion and rectilinear vortex motion. *Three hours a week.* Not given in 1919-20.

114. **Fourier's Series and Spherical Harmonics.**—*Three hours per week.*

**MUSIC**

**Director Sprague**

3, 4. **Music Appreciation.**—A study of the masterpieces of music from the standpoint of the listener. This course is analytical rather than historical. While the vital forces and personalities in the development of the art are noted and discussed, the music itself is taken as the basis of study, a knowledge of the evolution of form in music, of the molds in which the composers' ideas are cast, being the most tangible and immediate approach to an understanding and appreciation of their works. This evolution is traced from the folk-song to the symphony, and masterpieces of both classic and modern schools are analyzed. Lectures, illustrations, prescribed readings, and reports. The department is equipped with an Angelus for illustration and laboratory investigation. Ability to read music is required. *Two hours a week.*

5, 6. **Introductory Theory and Harmony.**—This course deals with the grammar of music, the preliminary work being a survey of the elements of music structure. Harmony is the foundation of the art of composition, and its study is basic to a genuine musical understanding. It treats of the conditions under which tones sound together and progress in combination. The work in this subject consists of the study of intervals, scales, and chords, their structure, individualities, and associations; the harmonization of melodies; analysis. Knowledge of notation required. *Two hours a week.*
7, 8. Advanced Harmony.—Supplementary to Course 5, 6 and designed to apply to the more advanced problems of tone combination the training already obtained. Harmonic analysis is taken up more fully and systematically. Individual expression is encouraged, the plan of the course including melody-writing and composition in the simpler forms. Two hours a week.

9, 10. Counterpoint.—This subject follows logically that of harmony and develops freedom of expression and facility in the handling of material necessary to all forms of composition. Counterpoint is the art of combining melodies. In its application the principles of harmony are still the guiding element, but the voices or strands of the musical structure are developed with more individual character and independence. Melody, rhythm, and harmonic accompaniment are studied in detail. Open to students who have completed Course 5, 6. Two hours a week.

51. Interpretation and Conducting.—The aim of this course is to assist in meeting the demand for leadership in the rapidly growing school and community music movement and thus to familiarize students possessing the technical training and natural ability for musical leadership with the problems of organizing bodies of singers and players; of time-beating; of program-building; and of interpretation as applied to the rehearsing and performance of choral and orchestral music. When talent warrants it, opportunity will be offered for practice in actual conducting. Membership in the university chorus, orchestra, or band, is a prerequisite. Attendance at ensemble concerts is urged, student tickets supplied to the department rendering such expense very small. Open to juniors and seniors. One hour a week.

PHILOSOPHY

Professor Craig

3. History of Mankind.—The early history of man. Origins of the arts and sciences, of language, of social life, customs, and institutions. The evolution of cultures, or civilization. Tylor's Anthropology is used as a text-book. For freshmen only. Three hours a week.

4. Science of Morals.—History of moral codes and customs. Study of the practical moral life, including such topics as justice, honesty, industry, professional and business ethics, duties toward the State, etc. Moral education. For freshmen only. Three hours a week.
51, 52. Psychology.—Anatomy and physiology of the nervous system and sense-organs. Psychology of sensation, instinct, habit, emotion, attention, interest, learning, memory, imagination, reasoning, will. Applications in school teaching, in the training of children in the home, in self-education, in the practical world, and in the life of the scholar. Required of students in Home Economics and in the professional curriculum for teachers. Open to upper-classmen. Three hours a week.

57, 58. Experimental Psychology.—Laboratory courses, open to a limited number of students. Prerequisite, Philosophy 51. †Four hours a week.

83, 84. History of Thought in Europe and America.—A history of thought, in which the movements in science, art, literature, and politics are considered in their fundamental aspects, leading up to the great thought-movements of the present day. Marvin's History of European Philosophy and collateral reading. Two hours a week.

PHYSICS

Professor Stevens; Associate Professor Fitch; Assistant Professor Hildreth; Mr. Steffey; Mr. Ballantine

Note.—For students who are specializing in this department, the time indicated for the various laboratory courses may be extended. Two and one-half hours of laboratory work give a credit of one hour.

1. General Physics.—Recitations and lectures on the dynamics of solids, liquids, and gases; sound and heat; experiments before the class; problems. Open to students who have taken Mathematics 1. Five hours a week.

2. General Physics.—A continuation of Course 1. Electricity and light. Three hours a week.

3. Qualitative Laboratory Work.—A course in which students who are preparing to become teachers of physics are given the opportunity of performing the various class-room experiments which accompany the lecture courses. ‡Five hours a week.

4. Laboratory Physics.—The subjects usually included in an under-graduate course. Especial attention is given to the reduction of observations and the tabulation of results. Open to students who have taken either Course 1 or Course 5. ‡Five hours a week.
5, 6. General Physics.—A course covering the ground of Courses 1 and 2, with more attention to the experimental and historical aspects, and less to the mathematical. Three hours a week.

8. Elementary Physics.—This course is to be taken only by students in Home Economics, and will consist of four recitations and one laboratory period per week. Five hours a week.

9. Laboratory Physics.—A course similar to Course 4, open to students in the College of Arts and Sciences. Five hours a week.

10. Meteorology.—A course covering the essential principles of the subject of meteorology, including a study of meteorological instruments and weather predictions. Three hours a week.

11. Meteorology.—A continuation of Course 6, dealing with special topics, and a discussion of the results obtained at the meteorological observatory. One hour a week recitation; two and one-half hours a week laboratory.

50. Optics.—Lectures and recitations in continuation of Course 1. Open to students who have taken Mathematics 8. Three hours a week. Given in 1918-19 and alternate years.

51. Mechanics and Heat.—Advanced laboratory work in continuation of Course 4. Five hours a week.

52. Optics.—Advanced laboratory work in continuation of Course 4. Seven and one-half hours a week, or five hours a week.

53. Electrical Measurements.—Advanced laboratory work in continuation of Course 4. Seven and one-half hours a week.

55. Theory of Electricity and Magnetism.—Lectures and recitations on the mathematical theory of potential, capacity, and inductance, with application to direct current phenomena. Two hours a week.

58. Mathematical Physics.—The application of mathematical methods to the treatment of problems in physics. Two hours a week. Given in 1919-20 and alternate years.

59. Theory of Alternating Currents.—Continuation of Course 55, with applications to alternating current phenomena; the addition and subtraction of vector quantities; the analysis of wave forms by use of Fourier's series; the algebra of complex numbers. Two hours a week.

60. Sound.—Lectures and recitations in continuation of Course 1. Open to students who have taken Mathematics 8. Two hours a week. Given in 1918-19 and alternate years.

61. Heat.—An advanced course in heat in continuation of Course 2. Three hours a week. Given in 1919-20 and alternate years.
63. **Theory of Measurements.**—A text-book course covering the more important topics treated in this subject. *Two hours a week.*

65. **Vacuum Tubes.**—Lectures and recitations covering the theory and operation of vacuum tubes as amplifiers, detectors, oscillators, etc. Open to students who have taken Mathematics 8. *Two hours a week.*

69. **Radio-Activity.**—A combined lecture and laboratory course. Elementary quantitative experiments in radio-activity are performed. *Two hours a week.* Given in 1920-21 and alternate years.

71. **Thermodynamics.**—An elementary course in thermodynamics. *Two hours a week.*

101, 102. **Special Laboratory Course.**—A course open to students who have completed all the undergraduate laboratory courses. A subject is assigned for special investigation, or the work of a published research is repeated. *Five hours a week.*

**PUBLIC SPEAKING**

**Associate Professor Harriman**

1, 2. **Public Speaking.**—The purpose of this course is to lead students to an appreciation of oratorical literature, and to help them in the oral expression of their thoughts that it may be eloquent, effective, and impressive. There will also be practice in the oral delivery of lyric, narrative, and dramatic literature; in extempore speaking; and in the composition and the delivery of the occasional address. The course will be of practical value to the public dramatic reader and entertainer, as well as to the public speaker. Especial and thorough attention will be given to vocal and esthetic physical culture exercises. *One hour a week.*

3, 4. **Public Speaking.**—A continuation of Course 1. Advanced work will be required, and the study will be more critical and more technical. *One hour a week.*

*For the courses which follow, English 1 and 2 are prerequisite. Students should consult head of the department before selecting courses.*

5, 6. **Argumentation.**—Special attention is given to the oral side of argumentation. This course is intended to develop the power of handling argumentative topics cogently and persuasively. There will be practice in brief drawing and the writing of forensics and less formal arguments. *One hour a week.*
7. Parliamentary Law.—A study of the rules and the precedents which govern debate, and the laws by which deliberative assemblies govern their procedure. One hour a week.

8. Speech Defects.—The purpose of this course is to enable teachers to diagnose, to treat, and to correct the speech defects of students. A study of the vocal and the respiratory tracts; their faults, defects, and diseases; stammering, stuttering, lisping; clerical sore throat; improper articulation, enunciation and utterance, and pronunciation. Two hours a week.

9, 10. Teachers’ Training Course in Play Production.—Teachers, especially high school teachers, are frequently called upon to coach class and other plays in connection with their regular school work. This course presents the theory of the theatre and the technique of the drama. Instead of the regular classroom period, this class will occasionally be present at a play rehearsal conducted by the head of the department. One hour a week.

11, 12. Dramatic Literature.—Tragedy, Melodrama, Comedy, Farce, The Pageant.—Plays representing the different species of dramatic literature will be read for entertainment, and for the purpose of leading students to an enjoyment and appreciation of dramatic literature. This assignment will include American, British, and European drama. In the second semester of the course these plays will be analyzed for their technique. The course will also encourage local play writing. One hour a week.

SPANISH AND ITALIAN

Professor Peterson; Mr. Crowley; Mr. Stearns; Miss Carswell

Spanish

The minimum requirement for a major in this department may be met by completing Courses 1, 2, 3, 4, 5, 6, 51, 52, 53, 54. The requirement of thirty semester hours for a master's degree in Spanish may be met in one year by completing twelve hours of advanced work, by writing a satisfactory thesis on some topic connected with Spanish for which six hours of credit will be allowed, by completing twelve hours' work in not more than two minor subjects, and by passing an oral examination covering all the work of the year.
1, 2. Elementary Spanish.—In this course stress will be laid upon conversation as well as upon grammar, reading, and composition. The instructor will insist upon careful pronunciation and accurate translation. At the end of the course the student should be able to read at sight easy Spanish prose. During the spring semester collateral reading will be assigned. Five hours a week.

1a, 2a. Elementary Spanish.—For students in the College of Agriculture and students in the College of Arts and Sciences beyond the rank of freshmen who have had no previous work in Spanish. Similar to Courses 1 and 2 but less comprehensive. Three hours a week.

3, 4. Elementary Conversation and Composition.—These courses along with Courses 5 and 6 should be taken by second year students. Stress will be laid upon review of the grammar, dictation, and oral work. Students will be expected to memorize selections in prose and verse. Special attention will be given the acquisition of a practical vocabulary. Two hours a week.

5, 6. Modern Spanish Literature.—These courses along with Spanish 3 and 4 should be taken by second year students. The aim of this work is to acquire a reading knowledge of Spanish so as to be able to read at sight ordinary prose and poetry, to gain some acquaintance with the literature of the Nineteenth Century, and to facilitate the study later on of the Spanish classics. Collateral reading will be assigned. There will be daily oral practice based on the texts read, and much attention will be given to the mastery of the idioms of the language. Three hours a week.

7, 8. Commercial Spanish.—Open to students who attained a grade of B in elementary Spanish or who have pursued some more advanced course. The object of these courses is to acquaint the student with the forms of private and commercial correspondence and the vocabulary used in the business world. Considerable reading of selections dealing with commercial life will be required. Two hours a week.

9, 10. The Spanish American Countries.—In this course the civilization of the Spanish speaking Americas will be considered in its intellectual and moral as well as its material aspect. The customs, social institutions, literature, history, and ideals of Spanish America will be touched upon as well as its geography, commerce and industries. Lectures and recitations. No reading in Spanish will be required the first semester. Not open to freshmen. Two hours a week.

51, 52. Spanish Classics.—In this course selections from Cervantes and the dramatic works of Calderon, Lope de Vega, and others
will be studied. Some of the more difficult works of later authors will also be read. Collateral reading will consist of about 1000 pages of less difficult material. Open to students who have completed satisfactorily twenty hours of Spanish. *Three hours a week.*

53, 54. **Advanced Composition and Conversation.**—A continuation of Courses 3 and 4 for third year students. Translation from English to Spanish, original compositions on assigned subjects and oral work to secure facility in expression form the basis of these courses. *Two hours a week.*

55. **Spanish Civilization.**—The subject of this course will be approached from the point of view of the Spaniard. Collateral reading will be assigned. Open to students who have completed Spanish 5 and 6. (Offered in alternate years. To be offered 1920-21.) *Two hours a week.*

56. **The Teaching of Spanish.**—A consideration of problems and methods of teaching Spanish in the secondary schools; lectures, investigations, and reports. The teaching of pronunciation, grammar, reading and literary interpretation will be discussed and attention will be given to the matter of text books and bibliography. (Offered in alternate years; to be offered 1920-21.) Open to juniors and seniors. *Two hours a week.*

57, 58. **History of Spanish Literature.**—In this course Spanish literature will be considered from its inception to the present day. Semi-monthly themes in Spanish will be written on the epochs and authors discussed. Collateral reading. Some attention will also be given at the end to Spanish American literature. Prerequisite, thirty hours of Spanish. *Three hours a week.*

101. **Old Spanish.**—The student will study the laws governing the development of Spanish from Popular Latin, and its growth from the beginning to the present day. As many selections from early authors will be read as time permits. Some acquaintance with Latin is presupposed. (Offered in 1919-20; not offered in 1920-21.) *Three hours a week.*

104. **The Spanish Novel.**—The Spanish Romances of Roguery will be considered as a literary type. The development of the novel will be traced up to the great writers of today. (Offered in 1919-20; not offered in 1920-21.) *Three hours a week.*
Italian

1, 2. Elementary Italian.—This is a course in Italian grammar, reading, and composition designed for those who wish to begin as soon as practicable the study of the Italian classics. Students will not be permitted to elect Elementary Italian and Elementary Spanish in the same year. Three hours a week.

51. Modern Italian Literature.—Selections from representative authors of the Nineteenth Century will be studied in an endeavor to acquire as much facility in reading as possible. Review of the grammar, composition and collateral reading. Three hours a week.

52. Dante.—The basis of the reading in this course will be the Inferno. The life and times of Dante and his influence in literature will be treated by means of lectures and reports. Open to students who have taken Course 51 or an equivalent. Three hours a week.
College of Law

FACULTY OF INSTRUCTION

Dean

Clarence Webster Peabody, A. B., LL. B., Professor of Law
Stacy Clifford Lanphere, A. B., LL. M., Professor of Law
Allen Sherman, A. B., LL. M., Instructor in Law

Instructor in Law

Lucilius Alonzo Emery, A. M., LL. D., Lecturer on Roman Law and Probate Law
Louis Carver Southard, M. S., LL. D., Lecturer on Medico-Legal Relations
Edward Harward Blake, LL. B., LL. D., Lecturer on Admiralty Law
Isaac Watson Dyer, A. B., Lecturer on Federal Jurisdiction and Procedure
John Rogers Mason, A. M., LL. B., Lecturer on Bankruptcy Law
Henry Burt Montague, LL. M., Lecturer on Practice and History of Law

Ethel Gertrude Wigmore, A. B., Assistant in the Library (in charge)

GENERAL INFORMATION

The College of Law was opened to students in 1898, as an integral part of the University of Maine. Until the summer of 1918 it has been located in Bangor, about eight miles from the other departments of the university. On account of conditions existing during the war, it has been thought best to move the school to Orono, where adequate and attractive quarters have been provided for it in the Carnegie Library Building on the university campus. Here all the privileges of the university are accessible to the law students, and at the same time they have
the courts at Bangor within easy reach by trolley car. The College of Law presents in its new location the unique distinction of being the only law school situated in a typical small New England town, and it expects that this circumstance will prove attractive to those young men and women, especially from Northern New England, who appreciate the opportunity for quiet study under refining influences which such a situation can offer.

It is the purpose of the school to fit the student by a three years course in law for active practice of the legal profession; but while primarily a professional school, many of the courses are recommended to the attention of students of either sex who expect to engage in the varied branches of administrative work which are now being offered by the government and by business. Moreover the instruction is sufficiently broad to inculcate that ideal of law as a science which in our greatest American law schools has made this branch of learning a liberal education.

Library

The law library consists of about 6000 volumes, unusually well selected. Among them are the law reports of the principal states, the full English Reprint Reports, the whole Reporter System, together with encyclopedias, digests, treatises, and journals, furnishing a complete working apparatus for the student of law, supplemented by the resources of the of the general university library of more than 50,000 volumes, with all the scientific and literary journals of importance.

Method of Instruction

The method of instruction is in general the analytic or case system, which has proved to be the most successful for the teaching of our American common law. This is supplemented by lectures, readings, problems, and practical demonstrations in the form of moot courts, etc., as the nature of the subject under consideration may demand.

Admission

Regular Students. Students who enter as candidates for degrees must present credentials showing the completion of at least two full
years of work in an approved college or university. An approved college or university will be understood to mean a college or university which requires at least 14 Carnegie units for entrance, which offers facilities for good college work, and which maintains acceptable standards.

SPECIAL STUDENTS. Special students will be admitted only when they satisfy the following requirements: They must be at least 21 years of age; they must appear personally before the committee on administration, and satisfy this committee that they have the maturity and mental training that will qualify them to do acceptably the work required of regular students.

ADVANCED STANDING.—A student entering from any law school having equal admission requirements is admitted to advanced standing and given full credit for work done in the school from which he comes, upon presenting certificates of proficiency from its executive head. All other persons seeking advanced standing as regular students must have the necessary educational qualifications required for admission and must pass examinations in the subjects covered in the earlier part of the curriculum.

Two Degrees in Six Years

Students of the College of Arts and Sciences at the University of Maine who have completed the work of the junior year and satisfied the requirement of a major, may enter the College of Law. Upon completing a year’s work in law satisfactorily, they will be granted the A. B. degree. Two more years of successful work in the College of Law will lead to the LL. B. degree.

Pre-legal Curriculum

A definite course of study has been outlined in the College of Arts and Sciences for those students preparing to enter the College of Law and who intend to take either two or three years in preparation.

Law Degrees

BACHELOR OF LAWS, (LL. B.) The degree of Bachelor of Laws (LL. B.) is conferred upon students who complete the prescribed work
in the College of Law, and who are recommended by the faculty. The time required is three years, at least one of which must be spent in attendance at this school.

Master of Laws. (LL. M.) The degree of Master of Laws (LL. M.) is conferred upon students holding the degree of LL. B. from this school or another school having equal requirements, who have completed one additional year's work in the College of Law subsequent to obtaining that degree and have complied with the requirements of the committee on graduate study. The work for this degree includes a course of resident study, an adequate thesis, and oral examinations. Applicants for this course should read the complete instructions to be found in the pamphlet entitled "Degrees and Theses" and should consult with the President of the University in reference to their work.

Program of Instruction

The courses in law are designed to occupy the student the usual period of three years, the time of study required by the laws of Maine and other states preliminary to taking the bar examinations. They cover the subjects specified by the Maine Board of Legal Examiners, together with the other principal branches of the law taught in the best three year law schools of the country.

First Year

Fall Semester

7. Common Law Pleading.—Professor Lanpher.—Martin's Notes on Pleading and other texts to be announced. Two hours a week.

53. Contracts.—Professor Lanpher.—Keener's Cases on Contracts. Three hours a week.

67. Principles of Liability.—Mr. Sherman.—Selected Cases. Two hours a week.

41. Real Property I.—Professor Peabody.—Finch's Cases on Real Property; Tiffany on Real Property. Two hours a week.

49. Torts.—Mr. Sherman.—Ames's Cases on Torts; Smith's Cases on Torts. Three hours a week.
Spring Semester

54. Contracts.—Professor Lanpher.—Keener’s Cases on Contracts. Three hours a week.

16. Criminal Law.—Mr. Sherman.—Beale’s Cases on Criminal Law. Three hours a week.

4. Agency.—Professor Huffcut’s Cases on Agency. Two hours a week.

42. Real Property I.—Professor Peabody.—Finch’s Cases on Real Property; Tiffany on Real Property. Two hours a week.

50. Torts.—Mr. Sherman.—Ames’s Cases on Torts; Smith’s Cases on Torts. Two hours a week.

Second Year

Fall Semester

*55. Insurance.—Professor Woodruff’s Cases on Insurance. Two hours a week.

5. Public Service Corporations.—Professor McClain’s Cases on Bailments and Carriers (3d ed.) and selected cases. Two hours a week.

*13. Damages.—Mr. Sherman.—Beale’s Cases on Damages. Two hours a week.

37. Private Corporations.—Professor Peabody.—Warren’s Cases on Private Corporations. Two hours a week.

43. Real Property II.—Professor Peabody.—Gray’s Cases on Property, vol. III. Three hours a week.

*1. Bankruptcy.—Mr. Mason.—Lectures and text to be announced. One hour a week.

15. Domestic Relations.—Mr. Sherman.—Smith’s Cases on Persons. Two hours a week.

Spring Semester

60. Negotiable Paper.—Professor Colson’s Huffcut’s Cases on Negotiable Instruments. Three hours a week.
44. WILLS AND ADMINISTRATION.—Professor Peabody.—Warren’s Cases on Wills and Administration. *Three hours a week.

*52. MUNICIPAL CORPORATIONS.—Mr. Sherman.—Macy’s Cases on Municipal Corporations. *Two hours a week.

38. PRIVATE CORPORATIONS.—Professor Peabody.—Warren’s Cases on Private Corporations. *Two hours a week.

*2. ADMIRALTY.—Mr. Blake.—Lectures and text to be announced. *One hour a week.

*24. EQUITY PLEADING.—Professor ————. Whitehouse on Equity Pleading and other text to be announced. *One hour a week.

64. EQUITY I.—Professor Peabody.—Ames’s Cases on Equity Jurisdiction, vol 1. *Two hours a week.

Third Year

FALL SEMESTER

21. CONSTITUTIONAL LAW.—Professor Peabody.—Boyd’s Cases on Constitutional Law and selected cases. *Two hours a week.

65. EQUITY II.—Professor Peabody.—Ames’s Cases on Equity Jurisdiction, vols. 1 and 2. *Three hours a week.

19. EVIDENCE.—Professor Lanpher.—Thayer’s Cases on Evidence. *Two hours a week.

45. SALES.—Professor ————. Burdick’s Cases on Sales. *Three hours a week.

*61. REAL PROPERTY III.—Professor ————. Kales’s Cases on Future Interests. *Two hours a week.

*63. TRUSTS.—Professor ————. Ames’s Cases on Trusts. *Two hours a week.

SPRING SEMESTER

10. CONFLICT OF LAWS.—Mr. Sherman.—Text to be announced. *Two hours a week.

66. EQUITY II.—Professor Peabody.—Ames’s Cases on Equity Jurisdiction vol. 2 and selected cases. *Two hours a week.

22. EVIDENCE.—Professor Lanpher.—Thayer’s Cases on Evidence. *Three hours a week.
*36. **Partnership.**—Professor Ames' Cases on Partnership. *Two hours a week.*

*30. **Suretyship.**—Professor Ames' Cases on Suretyship. *Three hours a week.*

*62. **Quasi Contracts.**—Professor Text to be announced. *Two hours a week.*

Of the above courses all those of the first year, amounting to twelve credit hours each semester, are required.

Courses of the second and third years, amounting to not less than twelve credit hours each semester, are required. Choice may be made among those marked with an asterisk (*), all others being required.

Students of the third year may also elect any second year course not previously taken.

Registration should not exceed fourteen hours each semester.

**Extra Courses**

The following optional courses will be offered if called for: **Brief Making; Maine Practice; Legal Ethics.**

These will not be counted towards a degree.

While no graduate courses have been arranged, a course in Roman Law, a seminar in International Law, and other appropriate instruction will be made available for students pursuing courses for the degree of LL. M.

**Law Review**

**The Maine Law Review** is published monthly during the college year, by the faculty and students of the College of Law. An opportunity is afforded on the editorial board for constructive and critical work of a legal character. This is necessarily limited to those students who have shown a special aptitude for research and criticism.

**Law Club**

Some of the most valuable work of the College of Law is done under less formal conditions than those of the classroom, thru the medium of the Law Club composed of the faculty and students.
Among the activities of this club are the Moot and Practice Courts, which furnish training in the actual trial and arguing of cases, debates and discussions by the students, and a series of lectures given by members of the judiciary and of the bar on subjects allied to the law.

The Club also has as one of its purposes to represent the College of Law in an effort to cooperate with schools and other agencies of the State in extending its influence in the community.

Lectures

It is expected to continue some of the lectures on special topics of the law which have been given in the past. These lectures by eminent judges and lawyers will be open to all students of the College of Law.

Theses

The student, whether a candidate for the LL. B. degree or the LL. M. degree, is required before graduation to present a thesis on some legal subject approved by the faculty and this will be a factor in recommending him for a degree.
College of Technology

FACULTY OF INSTRUCTION

Harold Sherburne Boardman, C. E., Dean and Professor of Civil Engineering
Charles Partridge Weston, C. E., M. A., Professor of Mechanics and Drawing
William Edward Barrows, E. E., Professor of Electrical Engineering
William Jordan Sweetser, S. B., Professor of Mechanical Engineering
Charles Andrew Brautlecht, Ph. D., Professor of Chemistry
Archibald Lewis Grover, B. M. E., B. S., Associate Professor of Drawing
Embert Hiram Sprague, B. S., Associate Professor of Civil Engineering
Benjamin Calvin Kent, B. S., Associate Professor of Mechanical Engineering
Arthur St. John Hill, E. E., Associate Professor of Electrical Engineering
Bertrand French Brann, M. S., Associate Professor of Chemistry
Alpheus Crosby Lyon, B. S., C. E., Associate Professor of Civil Engineering
Harold Walter Leavitt, B. S., Assistant Professor of Civil Engineering
Charles Matthew Curl, B. S., Assistant Professor of Drawing
Edward Frederic Rathjen, Ph. D., Assistant Professor of Chemistry
Everett Willard Davee, Instructor in Wood and Iron Work
Walter Davis Emerson, B. S., Instructor in Mechanical Engineering
Forest LeRoy Buckley, B. S., Instructor in Civil Engineering
Walter Joseph Creamer, B. S., Instructor in Drawing
John Newell Crombie, B. Chem., Instructor in Chemistry
Carle Byron Crosby, B. S., Instructor in Electrical Engineering
Norman Fitzhugh Eberman, B. S., Instructor in Chemistry
Bryant Leeland Hopkins, B. S., Instructor in Civil Engineering
Platt Ashley Pearsall, B. S., Instructor in Chemistry
Thomas Benjamin Russell, Instructor in Machine Shop Practice
Lion Reynolds Streeter, B. S., Instructor in Chemistry
Wilfred Arthur Wylde, Instructor in Chemistry
GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry, and in various branches of engineering. The number of hours required for graduation in this college is one hundred and fifty. In such technical curricula it is necessary to prescribe a large proportion of the work; but some elective studies may be chosen in the junior and senior years. Under each of the curricula described below is given a tabulated statement of the subjects pursued and the amount of work required. The college comprises:

Chemical Engineering Curriculum
Chemistry Curriculum
Civil Engineering Curriculum
Electrical Engineering Curriculum
Mechanical Engineering Curriculum

The following requirements for graduation are common to all curricula in this college.

1. Mathematics, the equivalent of two years, five hours a week, except in Chemistry and Chemical Engineering, where one and two-fifths years are required.

2. Science (chemistry, physics, or biology), the equivalent of one year, five hours a week, of which time an important part must be occupied with laboratory work.

3. Language: English, the equivalent of one year, five hours a week; modern foreign language, the equivalent of one year, five hours a week, but the foreign language may not be the one offered for admission except by permission of the Dean of the College of Technology. By permission of his major instructor, a student may transfer not to exceed three semester hours from English to the foreign language which he is taking.

If a student shall offer for admission in addition to the regular admission requirement in foreign language, at least two units of another modern foreign language, then the above requirement of a five-hour year in one of those languages may be waived by his major instructor.

At graduation in any of these curricula the student receives the degree of Bachelor of Science.
Maine Technology Experiment Station

By action of the Board of Trustees, June, 1915, the establishment of a Maine Technology Experiment Station was authorized. This station is under the direct control of the President of the University, the Dean of the College of Technology, and the heads of the Departments of Chemistry and Engineering. The Station carries on practical research in engineering subjects, makes investigations for State Boards and municipal authorities, furnishes scientific information to the industries of the State, and distributes accurate scientific knowledge to the people. Bulletins are issued during the college year.

Chemical Engineering Curriculum

In view of the rapid development of the application of chemistry in manufacturing, this curriculum is offered to furnish training in engineering together with specialization in chemistry. The first two years are almost identical with those under the Chemistry Curriculum, but in the junior and senior years the student takes the fundamental courses in mechanical and electrical engineering, where, in the Chemistry Curriculum, the student takes subjects having a chemical and biological aspect. The training is thus essentially chemical, and the graduates are primarily chemists having a knowledge of mechanical and electrical engineering. Such students will be prepared to enter the profession of chemical engineering and to occupy positions in manufacturing establishments such as metallurgical works, bleacheries, dye houses, chemical plants, gas works, sugar refineries, pulp and paper mills, etc.

Option I. Regular Curriculum

FRESHMAN YEAR

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<th>Subject</th>
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<td>Fall Semester</td>
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<td>Spring Semester</td>
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<td>Chemistry 1 or 3</td>
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<tr>
<td>Chemistry 5 or 7, †4</td>
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<td>Chemistry 6 or 8, †4</td>
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<td>German or French</td>
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## SOPHOMORE YEAR

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<td>Physics 1</td>
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<tr>
<td>Military 1</td>
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<tr>
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<td>Mathematics 14</td>
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<td>Mechanical Engineering 58</td>
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<td>Modern Language</td>
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<td>Physics 2</td>
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<tr>
<td>Physics 4, ‡5.</td>
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<tr>
<td>Woodworking, †3</td>
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## JUNIOR YEAR

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<td>Chemistry 71</td>
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<td>German 15</td>
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<tr>
<td>Mechanical Engineering 83</td>
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</tr>
<tr>
<td>Physics 53, ‡4.</td>
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<td>Chemistry 52, 3 and *6.</td>
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<td>Chemistry 62, †8.</td>
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<td>Chemistry 72</td>
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<td>Chemistry 74, †4.</td>
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## SENIOR YEAR

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<td>Chemistry 79, †8.</td>
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<td>Electrical Eng. 31.</td>
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<tr>
<td>Electrical Eng. 33, †4.</td>
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<td>English</td>
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<td>Chemistry 98, †10.</td>
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**Option II**

**Paper and Pulp Curriculum**

**Freshman Year**  
*Same as Option I*

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<td>Mathematics 13</td>
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<td>Physics 4, †5</td>
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<td>Modern Language</td>
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<tr>
<td>Military 1</td>
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<td></td>
<td></td>
<td>Woodworking *3</td>
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**Sophomore Year**

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<td>3</td>
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**Junior Year**

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<td>Electrical Eng. 31</td>
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<td>Electrical Eng. 33, †4</td>
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<td>Chemistry 90, †4</td>
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<td>1½</td>
<td>Chemistry 92, †2</td>
<td>1</td>
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**Senior Year**

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At graduation the chemical engineering student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science. Three years after graduation, upon presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Chemical Engineer.

Chemistry Curriculum

This curriculum is designed to give the student not only a thorough technical training, but also a breadth of education which will enable him readily to undertake the great variety of problems which naturally present themselves to a chemist. It differs from the Chemical Engineering curriculum in that the student takes some courses having a biological aspect, (bacteriology, biological chemistry, etc.) rather than those of an engineering type. The curriculum is a broad one and, when completed, it prepares the student to teach, or for the profession of chemist in experiment stations, food laboratories, chemical fertilizer and tanning plants; metallurgical, rubber, and electric machinery manufactories; and the general consulting and analytical work of a professional chemist.

**Freshman Year** Same as in Chemical Engineering

**Sophomore Year**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
<th>Subject</th>
<th>Hours</th>
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<tr>
<td><strong>Fall Semester</strong></td>
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<td><strong>Spring Semester</strong></td>
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<tr>
<td>Chemistry 11</td>
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</tr>
<tr>
<td></td>
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<td>Military</td>
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</table>
Civil Engineering Curriculum

The object of the Curriculum in Civil Engineering is to give the student as thorough a knowledge as possible of the principles underlying the profession. The attempt is made to give the student not only a technical education, but to form the basis for a liberal one as well. The endeavor is made to impress upon the mind of the student that the granting of his bachelor's degree does not make him an engineer, judgment, without which he can never become successful.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing. Effort is made to acquaint the student with the best engineering practice and with the standard engineering literature.

The work of the first year is the same for all engineering students, especial attention being paid to mathematics and English. The technical
work begins in the fall semester of the second year with field work and the study of surveying. This technical work is gradually increased, until the last year when it is nearly all professional. At the beginning of the fourth year an opportunity is offered to specialize slightly along one of the three lines. The first, called Option 1, consists of work in hydraulic engineering and electrical transmission, the second, Option 2, consists of work in railroad engineering, while Option 3 consists of work in railroad engineering and highway engineering.

Requirements for Graduation

Freshman Year

<table>
<thead>
<tr>
<th>Subject</th>
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<th>Hours</th>
<th>Subject</th>
<th>Spring Semester</th>
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<td>Chemistry 5, †4</td>
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Sophomore Year

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<td>Drawing 4, *6</td>
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**JUNIOR YEAR**

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**Spring Semester**

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19

*Civil Engineering 24........ 1
*Time Arranged.

**SENIOR YEAR**

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**Spring Semester**

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<td>(Option 2)</td>
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<td>Civil Engineering 68 and 72</td>
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<td>(Option 3)</td>
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16½

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Civil Engineer.
Electrical Engineering Curriculum

This curriculum is intended to provide the student with a thorough understanding of the underlying principles of electrical engineering and to develop an ability to solve problems of an engineering nature from commercial as well as technical premises. To accomplish this, the student first studies the various electrical laws and methods of electrical measurements and correlates them with various laws previously assimilated in the study of physics and mathematics. These studies are followed by more advanced courses involving the fundamental electrical laws and theories and showing their application to the design, operation, and performance of electrical apparatus such as is used in the generation of electrical energy or in transforming electrical energy into mechanical energy for the various commercial requirements.

It is the endeavor of the curriculum to acquaint the student with contemporary engineering practice, and, by persistent association of abstract analysis with practical problems, to equip him with the fundamentals of a successful career. Stress is laid upon the systematic reading of technical periodicals and the acquirement of a reference library. Effort is made to have lectures by active engineers and alumni following their profession, thus bringing the student into more intimate contact with the engineering world.

In addition to the purely electrical subjects, the student takes the customary work in mathematics, physics, mechanics, shop, drawing, and allied engineering courses, together with the cultural subjects enumerated below.

FRESHMAN YEAR

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<tr>
<th>Fall Semester</th>
<th>Hours</th>
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### Sophomore Year

#### Fall Semester

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#### Spring Semester

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### Junior Year

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### Senior Year

#### Fall Semester

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Mechanical Engineering Curriculum

The field of the mechanical engineer embraces all work involving the design, construction, or installation of machinery, either for manufacturing, transportation, or power generation; the design, manufacture, and installation of heating and ventilating or refrigerating equipment; the superintendence or management of factories, power plants, and motive power; the equipment of railways, and similar work.

The Mechanical Engineering Curriculum is arranged to equip men as well as possible in four years' time to enter any of these lines of work.

It is not possible to develop the student into an expert engineer in any branch of the profession. It is also not possible, in general, to foresee what will be his ultimate occupation. Accordingly, those subjects which are fundamental to all engineering work and which may best be learned in college are most emphasized in the required courses while those subjects which are best acquired in practical work are left for the engineer graduate to obtain in actual practice. An endeavor is made, however, to give the more advanced technical courses such a trend as to make the period of adjustment of the graduate to practical engineering conditions short and his acquirement of the knowledge necessary for advancement rapid.

The theoretical work is taught by lectures and recitations. The texts are carefully chosen and are supplemented, where necessary to illustrate more recent practice, by explanation and examples given by the instructor. Numerous problems are assigned for work outside the class-room to make sure the student can apply the principles learned.

Courses in the shops and laboratories illustrate the application of matter learned in the recitation work, and also teach methods of construction, operation, and testing of apparatus by direct contact with it. In the drawing rooms, application of theories to work in design are taught, together with methods and requirements for the production of neat and accurate engineering drawings.

Thoro instruction is given in the theory and operation of both direct and alternating current electrical machinery, with ample practice in the electrical laboratory. Sufficient time is devoted to recitation and field work in surveying to give familiarity with instruments and methods. Lectures by practical engineers and trips of inspection to engineering works help to bring before the student the conditions existing in practice.
### Requirements for Graduation

#### Freshman Year

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<th>Hours</th>
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#### Sophomore Year

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#### Junior Year

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### Senior Year

#### Fall Semester

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<td>Inspection Trip</td>
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<td>Thesis</td>
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*Substitution may be offered for this course if approved by the major instructor.*
Departments of Instruction

Note. A star (*) before the time designated for a course indicates that three hours of actual work are required to obtain credit for one hour; a dagger (†) indicates that two hours are required.

Courses designated by an odd number are given in the fall semester; those designated by an even number, in the spring semester.

Courses numbered 1-50 are for undergraduates only; courses numbered 50-100 are for graduates and undergraduates; courses numbered 100 and above are for graduates.

CHEMISTRY

Professor Brautlecht; Associate Professor Brann; Assistant Professor Rathjen; Mr. Crombie; Mr. Eberman; Mr. Pearsall; Mr. Streeter; Mr. Wylde

1, 2. General Chemistry.—This course deals with the general principles of the science. Lectures and recitations. Two hours a week. To be accompanied by Courses 5, 6. Courses 1, 2, 5, and 6 or 3, 4, 7 and 8 constitute the first year’s work in chemistry.

3, 4. Advanced General Chemistry.—A course similar to Course 1, 2, but for students who have had a thorough course in elementary chemistry. Two hours a week. To be accompanied by courses 7, 8.

5, 6. Laboratory Chemistry.—General Laboratory work to accompany courses listed above as 1, 2. †Four hours a week.

7, 8. Inorganic Preparations.—To accompany 3, 4. †Four hours a week.

(Students to enroll in Courses 3, 4, 7, 8, must, at time of registration, present their original laboratory note book in elementary chemistry, approved by and having the signature of their previous instructor.

11. Qualitative Analysis.—This course includes the general reactions of the metals and acids with their qualitative separation and identification. Lectures, recitations, and laboratory work. Twelve hours a week.
16. **Organic Chemistry.**—An elementary course giving in one semester the fundamentals of the subject. Students who have the time available are advised to take courses 51, 52. Prerequisite: General Chemistry. *Three hours* recitation and lecture and †*four hours* laboratory work a week.

40. **Elementary Quantitative Analysis.**—An introductory course illustrating the fundamental principles of gravimetric methods. Prerequisite: Course 11. †*Ten hours a week.*

51, 52. **Organic Chemistry.**—Lectures, recitations and laboratory work. Course 11 prerequisite. For juniors. *Three hours* of class room; *six hours* of laboratory work a week.

56. **Metallurgy.**—An introductory study dealing chiefly with iron and steel. *Two hours a week.*

58. **Mineralogy and Crystallography.**—This Course considers minerals and crystals from the viewpoint of the chemist. Course 40 prerequisite. †*Four hours a week.*

61. **Quantitative Analysis.**—A continuation of Course 40, including a study of calibration methods, volumetric analysis, and the application of gravimetric and volumetric methods. Course 40 prerequisite. †*Eight hours a week.*

62. **Quantitative Analysis.**—Application of gravimetric and volumetric methods of analysis to some of the more difficult problems of separation and determination. Course 61 prerequisite. †*Eight hours a week.*

65. **Pulp.**—A lecture course on the manufacture of pulp and the chemical engineering involved in present day pulp making and uses. Courses 40, 51, 52, prerequisite. *Two hours a week.*

67. **Pulp Analysis.**—Laboratory work. Course 65 must be taken in conjunction. †*Four hours a week.*


68. **Paper Manufacture.**—A laboratory course in which paper machinery will be studied and paper of various kinds made. Must be preceded by Course 65 and accompanied by Course 66. †*Four hours a week.*

71, 72. **Physical Chemistry.**—This course is devoted to the study of some of the more important principles and methods of physical chemistry in its several branches. Lectures and recitations. Open to students
who have completed Chemistry 40, Mathematics 13, and Physics 1, 2, 4.

74. Physico-Chemical Methods.—Determination of molecular weights; the study of solutions through conductivity and other methods; rate of reaction and chemical equilibrium; potential and electro-motive force; calorimetry; and the use of the more important instruments, such as the refractometer, polariscope, and spectroscope. †Four hours a week.

75. Cellulose.—A course in which cellulose is studied, including laboratory work dealing with the characteristics and derivatives of cellulose. †Four hours a week.

77, 78. Industrial Chemistry.—General processes of technical chemistry and selected topics, including the principal manufactured products. Lectures and recitations. As a part of this course, an inspection trip is made to manufacturing plants of a chemical nature in New England. The expense of this trip for the past few years has been from $25 to $35. Courses 51, 52, and 62 prerequisite. Three hours a week.

79. Technical Analysis.—This course includes the analysis of water from both the technical and sanitary viewpoint, coal, iron and steel, oils, fats, and other industrial products of general importance. Prerequisite, Course 62. †Eight hours a week.

81. Electrolytic Bleach.—Lecture course on electrolytic bleach for pulp and paper mills. Course 67 prerequisite. One hour a week.

87. Paper Testing and Analysis.—A laboratory course involving physical, microscopical, and chemical work. The work taken up is that ordinarily assigned to the chemist in a paper mill. It includes the testing of papers for bursting strength, tensile strength, stretch, crumpling, etc. Methods for estimating the quality and quantity of different fibres and the analysis of materials used in paper mills are also studied in the laboratory. Courses 62 and 67 are prerequisite. †Four hours a week for eight weeks.

86. Bleaching of Pulp.—A laboratory course dealing with the methods of bleaching various kinds of pulp. Course 65 prerequisite. †Four hours a week for eight weeks.

88. Paper Coloring.—Course 75 prerequisite. †Four hours a week for eight weeks.

90. Organic Analysis.—Qualitative and quantitative determination in organic compounds of carbon, hydrogen, oxygen, nitrogen, sulphur, phosphorous, the halogens, etc. Courses 51, 52, and 62 are prerequisite. †Four hours a week.
91. **Advanced Organic Chemistry.**—A course involving the general and also special topics of organic chemistry. Prerequisite, Courses 51, 52. *Three hours a week.*

92. **Dyeing.**—The practical application of dyes, with and without mordants, to the important textile fibers and filaments. Course 75 prerequisite. †*Eight hours a week for four weeks.*

93. **Chemical Literature.**—Reviews and discussions of leading articles appearing in current English, French and German chemical literature. For senior chemical engineering and chemistry students. *One hour a week.*

94. **Organic Preparations.**—The preparation of a large number of typical organic compounds. Courses 51, 52, and 91 are prerequisites. †*Eight hours a week, eight weeks.*

95. **Electrochemistry.**—A lecture and textbook course on the general principles of the subject and its application in industrial work. Courses 71 and 72 are prerequisites. *Three hours a week.*

96. **Assaying.**—The fire assay of important typical ores, especially ores containing gold and silver. †*Four hours a week.*

98. **Thesis Work.**—The thesis will embody the result of the study of a special problem in the laboratory. It will partake of the nature of original investigation and will ordinarily require not less than †*ten hours a week.*

Laboratory fees partly covering the cost of general chemicals, gas, etc., are as follows for the college year 1920-1921:

- Courses: 16, 58, 67, 75, 86, 88, 92, 96 $3.00
- Courses: 5, 6, 7, 8, 40, 51, 52, 68, 74, 87, 90, 94, 96 $5.00
- Courses: 11, 61, 62, 63 $7.00

Equipment obtained and receipted for by a student and not returned at the end of a course in good condition, as well as a few non-returnable supplies, and special chemicals, will be charged to the student at cost. The supply room will be open during all laboratory periods for the obtaining of special equipment on temporary charge slips and for obtaining permanent equipment and special chemicals and supplies on permanent charge slips. Payment of all fees and charges is made thru the University Treasurer's office.

For courses in Biological and Agricultural Chemistry, see description of courses given by the Department of Biological and Agricultural Chemistry.
CIVIL ENGINEERING

Professor Boardman; Associate Professor Sprague; Associate Professor Lyon; Assistant Professor Leavitt; Mr. Buckley; Mr. Hopkins

1. Plane Surveying. Field Work.—This course consists of practice in the use of the chain, tape, compass, transit, level, and other surveying equipment. Required of all students in the Departments of Civil Engineering and Forestry. *Twelve hours a week. First nine weeks.

2. Plotting.—This course consists chiefly of map drawing from field notes, by the different methods in common use. Courses 1 and 7 are prerequisite. *Twelve hours a week. First twelve weeks.

3. Plane Surveying.—A course similar to Course 7. Given to students in the Departments of Mechanical and Electrical Engineering Two hours a week.

4. Field Work in Surveying.—A continuation of Course 1. This course consists of original surveys, problem work, adjustment of instruments, note keeping, etc. Course 1 is prerequisite. *Twelve hours a week. Last six weeks.

5. Field Work in Surveying.—The use of the chain, compass, transit, and level. Required of all students in the Departments of Mechanical Engineering and Electrical Engineering. Given in connection with Course 3 but not with Course 7. *Six hours a week. First six weeks.

6. Railroad Curves.—A course of recitations and lectures investigating the geometry of railroad curves, switches, and turnouts. Course 7 or 3 is prerequisite. Two hours a week.

7. Plane Surveying.—Recitations and lectures covering the general theory of plane surveying; description of surveying equipment, and adjustment of instruments; use of chain, tape, compass, transit, and level, and other surveying operations. Required of all students in the Departments of Civil Engineering and Forestry. Three hours a week. Last nine weeks.

20. Masonry Construction.—A course including the discussion of stone and brick masonry; cement and cement testing; mortar; plain and reinforced concrete; foundations; pneumatic caissons; culverts, bridge piers, and abutments. Two hours a week.
21. **Railroad Field Work.**—The survey for a railroad about two miles in length. The preliminary and location surveys are made, including running in the curves, obtaining the topography, establishing the grade, and setting the slope stakes. Courses 4, 6 or Courses 4, 27 are prerequisites. *Six hours a week.* First nine weeks.

22. **Advanced Surveying.**—This course consists of lectures, readings, and recitations on the theory and practice of base line measurement, triangulation, precise leveling, topographical surveying, the use of the plane table, and the theory and application of least squares. It is a preparation for Course 24. Course 21 is prerequisite. *One hour a week.*

23. **Railroad Office Work.**—The office work of mapping the notes taken in Course 21, including the calculation of the earth work. Courses 2, 21 are prerequisites. *Six hours a week.* Last nine weeks.

24. **Summer Field Work.**—This course consists of the practical application in the field and in the office of the principles given in Course 22. Course 22 is prerequisite. Time arranged. Credit, *one hour.*

25. **Railroad Construction.**—Recitations and lectures on the field and office practice of staking out and computing amount of excavation and fill; borrow-pits; haul; methods and materials of railroad construction; subgrade; roadbed; track and track work. Course 6 or 27 is prerequisite. *Two hours a week.*

26. **Hydraulics.**—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow through orifices, weirs, tubes, pipes, and conduits; dynamic pressure of water. *Three hours a week.*

27. **Simple Curves and Earthwork.**—A lecture course on the theory and practice of simple railroad curves, and on the field and office practice of staking out and computing earthwork. Given to students outside of the Department of Civil Engineering who desire to take Courses 21 and 23. Courses 1, 4, or Courses 3, 5 are prerequisites. *One hour a week.*

28. **Structures.**—The theory of the simple beam; loads and reactions; vertical shear; bending moment; influence lines. The object of this course is to give the student a drill in finding vertical shear and bending moment under different systems of loadings, and to apply the same to the design of simple beams, also to familiarize him with the use of steel hand books, various tables, and the slide rule. Class room, *two hours a week.* Drawing room, †*two hours a week.*
29. **Sanitary Engineering.**—The general principles of sewer design and construction, and sewerage disposal; a study of city sanitation. Course 1 or 3 is prerequisite. *Two hours a week.*

30. **Highway Construction.**—The construction and maintenance of city pavements and country roads under various conditions of traffic, climate, soil, etc. Course 1 or 3 is prerequisite. *Two hours a week.*

31. **Roads and Trails.**—This course consists of lectures on the practice of building and maintaining trails and ordinary types of roads, and includes the design of simple beams and girders. For Forestry students. *One hour a week.*

33. **Foundations.**—A short course in the fundamentals of design for different classes of foundations; bearing power of soils, manufacture of cement, mixing and testing of cement and concrete, cofferdams, pneumatic caissons. Required of students in Mechanical and Electrical Engineering. *One hour a week.*

35. **Hydraulics.**—A short course which includes the main principles given in Course 26. Given to students in the Departments of Mechanical and Electrical Engineering. *Two hours a week.*

51. **Hydraulic Field Work.**—The measurement of the flow of rivers are illustrated by the use of the current meter. The data thus obtained is used to plot the rating curves, etc. The measurements taken are reported to the U. S. G. Survey. The expenses of this course are paid by the students. Required of students taking Option 1. Course 26 is prerequisite. *†Four hours a week.*

52. **Hydraulic Engineering.**—A continuation of Course 55. Course 51 is prerequisite. *Two hours a week.*

53. **Hydraulic Field Work.**—A short course similar to Course 51. Required of students taking Options 2 and 3. Course 26 is prerequisite. *†Two hours a week.*

54. **Cement Laboratory.**—This course consists of making the regulation commercial tests upon different samples of cement. A laboratory fee sufficient to cover the cost of materials used is charged. Required of students in Mechanical Engineering and in Civil Engineering. Course 20 is prerequisite for students in Civil Engineering. *The time varies.*

55. **Hydraulic Engineering.**—Rainfall, evaporation, and stream flow; the development and utilization of water power; the development of the modern turbine; inspection of hydro-electric plants. Lectures and recitations. Required of students electing Option 1. Course 26 is prerequisite. *Two hours a week.*
57. Structures.—A continuation of Course 28. The theory of stresses in framed structures, including the plate girder, bridge trusses, and roof trusses; reinforced concrete; the principles of designing. The object of this course is to train the student in the application of the principles of mechanics to the design of structures. Three hours a week.

58. Structures.—A continuation of Course 57. This course includes a study of the higher types of structures. Three hours a week.

59. Designing.—This course takes up the design for some of the common types of steel structures, and the preparation of the shop drawings. Course 28 is prerequisite. Nine hours a week.

60. Graphic Statics.—Class and drawing room work in the graphical determination of shear and bending moment, and the analysis of bridge and roof trusses by graphical methods. Course 57 is prerequisite. Two hours a week.

61. Road Materials Laboratory.—Physical and chemical tests of sand, gravel, stone, brick, wood block, bituminous compounds, and other road materials. Course 30 and Chemistry 1 or 3, 2 or 4, 5, 6 are prerequisites. +Two hours a week.

62. Designing.—A continuation of Course 59. Course 57 is prerequisite. +Six hours a week.

63. Railroad Engineering.—A course discussing the economics of railroad location and operation. The railroad corporation, its rights and limitations; traffic; operating expenses; the locomotive and its work; distance; curves; grades. Application to highway location. Required of students electing Options 2 and 3. Course 25 is prerequisite. Three hours a week.

64. Railroad Engineering.—A course in railroad design. A map reconnaissance for a railroad about twelve to fifteen miles in length is made, applying the theories of Course 63. The final line is located, profile made, grades established, and drainage areas and culverts calculated. The rails, switch points, frogs, and ties for a turnout are designed. Required of students electing Option 2. Courses 23, 63 are prerequisites. +Four hours a week.

66. Railroad Engineering.—A course of lectures and recitations studying various railroad problems; structures; grade crossings and elimination; yards and terminals; signals and interlocking; maintenance and betterment work as discussed in engineering periodicals. Required of students electing Option 2. Course 63 is prerequisite. Two hours a week.
68. **Highway Design.**—Drawing room study of highway location and relocation including plans of proposed improvement and construction of about five miles of highway. Detailed estimates and specifications for same. Required of students electing Option 3. Course 63 is prerequisite.

72. **Highway Engineering.**—An advanced course of lectures and recitations in highway economics, administration, and legislation; general highway engineering problems. Required of students electing Option 3. Course 63 is prerequisite. *Two hours a week.*

97 and 98. **Thesis Work.**—The study of and report upon some original investigation, or design. *Time to be arranged.* See regulations regarding degrees.

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**ELECTRICAL ENGINEERING**

Professor Barrows; Associate Professor Hill; Mr. Crosby

1, 2. **Elementary Electricity.**—Fundamental laws and principles of electricity, series and parallel circuits, electrical instruments, electrical measurements. Recitations and problems. *Two hours a week* first semester; *three hours a week* second semester.

5, 6. **Elements of Electrical Engineering.**—Application of laws studied in Courses 1 and 2. The magnetic circuit, the fundamental study of electrical apparatus. Principles of construction, operation, and testing of direct current generators and motors; general engineering problems. Lectures, recitations, and problems. *Three hours a week* first semester; *four hours a week* second semester.

7, 8. **Laboratory Work.**—Electrical measurements, operation, and testing of direct current generators and motors. Application of the work of Courses 1, 2, 5, 6. Laboratory fee $5.00. *One hour a week* class room; *four hours a week* laboratory.

20. **Ignition and Starting Systems.**—The principles of ignition and starting systems as used in the late types of automobiles. Lectures, and recitations. *Two hours a week.*

22. **Elementary Telephony.**—Principles of telephone apparatus and circuits and telephone lines. Lectures and recitations. *Two hours a week.*

30. **Direct Current Machinery.**—Electrical principles and applications; the production, distribution, and utilization of power from the
standpoint of the mechanical and chemical engineer. Recitations and problems. *Two hours a week.*

31. **Alternating Currents.**—Alternating current measurements and calculations; operation of generators and motors. Lectures, recitations, and problems. *Two hours a week.*

33, 34. **Electrical Laboratory.**—These courses are based on Courses 30 and 31. Operation of direct current and alternating current generators and motors; electrical power measurements. Laboratory fee, $5.00 per semester. *Three hours a week.*

42. **Electrical Power.**—Electrical measurements; the generation, transmission, and utilization of electrical power. Lectures, recitations, and problems. *Two hours a week.*

51. **Alternating Currents.**—Effect of alternating currents upon various elastic circuits; voltage; current and voltage relations in inductive and capacity circuits; the theory, construction, and operation of apparatus and machinery. Lectures, recitations, and problems. *Four hours a week.*

52. **Advanced Alternating Currents.**—A continuation of Course 51. Polyphase apparatus; generation, transmission, distribution and utilization of polyphase power; problems involving previous courses. High voltage long distance transmission; transmission line phenomena; methods and practice of securing most reliable service. Lectures, recitations, and problems. *Three hours a week.*

54. **Technical Reviews.**—A study of some special phase of electrical engineering and the presentation of it to the class. *One hour a week.*

56. **Electrical Power Plants.**—Electrical equipment of power plants methods of control, switching, protection, lightning arresters; arrangement of station and substation machinery, apparatus, and switchboards. Lectures and recitations. *Three hours a week.*

61. **Illuminating Engineering.**—Different types of lamps; light, photometry, illumination calculations, and problems of interior and exterior illumination. Lectures, recitations, and problems. *Two hours a week.*

62. **Telephone Engineering.**—Telephone systems; party and trunk lines; long distance lines; office and exchange practice; automatic and semi-automatic systems. Lectures and recitations. *Two hours a week.*
64. **Electric Railway Engineering.**—Preliminary considerations in electrical railway engineering; selection of proper equipment; car, bond, and transmission testing. Lectures, recitations, and problems. *Two hours a week.*

70. **Wireless Telegraphy.**—Fundamentals of wireless telegraphy and telephony. Detectors; sending; receiving; tuning. Lectures and recitations. *Two hours a week.*

75, 76. **Laboratory.**—Alternating current measurements; operating, testing, and experimental work on power and lighting apparatus; alternating current instruments; generators, motors, transformers, synchronous converters, polyphase power measurements. Laboratory fee $5.00 per semester. *One hour a week* classroom, *Four hours a week* laboratory.

77. **Engineering Economics.**—A study of the economic features of engineering projects including first cost, salvage values, operating cost, estimating and economic selection. *One hour a week.*

78. **Inspection Trip.**—About a week's trip visiting some of the electrical and industrial plants of New England.

80. **Thesis Work.**—The study of and report upon some original report or design. Time to be arranged. See regulations regarding degrees.

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**MECHANICAL ENGINEERING**

Professor Sweetser; Associate Professor Kent; Mr. Emerson; Mr. Davee; Mr. Russell; Mr. Perkins

1. **Foundry Work.**—Foundry instruction is given in bench and floor molding, mixing of materials, core making, operation of cupolas, etc. Charge for materials $4.00. *Three hours a week.*

2. **Woodworking.**—Graded exercises in woodworking designed to make the student familiar with tools used in modern woodworking practice, and to give him experience in working from dimensioned drawings. Pattern work, consisting of the making of complete patterns and core boxes from drawings. Charge for materials $4.00. *Six hours a week.*

3. **Forge Work.**—Forging; welding; tool dressing. A set of lathe tools for use in machine shop is made by each student. Charge for material $4.00. *Three hours a week.*
4. Woodworking.—A shorter course than Course 1, arranged for students in Agriculture and Chemical Engineering. Charge for materials $4.00. *Four hours a week.

5. Forge Work.—A special course to meet the needs of Agricultural Education students. Charge for materials $4.00. *Three hours a week.

7, 8. Machine Work.—Lathe work; exercises on planer, shaper, and milling machines; making cut gears, machinists' taps, etc. Course 3 is a prerequisite. Charge for materials $5.00. *Six hours a week.

9, 10. Machine Work.—Shorter course than 7, 8, for electrical engineers. Charge for materials $5.00. *Four hours a week.

53. Elements of Mechanical Engineering.—A course of lectures, supplemented by recitations, designed to familiarize the student with the mechanical apparatus of manufacturing and power plants, and with the elementary formulae and constants used in simple engineering calculations. One hour a week.

54. Kinematics.—A course similar to 57 for mechanical engineers with more attention given to the graphical determination of the velocity and acceleration of moving parts in machines. Three hours a week.

55. Kinematical Drawing.—Supplementary to Course 54. The drawings are of cams, gear teeth, and graphical studies of kinematical problems. *Three hours a week.

57. Kinematics.—A study of motion in machine design; linkages, gears, cams, etc., for Electrical Engineers. Three hours a week.

58. Kinematics.—A shorter course than 57 given to Chemical Engineers. Two hours a week.

61. Materials of Engineering.—Properties of the metals; timber, rope; protective coatings and preservatives. Two hours a week.

66. Machine Design.—A study of the designing of machines; proportioning of parts for strength, rigidity, etc. Mechanics 51, 52 are prerequisites. Three hours a week.

67. Machine Design.—A continuation of Course 66, including the execution of the design of some typical machines. Courses 54, 55, and 66 are prerequisites. *Six hours a week.

68. Valve Gears.—A study of the principal steam engine valve motions; construction and use of valve diagrams; solution of practical problems in the drawing room. Two hours a week.

69. Mechanical Laboratory.—Elementary experimental work such as calibration of instruments, use of steam and gas engine indicators,
mechanical efficiency tests, etc. Laboratory charge $2.00. †Two hours a week.

70. Mechanical Laboratory.—Thermal efficiency and economy tests of steam engines, steam turbines and gasoline engines; valve setting, steam calorimetry, etc. Laboratory charge $3.00. †Three hours a week.

71. Mechanical Laboratory.—Tests of materials, heating value of liquid fuels, heat balance tests of steam and gasoline engines. Laboratory charge $3.00. †Three hours a week.

72. Mechanical Laboratory.—Tests of condensers, boilers, air compressors, fans, hydraulic testing. Laboratory charge $3.00. †Three hours a week.

74. Mechanical Laboratory.—A course arranged for students in Civil Engineering. Testing of strength of materials; measurement of flow of water over weirs, through orifices and nozzles; calibration of venturi meters. Laboratory charge $2.00. †Two hours a week.

75. Mechanical Laboratory.—A course arranged for students in Chemical Engineering. Calibration of instruments; tests of engines; measurement of flow of water; tests of lubricants. Laboratory charge $3.00. †Three hours a week.

77, 78. Mechanical Laboratory.—A course arranged for students in Electrical Engineering. Calibration of instruments; testing of strength of materials; testing of steam engines, gas engines, hydraulic testing. Laboratory charge, $3.00. †Three hours a week.

79. Heat Engineering.—Laws of thermodynamics; laws of gases, saturated and superheated vapors; Carnot's, Rankine's, and actual steam engine cycles; use of steam tables; steam calorimetry; with illustrative practical problems. Mathematics 8 and Physics 1 and 2 are prerequisites. Three hours a week.

80. Heat Engineering.—Simple and compound steam engines; flow of steam; air compressors; flow of air; refrigeration. Course 79 is a prerequisite. Three hours a week.

81. Heat Engineering.—A continuation of Courses 79 and 80 dealing with steam turbines and gas engines; considerations affecting the design and efficiency of operation of heat motors. Two hours a week.

82. Power Plants.—Fuels and combustion; types, operation, and arrangement of power plant equipment; design, costs, operating expenses, and economics of steam and gas power plants. Course 81 is a prerequisite. Two hours a week.
83. Heat Engineering.—A short course for chemical engineers covering the laws of thermodynamics and their application to heat motors, air compressors, refrigerating machinery and power plant equipment. *Three hours a week.*

84. Heat Engineering.—Similar to Course 79. Given in the spring semester to Electrical Engineers. *Three hours a week.*

85. Heat Engineering.—Simple and compound steam engines; steam turbines; gas engines; gas producers; fuels and combustion; steam and gas plant power equipment and operation. For students in Electrical Engineering. Course 84 is prerequisite. *Three hours a week.*

88. Engine Design.—A study of problems affecting the design of a steam or gas engine with regard to their bearing on general machine design. An engine is partially designed in the drawing room. Courses 67 and 81 are prerequisite. *Six hours a week.*

91. Heating and Ventilation.—Course 80 is a prerequisite. *Two hours a week.*

94. Hydraulic Machinery.—Hydraulic turbines; water wheels; various features of hydraulic power plant development. *Two hours a week.*

96. Seminar.—Preparation, presentation, and discussion of papers on leading engineering topics. *One hour a week.*

98. Factory Organization and Management.—Lectures and assigned reading bearing upon various types of organization for industrial enterprises; planning and equipping of factory plants; systems of management; factory design and construction. *Two hours a week.*

Inspection Trip.—A visiting trip of one week's duration to various manufacturing and power plants. This trip is open only to seniors who are eligible for graduation. The expense to each student is in the neighborhood of thirty-five dollars. A complete schedule of the trip is pre-arranged and a member of the department staff is in charge of the party.

Thesis.—The results of some original investigation or design presented in proper form. The subject should be selected early in the fall semester of the senior year. See regulations regarding degrees.
MECHANICS AND DRAWING

Professor Weston; Associate Professor Grover; Assistant Professor Curl; Mr. Creamer

1. Drawing.—Instruction and practice in technical freehand drawing and lettering, in the care of drawing instruments and their use in elementary problems involving right lines, circles, conic sections, and orthographic projections. *Six hours a week.

2. Drawing.—A continued study of the methods of orthographic projection, isometric projection, and oblique projection, accompanied by instruction and practice in the making of working drawings and tracings. *Six hours a week.

3. Drawing.—The elementary principles and problems of descriptive geometry, including intersections and developments. *Six hours a week.

4. Drawing.—A continued study of the making of working drawings of simple machines, together with instruction and practice in making titles for the same. *Six hours a week.

9, 10. Drawing.—A course designed especially for students in Agriculture and for non-engineers. It combines the fundamental principles of Course 1 and Course 2. *Three hours a week.

12. Mechanics.—An elementary course in the fundamental principles of statics, kinematics and kinetics, with applications to practical problems involving frictional resistance, the transmission of power by belts, and the stresses and strains in beams, trusses, shafts, and columns. For students in Chemical Engineering. Three hours a week.

51, 52. Mechanics.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; exercises in finding center of gravity and moment of inertia; the study of stresses and strains in bodies subject to tension, compression, and shearing; the common theory of beams, including shearing force, bending moment, and elastic curves; torsional stresses and theories of stress in long columns. Five hours a week.

101. Advanced Mechanics.—General principles of kinematics, statics, and kinetics; the mathematical theory of elasticity; the theory of the potential function with applications to problems in gravitation, hydromechanics, etc. Three hours a week.

102. Advanced Mechanics.—A continuation of Course 101. Two hours a week.
Required Courses

MILITARY SCIENCE AND TACTICS

Captain James

Military instruction is required by law. The department is in charge of an officer of the Regular Army, detailed by the President of the United States, as Professor of Military Science and Tactics. The course maintained is that of an Infantry Unit of the Reserve Officers' Training Corps, Senior Division, the purpose of which is to train officers for infantry. Graduates fulfilling the requirements of law are eligible for commission in the Infantry Officers' Reserve Corps of the Army.

The students are organized into an infantry regiment, including band, officered by cadets selected for character, soldierly bearing, and military efficiency. Instruction is carried out under rules and regulations laid down by the President of the United States, in accordance with law.

Uniforms, arms, and equipment of the latest model of the U. S. Army are furnished by the Government.

The uniform prescribed is as follows:

For commissioned officers, the olive-drab service uniform prescribed for infantry officers of the United States Army, except that "R. O. T. C." and "Maine" insignia are used; for other than commissioned officers, the olive-drab service uniform prescribed for enlisted men of the United States Army, except that "R.O.T.C." and "Maine" insignia are used. Cadets are required to wear the uniform when on military duty.

In the following schedule of Courses 1 to 4, inclusive, are required of all physically fit male freshmen and sophomores, with the exception of students in the College of Law, and the School Course in Agriculture. Courses 5 and 6 are elective for juniors; and 7 and 8 are elective for seniors. The required courses cover two years' instruction as laid down in War Department orders. For convenience in arranging the schedule, freshmen and sophomores are united in this instruction, as far as practicable. It is necessary for each student to complete all four of
these courses. Having completed Courses 1 to 4, inclusive, students electing to continue their military training who comply with requirements of law and regulations are entitled to money commutation of rations at a rate fixed by the Secretary of War.

The elective courses are so scheduled that juniors and seniors may have the privilege of advanced theoretical military instruction in addition to the courses required for cadet officers.

1. **Military Art—**

   (a) **Practical. Weight 10.**


   (b) **Theoretical. Weight 4.**

   Talks and conferences, Infantry Drill Regulations, Schools of the Soldier, Squad, and Platoon. (Three hours a week, counting 14 units.)

2. **Military Art—**

   (a) **Practical. Weight 10.**


   (b) **Theoretical. Weight 4.**

3. Military Art—

(a) Practical. Weight 10.


(b) Theoretical. Weight 4.

Conferences on Infantry Drill Regulations, Schools of the Platoon, Company, and Battalion. Lectures on morale. Lectures on small arms firing, as in 1 (b). Lectures on topography and map reading. Orders and messages.

* Three hours a week (counting 14 units.)

4. Military Art—

(a) Practical. Weight 10.


(b) Theoretical. Weight 4.

Conferences on Infantry Drill Regulations (continued). Field engineering—purpose, description, and nomenclature of trenches and fortifications; trench equipment; construction of loopholes, observation and sniper posts, and obstacles; preparation of localities for defense; organization of working parties; camouflage. Talks and conferences on liaison for all arms.

* Three hours a week (counting 14 units.)

5. Military Art—

(a) Practical. Weight 13.

Duties consistent with rank as cadet officers and noncommissioned officers in connection with the practical work and exercises scheduled for the unit. Military sketching. Composition of field orders and messages. Tactical walks.
(b) Theoretical. Weight II.

Talks and conferences—Infantry Drill Regulations, to include offensive combat of platoon, company and battalion; tactical walks; infantry special weapons. Talks and demonstrations, small arms firing; development of coaches; range discipline and duties of range officers; proper methods of coaching. Solution of map problems. Talks on advance guards, outposts, patrols, etc. Topography—scales of horizontal equivalents; contouring. Military policy of the United States, to include the late war with Germany.

Five hours a week (counting 24 units.)

6. Military Art—

(a) Practical. Weight 13.

Duties consistent with rank as cadet officers and noncommissioned officers in connection with the practical work and exercises scheduled for the unit. Mechanism and use of automatic rifles and machine guns. Rifle and pistol practice. Military sketching. Field engineering—construction of spar bridges and obstacles; engineering expedients.

(b) Theoretical. Weight II.

Conferences and talks on liaison for all arms. Lectures on camp sanitation and care of troops in the field. Field engineering—bridge construction; explosives and demolitions. Elements of common law; military law.

Five hours a week (counting 24 units.)

7. Military Art—

(a) Practical. Weight 13.

Duties consistent with rank as cadet officers and noncommissioned officers in connection with the practical work and exercises scheduled for the unit. Tactical walks, tactical exercises, and map problems. Military sketching.

(b) Theoretical. Weight II.

Conferences—combat of small units; scouting and patrolling; Infantry Drill Regulations. Talks on practical methods of coaching riflemen; range practice; range

_Five hours a week_ (counting 24 units.)

8. Military Art—

(a) **Practical. Weight 13.**

Continuation of Course 7 (a). Range and pistol practice.

(b) **Theoretical. Weight 11.**

Lecture on musketry. Field engineering—conferences, talks, and demonstrations on nomenclature and construction of trenches, trench equipment and expedients, obstacles, observation posts, camouflage, bridges, explosives and demolitions, and cordage. Economic history of the United States and the relations existing in our economic conditions and those of Europe, Asia, and South America, and its relation to military history. A study of the most important campaigns and battles of the United States, including the late war with Germany, and tactical deductions therefrom. Company administration—military correspondence; company records and returns; property responsibility; accounting for company funds; duties and responsibilities of junior officers in the management of men. Hippology—care of animals in garrison and field; treatment of minor injuries; forage; transportation of animals.

_Five hours a week_ (counting 24 units.)

It is presumed that each member of the Reserve Officers' Training Corps during his academic course has taken one course or equivalent credit in French or German or Spanish.

The courses are so arranged that the standard required will be that for a platoon leader in an infantry company.

The schedule of training prescribes graded courses, covering a period of four years, as follows:

**Basic Course**

Freshman year, Courses 1 and 2 (28 units).

Sophomore year, Courses 3 and 4 (28 units).
Advanced Course

Junior year, Courses 5 and 6 (48 units).
Senior year, Courses 7 and 8 (48 units).

PHYSICAL EDUCATION AND ATHLETICS

Professor Rider; Miss Phillips

The organization of this department has been planned primarily to give the student such supervision, instruction, and experience as will enable him to establish and conserve his own health while in college, and to lead him to become an important factor in the advancement of public health during his graduate years.

1, 2. Physical Education and Athletics

1. Class Instruction in Hygiene.—All freshmen are required to attend lectures that will be given on personal and impersonal hygiene.

2. Individual Instruction in Hygiene.—This is given in the form of advice based upon the physical examinations and inspections of the student. Two physical and medical examinations are given to all students in their freshman year. These examinations are utilized for the purpose of finding defects, whose proper treatment may add to the health and efficiency of the student. Advice given at this time is recorded and when a student reports for conference, the advice on file is followed up. Students found with remediable physical defects are required to report in conference with evidence that their condition has been brought to the attention of the parent or family physician.

3. Physical Training.—Regular classes in gymnasium work are held daily and this work is so designed as to give the student general training. All first year men and women students and the second year students in home economics are required to attend three classes each week. One of the three hours each week is to be in the form of recreation.

It is the aim of this department to encourage participation in some form of athletics on the part of all students rather than the few. Not only are varsity teams maintained in all sports, but by the organization of interclass and intramural athletic teams, practically every man and woman is given an opportunity to indulge in some form of health-giving competitive sport.

Special classes in physical training, boxing, and wrestling are offered to advanced students.
Maine Agricultural Experiment Station

STATION STAFF

Charles Dayton Woods, Sc. D., Director
Alice Woods Averill, Laboratory Assistant
James Monroe Bartlett, M. S., Chemist
Mildred Rebecca Covell, Clerk in Biology
Walter Edson Curtis, Superintendent, Aroostook Farm
Donald Folsom, Ph. D., Assistant Plant Pathologist
Estelle Marcho Goggin, Clerk
John Whittemore Gowen, Ph. D., Assistant Biologist
Royden Lindsay Hammond, Seed Analyst and Photographer
Charles Clyde Inman, Clerk
Hugh Curtis McPhee, B. S., Scientific Aid
Viola Louise Morris, Laboratory Assistant
Warner Jackson Morse, Ph. D., Plant Pathologist
Mary Leonice Norton, Clerk
Edith Marion Patch, Ph. D., Entomologist
Raymond Pearl, Ph. D., LL. D., Sc. D., Collaborating Biologist
Edgar Raymond Ring, A. B., Scientific Aid
HeLEN Arline Ring, Laboratory Assistant
Wellington Sinclair, Superintendent, Highmoor Farm
Elmer Robert Tobey, M. S., Assistant Chemist
Charles Harry White, Ph. C., Assistant Chemist
Jacob Zinn, Ph. D., Assistant Biologist

GOVERNMENT OF THE STATION

By authority of the trustees the affairs of the Station are considered by the Station Council (see page 5), composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads of the various departments of the Station, the Dean of the College of Agriculture, the Commissioner of Agriculture, and one member each from the State Pomological Society, the State Grange, the State Dairymen's Association, the Maine Live Stock Breed-
ers' Association, and the Main Seed Improvement Association. The recommendations of the Council are referred to the trustees for final action. The Director is the executive officer of the Station and the other members of the staff carry out the lines of research that naturally come under their departments.

**INCOME**

The income of the Station for the year 1919-20 will probably be about $65,000 from the following sources: Federal Government, Hatch and Adams Funds $30,000; State appropriations for animal husbandry investigations, investigations upon Aroostook Farm, and upon Highmoor Farm, $5,000 each; sale of produce about $8,000; and analyses for the Commissioner of Agriculture about $12,000. Thru appropriations to the University the State provides for the cost of printing Station publications. This varies from $4,000 to $5,000 annually.

**OBJECT**

The purpose of the agricultural experiment stations is defined in the Act of Congress establishing them as follows:

"It shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural and artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese, and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective states or territories."

The work that the Station can undertake from the Adams Act fund is more restricted, as the fund can "be applied only to paying the necessary expenses for conducting original researches or experiments bearing directly on the agricultural industry of the United States, having due
regard to the varying conditions and needs of the respective states and territories.”

**EQUIPMENT**

Most of the Station offices and laboratories are in Holmes Hall, described on page 23. The Station is well equipped in laboratories and apparatus, particularly in the lines of biological, chemical, entomological, horticultural, pomological, plant pathological, and poultry investigations. It has extensive collections illustrating the botany and entomology of the State. It has a library of over 4,200 volumes comprising agricultural and biological journals and publications of the various experiment stations.

**HIGHMOOR FARM**

The State Legislature of 1909 purchased a farm upon which the Maine Agricultural Experiment Station “shall conduct scientific investigations in orcharding, corn, and other farm crops.” The farm is situated in the counties of Kennebec and Androscoggin, largely in the town of Monmouth. It is on the Farmington branch of the Maine Central Railroad, two miles from Leeds Junction. A flag station, “Highmoor,” is on the farm.

The farm contains 225 acres, about 200 of which are in orchards, fields, and pastures. There are in the neighborhood of 3,000 apple trees upon the place which have been set from 20 to 30 years. Fields that are not in orchards are well adapted to experiments with corn, potatoes, and similar farm crops. The house has two stories with a large wing, and contains about fifteen rooms. It is well arranged for the Station offices and for the home of the farm superintendent. The barns are large, affording storage for hay and grain. The basement affords limited storage for apples, potatoes, and roots.

**AROOSTOOK FARM**

By action of the Legislatures of 1913 and 1915 a farm was purchased in Aroostook County for scientific investigations in agriculture to be under “the general supervision, management, and control” of the Maine Agricultural Experiment Station. The farm is in the town of Presque Isle, about two miles south of the village, on the main road to Houlton.
The Bangor and Aroostook railroad crosses the farm. A flag station, "Aroostook Farm," makes it easily accessible by rail.

The farm contains about 275 acres, about half of which is cleared. The eight room house provides an office, and home for the farm superintendent. The large barn affords storage for hay and grain and has a large potato storage house in the basement.

INVESTIGATIONS

The Station continues to restrict its work to a few important lines, believing that it is better for the agriculture of the State to study thoroughly a few problems than to spread over the whole field of agricultural science. It has continued to improve its facilities and segregate its work in such a way as to make it an effective agency for research in agriculture. Prominent among the lines of investigation are studies upon the food of man and animals, the diseases of plants and animals, breeding of plants and animals, investigations in animal husbandry, orchard and field experiments, poultry investigations, and entomological research.

INSPECTIONS

The Commissioner of Agriculture is the executive of the laws regulating the sale of agricultural seeds, commercial feeding stuffs, commercial fertilizers, dairy products, drugs, foods, fungicides, and insecticides. The law requires the Commissioner to collect samples and have them analyzed at the Station. The law also requires the Director of the Station to make the analyses and publish the results.

PUBLICATIONS

The Station issues three series of publications: Bulletins, Official Inspections, and Miscellaneous Publications.

The results of the work of investigation are published in part in scientific journals at home and abroad, in U. S. Department of Agriculture publications, and in bulletins of the Station. All of the more important and immediately practical studies are published in the Station Bulletins. The Bulletins for a year form a volume of 300 to 400 pages and together make up the Annual Report. Bulletins are sent to the press of the State, to exchanges, libraries, and scientific workers. Bulletins which contain matter of immediate value to practical agriculture are sent
free to residents of Maine whose names are on the permanent mailing list.

The results of the work of inspection are printed in pamphlet form and are termed Official Inspections. Official Inspections are sent to dealers within the State; those that have to do with fertilizers, feeding stuffs, and seeds are sent to farmers, and those reporting food and drugs are sent to a list of several thousand women within the State.

The Miscellaneous Publications consist of newspaper bulletins, circulars, and similar fleeting publications. From twenty to thirty are published each year and are sent to different addresses according to the nature of the subject matter.

On request, the name of any resident of Maine will be placed on the permanent mailing list to receive either or both the Bulletins and Official Inspections as they are published.
Summer Term

This is a six weeks summer session of the university in which students may secure additional credit, and teachers have the opportunity to do work in the departments in which they are interested. The work of the summer term began in 1902 and continued to 1917. During the last two summers it was omitted on account of war conditions. A bulletin description of the courses offered in 1920 will be sent upon application.
Alumni Associations

GENERAL ASSOCIATION

President, Allen W. Stephens, 1899, 244 Madison Ave., New York, N. Y.
Vice President, Elmer J. Wilson, 1907, Gen. Electric Co., Lynn, Mass.
Recording Secretary, Paul W. Monohon, 1914, Orono
Executive Secretary, Wayland D. Towner, 1914, Orono
Treasurer, James A. Gannett, 1908, Orono
Necrologist, James N. Hart, 1885, Orono

ADVISORY COUNCIL

At Large

<table>
<thead>
<tr>
<th>Name</th>
<th>Term Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosea B. Buck, 1893</td>
<td>1920</td>
</tr>
<tr>
<td>Paul L. Bean, 1904</td>
<td>1920</td>
</tr>
<tr>
<td>Edward H. Kelley, 1890</td>
<td>1921</td>
</tr>
<tr>
<td>C. Parker Crowell, 1898</td>
<td>1921</td>
</tr>
<tr>
<td>George H. Hamlin, 1873</td>
<td>1922</td>
</tr>
<tr>
<td>A. H. Brown, 1880</td>
<td>1922</td>
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<td>L. C. Southard, 1875</td>
<td>1923</td>
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<td>E. W. Morton, 1909</td>
<td>1923</td>
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<td>P. B. Palmer, 1896</td>
<td>1924</td>
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<td>J. F. Gould, 1892</td>
<td>1924</td>
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</tbody>
</table>

College of Agriculture

Paul W. Monohon, 1914, Orono

College of Arts and Sciences

De Forest H. Perkins, 1900, City Hall, Portland

College of Law


College of Technology

Edward R. Berry, 1904, Gen'l Electric Co., W. Lynn, Mass
SPECIAL ASSOCIATIONS

COLLEGE OF LAW

President, James M. Gillin, 1913, 12 Columbia Building, Bangor
Vice President, Forrest B. Snow, 1909, Bluehill
Secretary, Mark A. Barwise, 1913, 101 Third St., Bangor
Treasurer, Charles H. Reid, Jr., 1903, 7 Hammond St., Bangor

SCHOOL AND TEACHERS' COURSES IN AGRICULTURE

President, Walter S. Jones, 1912, State Hospital, Bangor
Vice Presidents, George P. Fogg, 1908; Arthur W. Richardson, 1913
Secretary-Treasurer, Perley F. Smith, 1912, R. F. D. 1, East Brownfield

MAINE TEACHERS' ASSOCIATION

President, Ralph T. Coffee, 1914, E. Corinth
Vice President, Lewis Kriger, 1916, Fort Fairfield
Secretary-Treasurer, Edith Buzzell, 1902, Old Town

LOCAL ASSOCIATIONS

Androscoggin Valley—President, Paul L. Bean, 1904; Secretary, Weston B. Haskell, 1917, Auburn
Boston—George E. Seabury, 1888; Secretary, Ernest Lamb, 1910, 100 Summer St., Boston, Mass.
Central Maine—President, Mark J. Bartlett, 1901; Secretary, Carl Marr, 1917, 45 Silver St., Waterville, Me.
Knox County—President, O. H. Emery, 1910; Secretary, R. S. Sherman, 1906, Rockland
New York—President, A. D. T. Libby, 1898; Secretary, F. H. Lancaster, 1912, 2116 Dorchester Road, Brooklyn, N. Y.
Pacific—President, George R. Sweetser, 1909; Secretary, Walter W. Black, 1907, 527 Taylor St., Portland, Ore.
Penobscot Valley—President, Arthur S. Chalmers, 1904; Secretary, Clifford Patch, 1911, 175 State St., Bangor
Pittsburgh—President, C. L. Lyckett, 1911; Secretary, Warren McDonald, 1912, 113 Pennsylvania Station, Pittsburgh, Pa.
Western—President, Samuel B. Lincoln, 1905; Secretary, Henry M. Soper, 1903, 1615 Harris Trust Bldg., Chicago, Ill.
Western Maine—President, Albert E. Anderson, 1909; Secretary, Frank Fellows, 1910, Federal Court Building, Portland
Appointments

Members of Phi Kappa Phi

Samuel Wilson Collins, Caribou; Ernest Raymond Decker, Westfield, Mass.; Anna Pauline Epstein, Bangor; Ivan Stevens Hanson, Winter Harbor; Grace Hilda Hodgdon, East Boothby; Adele Cecilia Hopkins (Mrs. Earl Mann), Staten Island, N. Y., Lester Willis Kimball, Cliftondale, Mass.; Corinne Mary King, Orono; Nellie Ursula Little, Portland; Christine Adelia Northrup, Palermo; Jessie Mary Prince, Yarmouth; Dolore Frank Theriault, Millinocket; Elmer Joseph Wade, Richmond; Vernon Howard Wallingford, Auburn; Evelyn Marguerite Waugh, Winthrop.

Members of Tau Beta Pi

1920

Leslie Bannister, Cornish; Ray Maurice Boynton, Skowhegan; Henry Russ Butler, Portland; Lieh Hsun Chen, Pekin, China; Paul Franklin Corbin, Waltham, Mass.; Lawrence James Hodgkins, West Harpswell; Ralph Trueman Luce, Farmington; John Harding McCann, Bangor; Matthew Henry Merry, Vineyard Haven, Mass.; Everett Louis Roberts, Bangor; Walter Sangster Tolman, Portland; Tai Chi Wang, Pekin, China; Roy Alva Wentzel, Orono.

1921

Frank Swan Beale, Eastport.

Members of Alpha Zeta

1919

Frank Oren Alley, Jr., Bar Harbor; Earle Herrick Danforth, Bangor; Ray Winfield Dolloff, Hillside; Ralph William Hoyt, Stillwater; Randall Vaughan Williams, Lisbon Falls.
1920

Edward Herbert Brown, Bethel; Harry Carpenter Brown, Bethel; Harold Lincoln Bruce, Lebanon; Carl Arthur Randall Lewis, Augusta; David Carroll Packard, Marion, Mass.

1921

Chester Albert Ward, Hartland.

GENERAL HONORS

Samuel Wilson Collins, Caribou; Ernest Raymond Decker, Westfield, Mass.; Clifford Dawes Denison, Harrison; Anna Pauline Epstein, Bangor; Blanche Lillian Haley, South Brewer; Ivan Stevens Hanson, Winter Harbor; Adele Cecilia Hopkins (Mrs. Earl Mann), Staten Island, N.Y.; Corinne Mary King, Orono; Nellie Ursula Little, Portland; Christine Adelia Northrup, Palermo; Jessie Mary Prince, Yarmouth; Arthur Raymond Sanborn, Island Falls; Abraham Segal, Lewiston; Dolore Frank Theriault, Millinocket; Elmer Joseph Wade, Richmond; Vernon Howard Wallingford, Auburn; Evelyn Marguerite Waugh, Winthrop.

PRIZES AWARDED

Kidder Scholarship, Harold Lincoln Bruce, Lebanon.
New York Alumni Scholarship, Frank Peter Preti, Portland; Elmer Alton LeBlanc, Veazie.
Pittsburg Alumni Scholarship, Walter Sangster Tolman, Portland.
Sophomore Essay Prize, Ruth Butler Sullivan, Bangor.
Western Alumni Scholarship, Homer Franklin Ray, St. Albans.
Elizabeth Abbott Balentine Scholarship, Eleanor Flint, West Baldwin.
Phi Mu Scholarship, Marion Katharyn Bragg, Bangor.
Joseph Rider Farrington Scholarship, Florence Libby Chandler, Newcastle.
Walter Balentine Prize, Lucy Helen Kilby, Eastport.
Franklin Danforth Prize, Samuel Wilson Collins, Caribou.
Callaghan and Company Prize, Herbert William Hitchings, Caribou.
Washington Alumni Association Prize, Jeremiah Timothy Reardon, Concord, N.H.
Class of 1908 Commencement Cup, Class of 1882.
Fraternity Scholarship Cup, Sigma Nu.
Freshman Scholarship Cup, Alpha Tau Omega.
Commencement

Friday, June 20

5.00 P. M. Phi Kappa Phi Initiation
6.00 P. M. Phi Kappa Phi Banquet
8.30 P. M. Student Entertainment

Saturday, June 21, Alumni Day

10.00 A. M. Class Frolics—Athletic Field
12.00 M. Class Luncheons
1.30 P. M. General Alumni Meeting
2.30 P. M. Class Day Exercises, Assembly Hall
   Planting of the Ivy
6.00 P. M. Alumni Banquet

Sunday, June 22

10.30 A. M. Baccalaureate Address, Bishop Edwin Holt Hughes
12.30 P. M. Fraternity Banquets and Reunions
2.30 P. M. Open House at the President's House and at the Fraternity Houses
7.00 P. M. Memorial Vesper Service, Assembly Hall

Monday, June 23

9.30 A. M. Commencement Exercises—Addresses by Governor Carl E. Milliken, of Maine, and Ex-Governor M. G. Brumbaugh, of Pennsylvania
   Conferring of Degrees
8.00 P. M. Commencement Ball
Degrees Conferred

College of Agriculture

Bachelor of Science

Frank Oren Alley, Jr. (in Animal Husbandry)..............Bar Harbor
Carl Alfred Anderson (in Forestry)...........East Bridgewater, Mass.
Samuel Wilson Collins (in Agronomy)..................Caribou
Earle Herrick Danforth (in Horticulture)...............Bangor
Thomas Davis (in Dairy Husbandry)..................Veazie
Clifford Dawes Denison (in Horticulture)..............Harrison
George Annand Faulkner (in Forestry)...........South Hanson, Mass.
Marjorie Eunice Gooch (in Home Economics)...........Taunton, Mass.
Blanche Lillian Haley (in Home Economics).............South Brewer
Ella May Hall (in Home Economics)..................Brewer
Perley Francis Harmon (in Agronomy)...........Caribou
Elwyna Lewis Haskins (in Home Economics)..........Saco
Ralph William Hoyt (in Dairy Husbandry).............Stillwater
Fannie Louise Pratt (in Home Economics).............North New Portland
Carroll Coffin Reed (in Animal Husbandry)..........Hollis, N. H.
Willard Case Sisson (in Dairy Husbandry).............Hartford, Conn.
Estelle Paulina Spear (in Horticulture).............South Portland
Marion Esther Stubbs (in Home Economics)...........Bucksport
Marion Louise Thomas (in Home Economics).........Newburyport, Mass.
Louis Elmore Tibbetts (in Horticulture)..............Kennebunk
Paul Franklin Webber (in Horticulture).............Kennebunk
Randall Vaughan Williams (in Dairy Husbandry).......Lisbon Falls

College of Arts and Sciences

Bachelor of Arts

William Henry Allen (Economics & Sociology).....Brownville Junction
Frank Isadore Altman (Economics & Sociology)......Lawrence, Mass.
DEGREES CONFERRED

Jennie Christina Beaulieu (French) ................................................... Old Town
Joseph Thomas Beck (Economics & Sociology) ............................... Augusta
Charles Truman Corey (History) ..................................................... Portland
Mark Vernon Crockett (Education) ............................................... Gorham, N. H.
Hugo Silas Cross (Economics & Sociology) ................................... Guilford
Gerald Joseph Culhane (Economics & Sociology) ......................... Brighton, Mass.
Anne Genevieve Curran (English) .................................................. Old Town
Fred Llewellyn Damren (Biology) As of the Class of 1916........... Auburn
Anna Pauline Epstein (French) ....................................................... Bangor
Marion Louise Harthorn (Spanish) ............................................... Milford
Kathryn Estella Hitchings (Spanish) ............................................. Caribou
Grace Hilda Hodgdon (Mathematics) ............................................. East Boothbay
Adele Cecilia Hopkins (French) ..................................................... Old Town
Alice Mary Hurley (French) ........................................................... Old Town
Helen Rowe Johonnett (History) ..................................................... Pittsfield
Armand Elwood Joy (Education) .................................................... West Sullivan
Lester Willis Kimball (Economics & Sociology) ......................... Cliftondale, Mass.
Corinne Mary King (French) .......................................................... Orono
Nellie Ursula Little (French) ......................................................... Portland
Katherine Marie Lloyd (English) .................................................... Brewer
Pauline Mansur (English) ............................................................... Bangor
Paul Austin Morris (Economics & Sociology) ............................... Bangor
Christine Adelia Northrup (Latin) .................................................. Palermo
Carl Wakefield Perkins (Chemistry) .............................................. Ogunquit
Harold Merle Pierce (Economics & Sociology) ........................... Norridgewock
Jessie Mary Prince (Economics & Sociology) ............................... Yarmouth
Jeremiah Timothy Reardon (Economics & Sociology) ............... Portland
Hester Miles Rose (English) ............................................................ Brooks
Ethel Beatrice Sawyer (Spanish) ..................................................... Portland
Edith May Scott (English) .............................................................. Wolfeboro, N. H.
Ethel Lue Scott (English) .............................................................. Wolfeboro, N. H.
Abraham Segal (Biology) .............................................................. Lewiston
Faye Smith (English) ................................................................. Machias
Donald Melville Steadman (History) ............................................ Bridgton
Edgar Addington Stoddard (Chemistry) ........................................ Portland
Evelyn Marguerite Waugh (History) ............................................. Winthrop
Victoria Olive Weeks (French) ..................................................... Winslow
Ella Adams Wheeler (English) ...................................................... Bangor
Kenneth Thwing Young (Biology) ................................................ Arlington, Mass.
Bachelor of Pedagogy

Clarence Watson Dickey..............................................................Monroe

College of Law

Ernest Raymond Decker.........................................................Westfield, Mass.
Eudore Alphonse Drapeau (A. B. Bowdoin, 1916)...........................Brunswick
George Sydney Levenson.........................................................Dorchester, Mass.
Arthur Raymond Sanborn.........................................................Island Falls
Francis Allison Walsh...............................................................Bangor

College of Technology

Robert Dunning Chellis (in Civil Engineering)...............................Portland
George Henry Cheney (in Chemistry).........................................Randolph
Tsuei Chi Chow (in Chemical Engineering).........................Hangchow, China
Manley Webster Davis (in Chemical Engineering).......................Guilford
William Clarence Ellsworth (in Electrical Engineering)...........Farmington
Philip Talbot Farnum (in Electrical Engineering)..............East Wilton
Kenneth Randall Farr (in Chemical Engineering).......................Oakland
Ernest Leonard Garland (in Electrical Engineering)..................Old Town
John Elmer Goodwin (in Chemical Engineering).......................Pittsfield
Ivan Stevens Hanson (in Mechanical Engineering) ....................Winter Harbor
Ray Clifford Hopkins (in Electrical Engineering).......................Camden
Clifford Prentiss Larrabee (in Chemical Engineering) ..............Old Town
Millard George Moore (in Chemical Engineering)....................Old Town
Raleigh Dudley Morrill (in Mechanical Engineering) As of the
Class of 1909.................................................................Northfield, Vt.
Charles Fernald Niles (in Civil Engineering)..............................Rumford
Kenneth Bradford Noyes (in Mechanical Engineering) ..........Orono
Charles Montgomery Poor (in Civil Engineering).....................Andover
Louis Schweitzer (in Chemical Engineering)..........................New York, N. Y.
Lester Clayton Swicker (in Electrical Engineering)...............Townsend, Mass.
Delore Frank Theriault (in Mechanical Engineering) .............Millinocket
Frank Alton Tracy (in Electrical Engineering).........................Cherryfield
Elmer Joseph Wade (in Electrical Engineering).......................Richmond
Vernon Howard Wallingford (in Chemical Engineering)...........Auburn
Samuel Weisman (in Chemical Engineering).............................Portland
Ralph Allen Wilkins (in Chemical Engineering).....................Beverly, Mass.
Willis Stone Winslow (in Civil Engineering)............................Waldoboro
Advanced Degrees

Master of Laws

Allen Sherman (A. B. Dartmouth, 1915; LL. B., Maine, 1918) ....... Orono

Electrical Engineer


Certificates

In the School Course in Agriculture

Charles Leslie Thomas ........................................................... Harrison

Honorary Degrees

Martin Grove Brumbaugh, LL. D.
Edwin Holt Hughes, LL. D.
Carl Elias Milliken, LL. D.
Raymond Pearl, LL. D.
George Ware Stephens, LL. D.
Catalog of Students


GRADUATE STUDENTS

Ballantine, John Perry, A. B., Ps. Harvard, 1918
Chapman, Chauncey Wallace Lord, B. S., Bl. Maine, 1914
Crombie, John Newell, B. Chem., Ch. Pittsburgh, 1916
Eberman, Norman Fitzhugh, B. S., Ch. Franklin and Marshall, 1919
Hopkins, Bryant Lealand, B. S., Ce. Maine, 1917
Hutchinson, Dorothy Mabel, B. S., Bl. Middlebury, 1919
James, Sara Bourke, A. B., Hy. Radcliffe, 1907
Jordan, Maynard Fred, B. S., Ms. Maine, 1916

Fitchburg, Mass. 33 Bennoch
Fitchburg, Mass. Balentine Hall
Bridgton Δ T Δ House
Wilkinsberg, Pa. Main Street
Chicago, Ill. 32 College Street
Orono 180 Main Street
Orono 279 Main Street
Auburn 15 Park Street
Orono University Inn
Islesford 46 College Street
Leavitt, Harold Walter, B. S., Ce.
Maine, 1915
McPhee, Hugh Curtis, B. S., Bl.
Maine, 1918
Meek, Howard Bagnall, B. S., Ms.
Boston, 1917
Merritt, Raymond Lowell, B. S., Bl.
Maine, 1918
Muller, Richard Theodore, B. S., Bl.
Cornell, 1916
Pashalian, Diran Harabed, A. B., Es.
Baldwin-Wallace, 1919
Pearsall, Platt Ashley, B. S., Ch.
Virginia Polytechnic, 1915
Perrin, Porter Gale, A. B., Eh.
Dartmouth, 1917
Pratt, Albert Sawyer, A. B., Ms.
Brown, 1918
Streeter, Leon Reynolds, B. S., Bc.
Colgate, 1919
Whitaker, Edith Susan, A. B., A. M.
Bl.
Radcliffe, 1916, 1917

Abramson, Lewis, Es.
Adams, Chester Norris, Ee.
Adams, George Joseph, Ps.
Amos, Luther Newell, Ee.
Anderson, William Henry, Ch.
Astle, Ray Milton, Ch. Eng.
Atherton, Raymon Neale, Ag.
Averill, Robert Wallace, Fy.
Averill, Walter Boardman, Fy.
Avery, Willard Crissey, Ce.
Bannister, Leslie, Ce.
Barber, Roscoe Hall, Ee.
Barker, Corinne Maude, Hy.
Barron, John Stehley, Fy.
Bartlett, Frances Dorothea, He.
Beale, Clara Helen, Fr.
Besse, Frank Arnold, Es.
Beverage, Stanley Fremont, Ch.
Beverly, Verne Curtis, Dh.
Bisbee, Frederick Carleton, Ee.

Boyd, Earl George, Ms.
Boytton, Ray Maurice, Ce.
Brasier, Everett Hovey, Es.
Brown, Edward Herbert, Ae.
Brown, Harry Carpenter, Ae.
Bruce, Harold Lincoln, An.

Bussell, Dorothea Mabel, Sp.
Bussell, Stephen Reginald, Es.
Butler, Harry, Bl.

Butler, Henry Russ, Ee.

Caldwell, Harold Benjamin, Es.
Carter, George Milton, Es.
Chadbourne, Walter Whitmore, Es.
Chase, Elizabeth Miller, Es.
Chase, Willard Linwood, Ped.
Chen, Lieh Hsui, Ch. Eng.
Colbath, Kenneth Brenton, Es.
Cole, Raymond Fuller, Es.
Cook, Raymond John, Es.
Coolbroth, Ernest Leon, Ce.
Cooley, Leland Rodney, Me.
Cornforth, Robert Gardner, Me.
Craig, Ira Caswell, Ee.
Crawshaw, Thomas Hill, Fy.
Currier, Stanley Morrison, Ce.

Darrah, John Clark Flagg, Ch. Eng.
Deering, Lawrence Ezekiel, Ee.

Oroon 33 Bennoch Street
Sac  Ω T  Ω House
Oroon Practise House
Oroon 33 Peters Street
Albion  Ω T  Ω House
North Haven  Σ A E House
Bangor  K Σ House
Berlin, N. H.

R. F. D. #7, Bangor

Kingman  Δ T Δ House
Skowhegan  Δ X A House
Guilford  Φ Γ Δ House
Bethel  K Σ House
Bethel  K Σ House
Lebanon

Boarding House, Campus

Old Town Old Town
Bangor

112 Grove Street, Bangor

Portland 201 H. H. Hall

Madison  Σ X House
Washburn  Σ X House
Danforth  Σ X House
Newcastle Balentine Hall
Oroon 143 Main Street
Old Town Old Town
Pekin, China 208 H. H. Hall
Presque Isle  K Σ House
Brewer  Δ T Δ House
Brewer  Θ X House
Portland  Φ Γ Δ House
Solon 105 Oak Hall
Cooper 45 Mill Street
Millinocket 301 H. H. Hall
Auburn  Σ N House
Brewer  Φ K Σ House

Richmond  Δ X A House
Hollis Center 101 H. H. Hall
Diehl, Edwayne Philip, Es.
Dole, Howard Noyes, Ch. Eng.
Donovan, Irving Raymond, Es.
Douglass, Lloyd Richmond, Ee.
Dunn, Barbara, Eh.
Dyer, Isabel Hayden, Bl.

Eastman, Doris Burkett, He.
Edgerly, Lloyd Irving, Ch. Eng.
Elliot, Priscilla Goldthwaite, Lt.
Emery, Newell Wyman, Es.

Farrar, Clarissa Palmer, Ms.
Flavell, Paul Irving Ce.
Foyle, Raymond Henry, Es.

French, Minerva Evelyn, Ps.
Friend, Francis Howard, Fy.
Furey, John Glynn, Es.

Gammell, Lewis Waldo, Ch. Eng.

Gardiner, Leigh Philbrook, Ag.
Gilman, Elva, Hy.
Gilman, Leona Mae, He.
Googins, Richard Lucien, Me.
Gorden, Kathryn Elizabeth, Sp.
Green, John Cornelius, Dh.
Guptill, Samuel, Ms.

Hacker, Edward Prince, Me.
Hackett, Ruby Marie, Fr.

Haines, Hfederick Bates, Ce.
Ham, Miles Frank, Es.
Ham, Wallace Reed, Ee.
Hansen, Milton Christopher, Me.
Harriman, Alonzo Jesse, Me.
Harris, Leon Carleton, Es.

New Britain, Conn.

Δ T Δ House
Haverhill, Mass.
Θ X House
Bangor
Α T Ω House
Augusta
Σ X House
Orono
51 Bennoch Street
Cape Elizabeth
Mt. Vernon House

Warren
Balentine Hall
Swampscott, Mass.
Κ Σ House
Guilford
Mt. Vernon Annex
Salisbury Cove
Σ N House

Princeton
Balentine Hall
Hanover, Mass.
Σ N House
East Bridgewater, Mass

Λ X Λ House
Woolwich
Balentine Hall
Skowhegan
Κ Σ House
Bangor
Θ X House

Attleboro, Mass.
7 Pleasant Street
Dennysville
210 H. H. Hall
South Portland
Balentine Hall
Woodfords
Practise House
Biddeford
101 H. H. Hall
Livermore Falls
Balentine Hall
Jacksonville
Δ T Δ House
Topsham
33 Pond Street

Brunswick
Φ H K House
New Vineyard
Mt. Vernon Annex

Portland
Β Θ Π House
Thomaston
Φ K Σ House
Bath
109 Oak Hall
Vernon, Conn.
66 Park Street
Bath
Σ A E House
Portland
Δ X Δ House
<table>
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<th>Name</th>
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<td>Hodgkins, Lawrence James</td>
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<td>Φ Κ Σ House</td>
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<td>Holbrook, Dorothy York</td>
<td>Rockland</td>
<td>Practise House</td>
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<td>Ingraham, Dwight Marden</td>
<td>Bangor</td>
<td>B Θ Π House</td>
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<td>Jackson, M. Eleanor</td>
<td>Hampstead, N. H.</td>
<td>Practise House</td>
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<td>Jones, Eliphalet Prentiss</td>
<td>East Boothbay</td>
<td>Φ Η Κ House</td>
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<td>Jones, Samuel Everett</td>
<td>Augusta</td>
<td>A Τ Ω House</td>
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<td>Jordan, Ruth</td>
<td>Old Town</td>
<td>Old Town</td>
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<td>Kelley, Edward Henry</td>
<td>Bangor</td>
<td>Θ Χ House</td>
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<tr>
<td>Kenniston, Luther Edward</td>
<td>Amherst</td>
<td>3 Middle Street</td>
<td></td>
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<tr>
<td>Kirk, Edward Benedict</td>
<td>Bar Harbor</td>
<td>Ε N House</td>
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<td>Landers, Carleton Ames</td>
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<td>University Inn</td>
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Packard, David Carroll, Ht.
Palmer, Beatrice Chase, Eh.

Park, Irwin James, Ce.
Peabody, Gertrude Devitt, He.
Plummer, Norman Dyer, Ce.
Potter, George Alva, Es.
Pulsifer, Mary Augusta, He.
Rapp, Herbert Victor, Ch.

Richardson, Flavia Lucile, Ms.
Rideout, Elmer William, Ch.
Ring, Arthur Andrews, Me.
Roberts, Everett Louis, Ee.

Robbins, Hamlyn Nelson, Dh.
Rosenthal, Samuel Charles, Ch.

Sinnett, Ralph Vernon, Ch.
Small, Clive Ceylon, Ch.
Snow, Charles Augustus, Ed.
Snow, Eveline Foster, He.
Stanley, Watson Frank, Es.
Stetson, Dorothea Hayward, Sp.
Stevens, Wingate Irving, Fy.
Stewart, Clyde Wentworth, Ch.

Thompson, Newton Bartlett, Ce.
Thurston, Lester Ralph, Ee.
Tolman, Walter Sangster, Ch. Eng.
True, Nathan Frank, Es.
Turgeon, Henry Wallace, Ch.
Turner, O'Dillion Charles, Eh.

Upham, Warren Pratt, Fy.

Walker, Stuart Frederick, Es.
Wang, Tai Chi, Ch. Eng.
Waterman, Burleigh Rumery, Ce.

Marion, Mass.  Σ Δ E House
Bangor
14 Garland, Street, Bangor
Orono  37 Pine Street
Princeton  Practise House
Dorchester, Mass.  Φ Γ Δ House
Mystic, Conn.  Φ Η K House
Auburn  Practise House
Turners' Falls, Mass.

Old Town  Balanced Hall
Bucksport  R. F. D. #7, Bangor
Orono  3 Summer Street
Bangor
16 Highland Avenue, Bangor

Scarborough
Boarding House, Campus

Portland  Φ E Π House

Brewer  Brewer
Farmington  Φ K Σ House
Stockton Springs  206 H. H. Hall
Rockland  Practise House
Springvale  Β Θ Π House
Houlton  Mt. Vernon Annex
Portland  107 H. H. Hall
Saco  A T Ω House
Milo  19 Oak Street

Waterville  Β Θ Π House
Andover  Β Θ Π House
Portland  Σ Χ House
Freeport  Φ Γ Δ House
Auburn  Β Θ Π House
Veazie  R. F. D. #7, Bangor

Orono  A T Ω House

Livermore Falls  Σ N House
Pekin, China  208 H. H. Hall
Portland  Β Θ Π House
Watson, Harry Dexter, Me.
Wentzel, Roy Alva, Ce.
Whitcomb, Ruel Whitney, Es.
Wight, Willard, Es.
Willard, Fred Spear, Es.
Woodman, Roger French, Fy.
Worcester, Frank Clark, Hy.
Worth, Harold Hinkley, Me.
Wray, Ruth Arline, Eh.

West Baldwin
Φ II K House

Orono
46 Main Street

Ellsworth Falls
K Σ House

Berlin, N. H.
Σ N House

Portland
Σ N House

Plymouth, N. H.
Α Τ Ω House

Harrington
Δ X Α House

Bangor
Σ Α E House

Brewer
Mt. Vernon House

Adams, Andrew, Ce.
Adams, James Campbell, Me.
Armstrong, Paul Shattuck, Ch.
Austin, Chester Jordan, Ee.
Barkley, Emma Elizabeth, He.
Barton, Frank Eugene, Bl.
Beale, Frank Swan, Me.
Bedard, Albert Joseph, Ce.
Beeaker, Stephen William, Ch. Eng.
Berry, Alden Wright, Ch. Eng.
Bisbee, Mildred Tressa Wheaton, Ms.
Blackwell, Henrietta, Bl.
Blackwell, Percy Lynn, Ce.
Blake, William Laurence, Es.
Blethen, Margaret, Fr.
Bornstein, Bernard, Ch. Eng.
Bourdon, Irene Cecile, Fr.

Portland
Δ X Α House

Cherryfield
Σ A E House

Malden, Mass.
Φ Γ Δ House

Greene
108 H. H. Hall

Carlyle, Illinois
Practise House

Rockport, Mass.
Σ Α E House

Eastport
204 H. H. Hall

Rumford
Δ X Α House

Rumford
Φ Η K House

Stamford, Conn.
Φ Κ Σ House

Berlin, N. H. Mt. Vernon House

Boston, Mass.
32 College Street

Madison
105 Oak Hall

Houlton
Σ X House

Foxcroft
Balentine Hall

Deering
Φ E Π House

Manchester, N. H.
435 Union Street, Bangor

Bangor
Mt. Vernon Annex

Sanford
Σ Α E House

Gloucester, Mass.
Σ Α E House

Gorham
Σ N House

Bangor
Balentine Hall

Gloucester, Mass.
Δ T Δ House

Orland
B Θ Π House

Gloucester, Mass.
Σ Α E House

Fort Fairfield
Φ Γ Δ House

Rockland
K Σ House

Sabattus
Balentine Hall
Campbell, Stanley Willey, Ch. Eng.
Carlin, James Edward, Ch.
Cary, Lester King, Es.
Castle, Roger Clapp, Ee.
Chaplin, Joseph Benjamin, An.
Chapman, Arthur Raymond, Ch. Eng.
Close, Mildred Mary, Eh.
Coady, Donald Lewis, Me.
Cobb, William Bangs, Dh.
Cohen, Robert, Ch. Eng.
Corbin, Paul Franklin, Ce.
Corson, Merton Clarendon, Me.
Coughlin, Mary Anna, Eh.
Courtney, Horace Sears, Ch. Eng.
Crandall, Horace Cushman, Ce.
Crane, George Wilson, Ce.
Crocker, Percival Bradford, Me.
Cross, Charlotte Geneva, Fr.
Curran, Helen Frances, Eh.
Curran, Raymond Joseph, Me.

Cushman, George Mason, Es.

Davidson, James Howard, Ce.
Davis, Alfred Dudley, Fr.
Deering, Edith Idella, Ms.
Deering, Howard Alfred, Me.
Demeritt, Dwight Burgess, Fy.
Dodge, Maynard Burnham, Ae.
Dow, Arthur Greenleaf, Ee.
Drisko, Clarence Holmes, Me.
Dunning, Ella Frances, Eh.

Eastman, Madeleine Gladys, Fr.
Emery, Orville Morton, Es.
Flint, ErIon Webster, Ee.
Fraser, Simon Chandler, Es.
French, Dwight Millard, Es.
Froberger, George Auguste Joseph, Es.
Gaudreau, Armand Theophane, Ms.
Gilpatrick, Julia Thompson, Sp.
Ginsberg, George Snow, Es.
Ginsberg, Simon, Me.
Goggin, Francis James, Es.
Gordon, Samuel Frederick, Ch.
Greenleaf, Harry Lowell, Me.

Hall, Sherman Barrett, Ce.
Hamm, Carol May, Lt.
Hammond, Robert Jardine, Bl.
Hanington, Dorothy Lyman, He.
Harden, Anna Sophia, Fr.

Hardy, Carl Edward, Ht.
Harmon, Max Carlton, Gm.
Harrington, Randall Alfred, Me.
Harris, Charles Edward, Ch.
Hart, Dorothy Endicott, Es.
Hatch, Walter Edward, Es.
Heistad, Erling, Me.
Hersey, Lilla Clarke, Es.
Hobbs, Vernon Francis, Ce.
Hotham, Charles Ernest, Ae.
Howard, Henry Young, Ee.
Hughey, John Millard, Ch. Eng.

Jenkins, William Henry, Ped.
Jocylen, Reginald Melvin, Ee.
Johnson, Leon Howard, Es.
Johnson, Stanley Jordan, Ch. Eng.
Jones, Alice Ward, Sp.
Jones, Cecil Roland, Ce.
Jordan, Ina, Ped.

Keating, Anna Josephine, Fr.
Kelleher, Ralph Bartholomew, Es.
Kelley, Linwood John, Es.
Kelly, Harold Joseph, Es.
Kendall, Ralph Miles, Ee.
Kilby, Lucy Helen, Ht.
King, Rufus Brooks, Ee.

Northeast Harbor

Bangor
Mt. Vernon Annex

Bangor
Φ Ε Π House

Bangor
Φ Ε Π House

Orono
Kelley Road

Lincoln
Φ Ε Π House

Monmouth
Φ Γ Δ House

Camden
A Τ Ω House

Bangor
Balentine Hall

Van Buren
24 Mill Street

Calais
Balentine Hall

South Brewer
Mt. Vernon House

Bangor
124 Parkview Avenue, Bangor

Buxton
306 H. H. Hall

South Bristol
Φ Η Κ House

Bar Harbor
Σ Α Ε House

Essex, Mass.
Balentine Hall

North Berwick
203 H. H. Hall

Camden
403 H. H. Hall

Bangor
Mt. Vernon Annex

Mattawamkeag
101 H. H. Hall

Patten
K Σ House

Winslow
K Σ House

Orono
81 Mill Street

Presque Isle
202 H. H. Hall

Bucksport
Σ Α Ε House

Portland
Κ Σ Ηouse

Bangor
411 H. H. Hall

Carmel
Balentine Hall

Waterville
Σ Α Ε House

Seal Harbor
Mt. Vernon House

Camden
Balentine Hall

Orono
Σ Χ House

Orono
Φ Η Κ House

Orono
20 Mill Street

Biddeford
Σ Α Ε House

Eastport
Balentine Hall

Peabody, Mass.
29 Park Street
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<th>City/State</th>
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<td>Madison</td>
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<td>Readfield Depot</td>
<td>B Θ Π House</td>
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<td>Gardiner</td>
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<td>Perry, Clark, Es.</td>
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Perry, Oscar Leland, Es.
Phillips, Cora Mae, Hy.

Pinkham, Seth Henry, Es.
Plumer, Wesley Clark, Ee.
Pratt, Harold Edward, Ch. Eng.
Preble, Warren Hinckley, Es.
Priest, Conan Althado, Ee.

Ramsdell, Leah May, Ped.
Ranger, Ralph Augustine, Me.
Reed, Helen Pierpont, Sp.
Riley, Edwin Alden, Ch. Eng.
Robinson, Joseph Sidney, Ch. Eng.

Salley, Florence Ulmer, Fr.
Schonland, Richard Palmer, Me.
Sewall, Howard Howe, Fy.
Sherman, Elmo Linwood, Eh.
Small, Donald Wallace, Es.
Small, Mabel Angeline, Ped.
Small, Ruth Mildram, He.
Small, Stanton Edward, Es.
Smith, Dorothy, Sp.
Smith, Hugh Clifford, Me.
Smith, Lucille Estelle, Eh.
Smith, Raymond James, Me.
Snow, Edward Haskell, Fy.
Staples, Elliot Marsellus, Ee.
Stephens, Raymond Donnell, Fy.
Stevenson, William Stanley, Ee.
Stewart, Katherine Dudley, Ms.
Stuart, Donald Wellington, Ce.
Sullivan, Alphonso Dennis, Ch. Eng.
Sullivan, Ernest John, Ce.
Sullivan, Eugene Leo, Ee.
Sullivan, Ruth Butler, Es.
Swicker, Harold Benton, Ed.
Swift, Carroll Candy, Me.

Taylor, Wilfred Avery, Ee.
Tibbetts, Harold Samuel, Es.

Rockland
Northeast Harbor

K Σ House
Mt. Vernon House
Cape Porpoise
Portland
Barre, Mass.
Addison
Solon

Lubec
Wilton
Bangor
Livermore Falls
Houlton

Waltham, Mass. 301 H. H. Hall
Auburn  B Θ Π House

Lynn, Mass. Balentine Hall
Portland
Livermore Falls
Brewer
East Machias
Milbridge
Auburn
Farmington
Bangor
Bangor
Bangor
Brewer
South Brewer
Bluehill
Ogunquit
Auburn
Thorndike
Bangor
Houlton
Orono
Orono
Orono
Bangor
Bangor

Wareham, Mass. 301 H. H. Hall
Auburn  B Θ Π House
<table>
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<td>Tinker, Herbert Dunbar, Es.</td>
<td>Orono</td>
<td>Σ N House</td>
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<td>Tozier, Norman Stanley, Dh.</td>
<td>Fairfield</td>
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<td>Tracy, Earle Bedford, Es.</td>
<td>Winter Harbor</td>
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<td>Trafton, George Maynard, Ce.</td>
<td>Springvale</td>
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<td>Travers, George Clifton, An.</td>
<td>Bangor</td>
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<td>Trouant, Virgil Elmer, Ee.</td>
<td>Augusta</td>
<td>410 H. H. Hall</td>
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<tr>
<td>Turner, Erwin Sibley, Me.</td>
<td>Topsham</td>
<td>Φ Η Κ House</td>
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<tr>
<td>Underhill, Orra Ervin, Ch.</td>
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<td>203 H. H. Hall</td>
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<tr>
<td>Urann, Arthur Reed, Ee.</td>
<td>North Hancock</td>
<td>205 Oak Hall</td>
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<td>Varney, Allen Morelen, Ch.</td>
<td>Gloucester, Mass.</td>
<td>302 H. H. Hall</td>
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<td>Vaughan, Frederick Ray, Es.</td>
<td>Cherryfield</td>
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<td>Vaughan, Kenneth Emery, Ch. Eng.</td>
<td>Brewer</td>
<td>Φ Η Κ House</td>
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<tr>
<td>Vining, Clyde Victor, Es.</td>
<td>Auburn</td>
<td>Κ Σ House</td>
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<td>Wass, Raymond Clifton, Ped.</td>
<td>Columbia Falls</td>
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<tr>
<td>Weeks, Donald Ross, An.</td>
<td>Rockland</td>
<td>56 Park Street</td>
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<tr>
<td>Wessenger, Hester Mary, Lt.</td>
<td>Masardis</td>
<td>Balentine Hall</td>
</tr>
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<td>Weymouth, Leta Alvena, Es.</td>
<td>Howland</td>
<td>Balentine Hall</td>
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<tr>
<td>Whitehouse, Thurl Stevens, Ee.</td>
<td>Portland</td>
<td>Σ N House</td>
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<tr>
<td>Williams, Hugh Montgomery, Me.</td>
<td>Guilford</td>
<td>Φ Γ Δ House</td>
</tr>
<tr>
<td>Wonson, Philip Reed, Es.</td>
<td>Gloucester, Mass.</td>
<td>Σ Α Ε House</td>
</tr>
<tr>
<td>Woodbury, Martha Lander, Lt.</td>
<td>Dover</td>
<td>Balentine Hall</td>
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<td>Lewiston</td>
<td>Κ Σ House</td>
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</tbody>
</table>

**SOPHOMORES**

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
<th>Residence</th>
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</thead>
<tbody>
<tr>
<td>Anderson, Paul Washburn, Me.</td>
<td>Gloucester, Mass.</td>
<td>Φ Κ Σ House</td>
</tr>
<tr>
<td>Archer, Ceylon Richard, Ee.</td>
<td>Bangor</td>
<td>R. F. D. #1, Bangor</td>
</tr>
<tr>
<td>Armstrong, Rhandena Ayer, He.</td>
<td>Rockland</td>
<td>Balentine Hall</td>
</tr>
<tr>
<td>Atkinson, Horace Barker, Ce.</td>
<td>Morrill</td>
<td>36 Grove Street</td>
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</tr>
<tr>
<td>Baker, Anne Kathleen, Hy.</td>
<td></td>
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</tr>
<tr>
<td>Bangs, William Parcher, Ch. Eng.</td>
<td>Orono</td>
<td>29 Pierce Street</td>
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<tr>
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<tr>
<td>Barnard, John Hopkins, Ce.</td>
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<td>Barrett, Francoise Hildegarde, Fr.</td>
<td>Gardiner</td>
<td>Φ Γ Δ House</td>
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<tr>
<td>Barry, William Foster, Me.</td>
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<td>Balentine Hall</td>
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</tbody>
</table>
Bayard, Clayton Crowell, Es.
Bayley, Wilfred Donnell, Me.
Bean, Lester Carlton, Ee.
Bishop, Jacob Wetmore, Jr., Ce.
Black, Joseph Kenneth, Ce.
Blake, Foster Batcheler, Ee.
Blanchard, Morris William, Ce.
Blethen, Harold Andy, Ee.
Bowen, Howard Lancaster, Ms.
Bowker, Arthur Moses, Me.
Boyd, Parry Eustis, Es.
Brackett, Phyllis Mildred, Sp.
Bragdon, Helen Elizabeth, Sp.
Brawn, Herbert Andrew, Ch.
Brewer, Edgar Sterling, Me.
Buker, Joseph Steelbrooke, Es.
Bumpus, Amos Francis, Me.
Burns, John Edwin, Ce.

Carey, Henry Thomas, Me.
Carter, Earl Frank, Ag.
Chamberlain, Lucy Elizabeth, Fr.
Chapman, Franklin Kenneth, Me.
Chase, Martha Durgin, He.
Chatto, Morris Haskell, Me.
Clark, Helen Emily, He.
Clough, Raymond Whitney, Me.
Cole, Frederic Leslie, Jr., Es.
Collins, Ida Merrill, Sp.
Connon, William Dewey, Ee.
Connor, Rachel, He.
Coombs, Ruth Milton, He.

Costello, Coleman Joseph, Ch.
Craig, Ivan Lester, Ce.
Crehore, Sarah Elizabeth, He.
Cross, Donald Harvey, Ce.
Curran, Frances Elizabeth, He.
Cutler, Fannie Rebecca, Fr.

Daniels, Donald Howard, Ch. Eng.
Davee, Lawrence Weston, Ee.

Orono 76 Main Street
Wells Φ Κ Σ House
Freeport 310 H. H. Hall
Bowdoinham 405 H. H. Hall
Vinalhaven Δ Τ Ω House
Sedgwick 210 H. H. Hall
Cumberland Center Δ Χ Λ House
East Bangor Φ Γ Δ House
Bangor 16 Bower Street, Bangor
Bath Σ Δ E House
Bangor Φ Η K House
Weston Balentine Hall
Franklin Balentine Hall
Bath 109 Oak Hall
Peak Island Φ Γ Δ House
Hartland Δ Τ Δ House
Turner Campus
Bangor 15 Frazier Street, Bangor

Portland A Τ Ω House
Levant 188 Main Street
Houlton Balentine Hall
Old Town Old Town
Sebec Station Balentine Hall
South Brooksville 10 Pine Street
Thomaston Balentine Hall
Portland Φ Η K House
North Brooklin Σ N House
Caribou Balentine Hall
Philadelphia, Pa. Φ Η K House
Bangor Balentine Hall

Bangor 118 Leighton Street, Bangor
Portland A Τ Ω House
Caribou Θ X House
LaGrange Balentine Hall
Guilford Φ Γ Δ House
Bangor 112 Birch Street, Bangor
Old Town Old Town

Woodfords Φ Η K House
Orono 46 College Street
SOPHOMORES

Davis, Ulmer Winfield, Es.
DeBeck, Leona Louise, Sp.
DeCourcy, Paul, Ch. Eng.
Dennison, Harlan Stewart, Ee.
Derby, Helena Nason, Hy.

Dolliff, Ardis Eleta, Eh.
Downes, Helen Lucena, Fr.
Dufour, Joseph Paul, Ce.
Dunn, Gerald Perry, Ee.
Dunn, Lillian Ring, Fr.
Duran, Beulah Lillian, Sp.
Durham, Charles Albert, Ce.

Eastman, Charles Leslie, Ag.
English, Oliver Spurgeon, Bl.

Farnham, Gertrude Marion, He.
Feeney, Elton Olney, Ee.
Fenderson, Henry Charles, Ch. Eng.
Fenlason, Philip Greydon, Bl.
Ferguson, George Haines, Ce.
Field, William Nathaniel, Ce.
Fifield, Herbert Walker, Es.
Folsom, Rodney Gerry, Ce.
Frawley, Walter Louis, Es.
Furbish, Helen Lincoln, He.

Gantnier, Jerome Benedict, Ag.
Gillespie, Ina Evelyn, Sp.
Glover, Stanton, Ch. Eng.
Goldberg, Irving Albert, Es.
Goodhue, Lawrence West, Es.
Goodrich, Muriel Frances, Eh.
Gould, Clarence Bradford, Ce.
Gould, Gladys Marie, He.
Graffam, Reynold Warren, Fy.
Grant, Judson Milton, Ce.

Grant, Paul Abbot, Ee.

Machias
Franklin
Bucksport R. F. D. #8, Bangor
South Paris 205 H. H. Hall
Bangor

366 French Street, Bangor
Jackson
Winterport
Madawaska A T Ω House
Bridgton 405 H. H. Hall
Oroko 51 Bennoch Street
East Corinth
Bangor

309 H. H. Hall

Corinna
President's House, Campus
Presque Isle Φ Γ Δ House

Alfred
Woodfords
Saco
Milltown
Old Town
Millinocket
Vinalhaven
Bangor
Brunswick

Balentine Hall
Σ X House
Balentine Hall
Balentine Hall
Balentine Hall
Old Town
Σ A E House
Θ X House
Mt. Vernon Annex

Benedicta
Meddybemps
Rockland
Hartford, Conn. Φ Ε Π House
Fort Fairfield
Orono
Bowdoinham
Milo
Phillips
Bangor

Benedicta
Meddybemps
Rockland
Hartford, Conn. Φ Ε Π House
Fort Fairfield
Orono
Bowdoinham
Milo
Phillips
Bangor

67 Park Street
67 Park Street
Σ X House
Σ X House
2 Island Avenue
2 Island Avenue
Balentine Hall
Balentine Hall

16 Bower Street, Bangor
Winterport 212 Oak Hall
Gregory, Augustus Philip, Ch. Eng.
Greene, Roland Laurence, Arts
Griffin, Stephen Augustus, Ee.

Hall, Harold Gilmore, Ce.
Hall, Ruth Henrietta, Eh.
Ham, Philip Warren, Ch. Eng.
Harkness, Vinton Orris, Me.
Harmon, Alice Hope, Ch.
Hatch, Lynwood Scott, Ch.
Hathaway, Albion Kieth Parris, Es.
Hathorne, Helen Louise, Hy.
Hathorne, Philip Randall, Ce.
Hawkes, Wyman Eveleth, Ag.
Herrick, Winslow Kent, Ch. Eng.
Hescock, Milton Arthur, Ch. Eng.
Hill, Henry Francis, Jr., Ce.
Hill, Pauline Marguerite, Sp.
Hobart, Joel Elwin, Me.
Hodgdon, Philip Winslow, Es.
Hope, Eric Stiles, Me.
Hopkins, Sumner Phelps, Es.
Howe, Olga Lilla, Lt.
Howell, Richard Henry, Ce.
Hughes, Joseph Francis, Ce.

Hussey, Wayne Blethen, Fy.
Huston, Cecil Bachelder, Ee.
Hutchins, Leslie Waldo, Ch. Eng.

Isaacson, Max, Ch. Eng.

Jackson, Harry Laton, Ee.
Johnson, Albert Edwin, Ce.

Johnson, Pearl Ernest, Ag.
Jordan, Fred Thompson, Es.
Jordan, Shirley Webster, Es.

Kenney, Edward Freeland, Ch. Eng.
Kennison. Ralph Gregory, Ee.

Fairfield  Σ N House
South Brewer  Stillwater
Peak Island  Φ H K House

Bath  Φ H K House
Dexter  Balentine Hall
Foxcroft  Σ X House
Veazie  R. F. D. #7, Bangor
Gardiner  Balentine Hall
Old Town  304 Oak Hall
Columbia Falls  A T Ω House
Orono  R. F. D. #7, Bangor
Woolwich  104 H. H. Hall
South Windham  Σ X House
Brewer  Φ Γ Δ House
Monson  Φ K Σ House
Augusta  Θ X House
Old Town  Old Town
Skowhegan  103 H. H. Hall
Portsmouth, N. H.  B Θ Π House
Dexter  308 H. H. Hall
Greenfield, N. H.  Σ X House
Ashland  Balentine Hall
Portland  Σ X House
Winterport  65 Second Street, Bangor

Bangor  Φ K Σ House
Patten  Δ T Δ House
Cape Neddick  Δ T Δ House

Auburn  Φ E II House

Bath  Φ Γ Δ House
New Britain, Conn.  Φ H K House

New Gloucester  Σ N House
Farmington  Σ A F House
Mechanic Falls  Φ H K House

Bangor  132 Park Street, Bangor
Madison  Φ H K House
Kingsbury, Dorothy Vivian, He.
Kipp, Mortimer Holmes, Ee.

Lancey, Ardis Elizabeth, He.
Laughlin, Robert William, Me.
Lawry, Connell York, Ch.
Leach, Dorris Lillian, Lt.
LeBlanc, Elmer Alton, Es.
Leighton, Russell Smith, Ee.
Libby, Bernard Augustus, Ee.
Libby, Philip Allan, Ce.
Littlefield, Robert Lincoln, Ag.

McGlaflin, Evelyn, Ms.
McGraw, Earl Cranston, Ms.
McGuff, Thomas Joseph, Ch. Eng.
McGuire, Frank Daniel, Es.
McLean, Mary Almeda, Eh.
McNally, Cecil Hazen, Ce.
Mahany, Lyman Paul, Es.
Mansur, Everett Brown, Ce.
Marston, Frederick Fairbrother, Ee.
Mulholland, Frank Stuart, Es.
Murphy, Norman Bernard, Bl.
Murray, Harold John, Sp.
Murray, Thomas Arthur, Ag.

East Corinth
Winterport

Hartland
Portland
Fairfield
Penobscot
Veazie
Columbia
Limerick
Gorham
Wells

Baring
South Orrington
Bangor
Bangor
North Anson
Pittsfield
Easton
Bangor
Portland
Lubec
Augusta
Bangor

Presque Isle

80 North Main Street
Hampden Highlands
Hampden Highlands

Bangor
320 Hammond Street, Bangor
Old Town
Old Town
Bangor

Caribou

Balentine Hall
311 H. H. Hall

θ Χ House
B Ω Π House
Balentine Hall
408 Oak Hall
3 Middle Street
28 Pine Street
Σ N House
302 H. H. Hall

Bangor 33 Walter Street, Bangor
Bangor
Balentine Hall
Th XD House
Th XD House
Φ Η Κ House
Φ Γ Δ House
Κ Σ House
56 Park Street
B Θ Π House

Φ Γ Δ House

Balentine Hall
<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
<th>Address</th>
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<tbody>
<tr>
<td>Norton, Edward Lawry, Ee</td>
<td>Rockland</td>
<td>Θ X House</td>
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<tr>
<td>Noyes, Lauriston Franklin, Ag.</td>
<td>East Wilton</td>
<td>408 H. H. Hall</td>
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<tr>
<td>O'Connell, John William, Ch. Eng.</td>
<td>Bangor</td>
<td>K Σ House</td>
</tr>
<tr>
<td>O'Donnell, James Francis, Me.</td>
<td>Northampton, Mass.</td>
<td>308 H. H. Hall</td>
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<tr>
<td>Packard, Ethel Frederica, He.</td>
<td>Camden</td>
<td>Mt. Vernon Annex</td>
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<tr>
<td>Packard, Irene Mae, He.</td>
<td>Carmel</td>
<td>Balentine Hall</td>
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<td>Patterson, Parker Williams, Ce.</td>
<td>Winslow</td>
<td>301 H. H. Hall</td>
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<td>Perkins, Hope, He.</td>
<td>North Brooksville</td>
<td>Balentine Hall</td>
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<td>Perkins, Stanley Wilbur, Ee.</td>
<td>Cape Porpoise</td>
<td>304 H. H. Hall</td>
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<tr>
<td>Perro, Walter Leo, Ch. Eng.</td>
<td>Old Town</td>
<td>Φ Γ Δ House</td>
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<td>Pike, Roscoe Marston, Es.</td>
<td>Lubec</td>
<td>K Σ House</td>
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<td>Pinkham, James Anderson, Es.</td>
<td>Portland</td>
<td>Σ N House</td>
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<td>Pitcher, Albert Elliot, Me.</td>
<td>Bangor</td>
<td>127 Thatcher Street, Bangor</td>
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<td>Pray, Wilbur Franklin, Ce.</td>
<td>Calais</td>
<td>Δ T Δ House</td>
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<td>Pulsifer, Helen Lucia, He.</td>
<td>Auburn</td>
<td>Balentine Hall</td>
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<td>Quinn, John Thomas, Es.</td>
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<td>Σ N House</td>
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<td>Ray, Homer Franklin, Ch. Eng.</td>
<td>St. Albans</td>
<td>45 Mill Street</td>
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<td>North Haven</td>
<td>A T Ω House</td>
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<td>Reagan, James Edward, Me.</td>
<td>Bangor 22 Birch Street, Bangor</td>
<td>Portland</td>
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<tr>
<td>Reed, Donald Winslow, Ag.</td>
<td>Bangor 77 Palm Street, Bangor</td>
<td>East Boothbay</td>
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<td>Reynolds, Silas Sprague, Ee.</td>
<td>Monmouth</td>
<td>Κ Σ House</td>
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<td>Rice, Claude Leon, Me.</td>
<td>East Boothbay</td>
<td>Α Χ Α House</td>
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<td>Rich, Louis, Me.</td>
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<td>Φ Ε Π House</td>
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<td>Ring, Ernest Harvey, Es.</td>
<td>Orono</td>
<td>5 Summer Street</td>
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<td>Robinson, Lloyd Herbert, Ce.</td>
<td>Island Falls</td>
<td>101 H. H. Hall</td>
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<td>Rock, Warren Stetson, Es.</td>
<td>Swampscott, Mass.</td>
<td>Σ Δ Ε House</td>
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<td>Ross, Forrest John, Ms.</td>
<td>Columbia Falls</td>
<td>3 Middle Street</td>
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<tr>
<td>Rusk, Ian MacNiven, Ce.</td>
<td>West Townsend, Mass.</td>
<td>Α Χ Α House</td>
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<td>Sargent, Carl Aaron, Me.</td>
<td>Westminster, Mass.</td>
<td>A T Ω House</td>
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<td>Sargent, Catharine Clapp, Ms.</td>
<td>Sargentville</td>
<td>Mt. Vernon Annex</td>
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<tr>
<td>Sawyer, Donald Frank, Es.</td>
<td>Milbridge</td>
<td>A T Ω House</td>
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</table>
SOPHOMORES

Sawyer, Harold Lester, Es.
Sawyer, Thelma Inga, Hy.
Scammon, Albert Fremont, Ag.
Severance, George Austin, Ce.
Shean, Perry Rufus, Ee.
Shepherd, Ruth Burleigh, Fr.
Shorey, Lena Etta, He.
Silverman, Max, Ch. Eng.
Simpson, Oscar Salisbury, Bl.
Small, Roger Elmer, Me.
Smith, Everett Lufkin, Ee.
Smith, George Daniel, Fy.
Smith, John Raymond, Ch. Eng.
Smith, Pauline Chambers, Lt.
Spaulding, Margaret Adessa, Eh.
Stevens, Carl Thompson, Ch. Eng.
Stevens, Maurice Hoyt, Me.
Stevens, Ronald Cecil, Fy.
Stowe, Frances Dillingham, Eh.
Strout, Andrew Everett, Me.
Sturgis, Perley Roy, Es.
Sturtevant, Norman Gardiner, Es.
Sullivan, Allen Francis, Ee.
Sullivan, Paul Damian, Ee.
Swan, Theodore Pease, Fy.

Portland  Δ T Δ House
Garland  Mt. Vernon House
Phillips  33 Bennoch Street
Old Town  304 H. H. Hall
Patten  202 H. H. Hall
Dexter  Balentine Hall
Thomaston  Balentine Hall
Portland  Φ E Π House
Marlboro, Mass.  29 Park Street
Brewer  Δ T Δ House
East Orrington  Φ Γ Δ House
Northampton, Mass.  Δ T Δ House
Houlton  306 H. H. Hall
Houlton  Balentine Hall
Norr ridge wood  Balentine Hall
Woodfords  Σ A E House
Presque Isle  Φ H K House
Kingfield  Φ K Σ House
Old Town  Old Town
Portland  Φ H K House
Woodfords  Δ X Δ House
Livermore Falls  Σ N House
Orono  212 Main Street
Biddeford  30 Grove Street
Old Town  Δ T Δ House

Columbia  3 Middle Street
Ellsworth  Σ A E House
Sanford  Σ A E House
Houlton  Balentine Hall
Presque Isle  Balentine Hall
North Berwick  204 H. H. Hall
Freedom  Κ Σ House
Millinocket  411 H. H. Hall
Lubec  Κ Σ House
Wilton  Balentine Hall
Gardiner  Balentine Hall
Casco  Φ K Σ House
Old Town  Balentine Hall
Augusta  Φ K Σ House

Tabbutt, David Wass, Fy.
Tapley, Paul Dutton, Es.
Tarbox, Errol Eugene, Fy.
Thompson, Mabel Ogilvie, Fr.
Thorpe, Mary Ellen, Ms.
Thurrell, Myron Bartlett, Ee.
Tibbetts, Gardiner Berry, Ag.
Tingley, Joseph Frederick, Ag.
Trecartin, Fred Elmore, Es.
Trefethen, Dorothy, He.
Turner, Constance Marion, He.
Turner, Henry Page, Ee.
Twitchell, Edythe Gertrude, Sp.
Tyler, Arnold Wesley, Ag.
Varney, Lawrence Brooks, Me.
Violette, Augusta Genevieve, Eh.

Wadsworth, John Emile, Ee.
Waite, John Philip, Es.
Walker, Carleton Asa, Ag.
Washburne, Russell Sage, Es.

Watson, Myron Edmund, Fy.
Webster, Henry Gillman, Ag.

Weisman, Max Myer, Ch. Eng.
Welch, Everett Philip, Ce.
Wentworth, Mary Crosby, Es.
White, Philip Rodney, Es.
Whittemore, Russell Adams, Ch. Eng.
Wilkins, Elwood Kempton, Me.
Wilson, Evan Frank, Ch. Eng.
Winslow, Arthur Franklin, Ch.
Wood, Charles Wesley, Ag.
Woodman, Charles Lorenzo, Fy.
Young, Bernice Burrows, Lt.

Eastport M Θ X House
Milford Θ X House
Skowhegan Δ X Λ House
Portland Φ Γ Δ House
Bridgton K Σ House
Bangor

181 Union Street, Bangor
Sanford A T Ω House
Farmington
Boarding House, Campus

Portland Φ E Π House
South Portland Δ T Δ House
Pittsfield Mt. Vernon House
Sebago 33 Peters Street
Bangor

70 Kenduskeag Avenue, Bangor
Caribou Φ H K House
Belfast 411 H. H. Hall
Freeport 307 H. H. Hall
Belfast 310 H. H. Hall
Plymouth, N. H. A T Ω House
Portland

68 Grant Street, Bangor

FRESHMEN

Ackley, Adrian Lowell, Ch. Eng.
Aikins, Nelson Brown, Ee.
Alexander, Donald Ford, Me.
Allen, Embert Ulrick, Ee.
Anderson, Clifford Wendell, Ag.
Andrews, Arthur Wilson, Fy.
Averill, Virginia, Arts.

Babson, John Low, Me.
Bailey, Robert Mansfield, Ee.

Bannister, Frank Cecil, Ee.
Barstow, Ruth Helen, He.

Peak Island Φ H K House
Windham 404 H. H. Hall
Bangor 209 Elm Street, Bangor
Columbia Falls 3 Middle Street
New Sweden 109 H. H. Hall
North Anson 102 Oak Hall
Old Town Mt. Vernon House

Gloucester, Mass. 211 Oak Hall
Bangor

59 Kenduskeag Avenue, Bangor
Cornish Φ H K House
Calais Balentine Hall
Bartlett, Annie Louisa, Arts.
Bates, Gerald Maynard, Arts
Beal, Austin Horace, Ee.
Beckett, Clarence Bertram, Ag.
Benson, Albert, Fy.
Berry, Charles Leslie, Ch. Eng.
Berry, Olin Lester, Ce.
Bessey, Ruth Anna, Arts
Bisson, Adolph Lawrence, Fy.
Black, Lloyd Lester, Ch. Eng.
Blair, Harry Joseph, Ee.
Blaisdell, Carl Elmore, Arts
Blanchard, George Vinton, Arts
Blanchard, Vernon Earle, Fy.
Bolster, Berenice Neta, Arts
Booker, George Ansyl, Arts
Boothby, Clinton Robert, Ee.
Boston, Royal, Jr., Ce.
Bouchard, Frederic James, Ee.
Boynton, Otis Fanning, Arts
Brackett, John Cutler, Ce.
Brackett, Ois Clem, Ag.
Brackett, William Delano, Arts
Bradbury, Philip Whitney, Ce.
Bradley, Fred Vincent, Arts
Bragdon, Leonard Jellison, Ch. Eng.
Brewer, Arthur Roland, Ee.
Brierly, Leo, Ag.
Broder, Harry, Ce.
Broe, James Augustine, Jr., Arts
Brooks, Donald Cameron, Arts
Brooks, Merle Lamb, Me.
Brown, Louis Milton, Arts
Brown, Ralph Clifton, Me.
Bryant, Lyman George, Arts
Buck, Clifford Hilyard, Me.
Buckley, James Edwin, Jr., Arts
Budge, Paul Leroy, Arts
Bullard, Parker Osman, Ch. Eng.
Burgess, Thomas Sheldon, Ag.

Ashland, Balentine Hall
Portland, Φ Γ Δ House
Jonesport, 27 Mill Street
Calais, 311 H. H. Hall
Presque Isle, Stillwater
Portland, 403 H. H. Hall
Houlton, Φ Κ Σ House
Mexico, Balentine Hall
Skowhegan, Κ Σ House
Milo, R. F. D. #7, Bangor
Dorchester, Mass. 402 H. H. Hall
North Sullivan College Street
Farmington, 409 H. H. Hall
Leominster, Mass. 202 Oak Hall
Orono, Campus
Waterville, K Σ House
Livermore Falls, 210 H. H. Hall
Portland, Λ Χ Α House
Millinocket, 407 Oak Hall
Portland, 208 Oak Hall
Boothbay Harbor, 104 Oak Hall
Rangeley, 109 H. H. Hall
Portland, Σ Χ House
East Brownfield, 101 H. H. Hall
Fort Fairfield, Φ Η Κ House
Franklin, 21 Middle Street
Bar Harbor, 309 H. H. Hall
Ocean Grove, N. J. Λ Χ Λ House
Gloucester, Mass. Φ Ε Π House
Portland, 312 Oak Hall
South Paris, 112 H. H. Hall
Rangeley, 109 H. H. Hall
Winthrop, Φ Η Κ House
Portland, 102 H. H. Hall
Worcester, Mass. Σ Α Ε House
Eastport, 304 Oak Hall
Bangor 10 Cedar Street, Bangor
Springfield, 28 Pine Street
Dorchester, Mass. Α Τ Α House
Sebec Station, Σ Α Ε House
Burke, Francis Patrick, Arts
Burr, Emerson Holt, Me.

Burr, Howard Dwight, Ee.

Cahill, Harold Daniel, Ee.
Calderwood, Robert Charles, Arts
Campbell, Henry Whiting, Ce.
Carroll, Milton Edward, Ce.

Carucci, Frank Nicholas, Arts
Cary, Catharine, Arts
Casey, Lawrence King, Arts
Chase, Virginia, Arts
Chesley, Horace Jefferson, Ee.

Chesterton, Allan Bowdoin, Ee.
Christie, Philip Gould, Ee.
Christopherson, Wilbur Reed, Ch. Eng.

Clark, Harold William, Ee.
Clark, Sumner Stevens, Ee.
Coffin, Charles Nicholas, Arts
Coffin, Silas Allan, Arts
Cohen, Abe, Arts
Cohen, Caspert, Arts
Colbath, Eldridge Percy, Ee.
Colbath, Virginia Lee, He.
Cole, Janet Bonney, He.
Conant, Willard Raynor, Ee.
Condon, Henry Ralph, Me.

Conley, John Benedict, Arts
Cook, George Edward William, Ee.
Cooke, Frank Noyes, Jr., Ee.
Cooney, Ardelle Agnes, He.

Cooney, Harold James, Me.

Cooper, Eugene Smith, Arts
Coughlin, Madeline Elizabeth, Arts

Portland A T Ω House
New Britain, Conn.

Bangor 193 Essex Street, Bangor

Bangor 220 Third Street, Bangor

Waldoboro 302 Oak Hall

Cherryfield Σ A E House

New Bedford, Mass.

Waterville 81 Mill Street

Houlton Mt. Vernon House

Portland 406 Oak Hall

Bluehill Mt. Vernon House

Hampden Highlands

West Jonesport 401 H. H. Hall

Steep Falls 80 North Main Street

Gloucester, Mass. 211 Oak Hall

Caratunk 50 Pine Street

Winterport 29 Bennoch Street

Lincoln 304 Oak Hall

Gray 18 Forest Avenue

Bangor 28 Adams Street, Bangor

Rumford Φ Ε Π House

Mars Hill Σ X House

Mars Hill Mt. Vernon House

Machiasport Balentine Hall

Buckfield 27 Mill Street

South Brooksville

23 Park Street

Portland A T Ω House

Sabattus 29 Park Street

Danvers, Mass. 305 H. H. Hall

Brownville Junction

Balentine Hall

Brownville Junction

54 Pine Street

Augusta Φ Κ Σ House

Brewer Brewer
<table>
<thead>
<tr>
<th>Name</th>
<th>Hometown</th>
<th>Address</th>
</tr>
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<tbody>
<tr>
<td>Arthur Eugene Covell</td>
<td>Me.</td>
<td>302 Oak Hall</td>
</tr>
<tr>
<td>Leon Emery Crediford</td>
<td>Ag.</td>
<td>410 Oak Hall</td>
</tr>
<tr>
<td>Warren Leonard Crosman</td>
<td>Ee.</td>
<td>202 Oak Hall</td>
</tr>
<tr>
<td>James Harold Crowley</td>
<td>Ag.</td>
<td>81 Mill Street</td>
</tr>
<tr>
<td>William Henry Crowley</td>
<td>Ce.</td>
<td>36 Grove Street</td>
</tr>
<tr>
<td>Everett Charles Cunningham</td>
<td>Ag.</td>
<td>209 Oak Hall</td>
</tr>
<tr>
<td>Lorenzo Gates Currier</td>
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<td>Wentworth, N.H. 402 H.H. Hall</td>
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<tr>
<td>Louis Everett Curtis</td>
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</tr>
<tr>
<td>Theodore Small Curtis</td>
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</tr>
<tr>
<td>Richard Deedes Cushman</td>
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<td>309 H. H. Hall</td>
</tr>
<tr>
<td>Alexander Braun Cutler</td>
<td>Ch. Eng.</td>
<td>Old Town</td>
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<tr>
<td>Roger Clarke Danforth</td>
<td>Arts</td>
<td>Castine 101 Oak Hall</td>
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<td>Beatrice Snow Davis</td>
<td>Arts</td>
<td>Bangor 124 Kenduskeag Avenue, Bangor</td>
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<td>Philip Dunning Davis</td>
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<td>Stuart Sprague Davis</td>
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<td>Marion Laura Day</td>
<td>Arts</td>
<td>Swampscott, Mass. 7 Pleasant Street</td>
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<td>Katherine Lambert Dennison</td>
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<td>Bangor 84 Highland Avenue, Bangor</td>
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<td>Louis Patrick Desjardins</td>
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<td>Horace Earl Dickison</td>
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<td>Lisbon Falls 2 Bennoch Street</td>
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<td>Edward Ferdinand Diehl</td>
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<td>Frank Parker Dobbins</td>
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<td>William Edmund Dolan</td>
<td>Fy.</td>
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<td>Franz Richard Dolliver</td>
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<td>Portland Δ Τ Ω House</td>
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<td>Henry Leroy Doten</td>
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<td>Raymond Carlton Douglas</td>
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<td>Northfield 21 Middle Street</td>
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<td>Edward French Dow</td>
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<td>Augusta 9 Peters Street</td>
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<td>Wilfred Lincoln Duffy</td>
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Dunn, Gerald Cobb, Ag.
Dunton, John Albert, Arts

Eames, Butler Matthews, Ee.
Eames, John Harry Anthony, Me.
Elias, Fred Joseph, Arts

Elkins, Alvah Herbert, Ee.
Ells, Frank Brown, Ee.
Emery, Herbert Thomas, Ce.
Epstein, Louis James, Arts
Erskine, Maxwell McLean, Arts

Farnum, Homer Stephen, Ch. Eng.
Farwell, Edward Sam, Arts
Penno, Frank Wesley, Jr., Ch.
Fernald, Roy Lynde, Arts
Fickett, Harvey Madison, Ee.
Fierman, Max, Me.
Fineberg, George, Ch. Eng.
Fisher, Linwood Winter, Ag.
Flint, Donald Thompson, Ag.
Fogg, John Garner, Ce.
Fogg, Raymond Gredley, Ee.
Foley, Francis Lawton, Ag.
Foss, William McKinley, Fy.
Fossett, Angela Bernice, Arts
Fowler, Theodore Lefavour, Ag.
Frazier, Harry John, Ce.
Frederic, Charles Hilding, Ch. Eng.
Freeman, Norman, Arts

Gallison, Samuel George, Arts

Gammon, Merle Turner, Arts
Garsoe, Julius Oscar, Ag.
Gellerson, Nadine Marie, Arts
Gerrish, Harry Jacob, Ce.
Gerrish, Lester Newton, Arts
Getchell, Ralph Augustus, Ee.
Gibbs, Kenneth Edmund, Ag.
Gifford, Warren Beverly, Ch.
Gillen, Wilfred Donnell, Arts
Gilmore, Eliot, Ce.
Gilpatrick, Paul Elmer, Arts
Golder, Raymond Miller, Me.
Goldsmith, Ersley Levi, Ag.
Gonyer, Doris Marie, Arts
Gould, Ralph Thompson, Ch. Eng.
Graham, Suzanne Alice, Arts

Grindle, Frederick Bruce, Ce.

Hall, Clyde Newman, Ag.
Hall, Mabel Geneva, Arts
Hall, Stanley Gilbert, Me.
Ham, Robert Frank, Ee.
Hamilton, Arabelle Gray, Arts
Hamlet, Robert Crosby, Ag.
Hamlin, Helen Beatrice, He.
Hannaford, Howard Chester, Ag.
Hanson, Stanley Freeland, Arts
Harding, Margaret Frances, Arts
Hardy, Elwin Wellington, Ce.
Harkness, Elizabeth Anna, Arts
Harmon, William Edward, Ag.
Harrigan, Helen Davis, He.

Harriman, Richard Sherwood, Ch. Eng.
Hart, Vernon L., Ce.
Harthorn, Pauline Dudley, He.
Harvey, Reed Darrell, Arts
Harvey, Robert Tweedie, Ag.
Hastings, Robert Decatur, Ag.
Hastings, William Straw, Ag.

Livermore Falls 103 H. H. Hall
Danvers, Mass. 211 H. H. Hall
Bangor 64 Fifth Street, Bangor
Winthrop 201 Oak Hall
Orono 29 Bennoch Street
Bath 36 Grove Street
Gardiner 112 H. H. Hall
Orono 43 Mill Street
Portland Φ H K House
Bangor

Unity 97 Second Street, Bangor
Harborside 0 X House
Bangor 412 H. H. Hall
Mapleton 402 Oak Hall
Manchester, N. H. 201 H. H. Hall

Vinalhaven Σ A Ε House

West Farmington 409 H. H. Hall
Caribou Balentine Hall
Dexter College Street
Guilford Stillwater
Bangor Mt. Vernon House
Saco 56 Park Street
Gardiner 15 Park Street
Cape Elizabeth 29 Bennoch Street
Portland B Θ Π House
Brunswick Balentine Hall
North Deer Isle Φ K Σ House
Veazie R. F. D. #7, Bangor
Caribou Σ X House
Bangor

319 State Street, Bangor

Rumford 310 H. H. Hall
Rockland Φ K Σ House
Milford Balentine Hall
Milltown Σ N House
South Dover 312 H. H. Hall
Bethel 312 H. H. Hall
Bethel 312 H. H. Hall
Hatch, Maurice Lester, Ag.
Hatch, Theodore Frederick, Me.
Hay, Lloyd Graham, Ag.
Healey, Melvin Edward, Ce.
Henderson, Harry Elmont, Arts
Hersey, Rowena Elizabeth, Arts
Higgins, Leslie Verne, Ce.
Higgins, Milton Ermond, Ee.
Hillman, Grace Forrest, Arts
Hitchings, Elizabeth May, Arts
Hitchings, Eugene Freeman, Me.
Hodgdon, Marie Ethelyn, Arts
Holmes, Melvin Jeffery, Ag.

Hooper, Christine Mary, Arts
Horan, George William, Eng.
Horne, Jacob McLellan, Ee.
Horr, Newell Golder, Ee.
Horsman, Walter Blair, Ce.
Howe, Edward Amasa, Ch.
Hoxie, Nathan Dillingham, Ch.
Hoyt, David William, Arts
Huckins, Leroy Sargent, Fy.
Humphreys, Helen May, Arts

Hunter, Doris Elizabeth, Arts
Hunter, Thomas Stanley, Ch. Eng.

Ingersoll, Robert, Ag.

James, Ruel Leroy, Ee.
Jellison, Walter Colby, Ce.

Johnson, Charles Edgar, Arts
Johnson, Percy Leroy, Ag.
Johnson, Stuart Miles, Ee.
Johnson, Vernon Leslie, Ce.
Jones, Clayton Francis, Fy.
Jordan, Horace Stedman, Ce.
Jordan, Maurice Donald, Arts
Jordan, William Henry, Me.

Old Town 304 H. H. Hall
Dark Harbor Stillwater
Portland Φ Γ Δ House
Gloucester, Mass. Δ T Δ House
Hartland Κ Σ House
Bangor Mt. Vernon House
Greene 111 H. H. Hall
Bar Harbor 309 H. H. Hall
Bangor Mt. Vernon House
Caribou Balentine Hall
Caribou 106 H. H. Hall
Berlin, N. H. Mt. Vernon House
Ocean Grove, N. J. Α X Α House

Biddeford 38 Forest Avenue
Kittery Θ X House
Portland Φ Γ Δ House
Lewiston 207 Oak Hall
Princeton Σ Δ Ε House
Presque Isle Α Τ Ω House
Clinton 103 H. H. Hall
Easton 203 H. H. Hall
Lubec 206 H. H. Hall
Brownville Junction
President's House, Campus
Rockland Balentine Hall
Freeport 307 H. H. Hall

Gloucester, Mass. Δ T Δ House

Princeton 31 Forest Avenue
Mt. Desert Ferry 8 Middle Street
Brownville 212 H. H. Hall
Bar Harbor 411 H. H. Hall
Brownville 103 H. H. Hall
North Berwick 203 H. H. Hall
Randolph, Vt. 301 H. H. Hall
Rochester, N. H. 406 H. H. Hall
Auburn 401 Oak Hall
Cape Elizabeth 29 Bennoch Street
FRESHMEN

Jordan, Wilson Rodell, Ch.
Jowett, John Naylor, Ce.
Junkins, Aubrey Willard, Ee.

Kaler, Stephen Scamman, Ce.
Kane, Thomas Patrick, Me.
Karlin, Harry, Arts
Kelleher, James Wilbur, Arts
Kelley, Norman James, Ch. Eng.
Kennedy, Jack Arthur, Me.
Kincade, Rachel Louise, Arts
Kingsbury, Lizzie Edna, Arts
Kipp, Mortimer Holmes, Ee.
Kittredge, Arthur Edmund, Me.
Knights, Allen George, Arts
Knox, Florence Laura, He.

Kritter, Emilie Angelina, Arts
Landers, Frank Marshall, Ee.
Lappin, Chase Roger, Ee.
Larson, Albion Olaf, Me.
Larson, Nealie William, Me.
Lawrence, Edward Stone, Ch. Eng.
Leach, Paul Joseph, Ch. Eng.
Leavitt, Francis Preston, Arts
Leddy, Percy Allen, Arts
Leighton, Phillip Matthew, Fy.
Levine, Louis Otis, Arts
Lineken, Edgar Elwyn, Ch. Eng.
Litchfield, Earle Vincent, Ch. Eng.
Littlefield, Theodore, Me.
Lombard, Mildred Ena, Arts
Lord, Leonard, Ce.
Lord, Sherman Emery, Ag.

Louis, Minnie Eaton, Arts
Lunge, Raymond Frank, Arts

Waltham
205 Forest Avenue, Bangor
Uxbridge, Mass. 81 Mill Street
Masardis B Θ II House

South Portland 203 Oak Hall
Bangor 56 Middle Street
Portland Φ E Π House
Orono 77 Mill Street
Livermore Falls 103 H. H. Hall
Portland Σ X House
Portland Balentine Hall
Biddeford Balentine Hall
Winterport 311 H. H. Hall
South Portland 308 Oak Hall
Albion A T Ω House

Augusta
President's House, Campus
Haverhill, Mass. Balentine Hall
Kingfield 54 Pine Street
Bryant Pond 110 H. H. Hall
Brownville College Street
Brownville College Street
Gardiner Φ Γ Δ House
Fitchburg, Mass. Σ N House
Portland 311 Oak Hall
Calais Φ H K House
Danforth Σ X House
Caribou Φ E Π House
Thomaston Φ K Σ House
Freeport 311 H. H. Hall
Brewer Balentine Hall
Sebago Lake
Saco 86 N. Main Street
West Lebanon
96 North Main Street
Kennebunk 61 Bennoch Street
Kennebunk Σ N House
**MacBride, Winthrop Lawrence, Arts**
**McCart, John Henderson, Me.**
**McCarthy, Edward Florence, Me.**
**McCobb, Robert Hastings, Ch.**

**McCormick, John Edward, Fy.**
**McCrysteil, John Darwin, Ch. Eng.**
**McCusker, Eleanor Alice, Arts**
**McDonald, William Rogers, Ee.**
**McGonigle, William Edward, Arts**
**McGouldrick, George Harris, Ag.**
**McCown, Roland Alexander, Eng.**
**McKay, John Angus, Ce.**
**McKechnie, Dwight Lundin, Ce.**
**McKechnie, Ishmeal, Fy.**
**McKeeman, Clyde Alexander, Me.**
**McLellan, Harold Russell, Arts**
**McLellan, Walter Fred, Arts**
**McLeod, James Leslie, Ce.**

**McMann, Mary Beatrice, Arts**
**McMullen, Tobias Thomas, Ce.**
**MacNair, Leonard Eugene, Arts**
**McNamara, John Ernest, Ee.**
**McNeill, Hazel Amelia, He.**
**McPhee, Annie Marie, He.**
**McRonald, Everett Howard, Ee.**
**Magill, Gerald Avery, Ee.**
**Malenanka, Witalus George, Me.**
**Manchester, Margaret, Arts**

**Portand**  
| <X> X House |
| 203 H. H. Hall |
| 30 H. H. Hall |
| 404 Oak Hall |
| 211 H. H. Hall |
| ΔΔ House |
| Balentine Hall |
| 208 Oak Hall |
| 303 Oak Hall |
| University Inn |
| 6X House |
| 309 H. H. Hall |
| 411 H. H. Hall |
| ΦHK House |
| ΦHK House |
| ΣN House |
| KΣ House |

**Bangor**  
126 Fern Street, Bangor

19 Cottage Street, Bangor

**Gardiner**  
108 Oak Hall

**Houlton**  
Σ X House

**Gardiner**  
410 Oak Hall

**Calais**  
Balentine Hall

**South Paris**  
Balentine Hall

**Portland**  
209 H. H. Hall

**Caribou**  
303 H. H. Hall

**Auburn**  
104 H. H. Hall

**Northeast Harbor**  
Mt. Vernon House

**Skowhegan**  
Mt. Vernon House

**Old Town**  
Σ N House

**Augusta**  
<X> X House

**Portland**  
Δ T Δ House

**Portland**  
Σ X House

**Berwick**  
86 North Main Street

**Hampden Highlands**  
301 Oak Hall
Matthews, Robert Burnett, Arts
Maxim, Wilbur Chandler, Ee.
Merchant, Iva Angerona, Ag.
Mercier, Marjorie, Arts
Merrill, Gladys Marion, He.
Merrill, James Wyman, Arts
Merritt, Carleton Westwood, Me.
Meserve, Wilbur Ernest, Ee.
Mikelsky, Horatio Allen Duncan, Arts
Miller, Thor, Arts
Millett, Francis Everett, Me.

Napolitano, Nunzi Francis, Arts
Nash, Wilder Verdell, Ag.
Neavling, Charles Cole, Ee.
Nevers, Hubert Archie, Ag.
Newcomb, Bernard Arlin, Ch. Eng.
Newhall, George Dewey, Arts
Nicoll, Berneice Ormiston, Arts
Niles, Merle Clyde, Arts
Nissen, Rudolph Arnold, Ce.
Noah, George, Ch.
Nolan, William Henry, Ag.

Norwood, Howard Lester, Ag.

Noyes, Albert Stevens, Ch. Eng.
Noyes, Hiram Otis, Arts
Nutting, Percy, Me.

Bangor Ohio Street, Bangor
Wayne 412 Oak Hall
Walnut Hill Mt. Vernon House
Princeton Balentine Hall
Gardiner Balentine Hall
Augusta Σ X House
Portland 110 H. H. Hall
Gorham 54 Pine Street

Bath Φ E II House
Portland Δ X A House
Bangor 296 Hancock Street, Bangor
Orono 56 North Main Street
West Pembroke Boarding House, Campus
Old Town Old Town
Bangor 7 Bower Street, Bangor
Brewer Brewer
Calais Balentine Hall

Portland 409 Oak Hall
Portland Φ H K House
Portland B Θ II House
Patten 67 North Main Street
Great Works Great Works
Cumberland Mills Δ X A House
Brunswick Balentine Hall
Rumford 311 H. H. Hall
Portland Δ T Δ House
Melrose, Mass. 406 H. H. Hall
Jamaica Plain, Mass. Φ II K House
Caribou Σ X House
Manchester, N. H. 47 Mill Street

Dorchester, Mass. 8 Juniper Street
Gardiner 410 Oak Hall
Bryant Pond 9 Peters Street
Skowhegan 103 Oak Hall
Oakes, Karl Rufus, Arts
O’Connor, Charles Lawrence, Ce.
O’Connor, Ernest Anthony, Ch. Eng.
O’Connor, Gerald Francis, Arts
O’Connor, Michael Henry, Ee.
O’Connor, Timothy Paul, Ce.
O'Regan, Donald Charles, Arts
O’Regan, Donald Charles, Arts
Orters, Rodney Emmanuel, Arts
Osborne, Sidney, Eng.
Osgood, Willis Harold, Ch. Eng.
Otis, William Danforth, Ag.

Packard, Mary Maria, He.
Page, Hilda Marjorie, Arts
Parker, Lysle Arlington, Fy.
Parsons, Phillip Emery, Ag.

Patten, Bryant McLellan, Arts
Patten, Lincoln Henry, Ee.
Patterson, Franklin George, Ee.
Peabody, Mabel Blakeslee, Arts
Peakes, Arthur Lambert, Ch.
Pease, Ivan Ralph, Ee.
Pendleton, Raymond King, Arts
Perham, Edwin Burton, Ee.
Perham, Harold Clayton, Ag.
Perkins, Mary Crowell, Arts
Perkins, Wallace Winfield, Ee.
Perro, Charles Augustus, Ch. Eng.
Perry, Alton Church, Ee.
Perry, Elsie Beryl, Arts
Peterson, Christian William, Hy.
Philbrook, Franklin Hatch, Ag.
Phipps, Albert Wight, Arts
Place, Francia May, He.
Plummer, Lester Lacy, Arts
Plummer, Roland Sparrow, Ee.
Pomeroy, Lendale Winslow, Ch. Eng.
Pompeo, Nuziando, Arts
Porter, Victor Arnold, Ch. Eng.

Rangeley Σ N House
Bangor 30 Otis Street, Bangor
Biddeford 110 Oak Hall

Bangor K Σ House
Biddeford 110 Oak Hall
Biddeford 8 Middle Street
Caribou Σ Χ House
Bangor Y. M. C. A., Bangor
Old Town
Bluehill B Θ Π House
Waterville Θ Χ House

Sebec Lake 4 Gilbert Street
Bangor
Dry Mills Α Χ Α House
Bangor

221 Third Street, Bangor

Portland Φ Γ Δ House
Hermon 63 Sixth Street, Bangor
Augusta 410 H. H. Hall
Orono 115 Main Street
Milo 104 H. H. Hall
Wilton 406 Oak Hall
Islesboro Stillwater

Bryant Pond 110 H. H. Hall
West Paris 401 H. H. Hall
Portland Mt. Vernon House
Bluehill 209 Oak Hall
Old Town
Randolph В Θ Π House
Hallowell Balentine Hall
Portland Θ Χ House
Dryden Φ Η Κ House
Gorham, N. H. Κ ΢ House
Dover 162 College Street
Harrington Φ Γ Δ House
Harrington Φ Γ Δ House
Gloucester, Mass. 302 H. H. Hall
Portland 412 H. H. Hall
Presque Isle 112 H. H. Hall
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<td>302 H. H. Hall</td>
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<td>Sanford</td>
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<td>207 Oak Hall</td>
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<td>201 Oak Hall</td>
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</tr>
<tr>
<td>East Holden</td>
<td>403 Oak Hall</td>
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<tr>
<td>Charleston</td>
<td>212 Oak Hall</td>
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<tr>
<td>Portland</td>
<td>312 Oak Hall</td>
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<tr>
<td>Kenduskeag</td>
<td>204 H. H. Hall</td>
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<tr>
<td>Winchester, Mass.</td>
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<td>8 Middle Street</td>
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Sanborn, Clarence Winfred, Me.
Sanborn, John Albert, Ce.
Sanborn, Martha Amanda, He.
Sawyer, Clayton Leonard, Arts
Sawyer, Harold Lester, Arts
Sawyer, Wilbur Cranton, Ag.
Sayward, Warren Albert, Me.
Searles, Paul Joseph, Arts

Seavey, Philip Bradford, Arts
Sewall, Rufus Shirley, Fy.
Shapiro, Henry, Arts
Shatney, Thomas Henry, Ch. Eng.
Shaw, John Hayes, Ag.
Shaw, Robert Aedred, Arts
Shaw, Sterling Eugene, Arts
Shechner, David, Arts
Shepard, Charles Joseph, Ag.
Sherman, Owen Frederick, Ch.
Shorey, Helen Elizabeth, Arts
Silby, Samuel Schoppee, Arts
Simmons, Ralph Morse, Ee.
Simons, Elwin Hunnewell, Ee.
Sirois, Levi George, Ce.
Small, Clinton Edgar, Ag.
Small, Frank Mark, Ag.
Smart, Ray John, Ce.
Smith, George Winfield, Ee.
Smith, Lionel Elwood, Ag.
Snow, Carl Albert, Ce.
Snow, Paul Elmer, Ee.
Sparrow, Theron Alonzo, Me.

Lynn, Mass.  Θ Χ House
Norway  401 H. H. Hall
Standish  Balentine Hall
Orono  6 Crosby Street
Portland  Δ Τ Δ House
Portland  134 College Street
Alfred  406 Oak Hall
Bangor  363 Union Street, Bangor
Sherman Mills  303 H. H. Hall
Wiscasset  84 Park Street
Portland  Φ Ε Π House
Orono  7 Pleasant Street
Springvale  209 H. H. Hall
Haverhill, Mass.  Κ Ε House
Canton  47 Mill Street
Portland  102 H. H. Hall
Corinna  405 Oak Hall
Randolph  211 H. H. Hall
Dover  Balentine Hall
Aurora  Φ Κ Ε House
Belfast  311 H. H. Hall
Gardiner  Σ Ν House
Columbia Falls  3 Middle Street
Portland  203 Oak Hall
Orono  27 Park Street
Dover  106 Oak Hall
Bangor  Κ Ε House
Mapleton  305 Oak Hall
Rockland  303 Oak Hall
Westfield  204 Oak Hall
Hampden Highlands  307 Oak Hall
Rockland  Mt. Vernon House
South Portland  Σ Χ House
Bridgewater  Balentine Hall
Veazie  R. F. D. #7, Bangor
Bangor  Mt. Vernon House
Gorham, N. H.  Δ Τ Ω House
Hebron  Σ Ν House
Auburn  412 H. H. Hall
FRESHMEN

Steward, Leon Henry, Ch. Eng.
Stewart, Oscar Earle, Ch. Eng.
St. Germain, Joseph Ross, Me.
Stickney, Fernald Stanley, Me.
Storer, Millard Leslie, Ee.
St. Pierre, Lionel Eugene, Ce.
Strong, Willard Emmons, Ag.
Strout, Avis May, Arts
Stuart, Erwin, Ag.

Stuart, Jeanette Lelia, Arts
Stuart, Richard Bryson, Ce.
Sullivan, Frederick Joseph, Arts
Sullivan, Herbert Augustine, Ch.
Sullivan, John Francis, Ch.
Swan, Hazel Elizabeth, He.
Synan, Edward Milton, Ce.

Tabachnick, Harry, Arts
Taines, Simon Louis, Arts

Tapley, Wasson Chick, Arts
Taylor, Charles Grandison, Ce.
Taylor, Iral Davis, Fy.

Teague, Vivian Illsley, Ag.
Thibodeau, Raymond Martin, Ee.
Thomas, Daniel Ferris, Ch. Eng.
Thomas, Edgar Weymouth, Ch. Eng.
Thomas, Evelyn Folsom, He.

Thomas, Ralph Edwin, Ee.
Thompson, Phyllis Esther, Arts
Thynge, Elmer William, Ag.
Titcomb, Clarence Joseph, Ag.
Tourangeau, Theodore Joseph, Ce.
Townsend, John Lawrence, Me.
Trecartin, William Burdell, Arts
Trott, Theodore Thompson, Ee.

Madison  Σ N House
Saco  A T Ω House
Greenville  404 Oak Hall
Brownville  212 H. H. Hall
Wells  29 Park Street
Auburn  31 Forest Avenue
Augusta  403 H. H. Hall
Portland  Balentine Hall
National Soldiers’ Home

Bangor  Σ X House
Houlton  Balentine Hall
Oroko  210 Main Street
Portland  207 H. H. Hall
Princeton  Mt. Vernon House
Pottersville, Mass.  310 Oak Hall

Portland  Φ Π House
Foxboro, Mass.  210 Oak Hall
Oroko  106 Oak Hall
Camden  210 Oak Hall

Bangor  184 Hancock Street, Bangor
Tremont  119 Bennoch Street
West Springfield, Mass.

Newburyport, Mass.

Camden  103 H. H. Hall
Waterboro  Balentine Hall
Augusta  Φ Σ House
Farmington  212 H. H. Hall
Westbrook  211 H. H. Hall
South Portland  103 H. H. Hall
Lubec  110 H. H. Hall
Gardiner  149 Main Street

Dover  Old Town
Old Town

Camden  Φ K Σ House

Lubec

Camden  Balentine Hall

Gardiner
Turner, Carl Winslow, Me.
Twitchell, Doris Frances, Arts

Van Den Kerckhoven, Eugene
Addison, Ee.
Varney, Frances Josephine, Arts
Vayo, Harold Edward, Arts
Vickery, Charles James, Me.
Viner, Abraham, Arts

Wallace, Vilma Louisa, Arts
Ware, Cecil Arthur, Ee.

Warren, Harold Howard, Arts
Washburne, Franklin Edmond, Ch.
Eng.
Waterman, Harold Frederick, Ag.
Way, George Franklin, 3rd, Ee.
Weatherbee, Effie May, Arts
Weatherbee, Harriet, Arts
Webb, Fred Delancey, Ch. Eng.
Webb, George Hersey, Ee.
Webber, Harley Vee, Ee.
Webber, Verlie Armand, Ce.
Webster, Frankie, He.
Welch, Harold Emerson, Ee.
Westcott, Guy Sterling, Ee.

Weston, Clayton Dinsmore, Ce.
Weston, Kenneth Keene, Ee.
Weymouth, Albert Edward, Arts
Weymouth, Irving Crosby, Arts
Whalen, Clara Bernice, Arts
Whipple, William Heman, Me.
Whitcomb, Marjorie Emeline, He.
Whitcomb, Paul Langley, Ce.
White, John MacGreger, Ce.
White, Kenneth Miles, Ee.
White, Lewis Henry, Ce.

Portland
Old Town

Bethel
312 H. H. Hall
South Berwick
Brewer
Brewer
Bangor
242 Hancock Street, Bangor

Sabattus
29 Park Street
Sebago Lake Mt. Vernon House
Hampden Highlands
301 Oak Hall
Kenduskeag
54 Pine Street

Bangor
402 Oak Hall
So. Portland
Δ Τ Ω House
Lincoln
Φ Κ Σ House
Foxcroft
Balentine Hall
Lincoln
Balentine Hall
Houlton
56 Park Street
Bartlett, N. H.
Β Θ Π House
Phillips
311 Oak Hall
Kittery
136 College Street
Rockland
Balentine Hall
Freeport
401 Oak Hall
Sebago Lake
80 North Main Street

Madison
403 H. H. Hall
Medomak
109 H. H. Hall
Old Town
Old Town
Albion
Δ Τ Ω House
Rockland
Balentine Hall
Waterville
404 H. H. Hall
Houlton
Mt. Vernon House
Ellsworth
Σ Χ House
Newport
33 Bennoch Street
Newport
Σ Α Ε House
Wayne
412 Oak Hall
Whitmore, John, Ch.
Whitten, Alice Louise, Arts
Whiten, Hugh Otis, Ce.
Whittier, Stanley Spencer, Ee.
Wiggin, Harold Alton, Arts
Wilder, Carroll Frederick, Ag.
Wilkins, Roland Lewis, Ag.
Willard, George Howard, Ce.
Willey, Gladys Nerita, Arts
Willey, Marjorie D., Arts
Williams, John Marshall, Ag.
Williams, Roger, Ag.
Wilson, Arthur Edward, Arts
Wilson, Walter Orlando, Ag.
Winslow, Eunice Hazel, Arts
Winslow, John Clifford, Ee.
Wiseman, Armand Joseph, Me.
Wiswell, Sarah Chaloner, Arts
Wood, Carlton Pratt, Ch. Eng.
Wood, Harold Percy, Arts
Woodbury, Kenneth Foster, Ee.
Wren, Fred Montelle, Fy.

Bucksport  Σ A E House
Kennebunk  32 College Street
Farmingdale  108 Oak Hall
Rockland  Θ X House
Winthrop  3 Middle Street
Dennysville  306 Oak Hall
Dryden  409 H. H. Hall
Worcester, Mass.  35 Park Street
Saco  Mt. Vernon House
Bar Harbor  Mt. Vernon House
South Portland  Δ T Δ House
Guilford  403 Oak Hall
Orono  23 Bennoch Street
Leeds  Σ A E House
Rockland  Balentine Hall
Westbrook  211 H. H. Hall
Lewiston  Σ A E House
Machias  Mt. Vernon House
Kingfield  402 H. H. Hall
Winthrop  Φ H K House
New Gloucester  Δ X A House
Sherman Mills  80 North Main Street

Freeport  Θ X House
East Surry  54 Pine Street
Greenville  201 H. H. Hall

COLLEGE OF LAW

SENIORS

Hitchings, Herbert William  Caribou  B Θ II House
Maine
Jordan, John Frederick  Bangor  143 Grove Street, Bangor
Preti, Frank Peter  Portland  Φ H K House
Maine

JUNIORS

Caswell, George Riley  Weeks Mills  Campus
Gilpatrick, Verner Elisha  Orono  29 Bennoch Street
Maine
### Hanson, Helen Nelson  
Calais  
University Inn

### Pilot, Michael  
Maine

### Dubord, Frederick Harold  
Waterville  
180 Main Street

### Partridge, Herbert George  
Searsport  
10 Mill Street

### Sweatt, Cecil Clayton  
Andover  
Φ K K House

### Tabachnick, David  
Portland  
Φ E II House

### Thompson, Seward Roy  
Standish  
106 Main Street

### Webb, Philip Raymond  
Portland  
Φ K K House

### Bean, Earle Drummond  
Bangor  
75 Hammond Street, Bangor

### Black, Lina Alice  
Portland  
Mt. Vernon House

### Roderick, Serenus Burleigh  
Bar Harbor  
Σ X House

### Shaw, Norman  
Prospect Harbor  
The Page, Bangor

### Whalen, Oscar Livermore  
Eastport  
106 H. H. Hall

### White, Percia Vinal  
Orono  
114 Main Street

### Barton, Lawrence Price, Es.  
Waterville  
50 Pine Street

### Bean, Myrtie Ann, He.  
Mt. Vernon  
Balentine Hall

### Carpenter, Guy Francis, Ce.  
Manchester  
8 Middle Street

### Conti, Armando John, Jr.  
Eastport  
202 H. H. Hall

### Creamer, Walter Joseph, Eh.  
Bangor  
135 Parkview Avenue, Bangor

### SPECIAL STUDENTS
Cunningham, Gladys Harriet, Eh.
Cyr, Honorine May, Pt.
Dean, Rhoda, He.
Desjardins, Fred Joseph
Dorsey, Llewellyn Morse, Bl.
Gehigan, Thomas Edward, Es.
Gould, Antoinette Walker, Eh.
Hamlin, Emery Leroy, Ce.
Holt, George Augustus, Arts
Johnston, Donald Perry, Ce.

Jones, Bryant Emerson, Fy.
Kelley, Robert, Emmet, Ce.
Kimball, Alice Appleton, Ag.
Leslie, William Edward, Me.
MacSwain, Mahlon Joseph, Ch.
Marcoux, Eli Albert, Ch. Eng.
Perry, Rodney Albert, Ag.
Porter, Lawrence DeLeon, Arts
Purinton, Lawrence Gilmore, Es.
Serpas, Ralph Joseph, Ch. Eng.
Sisson, Willard Case, Es.

Sprague, Addie Stockwell, Arts
Sweetser, Phyllis Sturdivant, He.
Thomas, Albert Hale, Ch.
Trafton, Norman Emerson, Ce.
Vaughan, George Fairbanks, Fy.
Vose, George Aubrey, Bl.
Wilde, Herman Emil, Ch.

Oro, Main Street
Malden, Mass. 33 Bennoch Street
Waterville, Balentine Hall
Oro, 31 Forest Avenue
Oro, 13 Pine Street
Bangor 68 Elm Street, Bangor
Bangor Mt. Vernon House
Portland 148 Main Street
Beverly, Mass. College Street
Bangor 352 Center Street, Bangor
Bangor A T O House
Willimantic, Conn. A T A House
Presque Isle 57 Bennoch Street
Norwell, Mass. 24 Mill Street
Grand Rapids, Wis. K E House
Berlin, N. H. 407 H. H. Hall
Alton Stillwater
Brewer Brewer
Augusta E N House
Poydros, La. 56 Park Street
Hartford, Conn. 33 Bennoch Street

SCHOOL COURSE IN AGRICULTURE

SECOND YEAR

Miller, Harry Baker
Solon 102 Oak Hall

FIRST YEAR

Burgess, George Starrett
Curtis, Earle Hammond

Union 36 Grove Street
Kennebunk 56 Park Street
The following students registered in short courses given in the College of Agriculture, January to February, 1919:

Mrs. R. W. Jones
Mrs. Mira C. Snow
L. H. Tuttle
Miss Lily Wallem

The following students registered in the winter and spring terms, 1919, too late to appear in the catalog for 1918-1919: (Not included in summary of students.)

**WINTER TERM, 1919**

**Graduate Students**

Hildreth, Arthur Griffin
Hsu, Yun-chung
Pan, Chen-Chi
Thomas, Roy Frank

**Seniors**

Alley, Frank Oren, An.
Anderson, Carl Alfred, Fy.
Beck, Joseph, Thomas, Es.                   \hspace{1in} Augusta
Bowen, Maurice Stetson, An.                \hspace{1in} Middleboro, Mass.
Caswell, Curtis Lowe, Ch.                   \hspace{1in} Harrison
Cheney, George Henry, Ch.                   \hspace{1in} Randolph
Chow, Tsui Chi, Ch. Eng.                    \hspace{1in} Hangchow, China
Collins, Samuel Wilson, Ag.                 \hspace{1in} Caribou
Corey, Charles Truman, Hy.                 \hspace{1in} Portland
Crockett, Mark Vernon, Ed.                  \hspace{1in} Gorham, N. H.
Davis, Thomas, Dh.                           \hspace{1in} Veazie
Dickey, Clarence Watson, Ed.                \hspace{1in} Monroe
Farr, Kenneth Randall, Ch. Eng.             \hspace{1in} Oakland
Ferren, Earle Leslie, Bl.                   \hspace{1in} East Corinth
French, Gardner Marble, Es.                 \hspace{1in} Mansfield, Mass.
Goodwin, John Elmer, Ch. Eng.               \hspace{1in} St. Albans
Harmon, Perley Francis, Ag.                 \hspace{1in} Caribou
Hoyt, Ralph William, Dh.                    \hspace{1in} Waterville
Joy, Armand Elwood, Ed.                     \hspace{1in} West Sullivan
Larrabee, Clifford Prentiss, Ch. Eng.        \hspace{1in} Old Town
Lurvey, Preston Eugene, Ch.                 \hspace{1in} Island Falls
Perkins, Carl Wakefield, Ch.                \hspace{1in} Ogunquit
Pierce, Harold Merle, Es.                   \hspace{1in} Norridgewock
Reardon, Jeremiah Timothy, Es.              \hspace{1in} Concord, N. H.
Reed, Carroll Coffin, An.                   \hspace{1in} Hollis, N. H.
Sisson, Willard Case, An.                   \hspace{1in} Hartford, Conn.
Spear, Estelle Paulina, Ht.                 \hspace{1in} Portland
Steadman, Donald Melville, Hy.              \hspace{1in} Bridgton
Stoddard, Edgar Addington, Ch.              \hspace{1in} Portland
Tibbetts, Louis Elmore, Ht.                 \hspace{1in} Cambridge, Mass.
Webber, Paul Franklin, Ht.                  \hspace{1in} Kennebunk
Whitehouse, Ralph Murch, Eh.                \hspace{1in} Fort Fairfield
Williams, Randall Vaughan, Dh.              \hspace{1in} Lisbon Falls

JUNIORS

Doloff, Ray Winfield, An.                           \hspace{1in} Hillside
Hersom, Arthur Syphus, Es.                          \hspace{1in} Blaine
Tierney, Arthur Joseph, Me.                         \hspace{1in} Westfield, Mass.
True, Milton Edward, Ce.                            \hspace{1in} Litchfield
West, Frederick Roland, Me.                         \hspace{1in} Milo
SOPHOMORES

Courtney, Samuel Edward, Jr., Es.  
Donnelley, James Patrick, Es.  
Hegarty, Richard Paul, Me.  
Parent, John Wilfred, Bl.  
Reardon, Charles Edward, Es.  
Reed, Louis Hersey, Ch.  
Stodder, Russell Henry, Ht.  

Boston, Mass.  
Arlington, Mass.  
Somerville, Mass.  
Van Buren  
Concord, N. H.  
Springfield  
Somerville, Mass.

FRESHMEN

Butler, Leonard Wolfe, Arts  
Chilles, William Thurlow, Me.  
Jordan, Joseph Grant, Ag.  
Lockhart, Hubert Winfield, Ag.  
Longley, Philip Morrison, Eng.  
Maddocks, Sydney Arthur, Eng.  
Meader, Montford Page, Arts  
Nevers, Theobald Matthew, Arts  
Rammer, Hyman Louis, Ch. Eng.  
Tackaberry, Robert Bernard, Arts  
Treworgy, Harold Eugene, Ce.

Brookline, Mass.  
Vinalhaven  
Bar Harbor  
Cambridge, Mass.  
Spencer, Mass.  
Ash Point  
Skowhegan  
Old Town  
Portland  
Lewiston  
Ellsworth

SPECIALS

Flanders, Walter Louis, Ee.  
Holt, Stanley, Norris, Arts  
McCabe, Francis Thomas, Ee.  
Read, Marion Izora, Ms.  
Southard, James Kneeland, Eng.  
Wallace, Clinton Douglass, Ht.

Dover, N. H.  
Dorchester, Mass.  
Orono  
Orono  
Portland

COLLEGE OF LAW

Berman, Harry  
Decker, Ernest R.  
Drapeau, Eudore Alphonse  
Levenson, George Sydney  

Lewiston  
Westfield, Mass.  
Brunswick  
Dorchester, Mass.
SCHOOL COURSE IN AGRICULTURE

Grover, Leon Herman  
Vinal, Lester Hall

Wiscasset  
Jefferson

SPRING TERM, 1919

SENIORS

Altman, Frank Isadore, Es.  
Kimball, Lester Willis, Es.  
Theriault, Delore Frank, Me.

Lawrence, Mass.  
Clftondale, Mass.  
Millinocket

JUNIORS

Ziegler, Charles Melvin, Dh.

South Boston, Mass.

SOPHOMORES

Thompson, Carl James, Ms.

Portland

FRESHMEN

Howe, Dyke Bradford, Arts
Johnson, Oliver Sayward, Ag.
Slattery, William, Arts

Patten  
Everett, Mass.  
Concord, N. H.

SPECIALS

Sullivan, Cornelius Dermott, Ch. Eng.

Bangor
General Summary

FACULTY

President 1
Professors 31
Associate Professors 14
Assistant Professors 16
Agricultural Extension Staff 21
Agricultural Extension Staff 29
Instructors 37
Assistants 5
Lecturers 6

Total 160

College of Agriculture (including Extension Staff) 50
College of Arts and Sciences 45
Agricultural Experiment Station 21
College of Law 9
College of Technology 26
Officers common to all Colleges 9

Total 160

STUDENTS

Fall Semester 1919

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<th>Students</th>
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<th>Women</th>
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<td>Graduate students</td>
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<td>Seniors</td>
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<td>122</td>
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<td>Juniors</td>
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<td>158</td>
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<td>Sophomores</td>
<td>237</td>
<td>176</td>
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### GENERAL SUMMARY

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<td>Seniors</td>
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<td>Juniors</td>
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### Two Year School Course in Agriculture

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<th>State</th>
<th>Total</th>
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<tr>
<td>Massachusetts</td>
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<tr>
<td>New Hampshire</td>
<td>235</td>
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</table>

### CLASSIFICATION BY RESIDENCE

- **Maine, by counties:**
  - Androscoggin: 37
  - Aroostook: 84
  - Cumberland: 176
  - Franklin: 30
  - Hancock: 56
  - Kennebec: 72
  - Knox: 40
  - Lincoln: 8
  - Oxford: 32
  - Penobscot: 288
  - Piscataquis: 42
  - Sagadahoc: 20
  - Somerset: 36
  - Waldo: 23
  - Washington: 67
  - York: 68

- **Maine Total:** 1079
- **Massachusetts:** 87
- **New Hampshire:** 20
- **Connecticut:** 12
- **Vermont:** 3
- **New Jersey:** 2
- **Pennsylvania:** 2
- **Illinois:** 2
- **Louisiana:** 1
- **Virginia:** 1
Wisconsin  1
China  2
Armenia  1  1213

Men Students  978
Women Students  235  1213

CLASSIFICATION BY COLLEGES

Graduate Students  21
College of Agriculture  238
College of Arts & Sciences  412
College of Law  19
College of Technology  523  1213

CANDIDATES FOR DEGREES

Graduate Students  21
College of Agriculture  213
College of Arts & Sciences  397
College of Law  13
College of Technology  512
<table>
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<tr>
<th>Administration, officers of</th>
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<td>Agricultural Clubs</td>
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<td>Agriculture, College of</td>
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