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THE MAINE BULLETIN

Vol. XXXIII APRIL, 1931 No. 10

University of Maine

Orono, Maine

Catalog Number with Records of the Sessions of 1930-1931

Announcements for the Sessions of 1931-1932

THE UNIVERSITY PRESS
ORONO, MAINE
1931

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CALENDAR

1931

S	M	T	W	T	F	S
January						
....	....	....	....	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
....	....	....	....	....	....	....
February						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
....	....	....	....	....	....	....
....	....	....	....	....	....	....
March						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	....	....	....	....
April						
....	....	....	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	....	....
May						
....	....	....	....	....	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	....	....	....	....	....	....
June						
....	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
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S	M	T	W	T	F	S

1931

S	M	T	W	T	F	S
July						
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
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....	....	....	....	....	....	....
August						
....	....	....	....	....	....	1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	....	....	....	....	....
September						
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	....	....	....
October						
....	....	....	....	1	2	3
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
November						
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	....	....	....	....	....
....	....	....	....	....	....	....
December						
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	....	....
S	M	T	W	T	F	S

1932

S	M	T	W	T	F	S
January						
....	....	....	....	....	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	....	....	....	....	....	....
February						
....	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	....	....	....	....	....
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March						
....	....	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	....	....
April						
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
May						
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22	23	24	25	26	27	28
29	30	31	....	....	....	....
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June						
....	....	....	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	....	....
S	M	T	W	T	F	S

Calendar

1931

January 6, Tuesday, Christmas Recess ends, 8 A.M.
January 30, Friday, Final Examinations end. End of Fall Semester, 5:05 P.M.

SPRING SEMESTER

January 31, Saturday, Registration, 8 A.M. to 12 M.
February 2, Monday, Spring Semester begins 8 A.M.
February 23, Monday, Washington's Birthday (February 22), a holiday.
March 20, Friday, Spring Recess begins, 5:05 P.M.
March 31, Tuesday, Spring Recess ends, 8 A.M.
May 25, Monday—May 27, Wednesday, Entrance Examinations.
May 30, Saturday, Memorial Day, a holiday.
June 5, Friday, Class Day.
June 6, Saturday, Alumni Day.
June 7, Sunday, Baccalaureate address.
June 8, Monday, Commencement.

SUMMER SESSION

July 6, Monday, Registration 8 A.M. to 5 P.M.
July 7, Tuesday, Classes begin 7:30 A.M.
August 14, Friday, Summer Session ends, 12 M.

1931

FALL SEMESTER

September 14, Monday—September 16, Wednesday, Entrance Examinations.
September 17, Thursday, University opens for freshmen.
September 22, Tuesday, University opens for upperclassmen.
November 26, Thursday, Thanksgiving Day, a holiday.
December 18, Friday, Christmas Recess begins 11:30 A.M.

1932

January 5, Tuesday, Christmas Recess ends, 8 A.M.
February 5, Friday, Final Examinations end. End of Fall semester, 5:05 P.M.

SPRING SEMESTER

February 6, Saturday, Registration 8 A.M. to 12 M.
February 8, Monday, Spring Semester begins 8 A.M.
February 22, Monday, Washington's Birthday, a holiday.
March 25, Friday, Spring Recess begins, 5:05 P.M.
April 5, Tuesday, Spring Recess ends, 8 A.M.
May 30, Monday, Memorial Day, a holiday.
May 31, Tuesday—June 2, Thursday, Entrance Examinations
June 10, Friday, Class Day
June 11, Saturday, Alumni Day
June 12, Sunday, Baccalaureate address.
June 13, Monday, Commencement

Board of Trustees

Hon. Harmon Gustavus Allen, President	Springvale
Term expires June 17, 1931	
Thomas Edward Houghton, Clerk	Fort Fairfield
Term expires May 6, 1934	
Bertram Everett Packard, A.B., LL.B., *ex-officio*	Augusta
Hosea Ballou Buck, C.E.	Bangor
Term expires July 14, 1930	
Frank Porter Washburn	Augusta
Term expires June 25, 1932	
William McCrillis Sawyer	Bangor
Term expires October 21, 1933	
John Thomas Gyger, M.S.	Portland
Term expires October 21, 1933	
Walter Alonzo Danforth	Bangor
Term expires May 4, 1935	
Edward Everett Chase, B.A.	Portland
Term expires January 10, 1936	

Executive Committee, Buck, Danforth, Sawyer

Officers of Administration

OF THE UNIVERSITY

Harold Sherburne Boardman, President. 4 Alumni Hall; Campus*

James Norris Hart, Dean. 6 Alumni Hall; 123 Main Street

George Davis Chase, Dean of Graduate Study. 140 Arts and Sciences Building; 143 Main Street

Achsa Mabel Bean, Dean of Women. 12 Coburn Hall; University Place

Lamert Seymour Corbett, Dean of Men. 26 Rogers Hall; Campus

Roy Merle Peterson, Director of the Summer Session and Editor of the University Catalog. 23 Fernald Hall; 29 Bennoch Street

Walter Joseph Creamer, Jr., Director of Freshman Week. 22 Lord Hall; 32 Forest Avenue

Louis Tappe Ibbotson, Librarian. Library; University Place

Charles John Dunn, Treasurer Emeritus. 114 Main Street

Frederick Shaw Youngs, Treasurer. 7 Alumni Hall; 225 Center Street, Bangor

James Adrian Gannett, Registrar. 2 Alumni Hall; 166 Main Street

Henry Terry Elmore, Resident Auditor. 3 Alumni Hall; 106 Main Street

Edward Havener Kelley, Acting Purchasing Agent. 5 Alumni Hall; 26 Mill Street

Irving Pierce, Accountant. 9 Alumni Hall; 34 Sixth Street, Old Town

Hazel Parks, Director of Dining Halls. 106 Hannibal Hamlin Hall

Addie Matilda Weed, Recorder. 2 Alumni Hall; Veazie

Mildred Ethel Johnson, Assistant Registrar. 2 Alumni Hall; Milford

---

OF THE COLLEGES AND EXPERIMENT STATION

James Stacy Stevens, Dean of the College of Arts and Sciences. 100 Arts and Sciences Building; 175 Main Street

Leon Stephen Merrill, Dean of the College of Agriculture. 16 Winslow Hall; Campus

Warner Jackson Morse, Director of the Maine Agricultural Experiment Station. Holmes Hall; 356 College Road

---

*Offices and residences

Paul Cloke, Dean of the College of Technology. 12 Wingate Hall; 49 Forest Avenue

Olin Silas Lutes, Dean of the School of Education. 26 Fernald Hall; College Road

Fred Griffee, Assistant Director of the Maine Agricultural Experiment Station. Holmes Hall; 35 Oak Street

OF THE DEPARTMENTS

Agronomy. Professor Simmons, 26 Winslow Hall, 7 Gilbert Street

Agricultural Economics and Farm Management. Professor Merchant, 36 Winslow Hall, 39 Mill Street

Agricultural Education. Professor Hill, 38 Winslow Hall, 162 College Road

Animal Industry. Professor Corbett, 26 Rogers Hall, Campus

Bacteriology and Veterinary Science. Professor Russell, 13 Winslow Hall, 85 Main Street

Biological and Agricultural Chemistry. Professor Smith, 15 Winslow Hall, 382 College Road

Biology (Agricultural Experiment Station). Professor Griffee, Holmes Hall, 35 Park Street

Botany and Entomology. Professor Steinmetz, 24 Coburn Hall, 38 North Main Street

Chemistry and Chemical Engineering. Professor Brautlecht, 333 Aubert Hall, 63 Bennoch Street

Chemistry (Agricultural Experiment Station). Professor Bartlett, Holmes Hall, 148 College Road

Civil Engineering. Professor Sprague, 25 Wingate Hall, 180 Main Street

Economics and Sociology. Professor Ashworth, 220 Arts and Sciences Building, 88 North Main Street

Education. Professor Lutes, 26 Fernald Hall, College Road

Electrical Engineering. Professor Barrows, 20 Lord Hall, Myrtle Street

Engineering Drafting. Professor Kent, 38 Wingate Hall, 16 Sixth Street, Bangor

English. Professor Ellis, 230 Arts and Sciences Building, 29 Park Street

Entomology (Agricultural Experiment Station). Professor Patch, Holmes Hall, College Road

Forestry. Professor Briscoe, 24 Winslow Hall, 380 College Road

French. Professor Kueny, 320 Arts and Sciences Building, University Inn

German. Professor Drummond, 325 Arts and Sciences Building, 61 Bennoch Street

Greek Language and Literature. Professor Huddilston, 28 Library, 193 Main Street

History and Government. Professor Colvin, 150 Arts and Sciences Building, University Inn

Home Economics. Professor Greene, Merrill Hall, University Place

Horticulture. Professor Waring, 34 Winslow Hall, College Road and Kell Street

Latin. Professor Chase, 140 Arts and Sciences Building, 143 Main Street

Mathematics and Astronomy. Professor Willard, 130 Arts and Sciences Building, 142 Bennoch Street

Mechanical Engineering. Professor Sweetser, 21 Lord Hall, 109 Main Street

Mechanics. Professor Weston, 15 Wingate Hall, College Road

Military Science and Tactics. Major Oliver, Armory, 36 Myrtle Street

Music. Professor Sprague, 350 Arts and Sciences Building, 217 Union Street, Bangor

Philosophy. Professor Levinson, 335 Arts and Sciences Building, 78 North Main Street

Plant Pathology (Agricultural Experiment Station). Professor Folsom, Holmes Hall, 63 Forest Avenue

Physical Education. Professor Curtis, 11 Alumni Hall, Gilbert Street

Physics. Professor Fitch, 200 Aubert Hall, 32 College Road

Psychology. Professor Dickinson, 120 Arts and Sciences Building, Bennoch Street

Public Speaking. Professor Bailey, 240 Arts and Sciences Building, University Place

Spanish and Italian. Professor Peterson, 23 Fernald Hall, 29 Bennoch Street

Zoology. Professor Young, 16 Coburn Hall, University Place

OF THE DORMITORIES

Delia Bird Sullivan, Superintendent of Colvin Hall
Gertrude Hayes, Superintendent of the University Inn
Florence Merrill, Superintendent of Mt. Vernon House
Madeleine Jones Walenta, Superintendent of Balentine Hall
Edith Effie Webster, Assistant Superintendent of Balentine Hall

MAJOR ADMINISTRATIVE ASSISTANTS

Florence Elizabeth Johnson, Secretary to the President. 4 Alumni Hall

Ethel Nichols, Secretary to the Dean of the University. 6 Alumni Hall

Yvonne Morin, Secretary to the Dean of the College of Agriculture. 16 Winslow Hall

Kathleen Kelley, Secretary to the Dean of the College of Arts and Sciences. 100A Arts and Sciences Building

Mildred French Creamer, Secretary to the Dean of the College of Technology. 12 Wingate Hall

Dorothea Lewis Miller, Secretary to the Treasurer. 7 Alumni Hall

Geneva Morton, Secretary to the Dean of Men. 27 Rogers Hall

*Faculty of Instruction

HAROLD SHERBURNE BOARDMAN, President.
B.C.E., Maine, 1895; C.E., 1898; Eng.D., 1922; LL.D., Colby, 1927; Eng.D., Rhode Island, 1928; LL.D., Bates, 1929

LUCIUS HERBERT MERRILL, Professor Emeritus 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; Ph.D., 1922

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; Litt.D., Maine, 1922

JOHN HOMER HUDDILSTON, Professor of the Greek Language and Literature and Lecturer on Art History.
B.A., Baldwin, 1890 and Harvard, 1893; Ph.D., Munich, 1897

GEORGE DAVIS CHASE, Dean of Graduate Study and Professor of Latin.
B.A., Harvard, 1889; M.A., 1895; Ph.D., 1897; LL.D., Maine, 1927

CAROLINE COLVIN, Professor of History and Government.
B.A., Indiana, 1893; Ph.D., Pennsylvania, 1901; LL.D., Maine, 1927

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

JOHN MANVERS BRISCOE, Professor of Forestry.
M.F., Yale, 1909

LEON STEPHEN MERRILL, Dean of the College of Agriculture.
M.D., Bowdoin, 1889; Sc.D., Maine, 1922

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*Arranged in groups in order of seniority of appointment.

George Edward Simmons, Professor of Agronomy.
B.S., Ohio Northern, 1902; M.S., 1905; B.Sc., Ohio State, 1909; D.Sc., Ohio Northern, 1922

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

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

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

Roy Merle Peterson, Professor of Spanish and Italian and Director of the Summer Session.
B.A., Coe, 1906; M.A., Harvard, 1910; Ph.D., 1912; F.A.A.R.

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

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

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

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

Charles Andrew Brautlecht, Professor of Chemistry and Chemical Engineering.
Ph.B., Yale, 1906; Ph.D., 1912

Milton Ellis, Professor of English.
B.A., Maine, 1907; M.A., 1908 and Harvard, 1909; Ph.D., 1913

Embert Hiram Sprague, Professor of Civil Engineering.
B.S., Dartmouth, 1900

Albert Lewis Fitch, Professor of Physics.
B.A., Albion, 1911; M.A., 1912; Ph.D., Michigan, 1916

Fred Mansfield Brice, Professor of Physical Education.

James Adrian Gannett, Registrar.
B.S., Maine, 1908; M.A., 1928

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

Charles Henry Merchant, Professor of Agricultural Economics and Farm Management.
B.S., Cornell University, 1920; M.S., 1922; Ph.D., 1928

Mark Bailey, Professor of Public Speaking.
B.A., Yale, 1915; M.A., Michigan, 1917

James Howard Waring, Professor of Horticulture.
B.S., Pennsylvania State, 1920; M.S., 1921

Paul Cloke, Dean of the College of Technology and Director of the Technology Experiment Station.
E.E., Lehigh, 1905; M.S., 1913

Charles Alexius Dickinson, Professor of Psychology.
M.A., Clark, 1922; Ph.D., 1925

Olin Silas Lutes, Dean of the School of Education and Professor of Education.
B.A., Ohio University, 1915; M.A., State University of Iowa, 1923; Ph.D., 1926

Pearl Stuart Greene, Professor of Home Economics.
B.A., Northwestern, 1909; B.S., Lewis Institute, 1914; M.A., Columbia, 1923

Arthur St. John Hill, Professor of Electrical Engineering.
E.E., Polytechnic Institute of Brooklyn, 1911

Ronald Bartlett Levinson, Professor of Philosophy.
B.A., Harvard, 1920; Ph.D., Chicago, 1924

Ferdinand Henry Steinmetz, Professor of Botany and Entomology.
B.S.Agr., Illinois, 1915; M.S., Minnesota, 1921; Ph.D., 1926

Donnell Brooks Young, Professor of Zoology.
B.S., Amherst, 1911; Ph.D., Columbia, 1923

Louis Tappe Ibbotson, Librarian.
B.A., Hamilton, 1922; B.L.S., University of the State of New York, 1925

Edward James Oliver, Professor of Military Science and Tactics.
Major of Infantry (D.O.L.), U. S. Army. B.A., Wisconsin, 1908

Loren Prescott Stewart, Professor of Military Science and Tactics.
Captain, Infantry (D.O.L.), U. S. Army. B.S., Maine, 1915

Benjamin Calvin Kent, Professor of Engineering Drafting.
B.S., Maine, 1912

Chester Albert Jenkins, Professor of Physical Education.
B.S., Dartmouth, 1911

Maurice Daniel Jones, Professor of Agricultural Economics and Farm Management.
B.S., Maine, 1912; M.S., 1926

Hugh Andrew Wear, Professor of Military Science and Tactics.
Captain, Infantry (D.O.L.), U. S. Army. B.S., Texas Agricultural, 1914

*Elmer Reeve Hitchner, Professor of Bacteriology.
B.S., Pennsylvania State, 1915; M.S., 1916

Llewellyn Morse Dorsey, Professor of Dairy Husbandry.
B.S., Maine, 1916; M.S., 1923

Stanley Moore Wallace, Professor of Physical Education.
Diploma, New Haven Normal School of Gymnastics, 1917

Marion Deyoe Sweetman, Professor of Home Economics.
B.S., Iowa State College, 1921; M.S., 1922; Ph.D., Minnesota, 1927

Harry Woodbury Smith, Professor of Biological and Agricultural Chemistry.
B.S., Maine, 1909; M.S., 1922

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

Andrew Jackson Briggs McFarland, Professor of Military Science and Tactics.
Captain, Infantry (D.O.L.), U. S. Army.

Theodore Small Curtis, Faculty Manager of Athletics.
B.S., Maine, 1923

Alpheus Crosby Lyon, Associate Professor of Civil Engineering.
B.S., Maine, 1902; B.S., 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 Chadbourne, Associate Professor of Education.
B.A., Maine, 1915; M.A., 1918 and Columbia, 1919; Ph.D., Columbia, 1928

Harold Walter Leavitt, Associate Professor of Civil Engineering.
B.S., Maine, 1915; C.E., 1918; M.S., 1921

Albert Ames Whitmore, Associate Professor of History and Government.
B.S., Maine, 1906; M.A., 1917

Noah Rosenberger Bryan, Associate Professor of Mathematics.
B.A., Pennsylvania State, 1913; M.A., Pennsylvania, 1918; Ph.D., Columbia, 1921

Charles Burton Crofutt, Associate Professor of Physics.
B.A., Cornell College, 1919; M.S., State University of Iowa, 1920; Ph.D., 1923

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*On leave of absence 1930-31.

KENNETH STILLMAN RICE, Associate Professor of Zoology.
Ph.B., Brown, 1913; Sc.M., 1915; Ph.D., 1927

CLIFFORD STETSON PARKER, Associate Professor of French.
B.A., Harvard, 1912; M.A., Harvard, 1914; Ph.D., Columbia, 1925

ALBERT MORTON TURNER, Associate Professor of English.
B.A., Harvard, 1912; M.A., 1914; Ph.D., 1920

WALTER JOSEPH CREAMER, JR., Associate Professor of Electrical Communication and Director of Freshman Week.
B.S., Maine, 1918; E.E., 1921; B.A., 1923

PAUL DECOSTA BRAY, Associate Professor of Chemistry.
B.S., Maine, 1914; Ch.E., 1918

*MAYNARD FRED JORDAN, Associate Professor of Mathematics and Astronomy.
B.A., Maine, 1916; M.A., 1921

JOHN ROBERT SMYTH, Associate Professor of Poultry Husbandry.
B.S., Purdue, 1920; M.S., Kentucky, 1928

GEORGE WILLIAM SMALL, Associate Professor of English.
B.A., Tennessee, 1915; M.A., Johns Hopkins, 1921; Ph.D., 1922; B.Litt., Oxford, 1927

EDWARD FRENCH DOW, Acting Associate Professor of History and Government.
B.S., Bowdoin, 1925; M.A., Harvard, 1926

WESTON SUMNER EVANS, Associate Professor of Civil Engineering.
B.S., Maine, 1918; M.S., 1923

*HARRY DEXTER WATSON, Associate Professor of Mechanical Engineering.
B.S., Maine, 1920; M.S., 1929

STANLEY ROYAL ASHBY, Associate Professor of English.
B.A., Texas, 1904; B.A., Oxford, 1907; M.A., 1923; M.A., Harvard, 1925; Ph.D., 1927

ERNEST JACKMAN, Associate Professor of Education and Director of Teacher Training.
B.A., Colby, 1912; M.A., Columbia, 1924

†DEWITT MCCLURE TAYLOR, Associate Professor of Mechanical Engineering.
B.S., Massachusetts Institute of Technology, 1906

CHAUNCEY WALLACE LORD CHAPMAN, Assistant Professor of Forestry.
B.S., Maine, 1914; M.S., 1921

---

†On leave of absence, spring semester, 1930-31.
†Appointment for spring semester 1930-31 only.

LEIGH PHILBROOK GARDNER, Assistant Professor of Poultry Husbandry.
B.S., Maine, 1920; M.S., 1923

WARREN STANHOPE LUCAS, Assistant Professor of Mathematics.
B.A., Maine, 1914; M.A., 1922

WALTER FRENCH, Assistant Professor of German.
B.A., Ohio State, 1912; M.A., 1915; Ph.D., 1918

CARL EVERETT OTTO, Assistant Professor of Chemistry.
B.A., Cincinnati, 1916; M.A., 1920; Ph.D., 1922

FRANCES ELIZABETH ARNOLD, Assistant Professor of Spanish and Italian.
B.A., Maine, 1910; M.A., 1923

MARION STEPHANIE BUZZELL, Assistant Professor of French
B.A., Maine, 1914; M.A., 1916

HAROLD CLAYTON SWIFT, Assistant Professor of Agronomy.
B.S., Maine, 1918; M.S., 1923

EVERETT LOUIS ROBERTS, Assistant Professor of Electrical Engineering.
B.S., Maine, 1920

*WALTER WHITMORE CHADBOURNE, Assistant Professor of Economics and Sociology.
B.A., Maine, 1920; M.B.A., Harvard, 1922

ACHSA MABEL BEAN, Dean of Women and Assistant Professor of Zoology.
B.A., Maine, 1922; M.A., 1925

CHARLES ORVILLE DIRKS, Assistant Professor of Entomology.
B.S., Kansas Agricultural, 1924; M.S., Iowa State College, 1925

HELEN ANNA LENGYEL, Assistant Professor of Physical Education for Women.
Diploma, Sargent School for Physical Education, 1915; B.A., Maine, 1927

DONALD STOVER PISTON, Assistant Professor of Physics.
B.S., Massachusetts Institute of Technology, 1921

IRVING HENRY PRAGEMAN, Assistant Professor of Mechanical Engineering.
Ph.B., Sheffield Scientific School, 1918; M.E., Yale, 1923

RICHARD GEORGE WOOD, Assistant Professor of History and Government.
B.A., Dartmouth, 1922; M.A., Harvard, 1924

WERNER THADEUS SNYDER, Assistant Professor of Agronomy.
B.S., Purdue, 1915; M.S., 1928

WILLIAM FRANCIS SCAMMAN, Assistant Professor of English.
B.A., Maine, 1908; M.A., 1930

LYLE CLAYTON JENNESS, Assistant Professor of Chemistry.
B.S., New Hampshire, 1922; M.S., Maine, 1925

---

*On leave of absence, 1930-31.

*Edward Newcomb Brush, Assistant Professor of Psychology.
B.A., Vermont, 1925; M.A., 1926

George Peter Steinbauer, Assistant Professor of Botany.
B.S., Minnesota, 1925; M.S., 1927; Ph.D., 1929

Marguerite Ruth Musgrave, Assistant Professor of Home Economics.
B.S., Columbia, 1925; M.A., 1926

Himy Benjamin Kirshen, Assistant Professor of Economics and Sociology.
B.S., Whitman, 1926; M.A., Columbia, 1929

Ruth Crosby, Assistant Professor of English.
B.A., Mount Holyoke, 1919; M.A., Radcliffe, 1920; Ph.D., 1929

Rena Campbell, Assistant Professor of Home Economics.
B.S., Maine, 1921; M.S., 1929

John Raymond Crawford, Assistant Professor of Education and Director of Bureau of Educational Research and Service.
B.A., Culver-Stockton, 1924; M.A., State University of Iowa, 1929

Monroe Edward Freeman, Assistant Professor of Biological and Agricultural Chemistry.
B.A., Minnesota, 1928; M.S., 1929

†Nathan Israeli, Assistant Professor of Psychology.
B.S., College of City of New York, 1926; M.A., Columbia, 1927; Ph.D., 1930

Robert Irving Ashman, Assistant Professor of Forestry.
B.A., Cornell University, 1913; M.F., Yale, 1929

George Perhac, Assistant Professor of Latin.
B.A., St. Bonaventure's College, 1921; M.A., Columbia, 1929

Frederick Shaw Youngs, Lecturer in Economics.
B.S., Maine, 1914; B.A., 1928

Everett Willard Davee, Instructor in Mechanical Engineering.

Everett Joshua Felker, Instructor in Civil Engineering.

Harry Roy Perkins, Instructor in Mechanical Engineering.

Howe Wiggin Hall, Instructor in Animal Industry.
B.S., Maine, 1914; M.S., 1925

Herman Samuel Silverman, Instructor in Mathematics.
B.A., Maine, 1925; M.A., 1927

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*On leave of absence, 1930-31.

†Appointment for 1930-31 only.

John George Leslie Caulfield, Instructor in Chemistry.
B.S., Maine, 1924; M.S., 1926

Kenneth Gerard Crabtree, Instructor in Electrical Engineering.
B.S., Massachusetts Institute of Technology, 1922

Earl Maynard Dunham, Instructor in Engineering Drafting.
B.A., Maine, 1924; M.A., 1928

Fay Hyland, Instructor in Botany.
B.S., Michigan State College, 1925; M.S., Maine, 1929

William Curtis Kenyon, Instructor in Physical Education.

George Ogilvie, Instructor in Military Science and Tactics.
Sergeant (D.E.M.L.), U. S. Army

Beulah Elizabeth Osgood, Instructor in Home Economics.
B.S., Maine, 1926

Theron Alonzo Sparrow, Instructor in Mechanical Engineering.
B.S., Maine, 1924

Ada Cohen Silverman, Instructor in German.
B.A., Maine, 1926; M.A., 1930

Cecil Gladstone Garland, Instructor in Economics and Sociology.
B.A., Maine, 1924; M.A., Brown, 1927

William Lester Gilliland, Instructor in Chemistry.
B.S., University of Washington, 1920; M.S., 1921; Ph.D., Massachusetts Institute of Technology, 1925

Marion Elizabeth Rogers, Instructor in Physical Education for Women.
Diploma, Sargent School for Physical Education, 1927; B.A., Maine, 1930

Herschel Leonard Bricker, Instructor in Public Speaking.
B.A., Coe, 1928

Louis Cabrera, Instructor in Spanish.
B.A., Dubuque, 1927

Gladys Marie Gould, Instructor in Home Economics.
B.S., Maine, 1922

Nancy Harper McCreary, Instructor in English.
B.A., Smith, 1918; M.A., Radcliffe, 1926

Lawrence Lewis Osborn, Instructor in Chemistry.
B.A., Indiana, 1924; M.A., 1927

John Emmons Stewart, Instructor in Mathematics.
B.A., Maine, 1927; M.A., 1928

Walter Reginald Whitney, Instructor in English.
B.S., Bowdoin, 1923

Mary Pauline Aiken, Instructor in English.
B.A., Maine, 1927; M.A., 1929

Edgar Junior Bogan, Instructor in Chemistry.
B.A., Miami, 1926; M.A., Princeton, 1929

Roger Clapp, Instructor in Horticulture.
B.S., Cornell University, 1928

Frederick John Guerin, Instructor in Chemistry.
B.S., Massachusetts Institute of Technology, 1922; M.S., 1923; Ph.D., New York University, 1928

Glenn Quenton Lefler, Instructor in Physics.
B.A., Indiana, 1929

Lindsay Jackson March, Instructor and Critic Teacher in Education.
B.A., Maine, 1921; M.A., Columbia, 1923

Richard McVay Riley, Instructor in Horticulture.
B.S., Ohio University, 1926; M.S., Cornell University, 1929

Ralph Albert Sawyer, Instructor in Engineering Drafting.
B.S., Norwich, 1925

Leonidas Dacosta Stephenson, Jr., Instructor in Civil Engineering.
B.S., North Carolina State College, 1927

Norman Callender Laffer, Instructor in Bacteriology.
B.S., Allegheny, 1929

Elizabeth Sophia Foster, Instructor in English.
B.A., Texas, 1922; M.A., 1923

Jessie Ellen Ashworth, Instructor in Economics and Sociology.
B.A., Maine, 1921; M.A., Clark, 1930

Everett Johnston Coil, Instructor in Economics and Sociology.
B.A., William Jewell, 1928; M.B.A., Harvard, 1930

Arlin Miller Cook, Instructor in English.
B.A., Western Reserve, 1927; M.A., Columbia, 1928

Pauline Elma Darby, Instructor in Zoology.
B.S., Arizona, 1928; M.S., Washington University, 1930

Max Hendricks Guyer, Instructor in History and Government.
B.A., Parsons, 1926; M.A., State University of Iowa, 1927

Fred Lincoln Lamoreau, Instructor in Mathematics.
B.A., Maine, 1930

Richard Carnes Ledgerwood, Instructor in Psychology.
B.A., Washington University, 1929; M.A., 1930

Richard Wilder Merrill, Instructor in German.
B.S., Bowdoin, 1928

James Moreland, Instructor in English.
B.A., Georgetown College, 1924

Delyte Wesley Morris, Instructor in Public Speaking.
B.A., Park, 1928

Bernard Franklin Parr, Instructor in Mechanical Engineering.
B.S., Illinois, 1929

Charles Robert Strother, Instructor in Military Science and Tactics.
Sergeant (D.E.M.L.), U. S. Army

Wilbur Everett Tomlin, Instructor in Chemistry.
B.A., Kentucky Wesleyan, 1926

Joseph Conrad Twinem, Instructor in Civil Engineering.
B.S., Massachusetts Institute of Technology, 1930

Alice Lowe Brown, Critic Teacher, School of Education.
B.A., Colby, 1899

Grace Stetson Grant, Critic Teacher, School of Education.
B.A., Colby, 1907

Helen Louise Hathorne, Critic Teacher, School of Education.
B.A., Maine, 1922

Veysey Hiram Robinson, Critic Teacher, School of Education.
B.Pd., Maine, 1917

Hubert Werts Allen, Graduate Fellow in Physics.
B.S., Parsons, 1929

Adrienne Gabrielle Bedelle, Graduate Fellow in French.
B..A, Barnard, 1929

Paul Dudley Giddings, Graduate Fellow in Zoology.
B.A., Maine, 1929

Andrew Bartlett Welch, Graduate Fellow in Animal Industry.
B.S., Maine, 1929

Irvin Carroll Mason, Graduate Fellow in Botany and Entomology.
B.S., Maine, 1930

Alta Miriam Bumpus, Graduate Fellow in Zoology.
B.A., Brown, 1930

Kenneth Richardson Haskell, Graduate Fellow in Agricultural Economics.
B.S., Maine, 1930

John Franklin Mee, Graduate Fellow in Psychology.
B.A., Miami, 1930

Helen Moore, Graduate Fellow in Physics.
B.A., Maine, 1929

Raymah Twining Wright, Graduate Fellow in Mathematics.
B.A., Wheaton, 1927

*Amy Belle Adams, Graduate Scholar in English.
B.A., Maine, 1927
*Rufus Manley Grindle, Graduate Scholar in English.
B.A., Colby, 1927
†Lowell Pond Leland, Graduate Scholar in English.
B.A., Colby, 1929
Philip Merrill Marsh, Graduate Scholar in English.
B.A., Maine, 1929

Herbert Burr Abbott, Mechanician in the Mechanical Engineering Department.
Leo Edward Day, Assistant in State Highway Laboratory.
Ralph Freeman Bowden, Electrician in the Electrical Engineering Department.
Clayton Leonard Sawyer, Assistant in the State Highway Laboratory.
Anne Louise Morrison, Resident Health Nurse.
R.N., Eastern Maine General Hospital, Bangor, 1928
Anna Elizabeth Fahey, Resident Health Nurse.
Dorothy Smith, Reference Librarian
B.S., Simmons School of Library Science, 1921
Mary Florence Reed, Cataloger
B.A., Maine, 1929; B.S., Simmons School of Library Science, 1930
Dorothy Mayo Morris, Circulation Assistant in the Library.
B.A., Maine, 1930
Louise Grindle Gray, Clerk in the Library.

VISITING MEMBERS OF SUMMER SESSION FACULTY

Session of 1930

Harold Hungerford Scudder, Professor of English, University of New Hampshire.
B.S., Dartmouth, 1903 *English*
Elmer Harrison Wilds, Professor of Secondary Education, Western State Teachers' College, Kalamazoo, Michigan.
B.A., Allegheny, 1910; M.A., Chicago, 1917; Ed.M., Harvard, 1928
Education

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*Appointment for fall semester 1930-31 only.
†Appointment for spring semester 1931 only.

Florence Louise Jenkins, Maine State Supervisor of General and Vocational Home Economics.
B.S., Simmons, 1915 *Home Economics*

Howard Watson Flack, Athletic and Physical Director, Neptune High School, Ocean Grove, New Jersey.
B.A., Syracuse, 1914 *Physical Education*

Edith Philips, Associate Professor of French, Goucher College.
B.A., Goucher, 1913; Docteur de l'Université, Paris, 1923 *French*

Mattie Louise Hatcher, Specialist in Reading and Supervisor of Elementary Education, State Normal School, Paterson, New Jersey.
Ph.B., Chicago, 1909; M.A., 1920 *Education*

Harold Bradford Foye, Vocational Guidance Department, City Schools, Boston, Massachusetts.
B.B.A., Boston University, 1923; Ed.M., Harvard, 1926 *Education*

Athern Park Daggett, Graduate Student in Government, Harvard University.
B.A., Bowdoin, 1925; M.A., Harvard, 1928
History and Government

Mary Jenkins, Foods and Nutrition, College of Industrial Arts, Denton, Texas.
B.S., Purdue, 1921; M.S., Chicago, 1929 *Home Economics*

Dorothy Brown Dean, Supervisor of Music, Public Schools, Bangor, Maine.
B.A., Smith, 1924 *School Music*

Alfred Carleton Andrews, Graduate Student, University of Pennsylvania.
B.A., Bowdoin, 1926; M.A., Pennsylvania, 1929 *Latin*

Mildred Louise Swift, Graduate Student, Cornell University.
B.S., Russell Sage College, 1927; M.A., Cornell University, 1930
Home Economics (First three weeks)

Verna Payson, Assistant State Supervisor of Home Economics Education, Massachusetts.
B.S., Minnesota, 1926 *Home Economics* (Last three weeks)

Ralph Douglas McLeary, Teacher of Mathematics, High School, Waterville, Maine.
B.S., Colby, 1924 *Education*

Evelyn Butler Phillips, Instructor in English, High School, Rockland, Maine.
B.A., Bates, 1926 *Education*

Bessie Cora Helena Cooper, Head of Department of English and Dean of Girls, Foxcroft Academy, Dover-Foxcroft, Maine.
B.A., Bates, 1904 *English*

Galen Irving Veayo, Member of Faculty, Northern Conservatory of Music, Bangor, Maine.

Student of Music, Institute of Musical Pedagogy, Northampton, Massachusetts *School Music*

Faculty of Investigation

(THE MAINE AGRICULTURAL EXPERIMENT STATION)

Warner Jackson Morse, Director.
B.S., Vermont, 1898; M.S., 1903; Sc.D., 1923; Ph.D., Wisconsin, 1912

James Monroe Bartlett, Chemist.
B.S., Maine, 1880; M.S., 1883; Sc.D., 1927

*Edith Marion Patch, Entomologist.
B.S., Minnesota, 1901; M.S., Maine, 1910; Ph.D., Cornell University, 1911

Donald Folsom, Plant Pathologist.
B.A., Nebraska, 1912; M.A., Minnesota, 1914; Ph.D., 1917

†Elmer Robert Tobey, Chemist.
B.S., Maine, 1911; M.S., 1917; Ch.E., 1920

Charles Henry Merchant, Agriculturist Economist.
B.S., Cornell University, 1920; M.S., 1922; Ph.D., 1928

Pearl Stuart Greene, Home Economist.
B.A., Northwestern, 1909; B.S., Lewis Institute, 1914; M.A., Columbia, 1923

Fred Griffee, Biologist, Plant Breeding, and Assistant Director.
B.S., Kansas, 1918; M.S., Minnesota, 1920; Ph.D., 1924

Clarence Ritchie Phipps, Associate Entomologist.
B.S., Massachusetts Agricultural, 1919; M.S., Iowa, 1927

William Franklin Dove, Associate Biologist, Animal Breeding.
B.S., Iowa State College, 1922; M.S., Wisconsin, 1923; Ph.D., 1927

Charles Harry White, Associate Chemist.
Ph.C., Maine, 1897

†Reiner Bonde, Associate Plant Pathologist.
B..S., Minnesota, 1922; M.S., Maine, 1926

George Farrington Dow, Associate Agricultural Economist.
B.S., Maine, 1927; M.S., 1929

Marion Deyoe Sweetman, Associate Home Economist.
B.S., Iowa State College, 1921; M.S., 1922; Ph.D., Minnesota, 1927

Joseph Anthony Chucka, Associate Biologist, Soils and Fertility.
B.S., Wisconsin, 1927; M.S., 1928; Ph.D., 1930

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*On leave of absence for three months, beginning January 15, 1931.
†On leave of absence 1930-31.

Bernie Elliott Plummer, Jr., Assistant Chemist.
B.S., Maine, 1924; M.S., 1925

John Henry Hawkins, Assistant Entomologist.
B.S., Illinois, 1926; M.S., Maine, 1927

Florence Lydia Markin, Assistant Plant Pathologist.
B.S., Montana, 1924; M.S., Wisconsin, 1926

William Ernest Schrumpf, Assistant Agricultural Economist.
B.S., Maine, 1928; M.S., 1930

Merton Stanley Parsons, Assistant Agricultural Economist.
B.S., Maine, 1929

Willard Batchelder Stone, Assistant Research Chemist.

Mildred Rebecca Covell, Assistant in Biology.

Iva Merchant Burgess, Assistant in Biology.
B.S., Maine, 1923; M.S., 1925

Elizabeth Florence Murphy, Assistant in Animal Breeding and Nutrition.
B.A., Maine, 1930

Myrtle Walker Dow, Assistant in Home Economics Research.
B.S., Maine, 1929

*Merna Myrtha Monroe, Assistant in Home Economics Research.
B.S., Iowa State College, 1929

Alice Woods Averill, Laboratory Assistant in Entomology.

Emmeline Wilson Kenney, Laboratory Assistant in Biology.

Gladys Elizabeth Babbin, Seed Analyst and Laboratory Assistant in Plant Pathology.

Frederick Barker Chandler, Laboratory and Field Assistant, Blueberry Investigations.
B.S., Maine, 1928

Delmar Boynton Lovejoy, Laboratory and Field Assistant, Plant Breeding.
B.S., Maine, 1928

Madeleine Frances Cotter, Laboratory Assistant in Animal Breeding and Nutrition.

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*Appointment from January 1, 1931 to July 1, 1931 only.

Faculty of Extension Service

(COLLEGE OF AGRICULTURE)

Arthur Lowell Deering, Director.
B.S., Maine, 1912

State Agents

Raymon Neale Atherton, Extension Economist, Marketing Specialist.
B.S., Maine, 1918

Mildred Greeley Brown, Assistant State Club Leader.
B.S., Maine, 1925

Edna Mansfield Cobb, Home Management Specialist.
B..S, Cornell, 1928

Albert Kinsman Gardner, Crops Specialist.
B.S., Maine, 1910

Ralph Melville Hutchinson, Forestry Specialist.
B.S., Maine, 1924

George Edgar Lord, County Agent Leader.
B.S., Maine, 1924

Wendell Earl Mosher, Executive Secretary to Director of Extension.
B.S., Maine, 1929

Estelle Nason, State Home Demonstration Agent Leader.
B.S., Maine, 1922

Donald Winslow Reed, Extension Economist, Farm Management.
B.S., Maine, 1922

Harrison Lambert Richardson, Specialist in Poultry Husbandry.
B.S., Maine, 1924

Glenn Kenton Rule, Extension Editor.
B.S., Ohio State, 1917

Lester Hale Shibles, State Club Leader.
B.A., Colby, 1915

Helen Constance Spaulding, Clothing Specialist.
B.S., Simmons, 1913

Richard Foster Talbot, Specialist in Dairy Husbandry.
B.S., Maine, 1907

Therese Elizabeth Wood, Foods Specialist.
B.S., Western Reserve, 1923

County Agents

Verne Curtis Beverly, Aroostook County.
B.S., Maine, 1920

Harry Elmer Bickford, Penobscot County.

Ralph Ashton Corbett, Franklin County.
B.S., Maine, 1930

Clarence Albert Day, Kennebec County.
M.S., Maine, 1929

Richard Carlton Dolloff, Assistant County Agent, Aroostook County.
B.S., Maine, 1927

Norman Sylvester Donahue, Waldo County.
B.S., Maine, 1915

Gerald Cobb Dunn, Somerset County.
B.S., Maine, 1923

Charles Leslie Eastman, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1922

Ralph William Hobson, Washington County.
B.S., Maine, 1925

Raymond Harvey Lovejoy, York County.
B.S., Maine, 1921

Donald Harry Ridley, Oxford County.
B.S., Maine, 1927

Wilfred Sherman Rowe, Cumberland County.

Gardner Berry Tibbetts, Hancock County.
B.S., Maine, 1922

Ralph Carlton Wentworth, Knox and Lincoln Counties.
B.S., Maine, 1918

Oscar Lewis Wyman, Piscataquis County.
B.S., Maine, 1926

Home Demonstration Agents

Mary Swan Barney, Hancock County.
B.S., Simmons, 1926

Hortense Bradbury, Washington County.

Clara Mina Bronson, York County.
B.S., Framingham Normal, 1925

Margaret Childs, Kennebec County.

Dora Louise Colomy, Oxford County.
B.S., Maine, 1930

Leone Mae Dakin, Franklin County.
B.S., Maine, 1926
Lucy Farrington, Piscataquis County.
B.S., Maine, 1927
Agnes Freyer Gibbs, Cumberland County.
B.S., Framingham Normal, 1926
Jessie Mildred Lawrence, Knox and Lincoln Counties.
B.S., Maine, 1928
Agnes May Massé, Waldo County.
B.S., Maine, 1928
Doris Elaine Urquhart, Somerset County.
B.S., Rhode Island State, 1927
Hortense Agnes Welch, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1927
Florence Evelyn Whitaker, Penobscot County.
B.S., Rhode Island State, 1929
Dorothy Vinal Curtis, Aroostook County.
B.S. in Ed., Framingham Normal School, 1930

County Club Agents

Earle Theodore Blodgett, York County.
B.S., Maine, 1927
Effie Gower Jones, Kennebec County.
Kenneth Cousins Lovejoy, Waldo County.
B.S., Maine, 1928
Martha Corinne Merrill, Penobscot County.
B.S., Farmington Normal, 1928
Evelyn Marie Plummer, Oxford County.
Alva Merwin Ranger, Cumberland County.
Loana Spearin, Knox and Lincoln Counties.

Faculty Committees

Administration—President, University and College Deans, Dean of Men, Registrar, Treasurer

Athletics—Corbett, Gardner, A. K., Kent, Sprague, E. H.

Educational Research—Hart, Ashworth, J. H., Bryan, Crawford, Creamer, Dickinson, Evans, Greene, Jones, Leavitt, Lutes, Merchant, Sweetman, Young

Eligibility—Waring, Bean, Curtis, Gannett, Sprague, A. W.

Financial Affairs—Youngs, Kent, Pierce

Health—Young, Bean, Greene, Jenkins, Oliver, Wallace

Honors—Brann, Chadbourne, A. H., Ellis, Merchant

Military—Oliver, Boardman, Cloke, Lutes, Merrill, L. S., Stevens

Publications—Gannett, Dorsey, Ibbotson, Leavitt, Peterson

Publicity—Gannett, Bray, Crossland, Jones, Moreland

Rules—Peterson, Dorsey, Smith

Schedule—Weston, Dorsey, Evans, Gannett, Peterson, and College Deans

Secondary School Relations—Hart, Cloke, Lutes, Merrill, L. S., Stevens

Social Affairs—Corbett, Bean, Buzzell, Drummond, Sweetser, Youngs

Women Students—Bean, Buzzell, Chadbourne, A. H., Colvin, Greene

GENERAL INFORMATION

HISTORY

The University of Maine is a part of the public educational system of the State. It was established originally as the State College of Agriculture and the Mechanic Arts under the provisions of the Morrill Act, approved by President Lincoln in 1862. The next year the State of Maine accepted the conditions of the Act and in 1865 created a corporation to administer the affairs of the college.

The institution opened September 21, 1868, with a class of twelve 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 original name was changed to the University of Maine in 1897. Women have been admitted as students since 1872, in compliance with special legal enactment.

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 was an integral part of the institution and until the year 1917 occupied quarters at the corner of Union and Second streets in Bangor. Later it was located on the campus at Orono. It has offered no work since 1920.

Graduate instruction has been given by various departments for many years. The first master's degree was conferred in 1881. Since 1923 graduate work has been a separate division in charge of a dean.

Beginning with 1902, a Summer Session has been held annually, consisting at first of five weeks, but now of six. It is designed primarily for teachers in secondary schools and for college students who desire to make up work or secure additional credits. The departments usually offering courses are Chemistry, Economics and Sociology, Education, English, French, History and Government, Home Economics, Latin, Mathematics

and Astronomy, Physical Education, Physics, Psychology, Public Speaking, Spanish and Italian, and Zoology.

To provide permanently for the support of the University the Legislature in 1929 passed an act levying a tax of one mill on the general property valuation of the State.

The University is controlled by a Board of Trustees. The first Board was composed of sixteen members, each county delegation in the Legislature selecting one member. Various changes have occurred in the appointment of Trustees. At the present time seven members 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 Commissioner of Education is *ex-officio* a member of the Board.

LOCATION

The University is located in Orono, an attractive town of 3,500 population, with good schools and four churches. The extensive campus, situated about a mile from the business section, 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. The campus, which is nine miles from Bangor and three from Old Town, is connected with both cities by a paved highway offering easy access by automobile. Cars of the Bangor Hydro-Electric Company also afford a half-hour trolley service in both directions.

Bangor, the third city of the State in size, has a population of about 25,000 and is an important business center. The location of the University gives students an opportunity to avail themselves 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.—This building, erected in 1914, is the largest dormitory for women on the campus. It consists of three stories and a basement

and has accommodations for 121 students. The name was given in honor of Elizabeth Abbott Balentine, secretary and registrar of the University from 1895 to 1913.

Colvin Hall.—This building, the newest dormitory on the campus, was completed in 1930. It is a three-story brick structure of colonial style with accommodations for forty-eight girls. It was named for Professor Caroline Colvin, of the Department of History and Government, who served as the first dean of women at the University.

Hannibal Hamlin Hall.—A men's dormitory, completed in 1911, which contains four stories and a concrete basement. It was named for the Hon. Hannibal Hamlin, of Hampden and Bangor, the first president of the Board of Trustees. It will accommodate 152 students.

Mount Vernon House.—A three-story wooden building, remodelled in 1898, which is used as a dormitory for women. It has accommodations for thirty-three students.

North Hall.—A two-story frame house located on the campus, which is used as a Practice House by the Home Economics Department. It is the residence and laboratory of senior Home Economics students taking the course in Household Administration.

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

University Inn.—A four-story wooden building, located in the village of Orono, which has recently been purchased by the University to provide living quarters for members of the faculty. It has accommodations for twenty 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 a gymnasium, assembly room, and administrative offices. The assembly room is now provided with a pipe organ, the gift of the Eastern Maine Musical Association.

Arts and Sciences Building.—The State Legislature of 1923 appropriated a sum of money for the construction of a building for the College of Arts and Sciences. It consists of forty-six rooms, which are used for recitations, conference rooms, and offices. They include a psychology laboratory and an accounting room.

Aubert Hall.—A four-story building, including a high basement, which 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, chiefly used by the Departments of Botany and Entomology and of Zoology, contains also the museum and the office of the resident health nurse. It was named for ex-Governor Abner Coburn, of Skowhegan, a former president of the Board of Trustees and benefactor of the University.

Crosby Laboratory.—This building, with a main section two stories high and two wings of one story, contains the laboratories of the Department of Mechanical Engineering. The main section houses the equipment for work in hydraulics, steam engineering, and compressed air; the wings are devoted to testing operations of various kinds. The building is named in honor of the Hon. Oliver Crosby, class of '76, who bequeathed $100,000 for its construction.

Fernald Hall.—This building, the oldest on the campus, was named in honor of ex-President Merritt C. Fernald. It contains offices and classrooms used by The School of Education, and the Department of Spanish and Italian, the University Store, and the offices of the alumni secretary and the director of physical education for women.

Holmes Hall.—A two-story building, in addition to a basement, which contains the offices and laboratories of the Maine Agricultural Experiment Station. 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, 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, while other books for which there is no room here are kept elsewhere in the building.

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 Hon. Henry Lord, of Bangor, a former president of the Board of Trustees.

Maine Christian Association Building.—Used chiefly by the Maine Christian Association, but also contains the personnel office of the College of Technology, the office of the Maine *Campus,* a large social room and a reading room for men, and a social room and a lunch room for women. On the second floor there is a prayer room or sanctuary, beautifully furnished and containing a simple altar, to which all who wish, both men and women, may come for quiet meditation and prayer.

The Maples.—The north half of the building has been occupied by the Home Economics Department and at present contains the design laboratory and such offices of the department as have not yet been transferred to Merrill Hall. The south half of the building, known as Balentine Annex, furnishes living quarters for a number of young women.

Merrill Hall.—This three-story brick building was erected in 1930 for resident teaching, extension, and experiment station work in Home Economics. Besides offices and classrooms it contains laboratories for student work in child development, institutional management, household equipment, foods and nutrition, art, clothing and textiles; and research laboratories for nutrition, foods, and household management. The building is named in honor of Dean Leon S. Merrill of the College of Agriculture. In the current year, the extension and research offices, and the research, foods and nutrition, and clothing and textile laboratories have been equipped and occupied.

Rogers Hall.—A two-story brick building for dairy manufactures forming the eastern end of the agricultural quadrangle. The first floor is made up of laboratories for butter, ice cream and cheese making, market milk processing, and milk and milk products testing. On this floor are also located cold storage rooms, a refrigerating machinery room, and a supplies room. The second floor contains offices, class rooms, and two research laboratories. The building was named in honor of Dr. Lore A. Rogers, Chief, Research Laboratories, Bureau of Dairy Industry, United States Department of Agriculture.

Wingate Hall.—This building, containing three stories and a basement, is used by the Departments of Civil Engineering, Mechanics, and Engineering Drafting. It contains also the office and laboratory of the Technology Experiment Station as well as the office of the dean of the College of Technology.

Winslow Hall.—A four-story building, including the basement, which contains offices, laboratories, and recitation rooms for the various departments of the College of Agriculture. It was named in honor of Hon. Edward B. Winslow, of Portland, a former president of the Board of Trustees.

Agricultural Engineering Building.—A large two-story wooden building located on the north side of the road leading to the dairy barns is used by the Department of Agronomy for laboratory instruction purposes in connection with its courses in agricultural engineering.

Farm Buildings.—These comprise two large modern dairy barns having accommodations for 150 head of cattle, a horse barn, a hay storage barn, a piggery, a sheep barn, and two tool houses.

Horticultural Greenhouses.—Two modern steel-frame houses interconnected with one another and with a two-story brick service and educational building are located near the south end of the campus. These houses are devoted to the growing of flowers, ornamental plants, and vegetables. The service building contains work rooms, laboratories, a classroom, sales and storage rooms, and a basement winter-storage room.

The old greenhouse of wood-frame type, east of Holmes Hall, is utilized by several departments for investigational work requiring greenhouse space, and by the Department of Horticulture for the production of seedlings for garden planting. The two-story frame building attached provides office space on the second floor for several extension specialists, while the first floor is devoted to research laboratories equipped for studies in human nutrition.

Milk House.—The milk house, located west of the dairy barns, is designed to serve as a demonstrational laboratory in milk handling and processing. It contains a milk room, bottle and can washing room, laundry, boiler room, milk testing room, artificially refrigerated holder for milk, and an office for herdsman and dairyman.

College of Agriculture Poultry Plant.—Consists of a two and one-half story building to which is attached a permanent brooder house. The basement of this building contains an egg-candling room and an incubator room. The laying houses have capacity to accommodate six to eight hundred laying hens.

Agricultural Experiment Station Poultry Plant.—This plant comprises a service building, with two wings as laying pens. The service building is two stories and a half high with separate rooms for incubator, egg storage, root storage, grain mixing and grain storage space, and post-mortem and hospital for sick birds. On the second floor are located chick battery rooms, and laboratories for experiments in physiology and nutrition.

Stock Judging Pavilion.—This is an octagonal structure located in the rear of Winslow Hall. It has a seating capacity of 600.

Memorial Gymnasium Armory.—The Indoor Field-Armory section has been completed and is in constant use. The Indoor Field is believed to be the largest in the world. It is 340 feet long, 168 feet wide, and 70 feet high. Football, basketball, baseball, and track squads use it in season. It has proven of great value to the University. The section already completed cost well over $350,000, which was contributed by Maine alumni, undergraduates, faculty, and friends. A campaign is underway to raise sufficient additional funds to build the gymnasium section which will complete the Memorial. It is hoped that construction may be started within a year.

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 and also bleachers seating 2,500.

Athletic Field for Women.—A new field on the southern end of the campus consists of a regulation hockey field, archery field, and seventy-five yards of straightaway. A field house just completed on the northern end houses all the athletic supplies, and serves as a shelter for teams not in action.

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

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.

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.

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. A new smokestack 150 feet high has recently been erected, and three boilers have been provided with semi-automatic mechanical stokers.

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.

Fraternity Houses.—The local chapters of Beta Theta Pi, Delta Tau Delta, Kappa Sigma, Phi Kappa Sigma, Sigma Alpha Epsilon, Theta Chi, Sigma Nu, and the Phi Eta Kappa Society have houses on the campus. The following chapters own houses in the vicinity of the University: Phi Gamma Delta, Lambda Chi Alpha, Phi Mu Delta, Sigma Phi Sigma, and Beta Kappa on College Road adjoining the campus; Alpha Gamma Rho on Grove Street; Phi Kappa on College Road at the intersection of North Main Street; Alpha Tau Omega and Sigma Chi on North Main Street. These houses accommodate from twenty to fifty students each.

Sorority Houses.—The local chapter of Delta Delta Delta has recently purchased a residence on College Road. The chapter of Pi Beta Phi owns a log-cabin, which is used for social events.

THE UNIVERSITY FARMS

The University farms consist of approximately 435 acres divided into two farms, one of which adjoins the campus while the other is located in Stillwater. The land under cultivation amounts to 192 acres, divided as follows: 163 acres for farm crops, ten acres for orchards, two acres for the forest nursery, fifteen acres for poultry lots, twenty acres for systematic forestry, and 213 acres for forest and pasture lands. These farm lands, together with the campus, make the University holdings at Orono and vicinity approximately 535 acres.

THE LIBRARY

The University Library contained at the end of the academic year 94,000 volumes and 27,000 pamphlets. In addition to the general collection of books it includes the following of a more special nature: Law Library, 5,600 volumes, the greater part of which are on deposit in the Court House at Bangor; Agricultural Experiment Station Library, 6,500 volumes, on deposit in the Library Building; Reference Collections shelved in the Department of Physics and the College of Agriculture. About 350 periodicals are subscribed for by the library; 200 received as gift or exchange; 75 taken by the Experiment Station.

The library is housed in a building erected in 1906 by gift of Andrew Carnegie. The reading and seminar rooms have table and seating accommodations for 150 students. In the four seminar rooms are shelved German, French, Spanish and Italian literature and language; history; and material relating to the State and the University of Maine. The reference room contains a working collection of almanacs, atlases, concordances, dictionaries, encyclopedias, and yearbooks for the convenience of the student, and for use in the room. Magazines for the current year are on file in the periodical room. Current numbers of engineering journals are available for general use in Wingate Hall and in Lord Hall. Newspapers are kept in a special reading room in the basement.

The library is classified by the Dewey Decimal system. Each book is fully cataloged by author, subject, and title. The catalog is situated in the

rear of the delivery room, where are kept magazine indexes and bibliographies as well.

Elementary instruction in the use of the library is given new students during Freshman Week. This includes lectures and practice in the use of the catalog and magazine indexes.

The rules of the library are designed to facilitate study and promote the use of books. Books and magazines may be taken out of the building for a period of three weeks. Exceptions to this rule are: seven-day books, which include fiction, popular non-fiction, and bound education magazines; Experiment Station books which may only circulate with the written order of the Director, and to members of the Station staff; reference books, which do not circulate; reserved books and current numbers of magazines, which may be taken out of the building only while the library is closed.

Members of the faculty are not restricted as to the number of books borrowed or to the time they may be retained except in the case of fiction, or books otherwise in demand.

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. Transportation charges are payable by the borrower.

Any book in circulation or shelved elsewhere on the campus may be recalled to the library at any time. All library books must be returned to the library before the close of the academic year in June for inventory, repair, and binding.

Library Hours

8 a.m.— 5 p.m.	6:30—9:30 p.m.	Monday—Thursday
8 a.m.— 5 p.m.	6:30—9 p.m.	Friday
8 a.m.—12 m.	1:30—5 p.m.	Saturday
2 p.m.— 5 p.m.	6:30—9:30 p.m.	Sunday

Collections

ART COLLECTION

This collection consists 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 over 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 work the photographs are supplemented by lantern slides.

The University possesses several of the famous polychrome prints published by the Arundel Society. These and many other colored reproductions 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 fourteenth and fifteenth 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 University possesses a large collection of photographs and lantern slides.

BIOLOGICAL COLLECTIONS

The biological collections are located in Coburn Hall.

Zoological Collections.—These consist of a working collection of bird skins; a display collection of bird mounts; a study collection of various other groups of both vertebrates and invertebrates. These are arranged in the various rooms and laboratories where they are best available for purposes of class use.

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 Algae of the Maine Coast, Halsted's Lichens of New England, Halsted's Weeds, Ellis and Everhart's North American Fungi, Cook's Illustrative Fungi, Underwood's Hepaticae, Cummings and Seymour's North American Lichens.

GEOLOGICAL COLLECTIONS

Geological Collections.—Owing to demand for additional laboratory space by the Departments of Botany and Zoology, it has been found necessary to remove the geological collections from the room in which they have been exhibited and store them wherever space could be found. The cases in which they are contained are at present in the basement and upper rooms of Coburn Hall, and the collections are no longer accessible. A new wall case containing such specimens as are necessary for classroom illustration has been placed in 17 Winslow Hall.

UNIVERSITY PUBLICATIONS

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.

University of Maine Studies, Second Series.—This is a series of research studies by members of the faculty and graduate students, published under the direction of the Faculty of Graduate Study. For a list of numbers published to date and of the issues of the first series, see the section on graduate study.

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.

Extension Bulletins and Extension News Letters.—These publications are issued by the Agricultural Extension Department. A limited

supply of the bulletins is available for distribution and will be forwarded on application. The News Letters are distributed to newspapers and persons whose names are on the classified mailing lists.

Technology Experiment Station Publications.—Bulletins are published giving the results of investigations and research, and are sent free of charge on request.

The Maine Alumnus.—This is published nine times during the academic year by the General Alumni Association and is sent to former students of the University.

Student publications are described in the section "Student Activities."

HEALTH SERVICE

This department, located in 8 Coburn Hall, offers to the students the services of two nurses and part time services of a physician. It is equipped to supervise the care of students on the campus who are ill; assists and coöperates with the Departments of Physical Education and Military Science in conducting physical examinations; when and wherever possible, aids students in securing the correction of defects revealed by the physical examination; maintains office hours for private consultations; and, so far as possible, supervises the health of students.

TEACHERS' REGISTRATION BUREAU

A registration bureau for teachers, located in the office of the Dean of the College of Education in Fernald Hall, undertakes to assist properly qualified graduates and former students in securing positions. All seniors who plan to teach are urged to register with the committee. Correspondence with officials who are looking for teachers is welcomed. A fee of $1.50 is charged for this service to students.

STUDENT ACTIVITIES

Cooperative Government

Student Senate.—The Men's Student Senate exists to act as a coördinating body between the University administration and the student body and to make recommendations to the administration. The Senate is empowered to investigate any question relative to the student body or any member

thereof and to recommend action on the same to the administration. The Senate is empowered to summon before it any student or students for trial or testimony. It is truly representative of the men students of the University, being composed of representatives from: (a) each fraternity, (b) the dormitory men, (c) the off-campus men. It maintains a joint committee with the Women's Student Government. It is a member of the National Student Federation of America.

Women's Student Government Association.—An association to which all of the women registered as students of the University of Maine belong. Its purpose is to enact and enforce laws in all matters pertaining to student life and to encourage active coöperation in the work of self-government among the women of the University.

Religious Activities

Maine Christian Association.—The Maine Christian Association, open to all students, both men and women, has for its object the promotion of Christian fellowship, knowledge, and service. The work is done by student committees, under the guidance of three secretaries, one of whom, a young woman, is assigned especially to women, and one to the men of the freshman class. The Association conducts the religious services of the University, arranges for prominent outside speakers on religious and social subjects, carries on Bible classes and discussions of various practical problems, sends out religious deputations, brings comfort to the sick, and in general seeks to meet the spiritual needs of the students. The general secretary also acts as representative of several coöperating denominations. The work is centered in the Maine Christian Association Building, which also serves as a union building for student activities. On the second floor is a room for meditation and prayer, open all day for any who wish to come.

Church Services.—Students receive a cordial welcome at the services of the churches of Orono—the Methodist Episcopal Church, St. John's Universalist Church, St. Mary's Roman Catholic Church, and the undenominational Fellowship Church. Other denominations are represented at Old Town and Bangor.

National Honor and Professional Societies

Phi Kappa Phi.—The society of Phi Kappa Phi, founded at the University of Maine in 1897, is a national honor society that aims to recognize excellence in any field of knowledge. At the end of the junior year and

near the beginning of the senior year it elects to membership a total of seven of the highest ranking members of the class. In the second semester of the senior year it elects additional members of the class who meet its standards.

Alpha Zeta.—The Maine chapter of Alpha Zeta, the national agricultural fraternity, was organized at the University in 1905. Chapters exist in thirty-seven 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 Beta Kappa.—A chapter of Phi Beta Kappa, the oldest national honorary scholarship society, was granted to the College of Arts and Sciences of the University in 1922. Its object is to promote scholarship in the liberal arts. Elections to membership are based upon scholarship, breadth of culture, and general promise.

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.

Alpha Chi Sigma.—A professional fraternity made up of majors in the Department of Chemistry and Chemical Engineering. Two meetings are held monthly.

American Chemical Society.—Orono is headquarters for the Maine section. Students of chemistry and chemical engineering may become student members. Meetings are open to those interested.

Student Branch of the American Society of Civil Engineers.—Composed of juniors and seniors enrolled for the curriculum in Civil Engineering. The object of the society is to investigate by reading and discussion engineering topics of the day. Monthly lectures are given by teachers of engineering and practicing engineers.

Branch of the American Institute of Electrical Engineers.—Consists of members of the teaching staff, graduate students, seniors, juniors, and sophomores of the Department of Electrical Engineering. Its aim is to promote interest in electrical engineering and to foster acquaintance and good fellowship among faculty and students. Talks and lectures are given by members of the branch and practicing engineers.

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

Beta Pi Theta.—This is an honorary society with a national charter into which are elected students in French with an outstanding record of scholarship.

Kappa Phi Kappa.—A national educational fraternity whose membership is restricted to men who intend to make teaching their profession and who have a high scholastic record.

Phi Sigma.—A national honor society for students in biology who have completed a certain number of courses with honor grade.

Scabbard and Blade.—An honorary military fraternity with active membership restricted to cadet officers of high moral and scholastic standing. Commissioned officers of the United States Army and non-military persons deemed worthy of the honor may be elected as honorary members. The local company was organized in 1916.

Xi Sigma Pi.—A national honorary forestry fraternity open to upper-class students in forestry who possess the proper qualifications. The local chapter was organized in 1917.

Departmental Clubs

Agricultural Club.—An organization composed of students of agriculture. At the bimonthly meetings important agricultural topics are discussed by club members and also by prominent outside speakers.

Cercle Français.—This society, whose object is to stimulate interest in the language and culture of France, is open to all students of French. The monthly meetings offer varied programs in French, music, games, and the like. Active participation in the work of the Cercle will be taken into account in the election of members to Beta Pi Theta.

Circulo Español.—An organization established in 1921 to afford practice in the use of Spanish and to promote a knowledge of the culture of Spain and the Spanish-American nations. The public representation of a Spanish play or a festival consisting chiefly of Spanish music is an annual event.

College 4-H Club.—An organization composed of students who have completed one or more years of Boys' and Girls' Agricultural and Home Economics Club Work. It was organized in 1924 to increase the interest in Club Work and to strengthen the friendships of College 4-H men and women. Meetings are held in October, January, and May.

Contributors' Club.—This organization, composed of students and members of the faculty who have shown ability in writing, has as its object the cultivation of the literary talents of its members and the general

encouragement of literary effort in the University community. At the bi-monthly meetings, original stories, essays, and poems are read and criticized by the members. The club publishes the University literary magazine, the *Maine-Spring,* and brings to the campus each year some distinguished speaker for a literary lecture.

Delta Pi Kappa.—A musical fraternity which was founded at the University of Maine in 1929. The purpose of this fraternity is to promote the best interest of college musicians and to encourage a high type of musicianship.

Delta Sigma Mu.—A local honorary forensic fraternity, established in 1922, which chooses its members from those who have represented the University in intercollegiate debate. In coöperation with the director of debate it assists with the various forensic contests. The president and secretary of this organization are automatically president and secretary of the University of Maine Debating Council.

Deutscher Verein.—The purpose of this society is to stimulate interest in the various phases of German life and literature, and to afford practice in speaking German. Meetings are held once a month.

Forestry Club.—This organization, which is open to all majors in Forestry, affords the opportunity for presenting informal discussions and technical papers on forestry subjects and aims to promote coöperation and good fellowship among students in the department. Meetings are held monthly.

Home Economics Club.—This organization, composed of students majoring in home economics whose grade in major courses has averaged 2.5, is affiliated with the American Home Economics Association. The object of the society is to keep in touch with current problems in home economics, and to develop a professional interest in the field.

Kappa Gamma Phi.—This is a local honorary journalistic fraternity, organized in 1924. The fraternity is made up of members of the *Campus, Maine-Spring,* and *Prism* boards and conducts an annual State Journalistic Conference for secondary-school editors in Maine.

The Language Conference.—Meetings are held monthly at which papers are read by members of the faculty and graduate students who are interested in ancient or modern languages and literatures.

Maine Masque.—A dramatic club which aims to make a practical study of the acted drama, and to present each year several plays before the public. The Masque considers for membership all students who have participated in one or more plays, or who for at least a year have helped in the stage production of these plays.

Pi Pi Kappa.—A local fraternity, the members of which are elected from the faculty and higher ranking students majoring in the Department of Economics and Sociology. The purpose of the organization is to stimulate interest in economic, political, and social problems.

Mathematics Club.—Open to all students majoring in mathematics and others who are interested in the study of the subject. 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.

Physics Club.—Open to members of the faculty and students who are taking courses in physics or allied subjects. Meetings are held every two weeks at which papers are presented and current topics are discussed.

Sigma Mu Sigma.—The local honorary psychological fraternity holds its meetings twice monthly. Its purpose is the furtherance of interest in the theories and practical application of psychology. Members are chosen from those majoring and minoring in psychology whose records show interest in this science.

Sodalitas Latina.—Students who elect Latin a second year are eligible to membership. The club holds meetings once a month for lectures, informal entertainments, or social gatherings.

Musical Organizations

University Band.—This organization is attached to the Military Department. Rehearsals are credited as regular class work under the director of music. A particular aim is to develop leadership, and to this end, in coördination with the course in interpretation and conducting in the Music Department, students properly qualifying are coached to conduct the concert presentations of the band. The band plays for various university functions and games and makes concert trips.

University Chorus.—This organization, open to both men and women students, has for its objective the study and public performance of choral music. Participation in college assemblies, student concerts, and the annual Bangor Music Festival is a part of the program. The sharing in programs at the Festival with world-famous musicians and concert artists renders this choral work inspiring and memorable. The chorus is conducted by the director of music as class work, for which students receive credit. Conditions of membership are listed under the Department of Music (Courses 25, 26).

Musical Clubs.—A glee and instrumental club is maintained by the men and students and concert trips are taken at intervals during the college year.

Social Fraternities and Sororities

The following fraternities and sororities have chapters, the figures in parenthesis giving the dates chapters were established at the University.

Fraternities.—National: Beta Theta Pi, (1879); Kappa Sigma, (1886); Alpha Tau Omega, (1891); Phi Kappa Sigma, (1898); Phi Gamma Delta, (1899); Sigma Alpha Epsilon, (1901); Sigma Chi, (1902); Theta Chi, (1907); Delta Tau Delta, (1908); Lambda Chi Alpha, (1913); Sigma Nu, (1913); Sigma Phi Sigma, (1921); Phi Mu Delta, (1923); Alpha Gamma Rho, (1924); Beta Kappa, (1926); Phi Kappa, (1926); Tau Epsilon Phi, (1929). Local: Phi Eta Kappa, (1906); Eta Nu Pi, (1926).

Sororities.—National: Alpha Omicron Pi, (1908); Phi Mu, (1912); Delta Delta Delta, (1915); Pi Beta Phi, (1920); Chi Omega, (1921); Delta Zeta, (1924). Local: Kappa Psi, (1923); Sigma Theta Rho, (1924); Sigma Tau, (1927).

Student Publications

Maine Campus.—This is a newspaper published weekly during the academic year by an editorial board composed of students.

Prism.—The Prism is an illustrated annual published by the junior class.

The Maine-Spring.—This is a literary magazine published four times a year by the Contributors' Club.

Debating

The Debating Society is open to all students interested in forensic work. Questions of public interest are discussed. During the year the society meets once a week to study questions, to debate, and to speak. The members make a special study of the questions used for inter-collegiate debating. From this group representatives are chosen to speak before luncheon clubs, and to participate in the inter-collegiate debates.

The University of New Hampshire, the State College of Rhode Island, New York University, Massachusetts Agricultural College, and Colby College are among the institutions usually scheduled for these debates, which are frequently of a dual nature. Members of this society are selected to represent the University on a debating tour of Eastern institutions.

The society is controlled by a Debating Council, composed of three secretaries, a president, and the director of debate. It is the duty of this Council to direct the procedure of the forensic activities.

ADMISSION

METHODS OF ADMISSION

General Requirements.—Candidates for admission should apply to the Dean of the University for an application card and other necessary blanks.

These blanks should be returned promptly together with the application fee of $10 (and room deposit of $15 if a dormitory room is desired).

In order that all candidates may receive equal consideration, it is desired that applications be filed as early as May first of the year the candidate wishes to enter. Candidates must present satisfactory certificates of fitness, or pass the required examinations, and on registration day make a cash deposit covering the bills of one semester.

The University admits men and women, both residents of Maine and non-residents. Applications from women not residents of the State, whether candidates for freshman or advanced standing, will not be acted upon until July 1st of the year in which they intend to enter. The University reserves the right to terminate admissions of both men and women whenever the capacity of the University to properly care for the students has been reached.

It is requested that all entering students submit a certificate from a physician stating that they have been vaccinated for smallpox within the past seven years, or be vaccinated at the time of their physical examination.

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. 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 twenty-one 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 Course in Agriculture must be over fifteen years of age and prepared for advanced grammar or high school work.

Admission of Graduates from Class A Schools in Maine

Graduates from Maine high schools and academies placed by the State Commissioner of Education in Class A, may be admitted upon their school records under the restrictions shown in the next paragraph, 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 elective subjects to make a total of fifteen units.

A candidate will not be admitted whose average rank for the high school course does not exceed the school pass mark by the margin shown in the following tabulation:

Pass mark of school	Candidate not admitted if rank is below	Candidate may be admitted on trial if rank lies between
60	68	68 and 76
65	72	72 and 79
70	76	76 and 82
75	80	80 and 85
80	84	84 and 88

Additional Information About Candidates

In addition to the school record, the following information is asked for:

A. Information from the student. The student is asked to answer on a blank furnished by the University, a series of questions showing his favorite studies, his school activities, his choice of a life work, reasons for this choice, his seriousness of purpose, and other matters bearing upon his preparation for college life.

B. The principal, and two teachers named by the student, are asked to give details regarding his character, class standing, activities, and general fitness for pursuing a college course.

C. So far as possible, a personal interview will be held with each candidate. The information gained from the interview and from the information sheets furnished by candidate, principal and teachers will be used to supplement the school record in determining whether the candidate shall be admitted. In doubtful cases candidates may be required to pass, before the opening of the fall semester, certain examinations, the choice depending upon the course of study that the candidate wishes to undertake. Each such candidate will be definitely informed regarding the tests required.

A student admitted on trial may be dropped from the University at any time if his work is reported as unsatisfactory. The student's record will be carefully reviewed at the end of eight weeks and again at the end of the first half year, and he will be placed in full standing, continued on the trial list, or required to withdraw, according to his record. While on trial, a student is not eligible to represent the University in any competition with students from other institutions.

Admission 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 and its standards meet 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. 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 satisfactory grade.

Admission by Examinations

Entrance examinations are held at Orono, beginning four days before the fall registration of freshmen. A schedule of the examinations will be furnished on request. Candidates for admission who wish to be examined in the spring can take the examinations at their own school provided the principal is willing to arrange for giving the tests. These examinations are given the last week in May. On request of any principal the University will send the necessary examination papers. Such requests should be received before May 15. Candidates for admission by examination 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 16-21, 1930. All applications for these examinations must be addressed to the Secretary of the College Entrance Examination Board,

431 West 117th Street, 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 27 and must be accompanied by the examination fee of $10.00.

REQUIRED SUBJECTS

College of Arts and Sciences

English	3	units
Foreign languages (four years in one or two in each of two)	4	"
History	1	"
Mathematics (Algebra and Plane Geometry)	2	"
Total	10	units

College of Agriculture

English	3	units
*Algebra	1	"
*Plane Geometry	1	"
Science (including laboratory notebook)	1	"
History	1	"
Total	7	units

College of Technology

English	3	units
Foreign language (two years in one)	2	"
Algebra	2	"
Plane and Solid Geometry	1½	"
History	1	"
Science	1	"
Total	10½	units

*For admission to the Home Economics curriculum, two units in mathematics acceptable to the Committee on Administration are required.

The required units and the units that may be accepted in various subjects in the respective colleges are shown in tabular form.

Subjects	Units Accepted		Units required and units accepted in the several colleges					
			Arts and Sciences		Agriculture		Technology	
	Min.	Max.	Req.	Acc.	Req.	Acc.	Req.	Acc.
English	3	3	3	3	3	3	3	3
French	*2	4	Four units in one language or two in each of two	2, 3, or 4		1, 2, 3, or 4	Two units in one language††	1, 2, 3, or 4
German	2	4		2, 3, or 4		1, 2, 3, or 4		1, 2, 3, or 4
Greek	2	3		2 or 3		1, 2, or 3,		1, 2, or 3,
Latin	2	4		2, 3, or 4		1, 2, 3, or 4		1, 2, 3, or 4
Spanish	2	3		2 or 3		1, 2, or 3,		1, 2, or 3,
Algebra (Elem.)	1	**2	1	2	§1	2	2	2
Plane geometry	1	1	1	1	§1	1	1	1
Solid geometry	½	½		½		½	½	½
Trigonometry	½	½		½		½		½
Algebra (Adv.)	½	½		½		½		½
History	1	4	1	1, 2, 3, or 4,	1	1, 2, 3, or 4	1	1, 2, 3, or 4
Civics	½	1		½ or 1		½ or 1		½ or 1
Economics	½	1		½ or 1		½ or 1		½ or 1
Biology	†1	1		1	One unit in Science	1	One unit in Science	1
Botany	†1	1		1		1		1
Chemistry	†1	2		1 or 2		1 or 2		1 or 2
Physics	†1	2		1 or 2		1 or 2		1 or 2
Physiography	½	1		½ or 1		½ or 1		½ or 1
Physiology	½	1		½ or 1		½ or 1		½ or 1
Zoology	†1	1		1		1		1
General Science	½	1		½ or 1		½ or 1		½ or 1
Agriculture	1	4		Not over two units in all of these		Not over five units in all of these		Not over four units in all of these
Domestic Science and Art	1	4						
Drawing	†½	2						
Manual Training	†½	2						
Commercial Subjects	½	4						
Music	½	1		½ or 1		½ or 1		
Bible Study	½	1		½ or 1		½ or 1		½ or 1
Debating	½	1		½ or 1		½ or 1		

*The minimum accepted in foreign languages applies to the College of Arts and Sciences only.

**Two units credit for elementary algebra completed. Technology candidates are expected to take some mathematics during their last year in school.

†The work in these subjects must include laboratory work with notebook, 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.

§See foot-note at bottom of page 53.

††Latin or French preferred.

ELECTIVE SUBJECTS

A total of fifteen units is required for admission to any four-year curriculum. The units not named above under required subjects may be selected as shown in the following table. Subjects not listed may be accepted among the electives, provided they represent a satisfactory equivalent for any of those listed.

REQUIREMENTS IN DETAIL

English

The entrance examination in English presupposes a study of English literature and of composition and rhetoric pursued thruout the preparatory school course. Candidates are expected to have had practice in writing equivalent to at least one composition a week during each of the four years in high school, and to have studied the elements of rhetoric in some such text as, for example, Tanner's *Rhetoric and Composition.*

The examination is designed mainly to test the candidate's ability to express his thoughts 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 special attention to spelling, punctuation, grammatical correctness, idiomatic words and phrases, and sentence and paragraph formation.

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

Composition.—The writing of short compositions, on topics based on the classics studied in high school or on the student's personal experiences, is required.

Literature.—A portion of the examination will be devoted to questions on the works in English and American literature customarily studied in high school. A list of books recommended by the Conference on Uniform Entrance Requirements in English may be obtained on application to the Registrar.

Foreign Languages

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 Cæsar for not less than one semester and selections from easy Latin prose for the remainder of a year.

2b. Questions on the ordinary forms and constructions of Latin grammar and the translation of easy English sentences into Latin.

3a. An examination in sight translation of Latin prose suited to test the ability of a candidate who has read Cicero for not less than one semester and such authors as Pliny, Sallust, and Livy for the remainder of a year.

3b. A test in writing simple Latin prose which shall demand a thoro knowledge of all regular inflections, all common irregular forms, and the ordinary syntax and vocabulary of the prose authors commonly read in school.

4. An examination in sight reading of Latin poetry suited to test the ability of a candidate who has read Vergil for not less than one semester and selections from Ovid and other poets for the remainder of a year.

In both 3 and 4 the examination will include questions in grammar and subject matter of the passages set.

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;* Mairet, *la Tâche du petit Pierre;* Mérimée, *Colomba;* extracts from Michelet; Sarcey, *le Siège de Paris;* Jules 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 thoro 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 Brète, *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 pupil 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;* Lamartine, *Graziella;* Marivaux, plays; Molière, plays; Musset, plays and poems; Pellissier, *le Mouvement littéraire au XIXe 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—*Elementary.*—The first year's work should comprise: careful drill upon pronunciation and oral work; the rudiments of grammar including the inflection of nouns, pronouns, and adjectives; the conjugation of the more common weak and strong verbs; the use of the more common prepositions; the conjugation and meanings of the modal auxiliaries; the elementary rules of syntax and word order; dictation and elementary composition; the reading of 75 to 100 pages of prose and poetry.

The second year's work should include the continued study of the grammar and composition, and the reading of 150 to 200 pages of literature.

The advanced German should include constant practice in conversation and composition, and the reading of about 400 pages of moderately difficult prose and poetry.

Spanish—*Elementary.*—The equivalent of Courses 1 and 2 offered by the University. The first year's work should comprise: careful drill in pronunciation; the rudiments of grammar, including the conjugation of the regular and more common irregular verbs; exercises containing illustrations of the principles of grammar; dictation; the translation of simple Spanish when spoken; sufficient translation from English to Spanish to illustrate the principles of grammar; the reading of about 125 pages of modern prose. In the second year in addition to the continued study of the grammar and the use of suitable exercises similar to those employed in the preceding year there should be read from 300 to 400 pages belonging to modern Spanish literature.

History

One unit is required by all colleges of the university for entrance. Four may be offered.

The admission requirements in history are based on the recommendations of the Committee of Seven. The student will be expected to show judgment as well as memory and be able to make comparisons and give summaries. Some knowledge of geography is required, and collateral reading is essential.

I Greek and Roman History.—One unit.

Greek History.—To the death of Alexander with due consideration of Greek life, literature, and art. One-half unit.

Roman History.—To 800 A.D. with emphasis on government and institutions. One-half unit.

II English History.—A general knowledge of the political and social development of England; in particular the growth of the limited monarchy with parliamentary government and the British Empire and Commonwealth. One unit.

III American History.—Including civics and with especial attention to social and economic life. One unit.

IV Medieval and Modern History.—One unit.

Medieval History.—To 1500. One-half unit.

Modern European History.—From 1500 to the present. One-half unit.

Mathematics

The requirements in mathematics given here are essentially those published by the College Entrance Examination Board. A pamphlet giving fuller details of the requirements can be obtained from the secretary of that Board.

Algebra to Quadratics.—One unit.

(1) The meaning, use, evaluation, and necessary transformations of simple formulas involving ideas with which the pupil is familiar, and the derivation of such formulas from rules expressed in words.

(2) The graph, and graphical representation in general. The construction and interpretation of graphs.

(3) Negative numbers; their meaning and use.

(4) Linear equations in one unknown quantity, and simultaneous linear equations involving two unknown quantities, with verification of results. Problems.

(5) Ratio, as a case of simple fractions; proportion, as a case of an equation between two ratios; variation. Problems.

(6) The essentials of algebraic technique.

(7) Exponents and radicals; simple cases.

(8) Numerical trigonometry.

Quadratics and Beyond.—One unit.

(1) Numerical and literal quadratic equations in one unknown quantity. Problems.

(2) The binomial theorem for positive integral exponents, with applications.

(3) Arithmetic and geometric series.

(4) Simultaneous linear equations in three unknown quantities.

(5) Simultaneous equations, consisting of one quadratic and one linear equation, or of two quadratic equations of certain types. Graphs.

(6) Exponents and radicals.

(7) Logarithms.

Plane Geometry.—The usual theorems and constructions contained in good textbooks, including the general properties of plane rectilinear figures; the circle and the measurements of angles; similar polygons; areas, regular polygons, and the measurement of the circle.

Solid Geometry.—The usual theorems and constructions contained in good textbooks, 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 their application to 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.

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

Chemistry.—The necessary ground is covered by the first textbooks in chemistry, such as: Brownlee and others, Hessler and Smith, McPherson in chemistry, such as: Brownlee and others, Hessler and Smith, McPherson, Henderson, and Fowler's *Chemistry for Today,* Newell, and Black and Conant. Records of laboratory work should be kept in permanent notebook form.

The work in chemistry should include at least ninety hours of classroom work and a full year of individual laboratory work of two double class periods weekly. The laboratory requirement is not limited to a specific number of experiments or exercises but must include a broad general training. The notebook must be certified by the instructor and presented as evidence, when called for, by the Department of Chemistry and Chemical Engineering. Candidates who make good records in the placement test in chemistry and present satisfactory note books can be assigned to the Advanced Groups in General Chemistry.

Physical Geography (Physiography).—A satisfactory preparation may be obtained from Davis's *Physical Geography* or one of similar grade.

Physics.—The work usually covered in one year in a good fitting school. This must include a certified notebook exhibiting the results of experimental work performed by the student. Forty exercises are required.

Bible Study

To obtain credit of a unit in this subject a student must follow a course of study which shall be equivalent to five hours a week thruout a year, and pass an examination which is set by the State Committee on Credits for Religious Education or give satisfactory evidence of the completion of an equivalent course and examination.

REGISTRATION

Freshmen.—All members of the incoming freshman class are REQUIRED to be in residence on the campus during the period known as Freshman Week. The dates are announced in the calendar in the front of the catalog. Following the general plan employed for the past eight years, it will be devoted to tests of various sorts whereby the University authorities may obtain more accurate information concerning the type and degree of mental qualifications of the new students, and to lectures and demonstrations by which the students may be more intelligently informed of the University and its customs.

NO EXCUSES FOR NON-ATTENDANCE OTHER THAN ILLNESS CERTIFIED TO BY A PHYSICIAN IN GOOD STANDING WILL BE ACCEPTED.

Upperclassmen: In the fall semester of 1931, upperclassmen will be required to register on September 22, or to present written evidence that

they have been excused from so registering by the University authorities. In other words, upperclassmen must before September 22 have communicated with the dean of their college giving him their reasons for desiring to register late, and have received from him written authorization so to do. In the event of an unusual circumstance wholly beyond the control of the student, and occurring just prior to the opening of the fall semester, the student may present his case in person to the dean upon his arrival at the University. Late registration is a handicap both to students and to University authorities, and will be rigidly discouraged whenever and wherever possible.

STUDENT EXPENSES

A partial list of necessary expenses is indicated below. It includes only items which are fairly uniform for all students. The estimates are prepared upon the basis of students living in University halls.

	Students from within the State			Students from without the State		
Tuition	$150.00			$250.00		
Text books	25.00	to	50.00	25.00	to	50.00
Board 34 weeks @ 7.00	238.00			238.00		
Room in Dormitory	85.00			85.00		
Special Assessment for Athletics & Debating	10.50			10.50		
Health Service Fee	2.00			2.00		
	$510.50	to	$535.50	$610.50	to	$635.50

The tuition for students taking the Two-Year Course in Agriculture is $70.00 a year. Such students do not pay the special assessment for athletics and debating.

Application for Admission

A fee of $10.00 is required at the time of application. Checks should be made payable to the University of Maine. This fee is refunded if the applicant is not admitted. When the applicant enters the University the fee will be applied toward payment of the first semester's tuition.

Application for Room

A deposit of $15.00 is required at the time application is made for a room. If a student is unable to enter, the deposit will be refunded provided the room is given up on or before August 1. If notice of withdrawal is given on or before September 1, $10.00 will be refunded. In case of withdrawal after September 1, the entire deposit is forfeited, but may be applied toward the payment for a room if the applicant enrolls in the University the following year.

When a student enters the University the deposit of $15.00 will be applied toward payment of dormitory charges.

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.

Rooms

The rooms in Mt. Vernon House, Balentine Hall, Oak Hall, and the middle section of Hannibal Hamlin Hall accommodate two students each. The north and south sections of Hannibal Hamlin Hall and Colvin Hall 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. Students furnish pillows, bed linen, and blankets.

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.

Applications for dormitory rooms should be addressed to the Registrar.

Gymnasium Uniform for Women

Every woman will be expected to purchase a prescribed uniform before coming to college. Information regarding uniform and place where it can be bought will be sent with application blanks. The approximate cost of the uniform is $15.00.

Deposits to Cover Expenses

The University *requires all students to pay in advance.* The payments indicated below are required at the beginning of each semester.

Deposit	Residents of Maine	Non-Residents of Maine
Tuition	$ 75.00	$125.00
Board and Room	161.50	161.50
Key Deposit (men only)	5.00	5.00
Military Deposit (required of all men taking military instruction)	30.00	30.00
Special Assessment for Athletics and Debating	5.25	5.25
Health Service Fee	1.00	1.00
Freshman Week (Freshmen only)	9.50	9.50
	$287.25	$337.25

For students who do not room and board in University halls the above amounts are reduced by $166.50.

All men taking military are required to make a deposit of $30.00 to cover cost of equipment. This deposit is returned at the end of the year, less a charge for lost or misused equipment.

For students in the Two-Year Course in Agriculture the deposit required for tuition is $35.00.

Communications

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

LOAN FUNDS

Kittredge Fund.—This fund, amounting to over $2200, was established by Nehemiah Kittredge, 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 prompt-

ly, and that the principal be returned from the first earnings after graduation. Individual loans are limited to $50.

Boston Alumnae Fund.—This is a fund now amounting to about $490, available for women of high scholastic standing who have completed at least two years of college work. Loans are made at the discretion of the faculty Committee on Honors, and shall in no case exceed $200. The recipient is required to sign a promissory note on which interest at the current rate is charged; she is expected to begin payment immediately upon leaving college and to complete the same within two years.

Maine Campus Fund.—This fund, the gift of the Maine *Campus,* amounting to $270 is loaned to juniors and seniors whose conduct and scholarship are satisfactory, preference being given to those interested in the literary activities of the University. Amount loaned is limited to $50 per person with interest at four per cent while in college and six per cent thereafter. Loans must have the endorsement of a satisfactory second party. Fund is in control of the Treasurer of the University, and the custodian, editor-in-chief and business manager of the *Campus.* Payment is to be made from first earnings after graduation or withdrawal from college.

Class of 1926 Loan Fund for Seniors.—This fund, the gift of the class of 1926, amounting to over $1100 is loaned to seniors of good scholastic standing during the last semester of their senior year. Amount loaned is $50 per person, exceptional cases to be allowed $100. Payment of such loan is to be made before March 1 of the following year, with interest at the prevailing rate. The fund is under the same control as the Kittredge Fund.

Women's Loan Fund.—This fund was inaugurated by the American Association of University Women, University of Maine Branch, in 1925. It provides for loans to undergraduate women of the University who have successfully completed one or more years of university work, and have been found by the University to be thoroly satisfactory in regard to character, scholarship, and general ability, and to be in genuine need. The fund amounts at present to $826, and loans to one student shall not exceed $100 a year. When the fund reaches $1000, the maximum loans shall automatically become $200 to one student per year. Loans bear interest at the rate of four per cent, and are made at the discretion of a committee of the local branch of the Association.

Mary S. Snow Memorial Fund.—Students and friends of Mary S. Snow, one-time superintendent of schools in Bangor, and later a leader in home economics education, have established as a tribute to her memory a loan fund to be used in helping earnest and deserving young women secure a home economics education at the University of Maine. The fund at pres-

ent amounts to $3300 and is administered by a committee consisting of the President of the University, the Dean of the College of Agriculture, and the head of the Home Economics Department. Loans may be granted to young women of such character and scholarship as give promise that the education thus made possible will be of genuine value to the students and to society. Interest is charged at the rate of three per cent while the student is in school, six per cent thereafter. Conditions of repayment shall be made for the individual student on the basis of her obligation to contribute to the education of other students by repayment as soon as possible after graduation.

American Pulp and Paper Mill Superintendents' Association Fund.—This fund amounts to $2500. The income is to be used to improve instruction and aid investigations in pulp and paper chemistry and technology, to develop coöperation between pulp and paper mill superintendents and young technical graduates, or to be loaned to meritorious students pursuing the pulp and paper course. A report is to be made annually to the Association.

Drummond Fund.—This fund of $1000 was established in memory of Frank Hayden Drummond, of Bangor, by his widow and children. It is in control of the President and the Treasurer of the University by whom it is loaned to needy students of good character who have attained an average of C or its equivalent. Loans shall bear interest at five per cent, and the principal must be paid from the first earnings after leaving the University.

Carleton Orchard Fund.—This fund originated in the gift to the State of Maine by James A. Gregory of one interest-bearing first mortgage bond for $1000, the interest on which was to be used for the promotion of scientific orcharding in Maine. At first administered by the Maine Department of Agriculture, the income from this bond was transferred in 1925 to the College of Agriculture of the University "for the assistance of needy students who shall be residents of the State of Maine, majoring in horticulture at the said college of agriculture." Loans are made at the discretion of a committee consisting of the head of the Department of Horticulture, the Dean of the College of Agriculture, and the Treasurer of the University. They bear interest at the current rate from the date of issue until repaid.

SCHOLARSHIPS AND PRIZES

Applications for scholarships, unless otherwise indicated, should be sent to the Chairman of the Committee on Honors before April 15. Application blanks may be obtained from the Chairman of the Committee on Honors or from the Registrar's office.

Trustee Scholarships. Three scholarships of the value of a year's tuition have been established by the Board of Trustees, one of which is awarded annually to a student in each of the three colleges composing the University. Beneficiaries of these scholarships must be residents of Maine. A fourth scholarship is awarded to a student in any of the three colleges without restriction as to residence. The chief consideration in making awards, but not necessarily the only one, is excellence of scholarship.

The Penobscot Valley Alumni Association Scholarships. Two scholarships of fifty dollars each are awarded to two male students selected by the President of the University, the executive secretary of the General Alumni Association and the faculty Committee on Honors, who are found to be worthy students, in need of financial assistance, and have satisfactory scholarship and conduct. If possible, students whose homes are in the Penobscot Valley shall be selected for the award.

William Emery Parker Scholarship. In memory of William Emery Parker, class of 1912, the income of a fund of one thousand dollars donated by Hosea B. Buck, class of 1893, is awarded annually to that male student of the sophomore or junior class who, in addition to being above the average rank scholastically, shows most clearly those qualities of manliness, honesty, and constructive effort which characterized the college career of the alumnus in whose memory the scholarship is given. It is to be awarded by the Committee on Honors with the approval and agreement of the President.

Women's Student Government Association Scholarships. Two scholarships of fifty dollars each are awarded annually to women students, who are found to be worthy, in need of financial assistance and to have satisfactory scholarship and conduct. Application for these scholarships must be in the hands of the President of the Student Council by April 1. The selection will be made by the Dean of Women, the Student Council, and the Faculty Committee on Honors.

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 Kidder Scholarship, thirty dollars, was endowed by Frank E. Kidder, Ph.D., Denver, Colorado, a graduate of the University in the class of 1879. This scholarship is awarded to a student whose rank excels in his junior year. The selection is made by the President and the faculty.

New York Alumni Association Scholarships.—Scholarship No. 1, fifty dollars, is offered for excellence in debating. In case the effort in debating does not justify this award in any year or years the amount shall be accumulative.

Scholarship No. 2, fifty dollars, is offered annually to encourage advancement and proficiency in English, particularly along the lines which will assist toward facility in correct, clear, direct, and efficient written and oral expression in later professional, commercial, and civil life. The candidates for this scholarship shall be juniors in the College of Technology. They shall assemble on an announced date and each one shall be required to compose an essay on a subject selected from a list of ten, of which five are chosen by the Department of English and five by the College of Technology. The award will be based upon the quality of the essay and the advancement which is indicated by the student's grade in courses in English. There shall be three judges, one of whom shall represent the College of Technology and the other two shall be selected by the Department of English.

Pittsburgh Alumni Association Scholarship, thirty dollars, awarded to a member of the junior class in the College of Technology. The ability of the student and his needs are considered in making this award. The selection is made by the President and the professors of the College of Technology.

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

The Joseph Rider Farrington Scholarship. The income of $1000, a gift of Arthur M., Edward H., Oliver C., Horace P., and Wallace R. Farrington, all graduates of the University of Maine and sons of Mr. and Mrs. Joseph Rider Farrington. The following order of preference is considered in awarding this scholarship: (a) To any direct descendant of Joseph Rider and Ellen Holyoke Farrington, or any one whom three of such descendants may select; (b) To any student bearing the surname Farrington or Holyoke; (c) To the student in the junior class of the College of Agriculture who attains the highest rank in studies and deportment during that year and who shall make application for the scholarship.

Stanley Plummer Scholarship. The income of $1000, the bequest of Colonel Stanley Plummer of Dexter, Maine. Awarded to needy and deserv-

ing students selected by the Trustees. Students born in Dexter, Maine, shall have the preference; but if there are none such, any needy and deserving students may be selected.

THE CHI OMEGA SOCIOLOGY PRIZE. In accordance with the national policy of the sorority, Chi Omega offers a twenty-five dollar prize to the woman student who secures the highest grade in the beginners' course in sociology. Her general deportment and interest in the study of sociology may also be considered in determining the award. This prize is intended for sophomore or junior students.

PRIZE OF THE CLASS OF 1873. The income of $1000, the gift of Russell W. Eaton, of Brunswick, a member of the class of 1873. Awarded annually to that member of the sophomore class who is able to show the greatest improvement in mechanical drawing during the first two years of his college course. It is expected that candidates for this prize shall have had no training in mechanical drawing previous to entering the University.

THE ELIZABETH ABBOTT BALENTINE SCHOLARSHIP was endowed by the Gamma chapter of Alpha Omicron Pi for a woman member of the current sophomore class to be determined by the President and the faculty. This scholarship is the equivalent of one semester's tuition. Both scholarship and individual need are to be considered in the award.

PHI SIGMA SCHOLARSHIP, thirty dollars, will be awarded each year to a sophomore of the current year. The award shall go toward payment of tuition and shall be made by the Phi Sigma Executive Committee in conference with the faculty of the Biology Department. The selection shall be made on the basis of proficiency, interest, general promise in biology, and financial need.

CENTRAL DISTRICT ALUMNI ASSOCIATION SCHOLARSHIP, thirty dollars, is awarded to a sophomore pursuing a regular curriculum whose deportment is satisfactory and who attains the highest rank of his class during the freshman year.

THE ALPHA OMICRON PI ALUMNAE PRIZE, ten dollars, given by the Bangor Alumnae Chapter of Alpha Omicron Pi. The award is made to a woman student showing the greatest improvement in her work during her freshman year. The record at the Registrar's office showing the comparison of grades of the fall semester with those of the spring semester will furnish the basis of award.

THE CLASS OF 1905 SCHOLARSHIP. The income of a one thousand dollar donation by members of that class shall be awarded to a man of the freshman class pursuing a regular curriculum, whose deportment is satisfactory, and who attains the highest rank in the mid-year examinations.

The Track Club Award, fifty dollars, is given each year by the Track Club to some member of the freshman class who needs help. He must show promise in track athletics his freshman year and have maintained a satisfactory scholarship. The awarding will be in the hands of a committee composed of the president of the Track Club, the coach of track athletics, and a member of the faculty to be chosen by the club, subject to the approval of the President. The winner will be given the award upon his return to college his sophomore year. Applications must be in writing and sent to either the coach of track athletics or the president of the Track Club before May 1 of each year.

The Deutscher Verein Prize, of ten dollars, is awarded for the best work in a competitive examination of students of elementary German.

The Henry L. Griffin Prize in English Composition, of ten dollars, in honor of the late Rev. Henry L. Griffin, of Bangor, is awarded by the Department of English for excellence in the freshman course in composition and literature.

Franklin Danforth Prize, ten dollars, the gift of the Hon. Edward F. Danforth, of 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.

Greek Culture Prize, ten dollars, the gift of the Hon. Edward F. Danforth of Skowhegan. Awarded annually to that member of the senior class who shall have given evidence of the best appreciation of the spirit of Greek culture.

The Kappa Psi Music Prize. A prize of ten dollars is awarded each year by the Kappa Psi sorority to a student in music. The award is determined by a committee consisting of the head of the Department of Music, a member of the Committee on Honors and a member of the Kappa Psi sorority.

The Washington Alumni Association Watch is presented to the member of the graduating class who, in the opinion of the faculty and students, has done the most for the University during his course. This award is made as the result of a secret ballot by the students and passed upon by the President and the faculty.

The Victoria Weeks Hacker Watch, the gift of the Portland Club of University of Maine Women, is presented to the woman member of the graduating class who, in the opinion of the faculty and students, has done the most for the University during her course.

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

Fraternity Scholarship Cup, presented to the University by the 1910 Senior Skull Society in 1910, and renewed in 1921 by the 1921 Skulls, 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, 1921 to 1931 inclusive, and the fraternity to which it is awarded the greatest number of times is to be its permanent owner.

The Pan Hellenic Sorority Cup is given to the sorority having the highest scholastic standing.

Agricultural Club Membership Cup is furnished by the Agricultural Club to be engraved each year with the numerals of that class which can show the best record of membership in the club.

The Charles Rice Cup, presented by the Kappa Sigma Fraternity in honor of the late Charles Anthony Rice, who was killed in service, is held for one year by the team winning the intra-mural track championship.

The Maine Campus Cup, the gift of the Campus Board of 1923-24, is awarded at Commencement to the fraternity whose freshman delegation has the highest standing in scholarship for the first semester.

Scholarships available for graduate students are described in the section of the catalog devoted to graduate study.

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.*

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 the School of Education, and from a minimum of seventeen hours to a maximum of twenty-two hours in the College of Technology and the College of Agriculture except that in the Department of Home Economics the limits are fifteen hours and twenty hours. 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.

Detailed information about the regulations affecting students is contained in a pamphlet which may be obtained at the office of the Registrar.

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 Arts in Education (B.A. in Ed.), or Bachelor of Science in Education (B.S. in Ed.) is conferred upon students who complete the prescribed work in the School of Education.

A minimum residence of one year is required for the attainment of any bachelor's degree. Except in the preparatory medical and legal curricula this pertains to the senior year.

The degrees of Master of Arts (M.A.) and Master of Science (M.S.) are granted for one year's graduate work completed with distinction.

DEGREES WITH DISTINCTION

Degrees with distinction are conferred at Commencement for the following attainments in rank:

Seniors in the Colleges of Agriculture and Technology having an average grade of 3.500 or above are graduated with highest distinction, 3.250 to 3.499 with high distinction, and 3.000 to 3.249 with distinction.

Seniors in the College of Arts and Sciences having an average grade of 3.750 or above are graduated with highest distinction, 3.500 to 3.749 with high distinction, and 3.250 to 3.499 with distinction.

The average grade is based on the work of the first three and one-half years.

SCHOLARSHIP HONORS

Scholarship honors are awarded to seniors whose scholarship places them in the first fifteen per cent of their class. The names of students winning these honors are printed in the catalog.

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.

A draft 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."

Organization of the University

The University is divided for purposes of administration by the Trustees into two divisions, the academic and the financial. The former is divided into the Colleges of Agriculture, Arts and Sciences, and Technology, The School of Education, and the Maine Agricultural Experiment Station. The policies of the University as a unit are determined by the Board of Trustees, the administrative officers, and the general faculty, but each division regulates those affairs which concern itself alone. In addition to the faculties of the colleges there are the Faculty of Graduate Study and the Faculty of the Summer Session.

College of Agriculture

Curricula in Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Botany, Dairy Husbandry, Entomology, Forestry, Home Economics, Horticulture, and Poultry Husbandry.

Two-Year Course in Agriculture.

Farm and Home Week.

Extension Lecture Courses.

College of Arts and Sciences

Major subjects may be selected in Chemistry, Economics and Sociology, Education, English, French, German, History and Government, Latin, Mathematics and Astronomy, Philosophy, Physics, Psychology, Public Speaking, Spanish and Italian, and Zoology.

College of Technology

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

School of Education

Professional training is offered for superintendents, supervisors and principals, and teachers of academic subjects in the secondary schools.

Maine Agricultural Experiment Station

Offices and principal laboratories at Orono; Highmoor Farm at Monmouth; Aroostook Farm at Presque Isle.

Faculty of Graduate Study

Courses leading to the degrees of Master of Arts and Master of Science have been organized in a considerable number of departments.

Summer Session

A summer session of six weeks is maintained by the University. Work is offered at present in seventeen departments.

College of Agriculture

FACULTY OF INSTRUCTION

Leon Stephen Merrill, M.D., Sc.D., *Dean*
Lucius Herbert Merrill, Sc.D., *Professor Emeritus of Biological and Agricultural Chemistry*
Fremont Lincoln Russell, B.S., V.S., *Professor of Bacteriology and Veterinary Science*
John Manvers Briscoe, M.F., *Professor of Forestry*
George Edward Simmons, M.S., D.Sc., *Professor of Agronomy*
Lamert Seymour Corbett, M.S., *Professor of Animal Industry*
Herbert Staples Hill, B.A., *Professor of Agricultural Education*
Charles Henry Merchant, Ph.D., *Professor of Agricultural Economics and Farm Management*
James Howard Waring, Ph.D., *Professor of Horticulture*
Pearl Stuart Greene, M.A., *Professor of Home Economics*
Ferdinand Henry Steinmetz, Ph.D., *Professor of Botany and Entomology*
Maurice Daniel Jones, M.S., *Professor of Agricultural Economics and Farm Management*
*Elmer Reeve Hitchner, M.S., *Professor of Bacteriology*
Llewellyn Morse Dorsey, M.S., *Professor of Dairy Husbandry*
Harry Woodbury Smith, M.S., *Professor of Biological and Agricultural Chemistry*
Marion Deyoe Sweetman, Ph.D., *Professor of Home Economics*
John Robert Smyth, M.S., *Associate Professor of Poultry Husbandry*
Chauncey Wallace Lord Chapman, M.S., *Assistant Professor of Forestry*
Leigh Philbrook Gardner, M.S., *Assistant Professor of Poultry Husbandry*
Harold Clayton Swift, M.S., *Assistant Professor of Agronomy*
Charles Orville Dirks, M.S., *Assistant Professor of Entomology*
Werner Thadeus Snyder, M.S., *Assistant Professor of Agronomy*
George Peter Steinbauer, Ph.D., *Assistant Professor of Botany*
Marguerite Ruth Musgrave, M.A., *Assistant Professor of Home Economics*

*On leave of absence, 1930-31.

Rena Campbell, M.S., *Assistant Professor of Home Economics*
Monroe Edward Freeman, M.S., *Assistant Professor of Biological and Agricultural Chemistry*
Robert Irving Ashman, M.F., *Assistant Professor of Forestry*

Howe Wiggin Hall, M.S., *Instructor in Animal Industry*
Fay Hyland, M.S., *Instructor in Botany*
Beulah Elizabeth Osgood, B.S., *Instructor in Home Economics*
Gladys Marie Gould, B.S., *Part-Time Instructor in Home Economics in Charge of Student Teaching*
Roger Clapp, B.S., *Instructor in Horticulture*
Richard McVay Riley, M.S., *Instructor in Horticulture*
Norman Callendar Laffer, B.S., *Instructor in Bacteriology*
Andrew Bartlett Welch, B.S., *Graduate Fellow in Animal Industry*
Kenneth Richardson Haskell, B.S., *Graduate Fellow in Agricultural Economics*
Irvin Carrol Mason, B.S., *Graduate Fellow in Botany and Entomology*

GENERAL INFORMATION

The College of Agriculture comprises the departments of Agricultural Economics and Farm Management, Agricultural Education, Agronomy, Animal Industry, Bacteriology and Veterinary Science, Biological and Agricultural Chemistry, Botany and Entomology, Forestry, Home Economics, Horticulture, and Extension Service. This college offers to young men and women an opportunity to secure a broad education and thoro training in the sciences and technics relating to the major course of study they may elect to pursue. It aims to prepare them for a life of usefulness as citizens of the State and for effective service in their chosen vocations or professions.

More specific and detailed information concerning the purposes of each major course of study offered by the college will be found in the description of the various curricula.

Each four-year curriculum in the College of Agriculture embraces 147 credit hours with the exception of the Home Economics curriculum for which 128 will be required beginning with the class of 1933. When one of these curricula is satisfactorily completed the student will receive the degree of Bachelor of Science (B.S.).

On entering either a four-year curriculum in agriculture or the two-year agricultural course a student is required to fill out a practical experi-

ence 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. Before receiving their degrees or certificates 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 majoring in Botany, Entomology, Forestry, or Home Economics.

Physical training is required in each semester of the first two years. No credit toward a degree is allowed for this work. Physical training is not required in the two-year agricultural curriculum.

Students in agriculture who contemplate entering experiment station chemical work should elect the courses offered by the Department of Biological and Agricultural Chemistry covering the qualitative and quantitative chemical analysis of feeds, fertilizers, and dairy products. They should also elect a preparatory course in quantitative chemical analysis.

Students desiring to specialize in the botanical or entomological aspects of Forestry may offer freshman and sophomore years in Forestry as equivalent to the first two years' work in Agriculture and register in the curriculum in Botany or Entomology during the junior or senior years.

A star (*) before the time designated for a course indicates that three or sometimes more hours of actual work are required to obtain a credit of one hour; a dagger (†) indicates that two hours of actual work are required to obtain a credit of one hour.

REGULAR CURRICULA AND COURSES OF INSTRUCTION

The courses of instruction are organized as follows:

1. Four-year agricultural curricula:
   Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Botany, Dairy Husbandry, Dairy Technology, Entomology,, Horticulture, and Poultry Husbandry.
2. Four-year Forestry curriculum:
3. Four-year Home Economics curriculum:
   Vocational Sequences
   1. Home Economics Education
   2. Extension-Home Demonstration or 4-H Club work
   3. Foods and Nutrition

4. Textiles and Clothing
5. Child Development and Training
6. Special Sequences: Home Economics Journalism, Household Equipment, Social Service, and others formulated to fit individual cases

4. The Two-Year Course in Agriculture
5. Farm and Home Week
6. Extension Lecture Courses

The Four-Year Agricultural Curricula

The four-year agricultural curricula are designed for those who wish to engage in the business of farming; for those contemplating the special fields of agricultural economics and farm management, agronomy and agricultural engineering, animal husbandry, botany, dairy husbandry, dairy technology, entomology, horticulture, and poultry husbandry; for those desiring to enter Federal or State agricultural research work; for those planning to prepare themselves for the teaching of agriculture and the allied sciences in secondary schools and colleges; and for those seeking to fit themselves to become agricultural extension agents or specialists in any of the various phases of agriculture. In addition to the specific fields mentioned above there are many other opportunities open to the college trained man in the agricultural and associated industries.

Certain studies are fundamental to all work in agricultural lines, and for this reason as many of these subjects as possible are offered in the first year, during which the student is necessarily given no choice of subjects. Beginning with the sophomore year each student should start specialization in one of the following major curricula: Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Botany, Dairy Husbandry, Dairy Technology, Entomology, Horticulture, or Poultry Husbandry; and at the beginning of the junior year he must establish a definite major course of study to be followed until the requirements for graduation will have been satisfied.

It should be noted that each major curriculum allows a student a number of elective hours. The elective subjects are selected with the advice of the major instructor. In view of the fact that the economic aspects of the agricultural industry are becoming more important each year, it is suggested that the student elect subjects in the field of agricultural economics in addition to those which may be required in his major curriculum; particularly is it suggested that he obtain as much information as he possibly can on the marketing of agricultural products. In the case of those students majoring

in Agricultural Economics opportunity is offered in the way of elective hours to obtain training in such of the agricultural production subjects as may be desired to furnish a basic production background.

Honor Course in Agriculture

Any student who has obtained an average grade of at least 3.25 in the courses offered by his major department during the first three years of his college course may register for honor courses in his major department or in an allied department during his senior year providing his average grade in such allied department is at least 3.25 in all subjects taken in that department. Such courses may be substituted for any elective course, the total number of credit hours not to exceed four. Such honor courses shall be designed especially to promote initiative and organizing ability in the student. The scope of such courses shall constitute a broad survey in the field selected for study and shall in no way be substituted for a thesis. The general plan shall be worked out by the head of the department in which the course is taken, and must be approved by the head of the student's major department.

Curriculum for the Freshman Year for All Students Taking Four-Year Curricula in Agriculture

Fall Semester

No.		Subject	Hours
Ag	11	Field Crops, 2 †2	3
Ch	5	Inorganic Chemistry, 2 †4	4
Eh	1	Exposition	3
Mt	1	Military, †3	1½
Ph	1	Types, Breeds, Mgt. of Poultry, 2 †2	3
Zo	1	General Zoology, 2 †4	4
Pt	1	Physical Education, 2	0
			18½

Spring Semester

No.		Subject	Hours
An	2	Types, Breeds, Farm Animals, 2 †2	3
Bt	2	General Botany, 2 †4	4
Ch	6	Inorganic Chemistry, 2†4	4
Eh	2a	Exposition	3
Ht	2	Tree Fruit Production, 2 *3	3
Mt	2	Military, †3	1½
Pt	2	Physical Education, 2	0
			18½

Curriculum for Students Specializing in Agricultural Economics and Farm Management

The curriculum in Agricultural Economics and Farm Management is planned to give the student a broad, comprehensive training in the economic principles of the production and marketing of agricultural products. The training in crops and livestock production, provided in this curriculum, is essential for a clear and proper understanding of the application of the principles of agricultural economics. The student may choose from the elective hours a sufficient amount of work in another department to prepare himself for a position in Agricultural Economics and Farm Management dealing with a particular group of agricultural products. The student upon completing this curriculum of study may engage in some phase of one of the main divisions in the field, such as: agricultural economics, farm management, agricultural marketing including coöperative marketing, agricultural statistics, or agricultural finance. Any one of these divisions offers many opportunities to the graduate.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Hours
Ag 1	Soils, 2 *3	3
An 3	Care, Feed, Mgt. of Live Stock, 3 †2	4
Bt 45	General Genetics	3
Dh 1	General Dairying, 2 †4	4
Es 1a	Principles of Economics	3
Mt 3	Military, †3	2
Pt 3	Physical Education, †2	0
		19

Spring Semester

No.	Subject	Hours
Ag 14	Field Crops (Corn) or in Fall Junior Year, 1 †2	15 2
Bc 8	Agricultural Chemistry	2
Fm 48	Agricultural Economics	3
Mt 4	Military, †3	2
Pt 4	Physical Education, †2	0
	Elective	9 or 11
		18

JUNIOR YEAR

Fall Semester			*Spring Semester*		
*Ag 15	Field Crops (Tubers), 1 †2	2	Fm 52	Farm Accounting, 1*6	3
Bv 3	Bacteriology	2	Fm 76	Agr. Marketing	3
Eh 5	Technical Composition	2		Elective	12
Fm 73	Adv. Agr. Economics	3			
Fm 75	Agricultural Statistics, 1 *3	2			
	Elective	8 or 10			
		19			18

*Not required if Ag 14 was taken in Sophomore Year.

SENIOR YEAR

No.	Subject	Hours	No.	Subject	Hours
Fm 77	Agricultural Finance	2	Fm 74	Farm Management, 3 *3	4
Fm 79	Coöperative Marketing	2	Fm 82	Current Economic Problems	1
Fm 81	Current Economic Problems	1	Fm 84	Thesis	3
Fm 83	Thesis	3	*Fm 86	Agr. Marketing	2
Fm 85	Agr. Marketing or 86 in Spring	2		Elective	8 or 10
Fm 87	Agricultural Prices	2			
	Elective	6			
		18			18

*Not required if Fm 85 was taken in Fall.

Curriculum for Students Specializing in Agricultural Education

In recent years there has grown a need in this State and a majority of the other States for young men especially trained to conduct agricultural courses in secondary schools. The Federal government, recognizing the im-

portance of teaching agriculture in secondary schools, has thru the Smith-Hughes Act made it possible for school boards to obtain Federal aid in this work. In order to receive this aid the teacher employed must be trained at an agricultural college following a specific agricultural education curriculum or teacher-training course, as it is called. There are two such teacher-training courses in the College of Agriculture. When these requirements have been met the graduate may become a candidate for appointment under the Smith-Hughes provisions as a teacher of agricultural subjects. It is a wise policy in any event for a student contemplating a career of teaching to follow the major agricultural teacher-training curriculum given below. For those students wishing to specialize in some other major curriculum but at the same time elect enough of the teacher-training curriculum to render themselves eligible to Smith-Hughes teaching positions, the following electives must be taken provided they are not required in their major curricula: Education 59 or Education 48; Agricultural Education 3; Agricultural Education 6; Farm Management 74; Dairy Husbandry 1; and Agronomy 34.

Students who elect either of the teacher-training courses must have had at least two years of practical farm work since their fourteenth birthday. One of these years must include all the year round experience. Experience on the home farm while attending school satisfies the requirement. Those who do not meet this requirement of practical experience will be allowed to take the course only with the understanding that they will be expected to get this experience before they will be allowed to teach.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.		Subject	Hours	No.		Subject	Hours
Ag	1	Soils, 2 *3	3	Bc	2	Biochemistry, 3 †4	5
An	3	Care, Feed, Mgt. of Live Stock, 3 †2	4	En	20	Gen'l Entomology, 2 †4	4
Bc	1	Organic Chemistry, 2 †2	3	Fm	48	Agricultural Economics	3
Mt	3	Military, †3	2	Mt	4	Military, †3	2
Pt	3	Physical Education, 2	0	Pt	4	Physical Education, 2	0
		Elective	3 or 4			Elective	5
		Option					
Dh	1	General Dairying, 2 †4	4				
		or					
Ht	1	Commercial Fruit Handling, 2 †2	3				
			19				19

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Hours	No.	Subject	Hours
Ag 33	Farm Structures, 2 *3	3	Ag 72	Farm Machinery, 2 *3	3
Bv 1	Bacteriology, †6	3	Bc 8	Agricultural Chemistry	2
Bv 3	Bacteriology	2	Bv 14	Veterinary Science	3
*Dh 1	General Dairying, 2 †4	4	Bv 16	Veterinary Science	1
Ed 59	Prin. Secondary Education	3	Ed 48	Methods of Teaching in Secondary Schools	3
Eh 5	Technical Composition	2	Ht 20	Vegetable Gardening, 2 †2	3
	Elective	2		Elective	2
		19			17

*Increase elective hours if taken in sophomore year.

No.	Subject	Hours	No.	Subject	Hours
Ae 3	Special Methods in Teaching Agriculture, 2 †2	3	Ae 4	Practice Teaching	4
Ag 3	Soil Fertility	2	Ae 6	Prin. Agr. Education	2
Ag 71	Farm Engineering, 2 *3	3	Ag 34	Farm Shop, †4	2
Fm 73	Advanced Agr. Economics	3	Fm 52	Farm Accounting, 1 *6	3
	Elective	5	Fm 74	Farm Management, 3 *3	4
		16			15

Curriculum for Students Specializing in Agronomy and Agricultural Engineering

Agronomy in a large sense is a study of the principles underlying modern methods of crop production, plant breeding, adaptation and care of the soil, the source and use of fertilizer materials, the management of the farm, and various phases of agricultural engineering. This curriculum provides a well-rounded training in these subjects, but does not neglect the other phases of agriculture such as stock raising, fruit and vegetable growing, biology, etc.

The graduate having followed this curriculum will find numerous fields of activity open to him; the more common of which are farming for him-

self, farm management positions, agricultural extension work, experiment-station investigational work, agricultural teaching, and opportunities in the various fertilizer and agricultural machinery industries.

With the consent of the head of the department substitutions may be made in case major students in Agronomy desire to specialize in Soil or Agricultural Engineering subjects instead of Crops providing plans are made early enough in the course for the student to take the subjects needed in their proper sequence.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Ag	1	Soils, 2 *3	3	Ag	16	Field Crops (Forage), 1 †2	2
An	3	Care, Feed, and Mgt. of Live Stock, 3 †2	4	Bc	2	Biochemistry, 3	4
Bc	1	Organic Chemistry, 2 †2	3	Bc	8	Agricultural Chemistry	2
Bt	45	General Genetics	3	En	20	Gen'l Entomology, 2 †4	4
Dh	1	General Dairying, 2 †4	4	Fm	48	Agricultural Economics	3
Mt	3	Military, †3	2	Mt	4	Military, †3	2
Pt	3	Physical Education, †2	0	Pt	4	Physical Education, †2	0
						Elective	2
			19				19

JUNIOR YEAR

No.		Subject	Hours	No.		Subject	Hours
Ag	15	Field Crops (Tubers), 1 †2	2	Ag	14	Field Crops (Corn), 1 †2	2
Bt	31	Plant Physiology, 2 †4	4	Ag	60	Field Crops (Crop Improvement)	2
Bv	1	Bacteriology, †6	3	Bt	36	Plant Pathology, 2 †4	4
Bv	3	Bacteriology	2	Fm	76	Agr. Marketing	3
Eh	5	Technical Composition	2			Elective	6
		Elective	5				
			18				17

SENIOR YEAR—1932

Fall Semester		*Spring Semester*	
Ag 3 Soil Fertility	2	Ag 20 Field Crops (Potato Diseases), 1 †2	2
Ag 71 Farm Engineering, 2 *3	3	Ag 72 Farm Machinery, 2 *3	3
Elective	12	Fm 52 Farm Accounting, 1 *6	3
		Fm 74 Farm Management, 3 *3	4
		Elective	3
	17		15

Curricula for Students Specializing in Animal Husbandry, Dairy Husbandry, Dairy Technology, or Poultry Husbandry

SOPHOMORE YEAR

No.	Subject	Hours	No.	Subject	Hours
Ag 1	Soils, 2 *3	3	Ag 16	Field Crops (Forage), 1 †2	2
An 3	Care, Feed, and Mgt. of Live Stock, 3 †2	4	Bc 2	Biochemistry, 3 †4	5
Bc 1	Organic Chemistry, 2 †2	3	En 20	Gen'l Entomology, 2 †4	4
Bt 45	General Genetics	3	Fm 48	Agricultural Economics	3
Dh 1	General Dairying, 2 †4	4	Mt 4	Military, †3	2
Mt 3	Military, †3	2	Pt 4	Physical Education, †2	0
Pt 3	Physical Education, †2	0		Elective	3
		19			19

ANIMAL HUSBANDRY

The curriculum in Animal Husbandry is so arranged that the student receives a comprehensive training in animal breeding, feeding, and management, consideration being given to the four chief groups of farm animals, cattle, horses, swine, and sheep. Because of the importance of crops to the maintenance of farm animals this curriculum embraces subjects relating to crop production and farm management. The student on completion of this curriculum may engage in the business of animal breeding, furthering the promotion of pure bred livestock utilization; he may enter special phases of animal industry, such as Federal extension, control and investigational lines;

he may become the superintendent of an animal breeding establishment; he may engage in college or university teaching of animal husbandry; or he may enter into any one of the great allied industries of animal industry, such as the meat packing business or the commercial feed business. The training he has received has furnished him with the necessary fundamental equipment to enable him to succeed.

JUNIOR YEAR

Fall Semester				*Spring Semester*			
No.		Subject	Hours	No.		Subject	Hours
Bc	9	Animal Biochemistry	2	An	52	Adv. Live Stock Judging and Management, †2	1
Bv	1	Bacteriology, †6	3	An	54	Adv. Live Stock Feeding	2
Bv	3	Bacteriology	2	Bv	14	Veterinary Science	3
Eh	5	Technical Composition	2	Bv	16	Veterinary Science	1
Zo	15	Vertebrate Zoology, 2 †4	4	Bv	52	Bacteriology, 1 †4	3
		Elective	5	Zo	18	Vertebrate Embryology, 2 †4	4
						Elective	4
			18				18

SENIOR YEAR—1932

Ag	3	Soil Fertility	2	Ag	72	Farm Machinery, 2 *3	3
Ag	71	Farm Engineering, 2 *3	3	An	60	Adv. Animal Breeding, 1 †2	2
An	53	Adv. Live Stock Feeding and Management	2	Fm	52	Farm Accounting, 1 *6	3
Bv	15	Veterinary Science	2			Elective	7
Bv	17	Veterinary Science	1				
Bv	19	Veterinary Science	2				
		Elective	5				
			17				15

DAIRY HUSBANDRY AND DAIRY TECHNOLOGY

These curricula are more specialized than that for Animal Husbandry in that dairy production and dairy manufactures are dealt with more specifi-

cally. The student pursuing one or the other of these curricula prepares himself to follow the business of dairy farming from the standpoint of efficient dairy-cattle breeding and efficient milk production, or some other phase of the dairy industry such as the market milk business, butter manufacturing, cheese manufacturing, condensed and powdered milk industry, and ice-cream manufacturing, each of which is constantly adding to its personnel young men who have received training similar to that offered in the Dairy Husbandry and Dairy Technology curricula. In addition to the foregoing there are many opportunities to follow special lines of endeavor, Federal, State, and commercial, all of which require specialized training in dairy production and dairy manufactures.

DAIRY HUSBANDRY

JUNIOR YEAR

Fall Semester				*Spring Semester*		
Bv	1	Bacteriology, †6	3	An 52	Adv. Live Stock Judging and Mgt., †2	1
Bv	3	Bacteriology	2	An 54	Adv. Animal Feeding	2
Bc	9	Animal Biochemistry	2	Bv 14	Veterinary Science	3
Dh	5	Market Milk, 2 †4	4	Bv 16	Veterinary Science	1
Eh	5	Technical Composition	2	Bv 52	Bacteriology, 1 †4	3
		Elective	5	Dh 2	Butter Making, 1 †4	3
					Elective	6
			18			18

SENIOR YEAR—1932

Ag	3	Soil Fertility	2	Ag 72	Farm Machinery, 2 *3	3
Ag	71	Farm Engineering, 2 *3	3	Bv 54	Bacteriology, 1 †4	3
Bv	15	Veterinary Science	2	Fm 52	Farm Accounting, 1 *6	3
Bv	17	Veterinary Science	1		Elective	7
Dh	3	Cheese Making, 2 *6	4			
Dh	51	Dairy Technology	3			
		Elective	2			
			17			16

DAIRY TECHNOLOGY

JUNIOR YEAR

Fall Semester

No.	Subject	Hours
Bv 1	Bacteriology, †6	3
Bv 3	Bacteriology	2
Dh 5	Market Milk, 2 †4	4
Eh 5	Technical Composition	2
	Elective	7
		18

Spring Semester

No.	Subject	Hours
Bv 52	Bacteriology, 1 †4	3
Dh 2	Buttermaking, 1 †4	3
Dh 4	Condensed Milk, 2 †4	4
Dh 6	Dairy Products Judging, †2	1
Fm 76	Agricultural Marketing	3
	Elective	4
		18

SENIOR YEAR

Dh 3	Cheese Making, 2 *6	4
Dh 51	Dairy Technology	3
Dh 63	Adv. Dairy Products Testing, †2	1
Es 9	Accounting, 2 †2	3
Fm 85	Agr. Marketing (Dairy & Poultry Products)	2
	Elective	5
		18

Bv 54	Dairy Bacteriology, 1 †4	3
Dh 58	Ice Cream Making, 2 †4	4
Dh 64	Adv. Dairy Products Testing, †2	1
Dh 66	Dairy Machinery, †2	1
Es 10	Accounting, 2 †2	3
	Elective	6
		18

POULTRY HUSBANDRY

The poultry industry of the United States has come to be recognized as one of the highest ranking agricultural industries and while it relies for its vastness on the widespread farm flock, nevertheless it offers abundant opportunities to men possessing special training in poultry breeding, feeding, and management. Commercial poultry raising calls for a specialized training in poultry husbandry and is becoming a business of large proportions. Many openings also occur in poultry extension work, either Federal or State, and also in the poultry supplies business. The curriculum in Poultry Hus-

bandry furnishes the necessary training for the student contemplating entrance into the fast growing poultry industry.

JUNIOR YEAR

Fall Semester

No.	Subject	Hours
Bc 9	Animal Biochemistry	2
Bv 1	Bacteriology, †6	3
Bv 3	Bacteriology	2
Eh 5	Technical Composition	2
Ph 3	Exhibition and Production Poultry Judging, 1 †2	2
Zo 15	Vertebrate Zoology, 2 †4	4
	Elective	3
		18

Spring Semester

No.	Subject	Hours
Bv 52	Bacteriology, 1 †4	3
Fm 76	Agr. Marketing	3
Ph 2	Poultry Breeding	2
Zo 18	Vertebrate Embryology, 2 †4	4
	Elective	6
		18

SENIOR YEAR—1932

Ag 3	Soil Fertility	2
Ag 71	Farm Engineering, 2 *3	3
Ph 5	Poultry Feeding	2
Ph 7	Poultry Literature	2
	Elective	8
		17

Ag 72	Farm Machinery, 2 *3	3
Bv 12	Veterinary Science	2
Fm 52	Farm Accounting, 1 *6	3
Ph 4	Incubation and Brooding, 2 †2	3
Ph 6	Poultry Farm Management, 1 †2	2
	Elective	3
		16

Curriculum for Students Specializing in Botany and Entomology

This curriculum is designed for those preparing themselves to engage in teaching or to enter the field of research in either botany or entomology. There is a constant demand for men and women trained in the applied as well as in the theoretical phases of plant and insect life. Students having a major interest in botany or entomology may arrange a special course of study with the instructor in charge, to be approved by the head of the depart-

ment, at the time of registration. Two years of French or German, or its equivalent are required. Students transferring at the beginning of the junior year will be guided by the curriculum given below:

SOPHOMORE YEAR

Fall Semester

No.	Subject	Hours	
Bc 1	Organic Chem., 2 †2	3	5
	Elective	2	
	or		
Ch 31	Qualitative Anal.	5	
Fr 3	Intermediate French,	3	5
	Elective	2	
	or		
Gm 1	First Y. German	5	
Ms 1	Trigonometry	2	
Ms 3	College Algebra	2	
Mt 3	Military, †3	2	
Pt 3	Physical Education, †2	0	
	Elective	2	
		18	

Spring Semester

No.	Subject	Hours	
Ch 40	Quantitative Analysis, 1 *8, or Elective	4	
Fr 4	Intermediate French,	3	5
	Elective	2	
	or		
Gm 2	First Y. German	5	
Mt 4	Military, †3	2	
Pt 4	Physical Education, †2	0	
	Elective	7	
		18	

JUNIOR YEAR

No.	Subject	Hours	
	Botany or Entomology	4	
Bv 3	Bacteriology	2	
Eh 5	Technical Composition	2	
Gy 5	Geology	3	
	Modern Language	3	
	Elective	5	
		19	

No.	Subject	Hours	
	Botany or Entomology	4	
Bt 36	Plant Pathology		4
	or		
	Elective		
Bv 2	Bacteriology, †6	3	
Eh 10	Modern Literature	2	
	Modern Language	2	
	Elective	4	
		19	

SENIOR YEAR—1932

Botany or Entomology	8	Botany or Entomology	8
Thesis or Elective	3	Thesis or Elective	3
Elective	5	Elective	5
	16		16

Curriculum for Students Specializing in Horticulture

The commercial production of fruits, vegetables, and flowers is well established in Maine, each being rather highly specialized in districts where climate, soil, or the convenience of a good market is particularly favorable. The beautification of the home grounds, and the designing, planting, and care of estate grounds, public grounds and parks, and the construction and care of golf courses are likewise important practical ends toward which college training in horticulture is found to be helpful.

The courses offered are designed to prepare those who pursue them either to engage independently in such occupations as have just been mentioned or to fill positions with others who are so engaged. The objectives include handling horticultural products and equipment, market inspection, nursery inspection, teaching agriculture in secondary schools, agricultural extension work, and civil service positions. Those who demonstrate superior capabilities will be encouraged to fit themselves thru graduate study to be college teachers and research workers in horticulture and related fields.

For graduation a minimum of twenty-five credit hours must be secured in the field of horticulture, and each student must complete at least one of the following groups as a minimum degree of specialization in pomology, ornamental horticulture, or vegetables: (1) Ht 1, 2, 3, and 10, and Fm 74; (2) Ht 5, 7, 8, and 54; (3) Ht 20, 21, and 55, and Fm 74. The department will attempt so to advise the students in the selection of elective courses that such abilities and strong interests as are early shown may be developed to the greatest extent possible, but not at the sacrifice of well-rounded development.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Hours
Ag 1	Soils, 2 *3	3
Bc 1	Organic Chemistry, 2 †2	3
Fm 75	Agr. Statistics, 1 *3	2
	and	
Ms 1	Trigonometry	2 } 4
	or	
Ms 3	College Algebra	2
Md 9	Agr. Drafting, †4	2
Mt 3	Military Training, †3	2
Pt 3	Physical Education, †2	0
	Elective	5
		19

Spring Semester

No.	Subject	Hours
Bc 2	Biochemistry, 3 †4	5
Bc 8	Agr. Chemistry	2
En 20	Gen'l Entomology, 2 †4	4
Fm 48	Agricultural Economics	3
Mt 4	Military, †3	2
Pt 4	Physical Education, †2	0
	Elective	3
		19

JUNIOR YEAR

Ag 71	Farm Engineering, 2 *3	3
Bt 31	Plant Physiology, 2 †4	4
Bv 3	Bacteriology	2
Eh 5	Technical Composition	2
	Horticulture	3
	Elective	5
		19

Bt 36	Plant Pathology, 2 †4	4
Bv 2	Bacteriology, †6	3
	Horticulture	6
	Elective	6
		19

SENIOR YEAR—1932

No.	Subject	Hours
Ag 3	Soil Fertility	2
Bt 45	General Genetics	3
Ht 3	Systematic Pomology	2 †2 3
	or	
Ht 5	Landscape Gardening	
Ht 51	Seminar	1
	Elective	8
		17

No.	Subject	Hours
Ht 50	Plant Improvement	3
Ht 52	Seminar	1
	Elective	11
		15

Curriculum in Forestry

Only the four-year undergraduate course is offered in Forestry. The curriculum for this course follows. It is arranged to meet the requirements of the National Committee of the Conference of Forest Schools, on standardization of instruction in forestry. Completion of the curriculum leads to the degree of Bachelor of Science in Forestry. It will enable the graduate to qualify for technical and administrative positions in professional forestry work, and will admit to advanced standing in post-graduate schools of forestry of high standing, if further and more advanced work is desired. It will also render a student eligible for the Civil Service examinations for the position of forest assistant in the United States Forest Service. Owing to the wide field covered by the curriculum, it offers an excellent basis for a broad and liberal education.

The first two years are given very largely to fundamental and auxiliary subjects, which are basic for a proper understanding of the more highly specialized work in technical forestry in the last two years.

Instruction in the department consists of lectures, recitations, laboratory and field work, the latter consuming a considerable portion of the scheduled time during the junior and senior years.

A camp course of eight weeks' practical experience is required of all seniors in the second half of the fall semester. This is given in the woods in coöperation with woods operations of the Great Northern Paper Company.

FRESHMAN YEAR

Fall Semester

No.		Subject	Hours
Ch	1	General Chemistry, 2 †4	4
Eh	1	Exposition	3
Fy	1	Economics of Forestry	2
Md	1	Fundamentals of Drafting, †4	2
Ms	9	Trigonometry	2
Mt	1	Military, *3	1½
Zo	1	General Zoology, 2 †4	4
Pt	1	Physical Education, †2	0
			18½

Spring Semester

No.		Subject	Hours
Bt	2	General Botany, 2 †4	4
Ch	2	General Chemistry, 2 †4	4
Eh	2a	Exposition	3
Md	2	Elementary Machine Drafting, †4	2
Ms	2a	Solid Geometry	2
Ms	10	Applications of Trigonometry	2
Mt	2	Military, *3	1½
Pt	2	Physical Education, †2	0
			18½

SOPHOMORE YEAR

Fall Semester

Ag	1	Soils, 2 *3	3
Bt	33	Forest Botany (Dendrology), 2 †4	4
Ce	1	Plane Surveying	3
Ce	3	Field Work and Plotting, *9	3
Eh	5	Technical Composition	2
Es	1b	Prin. of Economics	2
Mt	3	Military, †3	2
Pt	3	Physical Education, †2	0
			19

Spring Semester

Bt	34	Forest Botany (Physiography), 2 †4	4
Eh	10	Modern Literature	2
En	22	Forest Entomology, 2 †4	4
Es	2b	Prin. Economics	2
Ce	4	Field Work in Surveying, *9 (Last 6 wks.)	1
Fy	4	Wood Preservation	1
Fy	10	Forest Protection	1
Mt	4	Military, †3	2
Pt	4	Physical Education, †2	0
		Elective	2
			19

JUNIOR YEAR

No.		Subject	Hours
Bt	35	Plant Anatomy, 2 †4	4
Ce	21	Railroad Field Work, *3	1
Ce	23	Railroad Office Work, *3	1
Ce	27	Simple Curves and Earthwork	1
Fy	11	Forest Mensuration	2
Fy	13	Forest Mensuration Field Work, *6	2
Gy	5	Geology	3
Ht	5	Landscape Gardening, 2 †2	3
			17

No.		Subject	Hours
Bt	32	Plant Physiology, 2 †4	4
Ce	22	Advanced Surveying	1
Ce	24	Junior Field Work	1
Fy	6	Forest Mensuration	2
Fy	8	Forest Mensuration Field Work, *6	2
Ps	10	Meteorology	3
		Elective	6
			19

		First Half Semester:	
Fy	3	Lumber Industry	2
Fy	5	History of Forestry	1
Fy	9	Forest Products	1
Fy	15	Silviculture	1
Fy	17	Silviculture Field Work, *6	1
Fy	19	Lumbering	1
Fy	21	Lumbering Field Work, *6	1
		Second Half Semester (In Camp)	
Fy	31	Logging Engineering, *16	3
Fy	33	Forest Management, *16	3
Fy	35	Cruising and Mapping, *16	3
			17

Bt	42	Forest Pathology, 2 †4	4
Fy	12	Practice of Forestry	2
Fy	14	Nursery Practice, *6	2
Fy	16	Silviculture	2
*Fy	18	Advanced Nursery Practice, †8	2
Fy	20	Forest Finance	2
Fy	22	Policy and Laws	2
Fy	30	Wood Identification and Uses	2
		Elective	1
			19

*Last 9 weeks.

Curricula in Home Economics

The Department of Home Economics offers curricula based on a consideration of the problems of the contemporary home and responsibilities of the modern home maker. The basic curriculum requires foundation work in the physical and special sciences essential to the understanding of such problems and Home Economics courses applying these sciences to develop judgment and skill in solving them.

In addition each student is required to add to this basic course a vocational sequence which will prepare her for some one of the vocations for which the understanding of the modern home is essential or desirable. These sequences are listed below. As it is impossible in the limited time of classroom and laboratory to develop to a point of skill all the techniques necessary to success in any one of these vocations, the student is expected to make provision during her vacations, or during the school year, for developing the kinds and degrees of skill essential to beginning the vocation she has selected.

Each curriculum, also, includes in its total of 128 hours, 24 to 31 hours of electives.

Basic Curriculum in Home Economics

FRESHMAN YEAR

Fall Semester

No.	Subject	Hours
Ch 5	Inorganic Chemistry, 2 †4	4
Eh 1	Exposition	3
He 1	Textiles and Clothing, 2 †4	4
He 3	Design, 1 †2	3
Pe 1	Physical Education, †2	0
	Elective or Vocational sequence	2
		16

Spring Semester

No.	Subject	Hours
Ch 6	Inorganic Chemistry, 2 †4	4
Eh 2a	Exposition	3
He 2	Textiles and Clothing, 2 †4	4
Zo 2	Zoology, 2 †2	3
Pe 2	Physical Education, †2	0
	Elective or Vocational sequence	2
		16

SOPHOMORE YEAR

No.	Subject	Hours
Bc 3	Organic Chemistry, 3 †2	4
Es 1b	Principles of Economics	2
He 5	Foods, 2 †4	4
He 17	House Planning, Furnishing and Decorating, 2 †2	3
Py 1	General Psychology	3
Pe 3	Physical Education, †2	0
		16

No.	Subject	Hours
Bc 4	Biochemistry, 2 †4	4
He 6	Foods, 2 †4	4
He 8	Professional Lecture	1
Py 2	General Psychology	3
Zo 12	Human Physiology, 2 †4	4
Pe 4	Physical Education, †2	0
		16

JUNIOR YEAR

Bv 3	Bacteriology	2
Bv 5	Bacteriology, †2	1
Es 41	General Sociology	3
	Vocational sequence and Elective	10
		16

He 10	Sanitation and Public Health	3
He 14	The Preschool Child	3
Es 42	General Sociology	3
	Vocational sequence and Elective	7
		16

SENIOR YEAR

He 22	Household Administration	3	He 12 Household Management 4
Vocational sequence and Elective		13	Vocational sequence and Elective 12
		16	16

Vocational Sequences

Home Economics Education

To teach Home Economics in public schools in Maine, which receive State aid for their Home Economics program, it is necessary to hold the Special Home Economics Certificate.

The following courses, (22 hrs.) listed below in addition to the basic curriculum, fulfill the requirements for that certificate, also for the Secondary Professional Certificate. This curriculum, in addition, makes a teacher eligible, after two years' experience, for the Vocational Home Economics Certificate necessary to teach in the Federal-aided vocational home economics courses authorized by the Smith-Hughes and George-Reed Acts.

He 51, 52	Advanced Clothing	6 hrs.
He 54	Dietetics	4 hrs.
Ed 47 (48)	Methods	3 hrs.
Ed	Education	3 hrs.
He 56	Home Economics Ed.	3 hrs.
He 71 (72)	Supervised Teaching	3 hrs.
		22 hrs.

Other Vocational Sequences

For other vocational sequences, the student will select fifteen hours of work related to her vocational interest, from a sequence list of courses contributory to that vocation. These sequence lists will be furnished by the department.

The sequences offered are as follows:

Extension—for students interested in Home Demonstration or 4-H Club work

Foods and Nutrition—for students preparing for positions as hospital dietitians, Red Cross nutritionists, research workers in foods and nutrition, or home economists in commercial foods work

Textiles and Clothing—for students interested in the clothing, textile, or decoration field, either as research workers or as stylists, designers, buyers, or advertising copy writers

Child Development and Training—for students preparing to work in the new and rapidly expanding fields of nursery school, and parental education. Arrangements may be made for properly recommended students to do one semester's work in this field at the Merrill-Palmer School, Detroit, Michigan

Where vocational interests are not met by these groups, special sequences will be formulated to fit individual cases, such as home economics journalism, household equipment, and social service.

Special Courses in Agriculture

The Special Courses in Agriculture are for young men who cannot well spend four years in preparation, but who desire to secure special training in one of these lines. No fixed schedule of studies is prescribed, but students may elect along the line of horticulture, dairying, poultry management, farm management, and general agriculture.

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 only for students of unusual maturity (at least twenty-one years of age) 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.

Two-Year Course in Agriculture

This is a course of training for young men who wish to become practical farmers, farm superintendents, dairymen, poultrymen, fruit-growers, or gardeners, but who cannot devote time to high school or college training. Open to women.

The same equipment is used as in the four-year curricula, but the work is more elementary in nature. Most of the classes are separate and distinct from the four-year classes.

There are no entrance examinations required of those who desire to enter the Two-Year Course. Students over fifteen years of age who are prepared for advanced grammar or high-school work are eligible for registration.

The practical side of the 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 met the requirements.

Curriculum for Two-Year Course in Agriculture

FIRST YEAR

Fall Semester

Subject	Hours
Animal Husbandry, 2 †2	3
Business Arithmetic	2
English	3
Farm Botany, 1 †2	2
Farm Crops, 3 *3	4
Forge Work, *3	1
Fruit Handling, 2 *3	3
Poultry Husbandry, 2 †2	3
	21

Spring Semester

Subject	Hours
Carpentry, †4	2
Dairy Husbandry, 3 *3	4
English	3
Fruit Growing, 2 *3	3
Poultry Husbandry, 2 †2	3
Soils and Fertilizers, 3 *3	4
	19

SECOND YEAR

Fall Semester		*Spring Semester*	
Animal Husbandry, 2 †2	3	Animal Husbandry, 3 †2	4
English	2	English	2
Farm Engineering and Mechanics, 2 *3	3	Farm Chemistry	3
Farm Insects, 1 †2	2	Farm Crops	2
Farm Management, 2 *3	3	Farm Machinery, 2 *3	3
*Poultry Husbandry 2		Forestry	2
Vegetable Growing, 2 *3	3	*Poultry Husbandry, 2	
Veterinary Science	3	Small Fruit Culture and Plant Propagation, 2 *3	3
		Veterinary Science	3
	19		22

*Poultry Husbandry elective in second year.

DESCRIPTION OF SUBJECTS

Two-Year Course in Agriculture

The significance of a star (*) or a dagger (†) in the description of a course is explained on page 79.

First Year—Fall Semester

Animal Husbandry—Dairy Production.—A general survey of the field of dairy production and economic reasons for growth of the dairy industry. Breeds of dairy cattle, and their care, feed, and management. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Hall

Business Arithmetic.—A course in arithmetic based on the problems confronting the farmer in his business. *Two hours a week.* Mr. Swift

English.—Part of the time is devoted to a review of grammar and to the principles of effective writing, with attention also to spelling and punctuation. Weekly papers, chiefly expository, are required. During part of the year the third hour is devoted to the reading of two standard English novels. *Three hours a week.* English Department

Farm Botany.—Plant structure and tissues in their relation to plant growth and development and to agricultural practices. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Steinmetz

FARM CROPS.—Practices in growing crops under field conditions. Class room, *three hours a week;* laboratory, **three hours a week.* MR. SNYDER

FORGE WORK.—Forging; welding; tool steel work. **Three hours a week.* MR. DAVEE

FRUIT HANDLING.—Picking, packing, grading, storing, shipping, and marketing of fruit, particularly the apple. A survey is made of the principal apple producing regions and of the general status of the industry. A small amount of systematic study of fruits and some fruit judging are included. Classroom, *two hours a week;* laboratory, **three hours a week.* MR. RILEY

POULTRY HUSBANDRY.—Origin and development of types, breeds, and varieties of poultry; care, feed, and management; housing and house construction; breeding, incubation, and brooding; and marketing poultry products. Laboratory practice in judging poultry for exhibition and egg production. Judging, candling, grading, and packing eggs. Killing, picking, and packing poultry. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. GARDNER

FIRST YEAR—SPRING SEMESTER

CARPENTRY—Graded exercises in woodworking designed to familiarize the student with tools used in modern woodworking practice and to give him experience in working from dimensioned drawings. †*Four hours a week.* MR. SIMMONS, MR. SWIFT

DAIRY HUSBANDRY—GENERAL DAIRYING.—Milk secretion and composition; testing of milk and milk products; sanitary production and handling of milk from farm to consumer; cream separation; and buttermaking. Classroom, *three hours a week;* laboratory, **three hours a week.* MR. WELCH

ENGLISH.—A continuation of the work of the fall. *Three hours a week.* ENGLISH DEPARTMENT

FRUIT GROWING.—Principles and practices which should be followed in choosing an orchard site, and in the subsequent planting; and culture, pest control, and other care leading to the production of profitable crops. Classroom, *two hours a week;* laboratory, **three hours a week.* MR. RILEY

POULTRY HUSBANDRY.—A continuation of the course given in the fall semester. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. GARDNER

SOILS AND FERTILIZERS.—Properties, management and fertilization of soils in relation to fitting them for production of crops. Classroom, *three hours a week;* laboratory, **three hours a week.* MR. SWIFT

Second Year—Fall Semester

Animal Husbandry—General Animal Husbandry.—Breeds, and care, feed, and management of horses, beef cattle, sheep, and swine. Laboratory work in judging horses, sheep, and swine. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Hall

English.—Instruction in practical uses of English, including business correspondence, with as much review of grammar as seems necessary. *Two hours a week.* English Department

Farm Engineering and Mechanics.—Running farm lines, laying out drainage systems, and planning farm buildings and conveniences. Classroom, *two hours a week;* laboratory, **three hours a week.*
Mr. Simmons, Mr. Swift

Farm Insects.—A practical study of insects in their economic relationships to farm plants and farm animals. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Dirks

Farm Management.—Factors that affect the profitable operation of the farm as a business unit including size of business; labor efficiency; crop rotation; farm layout; and production costs. Individual farming systems are studied. Classroom, *two hours a week;* laboratory, **three hours a week.*
Mr. Jones

*Poultry Husbandry—Poultry Management.—A general consideration of poultry management with especial reference to sanitation and disease. *Two hours a week.* Mr. Gardner

Vegetable Growing.—Production of vegetables for home use. Important commercial vegetables of New England. Handling of forcers, growing of seedlings, marketing, and other topics are included in as much detail as time will permit. Classroom, *two hours a week;* laboratory, **three hours a week.* Mr. Riley

Veterinary Science.—A lecture course illustrated by models, prepared specimens, and living animals. Designed to increase the student's knowledge of the anatomy and physiology of domestic animals. *Three hours a week.*
Mr. Russell

Second Year—Spring Semester

Animal Husbandry—Feeding Livestock.—General principles underlying feeding of livestock; composition and characteristics of feed stuffs;

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*Poultry Husbandry is elective in second year.

calculating rations; and the best practices in feeding farm animals. Classroom, *three hours a week;* laboratory, †*two hours a week.* MR. HALL

ENGLISH.—A continuation, including reports, abstracts, and oral composition based on agricultural material. *Two hours a week.*

ENGLISH DEPARTMENT

FARM CROPS.—Grass and forage plants, their culture and uses. *Two hours a week.* MR. SNYDER

FARM MACHINERY.—A course given to acquaint the student with the machinery adapted to farm use. Classroom, *two hours a week;* laboratory, **three hours a week.* MR. SIMMONS, MR. SWIFT

FARM CHEMISTRY.—A review of general chemistry; chemistry of plant and animal life as particularly related to agriculture; and brief consideration of soil chemistry. *Three hours a week.* MR. FREEMAN

FORESTRY.—The general principles of forestry with special reference and application to the farm woodlands, particularly in this region. Lectures and textbook work in elementary systems of cutting, estimating, protection, and reforestation. *Two hours a week.* MR. CHAPMAN

*POULTRY HUSBANDRY—MARKETING POULTRY.—Common practices in handling, shipping, and marketing of poultry and poultry products. *Two hours a week.* MR. GARDNER

SMALL FRUIT CULTURE AND PLANT PROPAGATION.—Strawberries, raspberries, blackberries, blueberries, cranberries, grapes, and some other fruits of minor importance in the State. Production and disposal of the crops are considered. Instruction is given in general propagation of plants. Classroom, *two hours a week;* laboratory, **three hours a week.* MR. RILEY

VETERINARY SCIENCE.—Common diseases of farm animals. Lectures and practical experience in caring for sick animals. The prevention and early recognition of disease and nursing of sick animals is given particular consideration. *Three hours a week.* MR. RUSSELL

Farm and Home 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, "Farm and Home 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 prob-

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*Poultry Husbandry in second year is elective.

lems of rural betterment. Considerable emphasis is placed on agricultural marketing problems peculiar to Maine. The homemaking program includes the various phases of home management and is of interest to both rural and urban homemakers. Dates and programs may be secured each year by addressing the College of Agriculture.

The Extension Service

The Extension Service is organized as a department of the College of Agriculture. It operates under the provisions of the Smith-Lever and Capper-Ketcham Acts, receiving its funds from State and Federal sources.

Its personnel is made up of two groups of agents. One group, the County Extension Agents, consists of agricultural agents, home demonstration agents, and club agents, having their headquarters within the counties in which they serve. The other group, the State Agent force, consists of a limited number of specialists and leaders having their headquarters at the University but working with and assisting the County Extension Agents.

The Extension Service thru these men and women gives direct assistance to people living on the farms and in the rural and urban homes of this state. The Farm Bureau, an organization having a membership of more than 14,000 men and women, coöperates with the Extension Service in the determination and development of its county and community programs of work.

Extension 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.

CORRESPONDENCE SERVICE

It is recognized that a letter is a poor substitute for a personal conference in dealing with perplexing problems with which people are constantly confronted in the vocations of agriculture, forestry, and home economics, but the teachers in all departments of the college are always ready to furnish information dealing with these problems and thus render the greatest possible service to the people of the State. The College of Agriculture, therefore, welcomes inquiries on practical agricultural, forestry, and

home economics topics. Extension bulletins dealing with different phases of these subjects are published at frequent intervals thruout the year and will be sent without cost to persons applying for them. A list of bulletins and circulars available for distribution will be forwarded on request.

Departments of Instruction

NOTE.—A star (*) before the time designated for a course indicates that three or sometimes more hours of actual work are required to obtain credit for one hour; a dagger (†) indicates that two hours are required to obtain this credit.

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 51-100 are for graduates and undergraduates; courses numbered above 100 are primarily for graduates.

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

PROFESSOR MERCHANT; PROFESSOR JONES

47. ECONOMIC GEOGRAPHY.—A lecture course covering the agricultural regions of the world and more especially of the United States. The reasons why, both physical and economic, production of our agricultural commodities has become concentrated in certain areas and the possible expansion or contraction of production within these areas. *One hour a week.* MR. JONES

48. AGRICULTURAL ECONOMICS.—A general introductory course in the principles of economics as applied to agriculture. The following subjects are considered: development of commercial agriculture, price making forces, production, land tenure, land policies, farm capital, credit, farm labor, marketing, foreign trade, tariff, taxation, and farm income. This course is intended to give a broad fundamental training in the subject, and for those majoring in the department a foundation for further study. *Three hours a week.* MR. JONES

52. FARM ACCOUNTING.—All forms of farm records: farm inventories, cash accounts, single-enterprise cost accounts, complete farm cost accounting system, and miscellaneous records. Special emphasis is given to the interpretation of results and their practical application in the management of farms. Classroom, *one hour a week;* laboratory, **six hours a week.*

MR. JONES

73. ADVANCED AGRICULTURAL ECONOMICS.—An advanced course in the more important economic problems in agriculture, such as, farm labor; farm equipment; farm machinery; land ownership; land tenure; rent and systems

of renting; taxation; risk; price fluctuations; speculation; insurance; transportation and distribution problems; general problems in agricultural credit; general problems in storage; protective tariff; foreign competition; county agent and farm bureau; and State and Federal aid. Prerequisite, Course 48. *Three hours a week.* Mr. Jones

74. Farm Management.—Types of farming; farming as a business; size of business; balance; production rates; labor efficiency; crop rotations; machinery; farm layout; building arrangement; farm credit and its uses; choosing and buying a farm; ways of starting to farm; and study of farm organization and management of specific farms in the vicinity. Classroom, *three hours a week;* laboratory, **three hours a week.* Mr. Jones

75. Agricultural Statistics.—An elementary course in principles involved in collection, analysis, and interpretation of agricultural statistics. The laboratory work consists of practical problems in frequency distribution; averages; measurements of dispersion; measurements of trends, seasonal variations, and cyclical fluctuations; simple index numbers; simple linear and non-linear correlations; and standard and probable errors. Classroom, *one hour a week;* laboratory, **three hours a week.* Mr. Merchant

76. Agricultural Marketing.—Marketing of the more important agricultural products. The first part of the course deals with the economic principles of present marketing structure and its operation. The latter part involves the study of distribution and marketing of potatoes, apples, wheat, wool, hay, peaches, tobacco, truck crops, dairy products, poultry and poultry products, beef cattle, sheep, and hogs. The marketing of the more important agricultural products produced in Maine is emphasized. One week is devoted to study of the principles of coöperative marketing. *Three hours a week.*

Mr. Merchant

77. Agricultural Finance.—The farmers' credit problems including short time, intermediate, and long time credit. Special attention is given to study of the Federal Reserve System, Intermediate Credit System, and Federal Farm Loan Act. The material offered in the course is treated from the individual farmer's standpoint and from a national basis. *Two hours a week.*

Mr. Merchant

79. Cooperative Marketing.—Principles involved in coöperative organizations including the more important factors affecting the efficiency and success of coöperative organizations, such as: volume of business, capital and finance, management and price policies. The history, organization, and management of coöperative associations marketing the more important agricultural products. *Two hours a week.* Mr. Merchant

81, 82. Current Economic Problems.—Individual study of some of the more important current economic problems in agriculture. Problems in the field of agricultural economics and farm management are given attention in the fall semester. In the spring semester problems in marketing, agricultural credit, and agricultural statistics are considered. Open to senior students who have had considerable work in the department. *One hour a week.* Mr. Jones, Mr. Merchant

83, 84. Thesis.—All senior major students of the department are required to prepare a comprehensive thesis on a problem in agricultural economics, farm management, marketing, finance, and statistics or prices. *Three hours a week.* Mr. Jones, Mr. Merchant

85. Agricultural Marketing (Dairy and Poultry Products).—A specialized course in the economic factors involved in marketing dairy and poultry products in New England. Production; regional competition; grades; containers; storage; transportation; finance; sales methods; foreign trade; tariff; surplus; demand, price, and methods of price determination; and the costs of marketing are considered. Prerequisites, Courses 48 and 76. *Two hours a week.* Mr. Merchant

86. Agricultural Marketing (Fruits and Vegetables).—A specialized course in the economic factors involved in marketing apples, potatoes, and other important fruits and vegetables grown in New England. The topics considered: production; regional competition; grades; containers; storage; transportation; finance; sales methods and the costs of marketing. Prerequisites, Courses 48 and 76. *Two hours a week.* Mr. Merchant

87. Agricultural Prices.—Prices of agricultural commodities produced in Maine and competing areas. The underlying factors causing price changes, including long-time trends, seasonal variations, and cyclical fluctuations. Prerequisites, Courses 48 and 75. *Two hours a week.* Mr. Jones

101. Production Costs.—Cost of producing important farm commodities in Maine and in competing areas; relation of cost of production to price; and efficiency of production under varying economic conditions. Prerequisite, Course 52. Time and hours arranged. Mr. Jones

102. Advanced Agricultural Statistics.—A continuation of Course 75 giving special attention to the methods and practical application of correlation analysis involving two or more variables; multiple correlation; and linear and curvilinear relationships. Prerequisite, Course 75. Time and hours arranged. Given in alternate years; not given in 1931-32.

Mr. Merchant

103. Advanced Farm Management.—A continuation of Course 74 with special emphasis on the organization and management of specified types of farms under certain economic conditions, farm prices, and labor efficiency.

The student is given an opportunity for study along some line in which he has a special interest. Prerequisite, Course 74. Time and hours arranged.

Mr. Jones

104. Advanced Agricultural Marketing.—Advanced work in the marketing of a specific agricultural commodity. Special emphasis is given to marketing potatoes, apples, poultry, eggs, milk, butter, and cheese. Problem method is followed. Prerequisite, permission to register. Time and hours arranged. Given in alternate years; not given in 1932-33.

Mr. Merchant

AGRICULTURAL EDUCATION

Professor Hill

3. Special Methods in Teaching Agriculture.—The following topics are given consideration: The Smith-Hughes Act; the agricultural curriculum; seasonal sequence of topics; lesson plans; supervised study; laboratory work; field trips; room and equipment; supervised practical work; and records. Classroom, *two hours a week;* laboratory, †*two hours a week.*

4. Practice Teaching.—During the first six weeks of the spring semester the seniors are 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 are given an allowance to pay for their traveling expenses and board. *Four hours credit.*

6. Principles of Agricultural Education.—History of agricultural education; a study of the purposes of agricultural education; types of schools; the rural school; consolidation of schools; the agricultural college; the extension service; and prevocational agriculture. *Two hours a week.*

AGRONOMY

Professor Simmons; Assistant Professor Swift; Assistant Professor Snyder

Soils and Fertilizers

1. Soils.—Origin, types, physical properties, moisture content, and distribution of soils, and their relation to crop production. Fundamental principles underlying soil management for soil conservation and improvement. Classroom, *two hours a week;* laboratory, **three hours a week.*

Mr. Swift

3. Soil Fertility.—Stable manures; green manures; commercial fertilizers; and soil amendments. A study also of soil organisms affecting the plant food in soil. *Two hours a week.* Mr. Swift

51. Soil Surveying and Mapping.—Soil types, principles of correlation, and methods of soil surveying and mapping. Classroom, *two hours a week;* laboratory, **three hours a week.* Mr. Swift

54. Soil Fertility.—Soil improvement investigation. A review of experimental work in this country and abroad. Application of these results to soil improvement and crop production problems. Prerequisites, Courses 1 and 3. *Two hours a week.* Mr. Swift

Agricultural Engineering

32. Farm Mechanics.—Simpler laws of mechanics as applied to farm implements, farm machinery, heating, lighting, and water supply. Classroom, *two hours a week;* laboratory, **three hours a week.*
Mr. Simmons, Mr. Swift

33. Farm Structures.—Location, planning, designing, and construction of farm buildings; water system; sewage disposal; and concrete construction on the farm. Classroom, *two hours a week;* laboratory, **three hours a week.* Mr. Simmons, Mr. Swift

34. Farm Shop.—Training in use of tools and equipment for ordinary construction and repair work found necessary on the farm. Laboratory, †*four hours a week.* Mr. Simmons, Mr. Swift

71. Farm Engineering.—Farm surveying and leveling; plotting of farms and measurements of land; study of drainage; estimating the investment and returns for a system of drainage; roads; and road materials. Classroom, *two hours a week;* laboratory, **three hours a week.*
Mr. Simmons, Mr. Swift

72. Farm Machinery.—Machines for the farm, their operation, efficiency, and adjustment. Demonstrations and tests are made with various machines and implements. Classroom, *two hours a week;* laboratory, **three hours a week.* Mr. Simmons, Mr. Swift

74. Farm Power.—Application of power to farm operations; operation and care of various forms of motors used for agricultural purposes. Animal power and other motor powers. The gas engine is studied in the laboratory. Classroom, *two hours a week;* laboratory, **three hours a week.*
Mr. Simmons, Mr. Swift

81, 82. Problems in Agricultural Engineering.—Credit arranged.
Mr. Simmons

Crops

11. Field Crops.—Important cereal, grass, forage, and root crops, and their adaptation to systems of rotation, culture, and uses, with special reference to New England conditions. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Snyder

12. Field Crops.—Seed and grain identification; improvement by grading; testing; selecting; and preparing seed for planting. A collection of weeds and their seeds are required. †*Four hours a week.* Mr. Snyder

14. Field Crops. Corn.—Production of corn and care and marketing of the crop. Types and varieties of both field and sweet corn are considered. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Snyder

15. Field Crops. Tubers.—Production, storage, and marketing of potatoes. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Snyder

16. Field Crops. Forage Crops.—Forage plants, roots, grasses, soiling crops; and hay crop production and grading for market. Special consideration is given to their adaptation to local conditions. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Snyder

20. Field Crops. Potato Diseases.—Identification of all the important potato diseases, their effect upon yield and prevention methods. For students who have completed Course 15. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Snyder

60. Field Crops. Crop Improvement.—Principles and methods involved in field crop improvement. Work of experiment stations in this country and abroad is reviewed. Prerequisites, Courses 11 and 12. *Two hours a week.* Mr. Snyder

62, 63. Advanced Field Crops.—For advanced or graduate students preparing for experimental work, teaching, or plant breeding. 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.* Mr. Snyder

65, 66. Seminar.—Study of recent literature, problems, and experiments pertaining to agronomy and agricultural engineering. *One hour a week.* Mr. Simmons, Mr. Swift, Mr. Snyder

67, 68. Thesis.—*Three hours a week.*

ANIMAL INDUSTRY

PROFESSOR CORBETT; PROFESSOR DORSEY; ASSOCIATE PROFESSOR SMYTH; ASSISTANT PROFESSOR GARDNER; MR. HALL; MR. WELCH

Animal Husbandry

2. TYPES AND BREEDS OF FARM ANIMALS.—Types and breeds of farm animals. History, development, and characteristics of farm animals. The laboratory acquaints the student with the use of score cards, comparative judging, and the selection of breeding stock. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. CORBETT, MR. HALL

3. CARE, FEED, AND MANAGEMENT OF LIVE STOCK.—Selection, breeding, growing, and maintenance of horses, cattle, sheep, and swine. Consideration is given to general principles of nutrition as applied to live stock, composition of feed stuffs, comparison and use of feeding standards, and calculating rations. Prerequisite, Course 2. Classroom, *three hours a week;* laboratory, †*two hours a week.* MR. CORBETT, MR. HALL

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 show ring and market. In so far as it is practicable, visits will be made to live-stock farms. †*Two hours a week.* MR. CORBETT, MR. HALL

54. ADVANCED LIVE STOCK FEEDING AND MANAGEMENT.—Nutrition and feeding experiments, as well as the methods and practices of the most successful feeders in production of milk, meat, and rearing of horses. Prerequisite, Course 3. *Two hours a week.* MR. CORBETT

55. ADVANCED LIVE STOCK FEEDING.—A continuation of Course 54. *Two hours a week.* MR. CORBETT

57, 58. PROBLEMS IN ANIMAL HUSBANDRY.—Credit arranged. MR. CORBETT

60. ADVANCED ANIMAL BREEDING.—Principles and theories of breeding as applied to the live stock industry; study of pedigrees and records using the breed herd books; and economic study of the generative systems of domestic animals. Prerequisites, Course 3, and Veterinary Science 15. Classroom, *one hour a week;* laboratory, †*two hours a week.* MR. CORBETT, MR. HALL

64. SEMINAR.—Preparation and presentation of papers dealing with topics in the field of Animal Husbandry. *One hour a week.* MR. CORBETT, MR. HALL

65. Advanced Animal Industry.—Market classes and types; pasture and feed lot management; and farm and packing house methods of preparing animal products for the market. Prerequisite, Course 3. *Two hours a week.*
Mr. Corbett

Dairy Husbandry

1. General Dairying.—Milk, its secretion, composition, properties, pasteurization, and separation. Dairy practices in producing and handling milk and cream. Dairy equipment; use of common dairy machinery. Testing dairy products for fat (Babcock method), acidity, total solids, and common adulterations. Classroom, *two hours a week;* laboratory, †*four hours a week.*
Mr. Dorsey, Mr. Welch

2. Butter Making.—Creamery butter industry. Starter making, cream ripening, churning, and preparing butter for market. Prerequisite, Course 1. Classroom, *one hour a week;* laboratory, †*four hours a week.*
Mr. Dorsey, Mr. Welch

3. Cheese Making.—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 1. Classroom, *two hours a week;* laboratory, **six hours a week.*
Mr. Dorsey, Mr. Welch

4. Condensed Milk.—Manufacture of unsweetened and sweetened condensed milk, and milk powder. Sanitary control of milk supply, factory methods, defects in products, and economic phases of the industry. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, †*four hours a week.*
Mr. Dorsey

5. Market Milk.—The market milk industry from standpoints of production, supply, sanitary control, transportation, processing, delivery, organization, and economic aspects. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Dorsey

6. Judging Milk and Milk Products.—Study and practice of methods employed in scoring and judging milk and milk products. Prerequisite, Course 1. Laboratory, †*two hours a week.* Mr. Dorsey

51. Dairy Technology.—Milk products and by-products, methods of manufacture and processing, and scrutiny of recent literature relating to advances in dairy technology. Lectures, and assigned readings. Prerequisite, Course 1. *Three hours a week.* Mr. Dorsey

53, 54. Problems in Dairy Husbandry.—Credit arranged.
Mr. Dorsey

58. Ice Cream Making.—Manufacture of ice cream and ices. Prerequisite, Course 51. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Dorsey

63, 64. Advanced Dairy Products Testing.—Various methods of testing dairy products and the practical application of such new tests as may be developed from time to time. Special attention is given to the Mojonnier test. Prerequisite, Course 51. Open to senior major students in the Department of Animal Industry and to graduate students. Laboratory, †*two hours a week.* Mr. Dorsey

66. Dairy Machinery.—Milk and milk products machinery, accessory machinery, and plant layout. Prerequisite, Course 51. Laboratory, †*two hours a week.* Mr. Dorsey

Poultry Husbandry

1. Types, Breeds, and Management of Poultry.—Origin and development of types, breeds, and varieties of fowl; general care, feed, and management of farm poultry; and marketing of poultry products. Laboratory exercises include practice in poultry management, poultry judging, and preparation of poultry products for market. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Smyth

2. Poultry Breeding.—Principles of breeding as applied to poultry; inheritance of egg productivity; systems of breeding; and study of pedigrees and breeding results. Some time is given to a study of methods used by successful poultry breeders. Classroom, *two hours a week.* Prerequisite, Course 1. Mr. Smyth

3. Exhibition and Production Poultry Judging.—Selection and mating of fancy and utility poultry. Laboratory practice in judging fancy and utility poultry, and a study of the standard requirements of the breeds. Classroom, *one hour a week;* laboratory, †*two hours a week.* Prerequisite, Course 1. Mr. Smyth

4. Incubation and Brooding.—Principles of incubation and brooding. Laboratory practice in incubator and brooder management. Classroom, *two hours a week;* laboratory, †*two hours a week.* Prerequisite, Course 1. Mr. Smyth

5. Poultry Feeding.—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. Classroom, *two hours a week.* Prerequisite, Course 1. Mr. Gardner

6. Poultry Farm Management.—The business of poultry farming; systems and operations in use on large poultry farms; planning of specialized

poultry farms. In so far as is practicable, visits will be made to poultry farms. Classroom, *one hour a week;* laboratory, †*two hours a week.* Prerequisites, Courses 1, 2, 3, and 5. MR. GARDNER

7. POULTRY LITERATURE.—A study of literature giving the results of experimental work with poultry. Prerequisites, Courses 1, 2, and 3. *Two hours a week.* MR. GARDNER

51, 52. PROBLEMS IN POULTRY HUSBANDRY.—Credit arranged. MR. SMYTH

BACTERIOLOGY AND VETERINARY SCIENCE

PROFESSOR RUSSELL; *PROFESSOR HITCHNER; MR. LAFFER

Bacteriology

1. BACTERIOLOGY.—A laboratory course in general bacteriology. Open to all students. The work includes the preparation of the usual culture media and study of morphological and biological characteristics of typical bacteria. Some outside reading is required. Course 3 must be taken in conjunction. †*Six hours a week.* MR. HITCHNER, MR. LAFFER

2. BACTERIOLOGY.—Similar to Course 1. Offered for students in the College of Technology and others who may elect it. Special emphasis is placed upon bacteriology of water and sewage. Prerequisite, Course 3. †*Six hours a week.* MR. HITCHNER, MR. LAFFER

3. BACTERIOLOGY.—A lecture course open to all students. It must be elected by students taking Course 1. Subjects considered include the history of bacteriology; classification and biological characteristics of bacteria; bacteria in air, water, soil, and dairy products; relation of bacteria to health and disease; and immunity. *Two hours a week.* MR. HITCHNER

4. ELEMENTARY SANITARY BACTERIOLOGY.—A laboratory course open to students majoring in sanitary engineering. Includes work in general bacteriological technique with special emphasis upon the micro-biology of water and sewage. Laboratory, †*four hours a week.* MR. HITCHNER

5. BACTERIOLOGY.—An abbreviated laboratory course in general bacteriology. Demonstrations by the instructor and experiments conducted by the students in which many of the changes produced by bacteria in every day life are considered. Practical demonstrations of the relation of bacteria to disease, sanitation, food handling, and other economic phases are given. The aim is to develop appreciation of bacteriological technic. Course 3 must be taken in conjunction. †*Two hours a week.* MR. HITCHNER

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*On leave of absence 1930-31.

52. Bacteriology.—Physiological, morphological, biochemical, and serological activities of bacteria; isolation and identification of pathogens together with animal inoculation and serological tests. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week.*
Mr. Hitchner

53. Bacteriology.—Physiology of bacteria; bacteriological analysis of water; and study of soil bacteria. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week.*
Mr. Hitchner

54. Bacteriology.—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; and study of effect of separators, clarifiers, coolers, etc., on the bacterial content of milk and cream. Prerequisite, Course 52. Classroom, *one hour a week;* laboratory, †*four hours a week.* Mr. Hitchner

55. Bacteriology.—An experimental consideration of ammonification, nitrification, and dentrification in the soil; relation of bacteria to soil fertility; and symbiosis. Prerequisite, Course 53. †*Four to six hours a week.*
Mr. Hitchner

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

101, 102. Bacteriology.—A laboratory course for students desiring 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 are arranged to suit individual students. Mr. Hitchner

Veterinary Science

12. Veterinary Science.—Anatomy, physiology, and diseases of poultry. *Two hours a week.* Mr. Russell

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

15. Veterinary Science.—A continuation of Course 14. Prerequisite, Course 14. *Two hours a week.* Mr. Russell

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

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

20. Veterinary Science.—Physiology of domestic animals. *Two hours a week.* Mr. Russell

BIOLOGICAL AND AGRICULTURAL CHEMISTRY

Professor Smith; Professor Merrill (*Emeritus*);
Assistant Professor Freeman

Biochemistry

1. Organic Chemistry.—For agricultural students. A study of the aliphatic compounds; hydrocarbons, alcohols, acids, amines, amides, etc., and brief resumé of the more important aromatic compounds. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Freeman

2. Biochemistry.—Plant biochemistry, including a study of the physico-chemical reactions of plants. A detailed study of carbohydrates, fats, and proteins; glucosides; and enzymes. Prerequisite, Course 1. Classroom, *three hours a week;* laboratory, †*four hours a week.* Mr. Freeman

3. Organic Chemistry.—The aliphatic hydrocarbons, alcohols, acids, amines, amides, etc.; important aromatic compounds; and carbohydrates, fats and proteins. Classroom, *three hours a week;* laboratory, †*two hours a week.* Mr. Freeman

4. Biochemistry.—Physico-chemical reactions of plants and animals; chemistry of digestion; respiration; and blood and lymph. Prerequisite, Course 3. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Smith

8. Agricultural Chemistry.—Chemistry of the soil elements; colloidal condition and its effect upon the soil; chemical relationship of fertilizing constituents; and synthetic methods of producing fertilizing ingredients. Prerequisite, Course 1. Classroom, *two hours a week.* Mr. Smith

9. Biochemistry.—Animal biochemistry. Composition of the animal body; chemistry of digestion; assimilation and metabolism of foods; chemistry of blood and lymph; and elimination of waste product. Prerequisite, Course 2. Classroom, *two hours a week.* Mr. Smith

11. Physiological Chemistry.—A course dealing with relationship of chemistry to the human body, including chemistry of metabolism, blood,

respiration, oxidations and reductions, energy requirements and excretion. Emphasis placed upon modern clinical methods as used by the biochemist. Prerequisite, Courses 1 and 2, or 3 and 4. Classroom, *two hours a week.*

MR. SMITH

51. ADVANCED BIOCHEMISTRY.—Detailed study of carbohydrates, fats and proteins; nature of enzymes and their effect upon food materials; chemical changes involved in digestion, assimilation and absorption of foods; respiration; chemistry of the blood, including clinical methods of analysis; and elimination of waste material from the animal body. Prerequisite, Courses 1 or 3. Classroom, *three hours a week.* MR. SMITH

52. ADVANCED BIOCHEMISTRY LABORATORY.—Problems in the study of carbohydrates, fats and proteins; tests, both qualitative and quantitative; enzymes, their effects and methods of testing with food material; and analysis of blood and urine. Prerequisite, Course 51. Laboratory, †*four hours a week.* MR. FREEMAN

53. FOOD ANALYSIS.—Quantitative analysis of some common food products. The complete analysis of milk, butter, bread, cereal breakfast foods, and dried fish; carbon dioxide in baking powder; vinegar; and sugars in molasses and karo. Prerequisite, Course 3. Laboratory, †*four hours a week.* MR. SMITH

54. BIOCHEMICAL LABORATORY METHODS.—Methods used in the biochemical laboratory for testing carbohydrates, fats, amino acids, proteins, enzymes; studies of the colloidal properties of biochemical material; H-Ion concentration measurement methods; and individual problems dealing with various phases of biochemical investigations. Prerequisites, Courses 2 and 9. Laboratory, †*six hours a week.* MR. FREEMAN

55. TEXTILE CHEMISTRY.—Composition and properties of textile fibers; methods of scouring, bleaching, dyeing and finishing fibers; qualitative analysis of finishing material; and methods of testing composition of fabrics. Prerequisite, Course 3. Laboratory, †*four hours a week.*

MR. SMITH

56. AGRICULTURAL ANALYSIS.—Designed to give the student a working knowledge of methods employed in quantitative analysis of fertilizers and the more common agricultural products. Open only to juniors and seniors in agriculture. Prerequisite, Course 8. Laboratory, †*four hours a week.*

MR. SMITH

57. BIOLOGICAL COLLOIDS.—An introduction to colloidal chemistry with application and significance in biological systems. Open to junior, senior, and graduate students. Prerequisite, Courses 1 and 2, or 3 and 4. Classroom, *three hours a week.* MR. FREEMAN

101-102. Biochemical Research.—Problems dealing with various phases of biological or agricultural chemistry. Special problems may be selected by the student under direction and advice of the department. A comprehensive written summary is required. Open only to senior and graduate students. Time and credit arranged. Mr. Smith, Mr. Freeman

Geology

5. Geology.—The earth's geologic history and development, with especial attention to dynamical, structural, and physiographical geology. *Three hours a week.* Mr. Freeman

BOTANY AND ENTOMOLOGY

Professor Steinmetz; Assistant Professor Dirks; Assistant Professor Steinbauer; Mr. Hyland; Mr. Mason

Botany

2. General Botany.—Fundamental principles of plant life, with special emphasis on life processes. Required of all students in the College of Agriculture excepting those registered in Home Economics. Classroom, *two hours a week;* laboratory, †*four hours a week.*

Mr. Steinmetz and Assistants

29. General Cryptogamic Botany.—Orders of spore bearing plants, their structure, development, and economic importance. Prerequisites, Course 2 and the consent of the instructor. Classroom, *two hours a week;* laboratory and field, †*four hours a week.* Mr. Steinbauer

30. Plant Ecology.—A study of the environmental factors determining adaptations and distribution of plant life. Prerequisite, Course 2. Classroom, *one hour a week;* laboratory, †*two hours a week.* Mr. Steinbauer

31. Plant Physiology.—Class room and laboratory work on the physiology of plants. Prerequisites, Course 2 and one year of chemistry, Classroom, *two hours a week;* laboratory, †*four hours a week.*

Mr. Steinbauer

32. Plant Physiology.—For students in Forestry. Prerequisites, Course 2 and one year of chemistry. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Steinbauer

33. Forest Botany (Dendrology).—Lectures, laboratory, and field work on characteristics, habits, classification, and relationships of trees and native shrubs of North America. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Hyland

34. Forest Botany (Physiography).—A systematic study of the trees of North America; a comprehensive study of range, distribution, soil requirements, and commercial importance of timber trees of the United States; and survey of forest areas of the world. Prerequisite, Course 33. Classroom, *two hours a week;* laboratory, †*four hours a week.*
Mr. Hyland

35. Plant Anatomy.—Tissues of leaves, roots, and stems of herbaceous and woody plants. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Steinmetz, Mr. Hyland

36. Plant Pathology.—Principles of plant diseases; their nature and causes; basis for control. Prerequisite, Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Steinmetz

42. Forest Pathology.—Principles of plant diseases, as applied to seedlings, nursery stock, and forest trees; destruction of timber by fungi; and methods of combating plant diseases and preserving wood products. Required of seniors in Forestry. Classroom, *two hours a week;* laboratory, †*four hours a week.* Mr. Steinmetz

43. Wood Identification.—Identification of commercial woods with the unaided eye, lens, and microscope. Open to students in chemical engineering, and to others by permission. Laboratory, **three hours a week.*
Mr. Hyland

45. General Genetics.—Principles of genetics. Prerequisites, Zoology 1 and Course 2. Open to juniors and seniors. *Three hours a week.*
Mr. Steinmetz

46. Genetics Laboratory.—Experiments and problems on kinds, causes, measurements, and inheritance of variations in plants and animals. Prerequisite, Course 45. Laboratory, †*four hours a week.* Mr. Steinmetz

57. Taxonomy of Vascular Plants.—Characteristics, identification, classification, habits, and systematic position of representative species of flowering plants. Prerequisites, Course 2 and the consent of the instructor. Classroom, *two hours a week;* laboratory, and field, †*four hours a week.*
Mr. Steinmetz

Entomology

20. General Entomology.—Structure, life histories, habits, and classification of insects, and principles of control. Illustrated by common insect

pests of the field, garden, orchard, and domestic animals. Prerequisites, Zoology 1 and Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week.* MR. DIRKS

22. FOREST ENTOMOLOGY.—Fundamental principles of insect life with special reference to forest insects; and structure, bionomics, classification, and principles of control. Prerequisites, Zoology 1 and Course 2. Classroom, *two hours a week;* laboratory, †*four hours a week.* MR. DIRKS

40. APICULTURE.—A practical course in care of bees in relation to general farming and horticulture. The honeybee, its activities and habits; races of bees; diseases and enemies; and production and marketing of honey. Laboratory exercises include manipulation of bees and the making of hive equipment. Classroom, *one hour a week;* laboratory, **three hours a week.* MR. DIRKS

49. ECONOMIC ENTOMOLOGY.—An intensive study of the specific insect pests of farm, garden, and orchard; principles of their control; and consideration of insecticides and their uses. Prerequisite, Course 20 or 22. Classroom, *two hours a week;* laboratory, †*four hours a week.* MR. DIRKS

51. MORPHOLOGY OF INSECTS.—An introduction to the principles of insect morphology. The factors determining form and adaptations of typical insects. Prerequisite, Course 20 or 22. Laboratory, †*eight hours a week.* MR. DIRKS

52. TAXONOMY OF INSECTS.—Principles of insect classification; origin, history, distribution, and relationship of the order; and practice in use of keys for the identification of insects. Prerequisite, Course 51. Laboratory, †*eight hours a week.* MR. DIRKS

Problem Courses

47, 48. PROBLEMS IN BOTANY OR ENTOMOLOGY.—Open to juniors and seniors who have special interest and qualification in botany and entomology. The approval of the head of the department and the written consent of the instructor concerned must be obtained before registering for this work. Credit to be arranged in each case. THE DEPARTMENTAL STAFF

103, 104. PROBLEMS IN GENETICS.—MR. STEINMETZ.

105, 106. PROBLEMS IN ENTOMOLOGY.—MR. DIRKS.

107, 108. PROBLEMS IN BOTANY.—MR. STEINMETZ.

FORESTRY

PROFESSOR BRISCOE; ASSISTANT PROFESSOR CHAPMAN; ASSISTANT PROFESSOR ASHMAN

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

2. WOODLOT FORESTRY.—General principles of forestry, with special reference and application to farm woodlands, particularly in this region. Lectures and textbook work in elementary systems of cutting, estimating, protection, and reforestation. Especially for agricultural students. Open to all students. *Two hours a week.* MR. CHAPMAN

3. LUMBER INDUSTRY.—For seniors in Forestry. Milling and marketing problems of the lumber industry in America. First half of semester. *Four hours a week.* MR. ASHMAN

4. WOOD PRESERVATION.—Durability and seasoning of native woods; preservatives in commercial use; and methods of operation and equipment of preserving plants. Special attention given to posts, ties, poles, paving-blocks, and structural timbers. Prerequisites, Botany 33 and 34. First half of semester. *Two hours a week.* MR. CHAPMAN

5. HISTORY OF FORESTRY.—Development of forestry in European countries and in the United States. First half of semester. *Two hours a week.* MR. BRISCOE

6. FOREST MENSURATION.—A continuation of Course 11. Age, growth, taper, form-factors, and yield and volume tables. *Two hours a week.* MR. CHAPMAN

8. FOREST MENSURATION FIELD WORK.—Taken in connection with Course 6. Collection of data for making a map of an assigned tract; studies of age, growth, and yield under different conditions and in various types; determination of form-factors; and construction of volume tables. **Six hours a week.* MR. CHAPMAN

9. FOREST PRODUCTS.—Forest products other than logs and lumber, such as pulp-wood, veneers, shingles, lath, tight and slack cooperage, hoops and headings, excelsior, vehicle woods, spool stock, turpentine, tannin, gums,

syrups, dye-woods, and charcoal. Methods of utilization, markets, and values. First half of semester. *Two hours a week.* Mr. Briscoe

10. Forest Protection.—Systems of fire protection practiced by the Federal and State governments, and by individuals and associations. Protection against other natural enemies of the forest such as insects, fungi, wind, animals, and weed growth. Last half of semester. *Two hours a week.* Mr. Chapman

11. Forest Mensuration.—Lectures and recitations. Theory and application of forest measurements. Calculation and computations from data obtained in the field work. Course 13 to accompany this course. *Two hours a week.* Mr. Chapman

12. Practice of Forestry.—Applied systems of silviculture and management considered in relation to commercially important species and types of forest in the United States. Discussions of management as practiced in Europe, and the application of such systems to forest conditions in this country. Forestry seniors only. *Two hours a week.* Mr. Briscoe

13. Forest Mensuration Field Work.—Practical field work taken in connection with Course 11. The use of instruments, scaling, and estimating. **Six hours a week.* Mr. Chapman

14. Nursery Practice.—Taken in connection with Course 16. Tests of the germinating qualities of seeds of forest trees, and a study of seeds and seedlings. Planting and transplanting in the State Forest Nursery (a minimum of 72 hours actual time regardless of schedule changes on account of weather); practice in field planting. **Six hours a week.* Mr. Briscoe

15. Silviculture.—A study of silvics. The life factors determining the character and form of forest vegetation. The development of forest types and the silvical characteristics of stands. Cultural measures in the forest. The forest regions of the United States. Prerequisites, Botany 33 and 34. First half of semester. *Two hours a week.* Mr. Briscoe

16. Silviculture.—A continuation of Course 15, with special attention to silvicultural systems of management; the application of thinnings; and methods of reproduction both natural and artificial. *Two hours a week.* Mr. Briscoe

17. Silviculture Field Work.—Assigned problems in connection with Course 15. Studies of tolerance. Special studies and practical work in the forest; preparation of a type map and detailed silvicultural report. First half of semester. **Six hours a week.* Mr. Briscoe

18. Advanced Nursery Practice.—Additional field work in nursery and actual forest planting operations. For those who are taking Forestry 14, and show special adaptability for the work. Second half semester. †*Eight hours a week.* Mr. Briscoe

19. Lumbering.—The lumber industry in the United States considered from the economic standpoint; an account of logging methods in different regions. Textbooks and lectures. Forestry seniors only. First half of semester. *Two hours a week.* Mr. Ashman

20. Forest Finance.—Business principles applied to forest management. Forest valuation; theory of the normal forest; calculations for sustained yield and continuous revenue from forest resources; forms or accounts and cost keeping; and preparation of reports for Federal income tax on timber lands. Forestry seniors only. *Two hours a week.* Mr. Briscoe

21. Lumbering Field Work.—Taken in connection with Course 19. Inspection of operation and layout of pulp mills, saw mills, box factories, novelty mills and others, with detailed study, charts, and reports on methods of handling, storage, and transportation of logs, pulpwood, and raw materials. First half of semester. **Six hours a week.* Mr. Chapman

22. Policy and Laws.—National and State forestry policy and administration; relation of government, corporations, and individuals in regard to forestry policies and applied forest management; and laws of the Federal Government and the several states concerning forests and forestry. Forestry seniors only. *Two hours a week.* Mr. Briscoe

23, 24. Current Forestry Literature.—Review of periodicals, books, and current forestry literature; and preparation of a card index under subject and author headings. Forestry seniors only. *One hour a week.* Mr. Briscoe

25, 26. Thesis.—Credits of from two to six 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.

30. Wood Identification and Uses.—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; and their commercial production. Prerequisites, Botany 33 and 34. *Two hours a week.* Mr. Ashman

32. Forest Management.—Applied forest finance; appraisal of timber and forest soil; appraisal of damages; regulation of timber cut; and forest working plans. *Two hours a week.* Mr. Ashman

34. Preparation and Drafting of Maps.—Primarily for sophomore students in Forestry. Instruction in the correct drafting, preparation, and coloring of maps. The use of accepted conventional signs and symbols in mapping, and preparation of maps for reports and summaries of field surveys. Prerequisites, Drafting 1 and 2. **Three hours a week.*

Mr. Ashman

Courses in Camp

31. Logging Engineering.—Practical logging as applied to a typical spruce pulp-wood operation in Maine. **Sixteen hours a week,* second half semester. Mr. Ashman

33. Forest Management.—Business principles involved in the management of a forest area, including organization, regulation, and administration, leading to preparation of a complete working-plan for the area. **Sixteen hours a week,* second half semester. Mr. Ashman

35. Cruising and Mapping.—Making topographic maps and detailed estimates of standing timber. Methods of locating trails, highways, bridges, telegraph lines, ranger and lookout stations, and fire-lines. Special emphasis is placed on methods producing practical results of sufficient accuracy, at a minimum cost. **Sixteen hours a week,* second half semester.

Mr. Ashman

HOME ECONOMICS

Professor Greene; Professor Sweetman; Assistant Professor Musgrave; Assistant Professor Campbell; Miss Osgood; Miss Gould

1, 2. Textiles and Clothing.—Fibers and fabrics and the hygienic, economic, and social problems involved in selection of ready-made clothing. The laboratory work consists of the making of plain garments, involving drafting and design, and selection of materials. Classroom, *two hours a week;* laboratory, †*four hours a week.* Miss Musgrave, Miss Osgood

3. Design.—A first course in art expression. Lecture and recitation on the principles of design as they may be applied to house decoration, costume design, advertising, and related subjects. Some technique in the use of color, line, balance, rhythm, emphasis and proportion is acquired in the laboratory. Classroom, *one hour a week;* laboratory, †*four hours a week.*

MISS MUSGRAVE

4. APPLIED DESIGN.—Application of design principles to problems in textiles including batik, tie dyeing, applique, embroidery, and hand weaving. Laboratory, †*four hours a week.* MISS MUSGRAVE

5, 6. FOODS.—Nutritive value, principles of preparation, and buying of foods. Laboratory work in preparation of various types of foods, marketing studies, and planning and serving meals. Prerequisites, Chemistry 1 and 2. Classroom, *two hours a week;* laboratory, †*four hours a week.*

MRS. SWEETMAN, MISS OSGOOD

8. PROFESSIONAL LECTURE.—History and scope of the Home Economics movement in relation to general and vocational education. A study of the vocations open to Home Economics trained women, and of preparation and personal qualities essential to success in each. The major aim of the course is to aid the student in the selection of a vocation and in shaping her education to answer her vocational needs as well as to contribute to her individual development. *One hour a week.*

MEMBERS OF THE DEPARTMENTAL STAFF AND SPECIAL LECTURERS

9, 10. SANITATION AND PUBLIC HEALTH.—Health of the individual in relation to family and community responsibility. Includes housing problems such as ventilation, plumbing, water supply, sewage disposal, and zoning; school-health problems; recreational needs of adults and children; industrial hygiene; and a study of comunicable diseases with emphasis on methods of control. *Three hours a week.* MISS GREENE

11, 12. HOUSEHOLD MANAGEMENT.—Homemaking as a profession; brief history of the family; economic and social principles of the household; standards of living; budget; schedules; and equipment. *Four hours a week.*

MISS GREENE, MISS CAMPBELL

13, 14. THE PRE-SCHOOL CHILD.—Physical, mental, and social needs of the child including prenatal care, postnatal care, and responsibility of family and community to the child. Actual experience working with young children is given in connection with a Nursery School which is conducted during part of the semester. *Three hours a week.* MISS CAMPBELL

15, 16. MILLINERY.—Principles of design and color are applied to millinery. A consideration of materials suitable for various purposes and the making of frames, coverings, and hats in the prevailing fashion. Open only to juniors and seniors. Laboratory, †*two hours a week.* MISS MUSGRAVE

17, 18. HOUSE PLANNING, FURNISHING, AND DECORATING.—House and room plans. House furnishings, their color, design, and cost. Practical

problems in interior decoration, including finishing and refinishing of furniture. Field trips required. Classroom, *two hours a week;* laboratory, †*two hours a week.* MISS CAMPBELL

21, 22. HOUSEHOLD ADMINISTRATION.—A laboratory course in which the students organize and carry on activities of the Practice House in which they reside. Care of an infant; financial management of the house, and keeping of household accounts; planning, buying, preparing, and serving of meals; and care of the house are included. *Three credit hours.*

MISS CAMPBELL

25. ECONOMICS OF THE HOUSEHOLD.—The family as a unit for consumption including principles of food selection; clothing; shelter; and the use of the budget. Open to Arts and Sciences students, above freshman rank, only. *Three hours a week.* MEMBERS OF THE DEPARTMENTAL STAFF

26. THE CONTEMPORARY HOME.—Functions of the home as an environment for human development; factors involved in successful homemaking; and the child in the home, his development and welfare. Open to Arts and Sciences students, above freshman rank, only. *Three hours a week.*

MEMBERS OF THE DEPARTMENTAL STAFF

51. ADVANCED CLOTHING.—Economics, design and color in relation to dress. In the laboratory designing by modeling on the dress form, alteration and adaptation of commercial patterns, and selection of materials suitable for the individual, are studied with the technique of making and fitting silk and wool dresses. Prerequisites, Courses 1, 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week.* MISS MUSGRAVE

52. ADVANCED CLOTHING AND COSTUME DESIGN.—A continuation of Course 51. Problems in tailoring of coats, and construction of children's clothing. Two hours a week are used in study of the special application of design principles of line, color, dark and light, and texture, to costumes of the individual. Laboratory, †*six hours a week.* MISS MUSGRAVE

53. ADVANCED FOODS.—Application of biochemical methods in development of principles of food preparation. Prerequisites, Courses 5 and 6, and Biochemistry 4. Credit as arranged, *two or three hours.* MRS. SWEETMAN

54. NUTRITION AND DIETETICS.—Principles involved in normal human nutrition at all ages. Calculation and preparation of dietaries in the laboratory. Prerequisites, Courses 5 and 6, and Biochemistry 53. Classroom, *two hours a week;* laboratory, †*four hours a week.*

MRS. SWEETMAN, MISS OSGOOD

55, 56. HOME ECONOMICS EDUCATION.—Principles of teaching as applied to junior and senior high-school home economics. Aims, selection

of subject matter, and choice of method as exemplified in current literature, courses of study, and textbooks. Organization problems; equipment; budget; and class room management are included. *Three hours a week.*

MISS GREENE

57, 58. THESIS.—Undergraduate thesis in any one of the fields of home economics. *Two to four hours a week.*

MEMBERS OF THE DEPARTMENTAL STAFF

59, 60, a-i. SPECIAL PROBLEMS.—Individual problems in the various fields of home economics, arranged to enable students to extend their command of subject matter, or develop techniques according to individual interests and needs. A student may register more than once for the course, but for no more than three hours in any one subdivision. *One to three hours a week,* in each subdivision.

59, 60a. NUTRITION.
59, 60b. FOODS.
59, 60c. CLOTHING AND TEXTILES.
59, 60d. DESIGN.
59, 60e. HISTORY OF COSTUME.
59, 60f. HOUSE PLANNING AND DECORATION.
59, 60g. CHILD DEVELOPMENT.
59, 60h. HOUSEHOLD MANAGEMENT.
59, 60i. HOME ECONOMICS EDUCATION.

MEMBERS OF THE DEPARTMENTAL STAFF

61, 62. HISTORY OF COSTUME.—A survey of the development of costume of men and women from the peoples of antiquity, thru the various periods of European history to the present time. Lectures, readings, written reports, and collection and classifying of illustrations. *One hour a week.*

MISS MUSGRAVE

71, 72. SUPERVISED TEACHING.—Directed teaching in home economics. Students teach classes in the upper grades and high school at Brewer.

MISS GOULD

101, 102. ADVANCED NUTRITION.—Methods of research in human nutrition and recent advances in the field. Prerequisite, Course 54. Credit as arranged, *two or three hours.* MRS. SWEETMAN

HORTICULTURE

PROFESSOR WARING; MR. CLAPP; MR. RILEY

Pomology

1. COMMERCIAL FRUIT HANDLING.—The commercial apple industry and its methods in Maine and competing regions, with minor attention to other tree fruits. Laboratory exercises include grading and packing and visits to commercial-scale orchards, packing houses, and storage plants. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. WARING

2. TREE FRUIT PRODUCTION.—Underlying principles and practical methods involved in planting and subsequent care of orchard fruits of our region, leading to the production of profitable crops. Classroom, *two hours a week;* laboratory, **three hours a week.* MR. WARING

3. SYSTEMATIC POMOLOGY.—Important groups of tree and small fruits, together with practice in identification and judging of varieties. A trip to important orchard districts or to the state fruit show may be required. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. WARING

10. SMALL FRUIT PRODUCTION.—Selection of varieties, and methods recommended for commercial production and handling of such fruits as strawberries, grapes, raspberries, blackberries, and blueberries. Classroom, *three hours a week.* MR. RILEY

56. PRINCIPLES OF POMOLOGY.—A course supplementary to Course 2 for senior students, with emphasis on principles and modern methods of orchard management, including disease and insect control. Classroom, *two hours a week;* laboratory, **three hours a week.* MR. WARING

Vegetable Gardening

20. VEGETABLE GARDENING.—The best commercial practices; and the results of recent experimentation as applied to vegetable gardening. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. RILEY

21. VEGETABLE CROPS.—Includes harvesting, marketing, and systematic study of types and varieties of vegetables; also storage and care of vegetables for seed production. Prerequisite, Course 20. Classroom, *two hours a week;* laboratory, †*two hours a week.* MR. RILEY

55. VEGETABLE FORCING.—Culture of vegetables under glass. Types of greenhouses; soil sterilization; fumigation; special fertility problems; and

marketing. Prerequisite, Course 20. Classroom, *two hours a week;* laboratory, **three hours a week.* Mr. Riley

Floriculture and Ornamental Horticulture

5. Landscape Gardening.—Principles of landscape art and methods and plant materials used in executing landscape plans. Special attention is given to the improvement of home grounds. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Clapp

7. General Floriculture.—Culture and uses of flowers for commercial purposes. Methods of shipping and marketing are considered. One or more half-day trips in the Bangor area may be arranged. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Clapp

8. Decorative Floriculture.—A continuation of Course 7. Culture and uses of bedding and other garden plants, and floral design. Greenhouses, their construction and heating. One or more half-day trips in the Bangor area may be arranged. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Clapp

54. Landscape Gardening.—Detailed application of landscape principles to estates, parks, subdivisions, public grounds, and golf courses. Office management, fees, and other phases of the profession are considered also. A trip of one day to Bar Harbor may be arranged. Prerequisite, Course 5. Classroom, *two hours a week;* laboratory, **three hours a week.* Mr. Clapp

General Courses

4. Plant Propagation.—Methods of propagating plants. Current literature on propagation is reviewed. A report on methods applicable to a particular branch of horticulture is required. Laboratory, †*four hours a week.* Mr. Clapp

11, 12. Problems in Horticulture.—Open to seniors who manifest special interest and the capacity for individual effort. The selection of one problem and the preparation of a plan of attack must precede registration. Credit arranged. Members of Departmental Staff

51, 52. Seminar.—Preparation of papers, followed by classroom presentation and discussion, dealing with a wide range of topics related to horticulture. *One hour a week.* Mr. Waring, Mr. Riley, Mr. Clapp

Graduate Courses

101, 102. Horticultural Investigations.—Credit and hours arranged. Mr. Waring

103, 104. Research Methods.—Application of scientific method and equipment to the attack and solution of horticultural problems, and preparation of manuscript for publication. Credit and hours arranged. Mr. Waring

ALL DEPARTMENTS

Summer Projects.—A student in the College of Agriculture desiring to carry out a field project during the summer recess under faculty direction may obtain credit for such work providing arrangement is properly made with the major department concerned and the project is successfully carried thru to completion. Project work may be conducted during the summer recesses between the sophomore and junior years, and junior and senior years. Sophomore-Junior Project is designated Pj 2 and limited to one hour credit. Junior-Senior Project is designated, Pj 4 and may be one, two, or three hours credit. Complete details concerning project work may be obtained from heads of departments in which major curricula are offered.

College of Arts and Sciences

FACULTY OF INSTRUCTION

James Stacy Stevens, LL.D., Litt.D., *Dean and Professor of Physics*
James Norris Hart, C.E., Sc:D., Ph.D., *Professor of Mathematics and Astronomy*
John Homer Huddilston, Ph.D., *Professor of the Greek Language and Literature and Lecturer on Art History*
George Davis Chase, Ph.D., LL.D., *Professor of Latin*
Caroline Colvin, Ph.D., LL.D., *Professor of History and Government*
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*
Milton Ellis, Ph.D., *Professor of English*
Albert Lewis Fitch, Ph.D., *Professor of Physics*
François Joseph Kueny, L. ès L., *Professor of French*
Mark Bailey, M.A., *Professor of Public Speaking*
Charles Alexius Dickinson, Ph.D., *Professor of Psychology*
Ronald Bartlett Levinson, Ph.D., *Professor of Philosophy*
**Olin Silas Lutes, Ph.D., *Professor of Education*
Donnell Brooks Young, Ph.D., *Professor of Zoology*
Adelbert Wells Sprague, M.A., *Professor of Music*
*Bertrand French Brann, M.S., *Associate Professor of Chemistry*
**Ava Harriet Chadbourne, Ph.D., *Associate Professor of Education*
Albert Ames Whitmore, M.A., *Associate Professor of History and Government*
Noah Rosenberger Bryan, Ph.D., *Associate Professor of Mathematics*
Albert Morton Turner, Ph.D., *Associate Professor of English*
†Maynard Fred Jordan, M.A., *Associate Professor of Mathematics and Astronomy*

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*Member of the faculty of the College of Technology.
**Member of the faculty of the School of Education.
†On leave of absence, spring semester, 1930-31.

Charles Burton Crofutt, Ph.D., *Associate Professor of Physics*
Kenneth Stillman Rice, Ph.D., *Associate Professor of Zoology*
Clifford Stetson Parker, Ph.D., *Associate Professor of French*
George William Small, Ph.D., *Associate Professor of English*
Edward French Dow, M.A., *Acting Associate Professor of History and Government*
Stanley Royal Ashby, Ph.D., *Associate Professor of English*
Warren Stanhope Lucas, M.A., *Assistant Professor of Mathematics*
Walter French, Ph.D., *Assistant Professor of German*
Frances Elizabeth Arnold, M.A., *Assistant Professor of Spanish and Italian*
Marion Stephanie Buzzell, M.A., *Assistant Professor of French*
*Walter Whitmore Chadbourne, M.B.A., *Assistant Professor of Economics and Sociology*
Achsa Mabel Bean, M.A., *Assistant Professor of Zoology*
Donald Stover Piston, B.S., *Assistant Professor of Physics*
Richard George Wood, M.A., *Assistant Professor of History and Government*
William Francis Scamman, M.A., *Assistant Professor of English*
*Edward Newcomb Brush, M.A., *Assistant Professor of Psychology*
Ruth Crosby, Ph.D., *Assistant Professor of English*
Himy Benjamin Kirshen, M.A., *Assistant Professor of Economics and Sociology*
†Nathan Israeli, Ph.D., *Assistant Professor of Psychology*
George Perhac, M.A., *Assistant Professor of Latin*
Frederick Shaw Youngs, B.S., B.A., *Lecturer in Economics*
Ada Cohen Silverman, M.A., *Instructor in German*
Herman Samuel Silverman, M.A., *Instructor in Mathematics*
Cecil Gladstone Garland, M.A., *Instructor in Economics and Sociology*
Herschel Leonard Bricker, B.A., *Instructor in Public Speaking*
Louis Cabrera, B.A., *Instructor in Spanish*
Nancy Harper McCreary, M.A., *Instructor in English*
John Emmons Stewart, M.A., *Instructor in Mathematics*
Walter Reginald Whitney, B.S., *Instructor in English*
Mary Pauline Aiken, M.A., *Instructor in English*
Glenn Quenton Lefler, B.A., *Instructor in Physics*
Elizabeth Sophia Foster, M.A., *Instructor in English*
Jessie Ellen Ashworth, M.A., *Instructor in Economics and Sociology*

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*On leave of absence, 1930-31.
†Appointment for 1930-31 only.

Everett Johnston Coil, M.B.A., *Instructor in Economics and Sociology*
Arlin Miller Cook, M.A., *Instructor in English*
Pauline Elma Darby, M.S., *Instructor in Zoology*
Max Hendricks Guyer, M.A., *Instructor in History and Government*
Fred Lincoln Lamoreau, B.A., *Instructor in Mathematics and Astronomy*
Richard Carnes Ledgerwood, M.A., *Instructor in Psychology*
Richard Wilder Merrill, B.S., *Instructor in German*
James Moreland, B.A., *Instructor in English*
Delyte Wesley Morris, B.A., *Instructor in Public Speaking*
Hubert Werts Allen, B.S., *Graduate Fellow in Physics*
Adrienne Gabrielle Bedelle, B.A., *Graduate Fellow in French*
Paul Dudley Giddings, B.A., *Graduate Fellow in Zoology*
Alta Miriam Bumpus, B.A., *Graduate Fellow in Zoology*
John Franklin Mee, B.A., *Graduate Fellow in Psychology*
Helen Moore, B.A., *Graduate Fellow in Physics*
Raymah Twining Wright, B.A., *Graduate Fellow in Mathematics*
*Amy Belle Adams, B.A., *Graduate Scholar in English*
*Rufus Manley Grindle, B.A., *Graduate Scholar in English*
Philip Merrill Marsh, B.A., *Graduate Scholar in English*
†Lowell Pond Leland, B.A., *Graduate Scholar in English*

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*Appointment for fall semester, 1930-31 only.
†Appointment for spring semester, 1930-31 only.

GENERAL INFORMATION

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. Graduates of Maine normal schools who are also graduates of an approved high school will receive sophomore standing.

The regular admission requirements will be applied to all students who enter with advanced standing. Students must make up all entrance requirements before registering as juniors. Those who transfer from other colleges must make them up within a year.

FRESHMAN STUDIES

The character of the work of the first year is conditioned somewhat upon the subjects offered for admission. It is to a large extent prescribed.

All men freshmen are required to register for English, and, unless they are physically disqualified, they must register for Military Training and Physical Training. Women students register for English, Physical Education, and Hygiene. In addition, one subject must be selected from each of the divisions included under (1) foreign languages, (2) social sciences, and (3) sciences and mathematics. Other courses open to freshmen as electives include Public Speaking, Chorus and other courses in Music, Band, and the General Lecture Course. In addition during the spring semester Freshman Literature, Descriptive Astronomy, and Meteorology are available.

GRADUATION REQUIREMENTS

Every candidate for the Bachelor of Arts degree is required to complete the following work in college: (a) ten hours in Group 1, of which six are prescribed in English 1, 2, and the remainder may be elected from any of the courses included in the group; (b) ten hours in Group 2; (c) ten hours in Group 3; (d) ten hours in Group 4; (e) seven hours in Group 5 (for men students); (f) two years' work without credit in Group 6.

Thirty hours must be completed in the major subject, and 125 hours for graduation. Ninety-five of the hours required and three-fourths of the work in the major subject must be completed with a grade of C or above. If a student transfers from another institution three-fourths of all work done after transferring must be passed with a grade of C or better. Grades below C are not accepted from other institutions.

1. English Group.—This comprises the courses offered in the Departments of English and Public Speaking, and the courses in Biblical Literature and Bibliography.

2. Foreign Language Group.—This comprises the courses in language and literature offered in the Departments of French, German, Greek, Latin, and Spanish and Italian.

3. Science and Mathematics Group.—This comprises the courses offered in mathematics and the biological and physical sciences, and includes the courses offered by the Departments of Botany, Chemistry, Mathematics, Physics, and Zoology. These requirements may be satisfied by electing Zoology 1 and Botany 2, or Zoology 3, 4; Chemistry 1, 2, or 3, 4; Mathematics 1, 3, 6, or 1, 2, 3, or 17, 18, 19, 20, or Course 1 in mathematics, and Courses 15, 16 in astronomy; Physics 1, 2, 3, 4, or 5, 6, 3, 4. In case the requirements listed do not equal ten hours the remaining hours may be selected from any course in mathematics or science.

4. Social Science Group.—This comprises the courses offered in the Departments of Economics and Sociology, Education, History and Government, Philosophy, and Psychology, and the courses in history, archeology, fine arts, and music offered in other departments and not included in Group 1.

5. Military Science and Tactics (for men), two years' work giving seven semester hours' credit.

6. Physical Training, two years' work without credit. Women students also take Zoology 5 in the freshman year for which two credits are given. These courses may not be counted toward the science requirements.

Students are expected to complete all the required work listed above by the end of their sophomore year.

No credit is given for less than one year's work in a beginning language. This rule applies to German 1, 2; Greek 5, 6; Italian 1, 2; Latin 1, 2; Spanish 1, 2; 1a, 2a.

MAJOR SUBJECT

Beginning with the sophomore year each student must select some one department in the college in which he is to pursue his major work. Any one of the following subjects may be chosen: Chemistry, Economics and Sociology, English, French, German, History and Government, Latin, Mathematics and Astronomy, Philosophy, Physics, Public Speaking, Psychology, Spanish and Italian, and Zoology (including Physiology).

The head of the department in which the student has chosen his major subject becomes his major instructor, who is also the representative of the student before the faculty.

The major subject must include courses counting not less than thirty hours (of which at least twenty must be in courses not regularly open to freshmen) and not more than forty hours. In double departments the

maximum limit is 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 departments as the major instructor may prescribe. Major instructors may require their students also to select a minor subject. The minimum number of hours in the minor subject is fixed by the different departments, but, including freshman courses is not less than fifteen nor more than twenty-two. The remainder of the courses are selected among the different departments of the University, subject to the approval of the major instructor.

Students transferring from the Colleges of Technology and Agriculture to the College of Arts and Sciences will be required to do two full years' work in the College of Arts and Sciences before receiving the bachelor's degree, with the exception that students from the College of Technology may transfer after the junior year and be graduated in Arts after one year's work as major students in the Departments of Physics, Chemistry, or Mathematics; and students from the College of Agriculture may similarly transfer and be graduated as majors in the Department of Zoology.

Seniors shall be required to continue work in their major subject thru their senior year.

GENERAL LECTURE COURSE

A course of weekly lectures is given in the College of Arts and Sciences each semester. Attendance is open to all. Students expecting credit are required to pass in satisfactory notes on the lectures. One absence will be allowed without loss of credit. If a student is absent a second time, he may obtain credit by doing a certain amount of supplementary reading assigned him by the head of the department giving the lecture and making a satisfactory report on the same. A student absent more than twice will be reported as not passed. As a rank in the course the terms "passed" and "not passed" are employed. Work taken in this course does not count toward the major subject. The amount of credit may be one hour or one-half hour, depending on the nature of the course.

PROGRAM FOR SECONDARY SCHOOL TEACHERS LEADING TO A STATE CERTIFICATE

The College of Arts and Sciences 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 Teach-

ers. The program has been arranged in conference with the State Commissioner of Education 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 1, 2, twelve hours in Education in the junior and senior years, thirty approved hours in a major subject, and from fifteen to twenty approved hours in a minor field. The work in the minor field must have the approval of the heads of the departments in which this work falls as well as the head of the Department of Education before the student will be recommended for certification in this field.

The prescribed work in Education includes three hours in the History of Education, three hours in Methods of Teaching, two hours in Educational Measurements, and four hours to be elected. As much as three hours in special methods courses given by other departments may be counted as part of the twelve hours required in Education.

The selection of major and minor subjects is designed to equip the student for teaching two or more subjects which are commonly taught together in the high school. Usual combinations are mathematics and science, French and Latin, English and history, English and French, history and Latin, English and Latin, and French and history. For the completion of this program a high standard of scholarship is required. All the prescribed work, including major and minor subjects, must be of C grade or above. Upon completing this work the student will be recommended to the State Department of Education for a Professional Secondary Certificate, which will designate the major and minor subjects which he has pursued.

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 sessions. 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.

COMBINED ARTS AND MEDICAL CURRICULA

The University is in a position to meet the needs of pre-medical and pre-dental students. As the specific program of study is somewhat dependent on the school to which the student wishes to go, as well as his previous training, all pre-medical and pre-dental students are required to consult the pre-medical adviser (the head of the Zoology Department) in making out their program.

Pre-medical and pre-dental students can meet the University requirements by electing a major in Zoology, Chemistry, or what is termed a Pre-medical major. The latter has a requirement of fifty hours to be taken in Chemistry, Physics, and Zoology combined: the choice being a matter of personal preference of the student.

Students entering medical or dental schools at the end of three years at the University of Maine may receive their bachelor's degree from the University of Maine providing they have completed all of their requirements here and successfully completed the first year of medical work. Part of the work of the first medical year may be allowed to count as fulfilling hours in the major subject.

BANGOR THEOLOGICAL SEMINARY

Students in the College of Arts and Sciences have the privilege of registering for courses in Bangor Theological Seminary not to exceed five credit hours per semester, without payment of tuition charges, and a like privilege is extended by the College to students in the Seminary. The courses for which students may register must be approved by the Dean of the College, the President of the Seminary, and the instructors in the subject concerned in both institutions. Such work may be counted toward graduation; but in order to avoid duplication of credits it is understood that all courses at the University of Maine which have been used by Seminary students for graduation credit at the Seminary, shall be cancelled at the University in case the student is admitted to junior standing as a candidate for the Bachelor of Arts degree.

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.

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 51-100 are for graduates and undergraduates; courses numbered above 100 are primarily for graduates.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis.

ART HISTORY

PROFESSOR HUDDILSTON

1, 2. MASTERPIECES OF ART.—A general course covering the most distinctive values of art in the great periods, with special regard to architecture as a key to the spirit of the ages. Lectures and interpretations from photographs. Not open to students who have taken Courses 3 or 4. *Two hours a week.*

3. ANCIENT ART.—A course on the understanding and enjoyment of architecture and sculpture as developed by the ancients, and as perfected by the Greeks. Fundamental for art appreciation. Given in alternate years. *Three hours a week.*

4. RENAISSANCE ART.—Mainly a study of the Italian masters of the fifteenth and sixteenth centuries. This course should be taken as a sequel to the preceding. Given in alternate years. *Three hours a week.*

5. CULTURAL AMERICA.—A course of lectures on the relation of the fine arts to national culture and spirit. Designed to throw light on the history of the United States and to stimulate a broader interest in art appreciation particularly as affecting the public mind and reflecting national spirit. Open to all students except freshmen. Given in 1932-33. *Three hours a week.*

ASTRONOMY

PROFESSOR HART; *ASSOCIATE PROFESSOR JORDAN; MR. LAMOREAU

10. DESCRIPTIVE ASTRONOMY.—An elementary course. The textbook 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.* MR. LAMOREAU

11. 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. Open to students who have taken Mathematics 1, 3, and Astronomy 10. *Two hours a week* with additional hours for observation. MR. JORDAN

15, 16. GENERAL ASTRONOMY.—Designed for students in mathematics and physics and others wishing a more complete treatment of the subject than Course 10. Recitations, lectures, solutions of problems, observations with instruments in the observatory. Open to sophomores, juniors, and seniors who have had Mathematics 1. Given in 1931-32 and alternate years. *Three hours a week.* MR. JORDAN

59, 60. PRACTICAL ASTRONOMY.—The theory and use of the astronomical transit, zenith telescope, and equatorial; accurate determination of time and latitude. Open to students who have taken Mathematics 6, 7, 8, and Astronomy 10 or 15. Given in 1930-31 and alternate years. *Three hours a week.* MR. JORDAN, MR. LAMOREAU

BIBLICAL LITERATURE

DEAN STEVENS

1, 2. THE ENGLISH BIBLE.—A study of the English Bible as a masterpiece of literature, with the main object of familiarizing the student with the content of the Bible itself, and with the use made of it by the great masters of English literature. *Two hours a week.*

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*On leave of absence, spring semester, 1930-31.

CHEMISTRY

The courses in this department are described under the College of Technology.

The science and mathematics group requirement in the College of Arts and Sciences may be met by completing Courses 1, 2, and 42.

Students taking chemistry as a major subject in the College of Arts and Sciences must complete satisfactorily Courses 1, 2, and not less than twenty-five additional hours in chemistry, including 31, 40, 51, 52, 71b, and 72b. Zoology 3, 4 is required, also some mathematics and physics.

The following work in chemistry is required for some medical colleges of the first class:

"Three years' preparation in chemistry, including at least 240 hours of classroom work and 500 hours of laboratory work. The former must include 60 hours in organic chemistry and a short course in physical chemistry, while the latter must include one year's work in analytical chemistry and 120 hours in organic chemistry." It is a factor, also, in selection of candidates.

Students are advised to study carefully the chemistry requirements of the medical college they desire to enter before the beginning of the freshman year, and in any case not later than the beginning of the sophomore year.

ECONOMICS AND SOCIOLOGY

Professor Ashworth; *Assistant Professor Chadbourne;
Assistant Professor Kirshen; Mr. Garland;
Miss Ashworth; Mr. Coil; Mr. Youngs

Economics 1a, 2a, 9, and 10 are open to all upper class students. Those making economics their major subject are required to take these courses in their sophomore year.

Students who have passed Economics 1b and 2b and who transfer to the Department of Economics and Sociology will lose their credit in these courses, unless permission to the contrary is granted by the head of the department.

All students in the department are required to take General Sociology 41, 42 in their junior year except those who make sociology their chief in-

*On leave of absence, 1930-31.

terest. The latter are expected to take these courses in their sophomore year.

Major students in the department who so desire may make sociology their main interest. However, such students are expected to take twelve hours in economics proper. Courses 1a and 2a are to be included in the twelve hours.

Major students in Economics are required to take a minor of eighteen hours. This should be selected primarily with reference to the possibility of teaching.

After graduation students from this department go, mainly, into the following fields: business, teaching, and law. Those who wish to study law will be directed to those courses which give the best preparation for the work. A student whose departmental requirements are completed may, at the end of his junior year, go to one of several law schools and receive his B.A. degree here on the successful completion of one year in the law school.

Economics

1a, 2a. Principles of Economics.—These are introductory courses dealing with the development, the principles, and problems of our economic life. It is the purpose in these courses to give those students, who may not pursue the study of economics further, a broad knowledge and understanding of the economic world of to-day and to others a foundation for their further study of economics and allied subjects. *Three hours a week.*

Mr. Ashworth, Mr. Garland

1b, 2b. Principles of Economics.—Similar to Courses 1a and 2a. These are short courses for technical and agricultural students. *Two hours a week.* Mr. Kirshen, Mr. Garland, Mr. Coil

9, 10. Accounting.—These courses aim to give the student that general knowledge of the principles of accounting which every business person should possess. Since they do not presume any knowledge of double entry bookkeeping a considerable part of the first semester's work is devoted to fundamental principles. Balance sheets and income statements, depreciation, reserves, sinking funds, partnership, and corporation problems are the principal topics of the second semester. *Three hours a week.* Mr. Coil

11, 12. Cost Accounting.—Open to those who have passed Courses 9 and 10 with a grade of C or better. *Two hours a week.* Mr. Youngs

16. Business Law.—The legal principles of modern business: contracts, agencies, partnerships, corporations, negotiable instruments, mort-

gages, guaranty, and suretyship. For technical and agricultural juniors and seniors only. *Three hours a week.* Mr. Kirshen

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. *Three hours a week.*
Mr. Kirshen

52. Marketing.—The marketing functions; the marketing of farm products, raw materials, manufactured products; wholesaling and retailing; market risk, competition, price; a critical study of market organizations. Juniors and seniors only. *Three hours a week.* Mr. Garland

53. Money and Banking.—The monetary and banking systems of the United States and other countries; special emphasis on the relation of banking to business. Juniors and seniors only. *Three hours a week.*
Mr. Chadbourne

54. Advanced Banking.—Credit analysis, foreign exchange, investments, and investment banking. *Three hours a week.* Mr. Chadbourne

55, 56. Business Law.—The legal principles of modern business; contracts, agencies, partnerships, corporations, negotiable instruments, mortgages, guaranty, and suretyship. Seniors only. *Three hours a week.*
Mr. Kirshen

69. Labor Problems.—The industrial revolution and the development of the modern conflict between labor and capital; history, aims, policies, and methods of trade unions; agencies of industrial peace; child labor, hours of labor, wages, and industrial insurance. For technical juniors and seniors only. *Three hours a week.* Mr. Garland

71. Public Finance.—Government activities and expenditures; tax systems and reform measures; budget systems and current tax problems. Juniors and seniors only. *Three hours a week.* Mr. Ashworth

72. Labor Problems.—Similar to Course 69. Juniors and seniors only. *Three hours a week.* Mr. Ashworth, Mr. Garland

75. 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 European countries. Seniors only. *Three hours a week.* Mr. Garland

78. Business Statistics.—An introduction to the methods of collecting, compiling, presenting, and interpreting statistical data as applied to eco-

nomic and commercial facts. Attention is given to classification, tabulation and presentation of data by means of tables, charts, and graphs; to methods of summarization of statistical facts by use of averages, index numbers, etc.; to measurement of relationships; to statistical control of business enterprise. *Three hours a week.* MR. GARLAND

101, 102. SEMINAR.—Public Finance. MR. ASHWORTH

103, 104. SEMINAR.—Public Utilities. MR. KIRSHEN

105, 106. SEMINAR.—Banking. MR. CHADBOURNE

Sociology

41, 42. GENERAL SOCIOLOGY.—An introductory course analyzing such processes of group life as communication, social contact, social isolation, conflict, crowd formation, with the purpose of formulating principles of social behavior. Suggestions for the interpretation of the natural history of institutions such as family and law, and of concrete problems such as crime, immigration, growth of cities, and war, as embodying the principles formulated. Open to sophomores. *Three hours a week.* MISS ASHWORTH

61. SOCIAL PATHOLOGY: DEPENDENCY AND DEFECT.—A study of the poor, vagrants, and physical and mental defectives in their relations with other members of society. The history of the development of methods of controlling them. Prerequisites, Courses 41, 42. *Three hours a week.* MISS ASHWORTH

62. SOCIAL PATHOLOGY: CRIME.—A consideration of juvenile and adult delinquents as deviates from the mores. The relation of physical and mental defect, disease, and other inadequacy to contacts with society in the development of non-conforming personality patterns. Methods of social control. Field trips for scientific observation of these phenomena. Prerequisites, Courses 41, 42. *Three hours a week.* MISS ASHWORTH

81, 82. THE FAMILY.—Analysis of the natural history and the fundamental mechanisms of the family as a group of interacting personalities; consideration of its institutional nature and its pathological aspects. Prerequisites, Courses 41, 42. Six hours of biology recommended. *Two hours a week.* MISS ASHWORTH

87. IMMIGRATION.—An investigation of immigrant heritages, ideals, and attitudes, as shown in the immigration of the United States; agencies and methods of assimilating the immigrant. Prerequisites, Courses 41, 42, or permission of the instructor. *Three hours a week.* MISS ASHWORTH

88. Social Control.—A study of the social mechanisms involved in the control of people and groups, by facial and vocal gestures, force, custom, legal compulsion, political discussion, public opinion, and war; certain conscious programs for control in the form of socialism, communism, government ownership, single tax, etc. Seniors only. *Three hours a week.*

Miss Ashworth

ENGLISH

Professor Ellis; Associate Professors Turner, Small, and Ashby; Assistant Professors Scamman and Crosby; Instructors McCreary, Whitney, Aiken, Foster, Moreland, and Cook; Graduate Scholars Adams, Grindle, Leland, and Marsh

English 1, Freshman Composition, in the fall semester, and English 2a, 2b, or 18 in the spring semester are required of all freshmen unless excused by the department and are prerequisite for all other credit courses in English. Students in the Colleges of Arts and Sciences and Technology who show special proficiency in the Freshman Week English tests are excused from taking the usual freshman courses and admitted to English 3, 4 or to an advanced course in writing.

English 3, 4, the foundation course in English literature, is recommended for all sophomores in Arts and for students in the other colleges who desire a general cultural course in English.

English 5, (6), Technical Composition, is required of Technology students in the senior or junior year, of Forestry sophomores, and of juniors in the Agriculture curricula.

English 9, (10), Modern Literature, is required of juniors in Technology unless Public Speaking is elected instead, and is required of Forestry sophomores and of juniors in the Zoology curriculum.

English major students are expected to complete with satisfactory grades thirty hours in English beyond the freshman year, including Courses 3, 4 and 67; a year's work in advanced composition, and the equivalent of one full course in each of the following groups: (1) Courses 57, 58 or 61, 62; (2) 43, 44; 55, 56; 59, 60; or 81, 82; (3) 51, 52; 53, 54; 63, 64; 65, 66; 71, 72; 75, 76; or 87, 88. Substitutions for students desiring to specialize in journalism, public speaking, dramatics, or creative writing must have the approval of the major instructor. Extra-departmental requisites are History 17, 18 and an elementary knowledge of German. *Freshmen who*

expect to major in English are advised to elect German 1, 2 as their required language subject.

A comprehensive major examination, oral and written, covering the student's courses in English is held early in the final semester of the senior year.

A minor of eighteen hours is selected in some related department, usually History, Latin, French, or Public Speaking. Students intending to teach in secondary schools are advised to prepare themselves also in a third teaching subject.

An approved English minor, for major students in other departments, includes Courses 3, 4; 7, 8; 57, 58; and 67 (68) or 21 (22). No student will be officially approved by the department to teach English in secondary schools who has not satisfactorily completed the equivalent of these courses.

1. Freshman Composition.—An intensive course in expository writing, differentiated in method to suit the needs of the several college groups. The fundamental principles of good usage in writing. Frequent themes and conferences. Required of all freshmen not excused by the department. *Three hours a week.*

Mr. Turner (Chairman) and Members of the Department

0. Grammar Review.—A drill course in the fundamentals of grammar, sentence structure, punctuation, and good usage in the choice of words, provided for freshmen whose preparation in English is found to be defective. *Two hours a week,* first nine weeks and second nine weeks of the fall semester. *No credit.* Miss Adams, Mr. Cook

2a. Freshman Composition (Exposition).—A course in exposition, including training in business letters and the construction of reports. Required of freshmen in Agriculture and elective for those in Arts and Technology. Required as review for Arts and Technology freshmen who have not attained a grade of C in English 1. *Three hours a week,* spring semester.

Mr. Turner, Miss Aiken, Miss Foster, Mr. Cook, Mr. Leland

2b. Freshman Composition (Description and Narration).—Practice in writing and study of the descriptive and narrative types. Elective for freshmen in Arts and Technology who have passed English 1 with a grade of C or better. *Three hours a week.*

Miss Crosby, Miss McCreary

3, 4. History of English Literature.—A survey of English literature to 1832. Prerequisite for all advanced courses in English literature. *Three hours a week.*

Mr. Turner, Mr. Small, Mr. Ashby, Miss Crosby, Miss Aiken

5, (6). Technical Composition.—Business correspondence, reports, and preparation of manuscript for publication. *Not open to students in Arts and Sciences. Two hours a week,* fall or spring semester.

Mr. Scamman (Chairman), Mr. Grindle, Mr. Marsh

7, 8. Second-Year Composition.—A course in exposition and narration, for students who have passed English 1, 2 and desire further work in general composition. *Two hours a week.*

Mr. Whitney (Chairman), Mr. Small, Mr. Ashby

9, (10). Modern Literature.—A study of specimens of literature of contemporary interest, with the design of cultivating the appreciation and enjoyment of good reading. Since the subject matter of the course is changed each time it is offered, it may be repeated several times for credit. *Not open to students in Arts and Sciences or in Home Economics. Two hours a week,* fall or spring semester.

Mr. Scamman (Chairman), Mr. Small, Mr. Moreland

13, 14. Types of Literature.—A critical and appreciative study of representative novels, plays, lyric and narrative poetry, biography, magazines, and other literary types. For students in the Home Economics curriculum. *Three hours a week.* Mr. Ellis

16. Business Correspondence.—A course primarily for major students in Economics. The main object of the course is to acquaint students with the use of correct and effective English for business purposes. *Two hours a week.* Mr. Scamman

18. Literature for Freshmen.—Elective for freshmen in the Colleges of Arts and Sciences and Technology who have passed English 1 with a grade of C or better. A course in English literature from 1832 to the present. *Three hours a week.*

Miss Crosby, Miss McCreary, Mr. Whitney, Miss Aiken, Miss Foster, Mr. Cook

21, 22. Teaching of English in the High School.—Discussion of topics and practice teaching in high-school literature and composition, oral and written. Practice in composition and in theme correcting. Planning a well-ordered sequence of high-school classics. *Two hours a week.*

Miss McCreary

23, 24. News Writing.—Training in the fundamentals of newspaper work thru theory and practice. The first semester deals with general principles, the second semester with the newspaper reporting of public events. *Two hours a week.* Mr. Moreland

25, 26. History of the American Newspaper.—Origin and development of journalism in the United States. Notable personalities in American journalism and the expansion and influence of the press. *Two hours a week.*
Mr. Moreland

27. Mechanics of Editing.—Copy reading, headline writing, and page make-up, with a study of news values. Textbook and lectures. *Two hours a week.* Mr. Moreland

28. Editorial Writing.—A study of editorial writing; dramatic, literary and musical criticism; special column writing. The course emphasizes the mechanics of the writing and the importance of such writing in the formation of public opinion. *Two hours a week.* Mr. Moreland

29. Feature Writing.—Covering feature writing for newspapers and magazines. Each student will be required to write at least four articles acceptable for publication during the semester. *Two hours a week.* Not given in 1930-31. Mr. Moreland

30. The Country Newspaper.—A study of country journalism with a view to its improvement. Actual writing for weekly and semi-weekly papers of the state is required in the course. *Two hours a week.* Not given in 1930-31. Mr. Moreland

31, 32. The Eighteenth and Nineteenth Century Essay.—Addison, Steele, Swift, Johnson, Goldsmith. and Burke; Lamb, De Quincey, Macaulay, Carlyle, Ruskin, Arnold, and Stevenson. *Two hours a week.* Not given in 1930-31.

37, 38. Tennyson and Browning.—Primarily reading courses with class discussion. May be taken separately. *Two hours a week.* Not given in 1930-31. Mr. Turner

43, (44). American Literature.—A survey course, based upon the study of the chief works of American poets and prose writers. Lectures, recitations, assigned reading, and written reports. *Three hours a week,* fall or spring semester. Miss McCreary, Miss Foster

45, 46. Contemporary Literature.—A study of present-day tendencies and production in one or more of the various types of literature. For the fall semester of 1930-31, the topic is The Recent English Novel; for the spring semester of 1931, The Short Story and Biography. *Two hours a week.* Mr. Whitney

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For the courses which follow, English 3, 4, History of English Literature, is prerequisite.

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 proceed to graduate study in English. *Three hours a week.* Mr. Small

52. Beowulf.—This course supplements Course 51 with a study of the earliest English epic. Attention is given to metrical, literary, and linguistic qualities and to the historical background. *Three hours a week.* Mr. Small

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.* Miss Crosby

55, 56. Nineteenth Century Poetry.—In the first half the poets of the English Romantic Movement—Wordsworth, Coleridge, Byron, Shelley, and Keats—are chiefly considered; in the second, those of the Victorian Age, especially Tennyson, Browning, Arnold, and the Pre-Raphaelites. *Three hours a week.* Mr. Turner

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. Attention is given to Elizabethan stage conditions and the dramatic work of Shakespeare's contemporaries. *Three hours a week.* Mr. Ellis, assisted by Mr. Cook

59. English Literature from 1790 to 1830.—A study of the various types of literature during the Romantic Movement, with some interpretation of the spirit of the time. The poetry of the age of Wordsworth; Jane Austen and Scott; the rise of the essay with Lamb, Hazlitt, and De Quincey. *Three hours a week.* Not given in 1930-31. Mr. Turner

60. English Literature from 1830 to 1870.—A consideration of the various types of literature during the first half of the Victorian Period with a study of the spirit and interests of the period. The poetry of Tennyson, Browning, and their contemporaries; the Victorian novel; the great prose writers, such as Carlyle, Arnold, and Ruskin. *Three hours a week.* Not given in 1930-31. Mr. Turner

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

63. Sixteenth Century Literature.—Non-dramatic poetry and prose of the period, with particular attention to the poetry of Spenser. *Three hours a week.* Not given in 1930-31.

64. Seventeenth Century Literature.—The non-dramatic poetry and prose of the century, with particular attention to Milton. *Three hours a week.* Not given in 1930-31.

65, 66. Eighteenth Century Literature.—A study of the evolution of neo-classicism as it merges into the early Romantic Movement, as shown in the poetry, fiction, and drama of the period. *Three hours a week.*
Mr. Ashby

67. History of the English Language.—The origins of the language; its relation to other languages; the sources and development of the English vocabulary. *Two hours a week.* Mr. Small

68. History of the English Language.—The development of standard spoken English. A study of the changes that have taken place in our language from the time of King Alfred to our own day, with special attention to the pronunciation and inflection of American English. *Two hours a week.* Not given in 1930-31. Mr. Small

71, 72. Advanced American Literature.—A study of some special field or period of American literature. English 43, (44) or its equivalent is prerequisite. For the fall semester, 1930-31, the topic is The Eighteenth Century in America; for the spring semester the topics are The Novel in America and The Romantic Movement in American Literature. *Three hours a week.* Mr. Ellis, Miss McCreary

75, 76. Comparative Literature.—A survey of Continental European literature from Dante to the present, giving the student some acquaintance with the most important figures in modern Continental literatures and some idea of their chief movements and interrelations. No knowledge of foreign languages is required. Except by permission of the instructor, students may not take English 76 without English 75. *Three hours a week.*
Mr. Turner

77, 78. Creative Writing.—An advanced course for students who have shown exceptional interest and ability in some field of writing. The type selected will vary in different years. *Two hours a week.*

77a, 78a. The Short Story.—Given in the spring semester, 1931.
Mr. Whitney

77b, 78b. The Familiar Essay.—Given in the fall semester, 1930-31. Mr. Whitney

77c, 78c. Verse Writing.—Not given in 1930-31. Mr. Ellis

77d, 78d. The One-Act Play.—Given in the spring semester, 1931. Mr. Whitney

81, 82. The English Novel.—This course traces in the first semester the history of the English novel from the medieval prose romances to the death of Scott. The second semester treats the Victorian novel from Dickens thru Hardy and Stevenson. *Three hours a week.* Not given in 1930-31. Mr. Turner

85, (86). Restoration Literature.—The temper and life of the Restoration period as reflected in the literature; the Restoration drama; the significance of Dryden's work; political satire; the standards of neo-classicism in poetry; the rise of modern prose. *Three hours a week.* Not given in 1930-31. Mr. Ellis

87, 88. Middle English.—A study of English Literature from 1200 to 1500, exclusive of Chaucer. Prerequisite, Anglo-Saxon or Chaucer. *Three hours a week.* Not given in 1930-31. Mr. Small

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

FRENCH

Professor Kueny; Associate Professor Parker; Assistant Professor Buzzell; Miss Bedelle

French major students are required to elect thirty hours in French beyond their freshman year. In order to secure the department's approval for the teaching of French in secondary schools they must have satisfactorily completed Courses 7, 8, 9, 10; 53 and 54 (or 55 and 56); 57 and 58 (or 59 and 60); 62, 63, and 64.

Students electing French as a minor with a view to teaching it in secondary schools will be approved only if they have satisfactorily completed eighteen hours beyond their freshman year, and these eighteen hours must include Courses 7, 8, 9, 10; 53 and 54 (or 55 and 56); 63, and 64.

3, 4. Intermediate French.—A review of the elements of grammar, pronunciation and composition, combined with the reading of easy texts. Open to students who have offered two units of French as entrance requirements. *Three hours a week.* Miss Bedelle

5, 6. Advanced French.—Rapid reading of modern prose and poetry. Open to students who have offered three units of French as entrance

requirements, and other students with the same preparation. *Three hours a week.* MR. KUENY, MR. PARKER, MISS BUZZELL, MISS BEDELLE

7, 8. ELEMENTARY CONVERSATION AND COMPOSITION.—Open to students who have offered two units of French as entrance requirements. *Two hours a week.* MR. KUENY, MISS BUZZELL, MISS BEDELLE

9, 10. ADVANCED CONVERSATION AND COMPOSITION.—Open to students who have completed Courses 7 and 8, or an equivalent. *Two hours a week.* MR. KUENY, MISS BUZZELL

21. THE FRENCH HISTORIANS.—A brief survey of the part played by historical writers in French literature, with a detailed study of some representative historical works of the nineteenth century. Open to students who have passed Course 6. *Two hours a week.* MISS BUZZELL

22. FRENCH CRITIQUE.—A study of the development of French critique based on the reading of selections from the most important critical writers, especially Sainte-Beuve. Open to students who have passed Course 6. *Two hours a week.* MISS BUZZELL

53. THE NOVEL IN THE NINETEENTH CENTURY, 1800-1850.—Lectures on the fiction of the Romantic school, with especial emphasis on the historical novel, and on the work of Balzac. Students are required to prepare oral and written reports on assigned reading. Open to students who have passed Course 6. *Two hours a week.* MR. PARKER

54. THE NOVEL IN THE NINETEENTH CENTURY, 1850-1900.—The fiction of the principal realistic and naturalistic writers will be studied, with some attention to the novels of Loti, Anatole France, and Bourget. Conducted in the same way as Course 53. Open to students who have passed Course 6. *Two hours a week.* Courses 53 and 54 together are intended to prepare students for the intelligent reading of modern French novels. MR. PARKER

55. THE DRAMA IN THE NINETEENTH CENTURY, 1800-1850.—The important plays of Hugo, Dumas père, Vigny, Musset, and Scribe will be either studied in class or assigned for outside reading. Lectures, recitations, themes. Open to students who have passed Course 6. *Two hours a week.* MR. PARKER

56. THE DRAMA IN THE NINETEENTH CENTURY, 1850-1900.—A survey of the principal dramatic productions of the second half of the century. Lectures, recitations, oral and written reports. Open to students who have passed Course 6. *Two hours a week.* MR. PARKER

57, 58. ADVANCED FRENCH GRAMMAR.—Lectures, recitations, practical exercises. The student is trained in making his own grammar thru the study

of representative works. Open to students who have passed Courses 9 and 10, or an equivalent. Given in 1930-31 and alternate years. *Three hours a week.* MR. KUENY

59, 60. HOW TO WRITE FRENCH.—An advanced course in composition. Open to students who have completed Courses 9 and 10, or an equivalent. Those registered for the course are required to take at the same time a course in French literature. Given in 1931-32 and alternate years. *Three hours a week.* MR. KUENY

62. THE ROMANTIC POETS.—A survey of the period of French romantic poetry with especial emphasis on Lamartine, Vigny, Hugo, and Musset. Open to upper-class students. Given in 1930-31 and alternate years. *Two hours a week.* MR. KUENY

63. THE SEVENTEENTH CENTURY. 1600-1660.—A study, thru lectures and assigned reading, of the formation of classicism. Careful reading of the chief plays of Corneille. Open to students who have passed Course 6. *Two hours a week.* MR. PARKER

64. THE SEVENTEENTH CENTURY. 1660-1700.—The age of classicism. Especial attention will be paid to the plays of Molière and Racine. Open to students who have passed Course 63. *Two hours a week.* Courses 63 and 64 should give students a first hand acquaintance with the masterpieces of French literature in the seventeenth century and an appreciation of French culture in the age of Louis XIV. MR. PARKER

73. THE EIGHTEENTH CENTURY. 1700-1750.—A survey of the literature and ideas of the first half of the century, with especial study of the work of Voltaire. Lectures, recitations, oral and written reports. Open to students who have taken Courses 63 and 64, or to seniors who are also taking 63. *Two hours a week.* MR. PARKER

74. THE EIGHTEENTH CENTURY. 1750-1800.—A survey of the literature that anticipated the French Revolution, with emphasis on the work and influence of Rousseau, Diderot, and Beaumarchais. Open to students who have taken Course 73. *Two hours a week.* MR. PARKER

101, 102. THE MIDDLE AGES.—The historical development of the French language and literature from the origins to the Renaissance. A careful study of the text of the *Chanson de Roland* and of the chroniclers, with the reading of other texts. Open to students who have completed two courses in French literature. Given in 1931-32 and alternate years. *Two hours a week.* MR. KUENY

103. THE SIXTEENTH CENTURY.—A survey course combined with a somewhat intensive study of selections from Marot, Rabelais, Ronsard, and

Montaigne. Open to students who have taken two courses in French literature. Given in 1930-31 and alternate years. *Two hours a week.*

MR. KUENY

GENERAL COURSES

Gc 1, 2. GENERAL LECTURES.—The College of Arts and Sciences has arranged a series of weekly lectures of a popular nature, along the lines of work connected with the departments in that college.

Courses of lectures have been scheduled as follows:

1930-31 Greek and Latin; Chemistry.
1931-32 English; Education, Psychology, and Philosophy.
1932-33 German and Romance Languages; Zoology.
1933-34 History and Economics; Physics and Mathematics.

These courses will be repeated in the same order.

Registration for this course is open to all students in the University and proper credit is given for its completion. The lectures are open to the public and are without charge. For additional details see page 139.

GEOLOGY

The courses in this department are described under the College of Agriculture.

GERMAN

PROFESSOR DRUMMOND; ASSISTANT PROFESSOR FRENCH; MRS. SILVERMAN; MR. MERRILL

1, 2. FIRST YEAR GERMAN.—A course for beginners. Grammar, composition, translation, conversation. Credit is not given for less than a year's work to students registered in the College of Arts and Sciences. *Five hours a week.*

MR. FRENCH (Chairman), MRS. SILVERMAN, MR. MERRILL

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

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.* Mr. Drummond

7, 8. Fourth Year German.—For students who have had Courses 5, 6 or equivalent. Critical reading of standard works, principally from the nineteenth century literature; lectures; essays. *Three hours a week.* Mr. French

9. Teachers' Course.—For those who intend to teach German. Discussion of methods of teaching, the value of different texts, preparation of the lesson, classroom work, pronunciation, word-derivation, historical grammar. *Two hours a week.* Mr. French

13, 14. Elementary German Composition and Conversation.—For students who have had Courses 1, 2 or equivalent. *Two hours a week.* Mrs. Silverman

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.* Mr. Drummond, Mr. French

17, 18. Advanced German Conversation and Composition.—For students who have had Courses 13, 14. *Two hours a week.* Mr. Drummond, Mr. French

The following courses are given when there is sufficient demand.

51, 52. Studies in Eighteenth Century Literature.—Special attention is given to the life and works of Klopstock, Lessing, Wieland, Goethe, Schiller. Critical study of different works, lectures, discussions. *Two hours a week.* Mr. Drummond

53, 54. Goethe.—Lectures on the life and work of Goethe, with a critical study of Faust. *Two hours a week.* Mr. Drummond

55, 56. Studies in Nineteenth Century Literature.—The various literary movements of the nineteenth century; lectures, discussions, outside reading. *Two hours a week.* Mr. French

57, 58. Seminar.—A study of some special topic in German literature. *Two hours a week.* Mr. Drummond, Mr. French

60. History of German Literature.—An outline sketch of the history of German literature in German. Recitations, outside reading, lectures. *Three hours a week.* Mr. French

62, 63. Early New High German.—A study of the most important literary movements from the early religious drama to Opitz and his con-

temporaries; lectures, discussions, outside readings. *Two hours a week.*
MR. FRENCH

101, 102. GOTHIC: INTRODUCTION TO THE STUDY OF GERMANIC PHILOLOGY.—Historical grammar, word-derivation, translation. *Two hours a week.* MR. DRUMMOND

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.* MR. DRUMMOND

105, 106. MIDDLE HIGH GERMAN.—A study of the grammar and its relation to modern German grammar; reading of such texts as Nibelungenlied, Walter von der Vogelweide, Hartmann von Aue; lectures on the literature of this period. *Two hours a week.* MR. DRUMMOND

All students with a major in German are expected to be present at the meetings of the Journal Club, which are held monthly for the discussion of current magazine articles relating to Germanics. Other advanced students may be admitted to the meetings.

GREEK LANGUAGE AND LITERATURE

PROFESSOR HUDDILSTON; ASSISTANT PROFESSOR PERHAC

The Department of Greek is arranged with the idea of presenting several phases of ancient culture. 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 course 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 to do with the achievements of the Greeks and Romans in laying the foundations of Western life and thought. Some examination is made of Egyptian and Eastern civilization as the background of 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. Textbook, lectures, and notebook. *Three hours a week.* MR. HUDDILSTON

3. GREEK LIFE AND CULTURE.—A brief study of important features of the Greek legacy in art, literature, religion, and philosophy. Textbook and lectures. *Two hours a week.* MR. HUDDILSTON

4. Early Religions.—A study of the religious conceptions of the ancient Egyptians, Babylonians, Persians, and Greeks; with chief emphasis on the Greeks. Lectures and assigned reading; investigation of special topics by members of the class. *Two hours a week.* Mr. Huddilston

5. Beginning Greek.—Grammar and elementary work, followed in the second part of the semester by reading in the New Testament Greek. *Four hours a week.* Mr. Perhac

6. Continuation of Course 5.—Homer; selections from the Iliad. *Four hours a week.* Mr. Perhac

51. Greek Literature.—A general survey which does not presuppose any knowledge of the Greek Language. While the course includes prose literature as well as poetry, the main attention is given to Homer and writers of the drama; considerable reading is done in English translation and some time is given to the influence of the Greek masterpieces upon Latin and later European literatures. Given in 1932-33. *Three hours a week.*
Mr. Huddilston

55, 56. Ancient History.—Emphasis for the first semester centers on the national demonstrations that culminated before 500 B.C. Special attention is given to the value of the monuments in Egyptian, Babylonian, Hittite, and Cretan cultures. The second semester follows the Mediterranean West, passing in review important factors in Phoenician, Greek, and Roman history. Only students majoring in history may take this course except on arrangement with the instructor. Investigation of assigned topics, special reports, and discussions. Given in 1931-32. *Two hours a week.*
Mr. Huddilston

HISTORY AND GOVERNMENT

Professor Colvin; Associate Professor Whitmore; Acting Associate Professor Dow; Assistant Professor Wood; Mr. Guyer

History

1, 2. United States History and Government.—This course begins with the close of the Revolution. It is open to freshmen only. *Three hours a week.* Mr. Whitmore, Mr. Guyer

11. Medieval History.—A general survey course covering the period from the third century to 1500. Not open to freshmen. Primarily for sophomores. *Three hours a week.* Miss Colvin

12. Modern History.—Continuation of Course 11 to 1789. Three *hours a week.* Miss Colvin

17. History of England.—From early times to the beginning of the Stuart period. Not open to freshmen. *Two hours a week.* Mr. Wood

18. History of England.—Continuation of Course 17. From the beginning of the Stuart period to 1815. Not open to freshmen. *Two hours a week.* Mr. Wood

21. Current World Problems.—A course designed for those who wish to be intelligently informed on world affairs, but do not make history their major subject. Lectures and discussions on outstanding problems of history, government, and politics. Open to all university students except freshmen. *Two hours a week.* Members of the Department Staff

22. Current World Problems.—The above course, up to date, repeated. Not open to those who have had Course 21. *Two hours a week.* Members of the Department Staff

53, 54. Modern Europe.—From the background of the French Revolution to the present. Open to students who have taken Courses 11 and 12 or 17 and 18. *Two hours a week.* Mr. Wood

57, 58. United States History.—Studies of special periods, or of special phases of the development of American civilization. Open to seniors who have had Courses 1 and 2. *Two hours a week.* Mr. Whitmore

59. Social and Industrial History of England.—This course begins with the medieval manor and comes down to the present time. *Two hours a week.* Mr. Guyer

60. Social and Industrial History of the United States.—This course begins with early colonial history. *Two hours a week.* Mr. Guyer

63. Stuart England.—A detailed survey of the Stuart era in English life, with particular emphasis on the political and social factors of the Restoration period. *Three hours a week.* Prerequisites: Courses 17 and 18, and the permission of the instructor. Mr. Wood

64. Canadian History.—Beginning with the period of early French colonization, and stressing the consideration of the French background in Canadian life, the political and economic development of Canada is traced to the present. Prerequisite: one course in American history and government, or permission of instructor. *Three hours a week.* Mr. Wood

79. The Renaissance.—This course takes up the Renaissance as an intellectual and social movement in Italy, and its expansion into France,

England, and Germany. For seniors only. *Three hours a week.*
MISS COLVIN

80. THE REFORMATION.—This course follows Course 79 and the two are always given the same year. For seniors only. *Three hours a week.*
MISS COLVIN

97, 98. STUDY OF HISTORICAL MATERIAL.—Open only to students taking history as their major subject. *Two hours a week.* MISS COLVIN

Government

31. THE NATIONAL GOVERNMENT OF THE UNITED STATES.—The principles and interpretation of the Federal Union. Special attention will be paid to congressional organization, procedure, and powers; the presidency; the executive departments; present problems such as regulation of commerce. Not open to freshmen. *Three hours a week.* MR. DOW, MR. GUYER

32. STATE AND LOCAL GOVERNMENT.—Continuation of Course 31. Organization and powers of State governments; county, town, and city government; political parties and practical politics. *Three hours a week.*
MR. DOW, MR. GUYER

33. MUNICIPAL GOVERNMENT.—The relation of urban government to modern civilization. Lectures and discussion on such topics as mayor and city-manager government, elections, municipal graft and bosses. *Three hours a week.* MR. DOW

34. MUNICIPAL ADMINISTRATION.—How the city conducts its business, with practice in solving actual problems of city planning, law enforcement, traffic, fire protection, zoning, parks, schools, etc. Continuation of Course 33. *Three hours a week.* MR. DOW

71. THE GOVERNMENT OF THE BRITISH COMMONWEALTH OF NATIONS.—This course will deal with the government and politics of England, also the Dominions, colonies, and mandates. Special attention will be devoted to a comparison of English and American problems and practices. Course 31, a prerequisite. *Two hours a week.* MR. GUYER

72. COMPARATIVE EUROPEAN GOVERNMENT.—A study of governments, political parties, and current problems in the leading European countries. Special attention will be given to the newer nations of Europe. Course 71, a prerequisite. *Two hours a week.* MR. GUYER

73. INTERNATIONAL RELATIONS.—A survey of the problems of international life arising out of nationalism, imperialism, race conflicts, etc. How

these problems are met by treaties, conferences, and such agencies as the Permanent Court and League of Nations. *Two hours a week.* Mr. Guyer

74. American Foreign Relations.—The relations of the United States to the outside world. Such policies will be examined as the Monroe Doctrine, Pan-Americanism, the "Open Door". Attention will be paid to our attitude on the acquisition of territory, arbitration, limitation of armaments, the League of Nations. Courses 1 and 2, or 31, prerequisites. *Two hours a week.* Mr. Guyer

83, 84. American Constitutional Law.—This course deals with the interpretation of the Constitution in the Federal courts. Leading cases will be read and discussed on such topics as due process of law, regulation of interstate commerce, freedom of speech. Given in 1930-31 and alternate years. Courses 31 and 32 required. *Three hours a week.* Mr. Dow

87, 88. International Law.—The reading consists largely of selected cases, followed by classroom discussion. Discovery and occupation, search and seizure, neutrality, recognition of states, arbitration, laws of land and sea warfare, etc. *Three hours a week.* Mr. Dow

99, 100. Political Theory.—A survey of the classics of political theory from Plato to the present day. Reading, lectures, and discussion of Aristotle, Machiavelli, Paine, Rousseau, Jefferson, Mill, Spencer, Laski, and others. Either 99 or 100 given when requested by qualified students. *Two or three hours a week.* Mr. Dow

Courses 65 and 66, Latin-American History, are listed under the Department of Spanish and Italian.

See Courses 55 and 56 in the Department of Greek Language and Literature for Ancient History.

LATIN

Professor Chase; Assistant Professor Perhac

1, 2. Beginning Latin.—Equivalent to the first two years of high school study. Credit is not given for less than a year's work to students registered in the College of Arts and Sciences. *Four hours a week.* Mr. Perhac

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

5. Livy.—Selections from Livy, History of Rome. *Three hours a week.* Mr. Chase

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

7, 8. Latin Composition, with Review of Latin Syntax.—*One hour a week.* Mr. Perhac

9. Tacitus.—Reading and discussion of the Agricola and Germania. *Three hours a week.* Mr. Chase

10. 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.* Mr. Chase

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

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

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

24. Horace and Juvenal.—Reading of selections from the great satirists; study of Roman satire and social life. *Three hours a week.* Mr. Perhac

51, 52. Teachers' Course.—Discussions of topics connected with the teaching of Latin in secondary schools. Study of selected passages of Cæsar, Cicero, and Vergil. *Three hours a week.* Mr. Perhac

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.* Mr. Levinson

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

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. Given when asked for by a sufficient number of students. *Two hours a week.* Mr. Chase

MATHEMATICS

PROFESSOR HART; PROFESSOR WILLARD; ASSOCIATE PROFESSOR BRYAN; *ASSOCIATE PROFESSOR JORDAN; ASSISTANT PROFESSOR LUCAS; MR. SILVERMAN; MR. STEWART; MR. LAMOREAU; MISS WRIGHT

Students whose major subject is mathematics are required to take Courses 1, 2 (unless offered for admission), 3, 5, 6, 7, 8, and to elect other courses to a total of forty hours. At least twelve of the forty hours must be chosen from Courses 51, 52, 53, 54, 56, 61, 63, 64 and Astronomy 15, 16, 59 and 60. Mechanics 51 and 52 may be substituted for ten hours of the above group. Astronomy 11 may be taken as mathematics elective. Students majoring in mathematics who intend to teach are advised to elect Courses 26, 63, and 64 as well as 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. *Three hours a week.*

MR. HART, MR. WILLARD, MR. BRYAN, MR. JORDAN, MR. SILVERMAN, MR. STEWART, MR. LAMOREAU

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

2a. SOLID GEOMETRY.—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. This course is primarily for students in Forestry who did not offer solid geometry for admission. *Two hours a week.*

3. COLLEGE ALGEBRA.—A brief review of radicals, the theory of exponents, quadratic equations, and the binomial theorem; determinants; theory of equations. *Two hours a week.*

MR. HART, MR. WILLARD, MR. BRYAN, MR. SILVERMAN, MR. STEWART, MR. LAMOREAU, MISS WRIGHT

4. SPHERICAL TRIGONOMETRY.—The elements of this subject with problems and applications to spherical astronomy. Given in 1931-32 and alternate years. *Two hours a week.* MR. SILVERMAN

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

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*On leave of absence, spring semester, 1930-31.

freshmen with especially good high-school preparation. *Three hours a week.* MR. LUCAS

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. The equivalent of Course 2 is desirable. *Four hours a week.*

MR. HART, MR. WILLARD, MR. BRYAN, MR. SILVERMAN, MR. STEWART, MR. LAMOREAU, MISS WRIGHT

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.*

MR. WILLARD, MR. BRYAN, MR. JORDAN, MR. LUCAS, MR. SILVERMAN, MR. STEWART

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.* MR. WILLARD, MR. BRYAN, MR. LUCAS, MR. SILVERMAN, MR. STEWART, MISS WRIGHT

9. TRIGONOMETRY.—A course equivalent to Course 1, given to freshmen in Forestry. *Two hours a week.* MR. JORDAN, MR. LAMOREAU

10. APPLICATIONS OF TRIGONOMETRY.—A continuation of Course 9. *Two hours a week.* MR. LUCAS

17. MATHEMATICAL THEORY OF INVESTMENT.—A study of interest, both simple and compound, present value, discount, and annuities. Thruout the course numerous problems are solved to illustrate the theory and to fix the principles involved. *Two hours a week.*

MR. SILVERMAN, MR. STEWART

18. MATHEMATICAL THEORY OF INVESTMENT.—A continuation of Course 17. A study of amortization, the valuation of bonds, sinking funds and depreciation, building and loan associations; also the theory of probability and its application to life annuities and certain problems connected with life insurance. *Two hours a week.* MR. SILVERMAN, MR. STEWART

19, 20. THE THEORY OF STATISTICS.—A study of the theory of statistics and the application of statistical methods. *Two hours a week.*

MR. BRYAN

21. SOLID GEOMETRY.—The equivalent of Course 2 but given in the fall semester. *Three hours a week.* MR. LAMOREAU

26. College Geometry.—An elementary course in modern synthetic geometry. The nine-point circle, harmonic section, poles and polars, Ceva's theorem, Menelaus's theorem are among the topics considered. Emphasis is placed on the solution of original exercises. Not given in 1930-31. *Three hours a week.*

51. Advanced Analytic Geometry.—A course for students who have completed Courses 5, 6, 7, and 8. Given in 1930-31 and alternate years. *Three hours a week.* Mr. Lucas

52. Solid Analytic Geometry.—Given in 1930-31 and alternate years. *Three hours a week.* Mr. Lucas

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.* Mr. Lucas

54. Advanced Integral Calculus.—A continuation of Course 53. *Three hours a week.* Mr. Lucas

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

61. History of Mathematics.—Lectures and recitations. A course essential to students majoring in mathematics and to prospective teachers of mathematics. Given in 1930-31 and alternate years. *Two hours a week.* Mr. Bryan

63, 64. Teachers' Course in Mathematics.—A critical study of the methods of teaching high-school mathematics, an investigation of fundamental principles, and directions for the selection and arrangement of the subject matter of secondary-school mathematics in harmony with modern mathematics. Given in 1931-32 and alternate years. *Three hours a week.* Mr. Bryan

68. Theory of Numbers.—A study of the elements of the theory of algebraic numbers. The discussions will consider the divisibility of integers, congruences, and quadratic residues in the rational realm. *Three hours a week.* Not given in 1930-31. Mr. Bryan

73, 74. Advanced Statistics.—Derivations of formulas, proofs of propositions, discussions of preferential methods of correlation and of procedure, investigations by individuals and by groups. *Three hours a week.* Not given in 1930-31. Mr. Bryan

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, con-

formal 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 1930-31. MR. WILLARD

102. ELLIPTIC FUNCTIONS.—The Weirstrass and Jacobi functions. A brief treatment of transformation theory, and numerous examples. *Three hours a week.* Not given in 1930-31. MR. WILLARD

105. VECTOR ANALYSIS.—The elements of vector algebra and the differential and integral calculus of vectors. Applications to geometry and mechanics. *Three hours a week.* Not given in 1930-31. MR. LUCAS

115. THEORY OF FUNCTIONS OF REAL VARIABLES.—The Cantor theory of real numbers. Elementary point set theory. Limits. Properties of continuous functions. Series. Implicit functions. Cauchy-Reimann theory of integration. *Three hours a week.* Not given in 1930-31. MR. LUCAS

116. FOURIER'S SERIES.—The formal expansion of a function in a trigonometric series. Theory of convergence of such series. Legendre's polynomials. A study of the degree of accuracy attainable in the approximate representation of a given function by means of polynomials or finite trigonometric sums. *Three hours a week.* Not given in 1930-31. MR. LUCAS

119, 120. DIFFERENTIAL GEOMETRY.—Metric theory of twisted curves and surfaces in space. Lectures and problems. Prerequisite, solid analytical geometry. *Three hours a week.* Not given in 1930-31.

The department is also prepared to give the following courses, which may be offered when there is sufficient demand: 65. THEORY OF EQUATIONS. 66. MODERN PROJECTIVE GEOMETRY. 71, 72. MODERN HIGHER ALGEBRA. 109. CELESTIAL MECHANICS. 110. HYDRODYNAMICS. 117. THEORY OF SUBSTITUTION GROUPS AND OF ALGEBRAIC FIELDS. 118. THEORY OF TRANSFORMATION GROUPS (LIE THEORY).

MUSIC

PROFESSOR SPRAGUE

3, 4. MUSIC APPRECIATION.—A study of the masterpieces of music from the standpoint of the listener. Analytical rather than historical. The vital forces and personalities in the development of the art noted briefly, but the chief stress laid upon the music itself. The evolution of form traced from the folk-song to the symphony. Lectures, illustrations, prescribed readings, reports. *Two hours a week.*

5, 6. Introductory Harmony.—The grammar of music, basic to an understanding of music structure. The foundation of the art of composition. A study of the conditions under which tones sound together and progress in combination. The invention and harmonization of melodies. A knowledge of notation required. *Two hours a week.*

7, 8. Advanced Harmony.—Supplementary to Courses 5, 6 and designed to apply to the more advanced problems of tone combination the training already obtained. Emphasis placed upon harmonic analysis, melody writing, and composition in the simpler forms. *Two hours a week.*

9, 10. Counterpoint.—The art of combining melodies. A correlative with Harmony as the material of composition. Freedom and facility of expression in all the forms of music writing developed thru its study and practice. Original work the chief aim of the course. Courses 5, 6 a prerequisite. *Two hours a week.*

11, 12. Music in the Nineteenth Century.—A survey of the rise of Romanticism, including the evolution of the modern orchestra and its attendant art products, the symphonic poem and the music drama. Analysis of masterworks, assigned studies. Courses 3, 4 a prerequisite. *Two hours a week.*

13, 14. Orchestration.—A study of the modern symphony orchestra, its instrumental individualities and groupings. Analysis of representative works thru score-reading, phonographic records, and attendance at concerts. Assigned readings in history and theory. Practical scoring, with performance of successful class work. Candidates must satisfy the instructor of the proper degree of musicianship. *Two hours a week.*

21, 22. Public School Music Methods.—This course is designed to meet the needs of students expecting to enter the general teaching field and who may be required or have the opportunity to teach or direct music in addition to other subjects. Presentation of methods as applied to elementary and secondary education. A knowledge of notation required. *Three hours a week.*

25, 26. University Chorus.—An applied course in the history, development, and interpretation of choral music, designed for ensemble study and public performance of representative compositions. A satisfactory test of musical aptitude and permission of the director of music a prerequisite. †*Two hours a week.*

51. Interpretation and Conducting.—A consideration of the problems of organizing bodies of singers and players; of time-beating; of program building; and of interpretation as applied to the rehearsal and per-

formance of choral and orchestral music. Membership in the University chorus, orchestra, or band a prerequisite. Open to juniors and seniors of sufficient talent. *One hour a week.*

PHILOSOPHY

PROFESSOR LEVINSON

This department aims primarily at correlating the student's work in other fields into a unified conception of the methods and ideals of knowledge. See Courses 1, 2; 8; 51, 52.

1, 2. ORIENTATION.—An introduction to liberal education restricted to Arts freshmen. This course aims at assisting the student in an intelligent choice of his major subject and electives by presenting an elementary account of the history and present condition of the subjects treated by the various departments in the College of Arts and Sciences. Given in collaboration with other departments of the college. *Three hours a week.*

3. HISTORY OF ANCIENT AND MEDIEVAL PHILOSOPHY.—An introduction to philosophy thru the study of Greek thought from the beginning to the Christian era, and its projection into the Christianity of the Middle Ages. Given in 1931-32 and alternate years. *Three hours a week.*

4. HISTORY OF MODERN PHILOSOPHY.—The rise of experimental science and the development of the great philosophical systems from Descartes to William James. Given in 1931-32 and alternate years. *Three hours a week.*

5, 6. TYPES OF PHILOSOPHY.—An introduction to philosophy by way of an elementary analysis and appraisal of various representative philosophical systems. While designed as an alternative to Courses 3 and 4, open by consent of the instructor to students who have taken either of these courses. Given in 1930-31 and alternate years. *Three hours a week.*

8. TYPES OF PHILOSOPHIC DRAMA.—Reading and discussion of certain outstanding plays conveying various conceptions of the nature of the world and man. *Two hours a week.*

51, 52. TOPICS IN PHILOSOPHY.—This course is restricted to a limited number of properly qualified upperclassmen, whose needs in philosophy are not satisfied by any of the other courses offered by the department. Topics associated with the student's major subject will be studied thru tutorial conferences, assigned readings, and reports. No work in philosophy is prerequisite. *Two or three hours a week.*

A course in Roman Philosophy is listed under the Department of Latin (Latin 57, 58).

PHYSICS

PROFESSOR STEVENS; PROFESSOR FITCH; ASSOCIATE PROFESSOR CROFUTT; ASSISTANT PROFESSOR PISTON; MR. LEFLER; MR. ALLEN; MISS MOORE

Students electing physics as a major subject are expected to take Courses 1, 2, or 5, 6, and 3, 4, 16, 17, 18, and elect other courses making a total of 30 hours. Students majoring in physics are expected to take several courses in mathematics.

1, 2. GENERAL PHYSICS.—A course covering the fundamental relations in mechanics, sound, heat, light, and electricity. Lectures, recitations, and laboratory. Classroom, *four hours a week;* laboratory, †*two hours a week.* MR. FITCH, MR. CROFUTT, MR. PISTON, MR. LEFLER, MR. ALLEN, MISS MOORE

3, 4. PHYSICS PROBLEMS.—The solution of problems in General Physics. Open to and especially recommended for students in Courses 1 and 2, or 5 and 6. *One hour a week.* MR. FITCH

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. Classroom, *three hours a week;* laboratory, †*two hours a week.* Under special circumstances the class work may be taken without the laboratory work.

MR. PISTON, MR. LEFLER, MISS MOORE, MR. ALLEN

10. METEOROLOGY.—A course covering the essential principles of the subject including a study of instruments and weather predictions. *Three hours a week.* MR. PISTON

11. APPLIED METEOROLOGY.—A course dealing with experiments and problems in observational meteorology. Students who go to the forestry camp may complete the course in the first half of the semester. Recitations, *two hours a week,* first half-semester; laboratory, †*four hours a week,* second half-semester. MR. PISTON

15. HISTORY OF PHYSICS.—A textbook course dealing with the lives of those men who have contributed most to the development of physics. Given in 1930-31 and alternate years. *Two hours a week.* MR. STEVENS

17, 18. Advanced Physics.—A course dealing with certain chosen topics somewhat more in detail than the beginning courses. *Two hours a week.* Mr. Fitch, Mr. Crofutt

51. Mechanics and Heat Laboratory.—An advanced laboratory course stressing the physical principles. †*Four hours a week.* Mr. Piston, Mr. Crofutt

52. Mechanics and Heat Laboratory.—An advanced laboratory course stressing the physical principles. †*Four hours a week.* Mr. Crofutt, Mr. Piston

54. Electrical Measurements.—An advanced laboratory course in the measurement of electrical quantities. Both direct and alternating currents are studied. †*Six hours a week.* Mr. Crofutt

55. Electricity and Magnetism.—Recitations on the mathematical theory of direct current phenomena. Given in 1930-31 and alternate years. *Two hours a week.* Mr. Fitch

56. Electricity and Magnetism.—A continuation of Course 55, dealing with alternating current phenomena. Given in 1930-31 and alternate years. *Two hours a week.* Mr. Fitch

58. Mathematical Physics.—The application of mathematical methods to the treatment of problems in physics. Given in 1931-32 and alternate years. *Two hours a week.* Mr. Stevens

60. Sound.—Lectures and recitations. Given in 1930-31 and alternate years. *Three hours a week.* Mr. Crofutt

61. Heat.—An advanced course. Given in 1931-32 and alternate years. *Three hours a week.* Mr. Piston

63. Theory of Measurements.—This course is based upon the theory of least squares, and covers such topics as adjustment of observations, propagation of errors, empirical formulae, and graphic methods. Given in 1931-32 and alternate years. *Two hours a week.* Mr. Stevens

65. Vacuum Tubes.—Lectures and recitations covering the theory of the vacuum tube as used in amplifiers, detectors, oscillators, etc. Course 2 and Mathematics 8 are prerequisites. Given in 1931-32 and alternate years. *Two hours a week.* Mr. Fitch

66. Vacuum Tube Laboratory.—Laboratory work with vacuum tubes covering the work of Course 65. Given in 1931-32 and alternate years. †*Two hours a week.* Mr. Fitch

69. Modern Physical Theories.—A course dealing with radioactivity, X-rays, the vacuum tube and other electron phenomena which lead

to the theory of matter. Courses 1, 2 or 5, 6 are prerequisites. Given in 1931-32 and alternate years. *Three hours a week.* Mr. Crofutt

74. Optics.—An advanced course in the subject. Lectures; recitations. Mathematics 8 is a prerequisite. Given in 1930-31 and alternate years. *Three hours a week.* Mr. Stevens

75. Optics Laboratory.—An advanced laboratory course in light. †*Four hours a week.* Mr. Piston

81, 82. Advanced Laboratory.—An original investigation by the student under the direction of a faculty member. In this course the student learns about research by actually taking data on an original problem. All senior physics students are expected to take this for one semester. †*Two or more hours a week.* Mr. Fitch, Mr. Crofutt, Mr. Piston

101, 102. Special Laboratory Courses.—A subject for investigation is assigned or some published research is repeated. Open only to graduate students. †*Four or more hours a week.*

Mr. Stevens, Mr. Fitch, Mr. Crofutt

PSYCHOLOGY

Professor Dickinson; Assistant Professor Brush*; Assistant Professor Israeli; Mr. Ledgerwood; Mr. Mee

1, 2. General Psychology.—Introductory course presenting facts and laws of mental life. Psychology of elementary mental processes and higher mental processes, supplemented by class demonstrations. Laboratory work required. A brief survey of the field of psychology is included. *Three hours a week.* Mr. Israeli, Mr. Ledgerwood, Mr. Mee

61, 62. Applied Psychology.—Psychology applied to business, industry, advertising, salesmanship, and other fields. The application of psychological methods and tests in the selection and training of workers. Two one-semester courses covering the same subject matter. For Technology students only. *Three hours a week.* Mr. Dickinson

64. Advertising.—A course designed to acquaint the student with the psychological principles involved in advertising. Opportunity for the practical application of these principles will be given in the form of the rewriting of advertisements appearing in newspapers and magazines. For a limited number of students particularly interested in advertising. Permission of the instructor is a prerequisite. *Three hours a week.* Mr. Dickinson

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*On leave of absence, 1930-31.

65. Psychology of Childhood.—A study of the mental growth of the child to six years of age. Native equipment and environmental influences are given adequate consideration. Modern experimental techniques of child study are discussed. Prerequisite, Psychology 1, 2. *Three hours a week.*

Mr. Dickinson

66. Educational Psychology.—Lectures and discussions, supplemented by laboratory work, with special reference to native equipment, perception, progress in learning, and methods of study. Prerequisite, Psychology 1, 2. *Three hours a week.* Mr. Israeli

67, 68. Mental Measurement.—Training in the use of the more commonly used psychometric methods, with opportunity for their application to practical or research problems. During the first semester the emphasis is upon the technical training, during the second semester upon the application to problems. The technical training will be supplemented by readings, discussions, and lectures. Open only to a limited number of qualified students. Primarily for seniors and graduate students. Prerequisite, Psychology 1, 2. *Three hours a week.* Mr. Israeli

71, 72. Qualitative Experimental Psychology.—A course designed to afford an understanding of scientific methods in observation as applied to mental material, and to acquaint the student at first hand with the fundamental laws of the psychological organism. Prerequisite, Psychology 1, 2. *Three hours a week.* Mr. Ledgerwood

81, 82. Abnormal Psychology and Mental Hygiene.—A study of mental abnormalities and of the normal mentality, with a view to a better understanding of educational practice and the problems of human adjustment. Thru the courtesy and coöperation of Dr. C. J. Hedin, superintendent, clinics are conducted at the Bangor State Hospital. Attendance at the clinics is required. Prerequisite, Psychology 1, 2, with a grade of C or better. *Three hours a week.* Mr. Dickinson

83. Social Psychology.—A course designed to acquaint the student with the psychological factors underlying human social behavior. Instinctive behavior and such topics as custom, convention, psychic contagion, and the mob spirit will be adequately discussed. Prerequisite, Psychology 1, 2. *Three hours a week.* Mr. Dickinson

95, 96. Problems in Psychology.—Primarily for graduate students and seniors with a rank of B or better. Students intending to enter upon a problem should first consult Mr. Dickinson. *Hours arranged.*

Mr. Dickinson

97, 98. Seminar in Psychology.—Advanced work for those interested and fitted for it. Prerequisite, permission of the instructor. *One or two hours a week*, depending upon the subject and group involved.

Mr. Dickinson

PUBLIC SPEAKING

Professor Bailey; Mr. Bricker; Mr. Morris

The Department of Public Speaking offers courses in Speaking, Expression, and Dramatics as listed below:

Courses 1a and 2a are identical; Course 1a being given the first semester, Course 2a the second semester.

Course 1, 1a, or 2a is prerequisite for Course 6.

Courses 11 and 12 may be taken after Course 6.

Courses in Expression and Dramatics should be taken in the sequence given in the catalog. Course 56 may be taken after Courses 7 and 8.

Major requirements in the department consist of thirty hours. Students interested primarily in Dramatics and Expression may substitute certain courses in English Drama for courses in Public Speaking. Likewise, students interested primarily in Speaking may substitute advanced courses in Psychology, History, or Economics for certain courses in Dramatics. In any case the program must form a unit and have the consent of the head of the department.

Courses in Speaking

1. Public Speaking.—This course is primarily for Technology students. It trains the student to organize material and to deliver short speeches from the platform. Extemporaneous speaking on various subjects is especially emphasized. *Two hours a week.*

Mr. Bailey, Mr. Bricker, Mr. Morris

1a. Public Speaking.—Similar in general character to Course 1 but primarily for students in Arts and Sciences. *Two hours a week.*

Mr. Bailey, Mr. Bricker, Mr. Morris

2a. Public Speaking.—Similar to Courses 1 and 1a but designed to meet the needs of all students who may wish to begin public speaking the second semester. *Two hours a week.* Mr. Bricker

3a. Argumentation and Debate.—This course is primarily for students in Arts and Sciences. The written argument is stressed. Briefs and frequent debates in class are required. Prerequisites, English 1 and Public Speaking 1a or equivalent. *Two hours a week.* Mr. Bricker

4. Debating.—This course is primarily for Technology students and should be taken after Course 1. Public or technical questions are discussed and debated in class. Extemporaneous speaking is emphasized. *Two hours a week.* Mr. Morris

4a. Argumentation and Debate.—Similar to Course 3a but offered in the spring semester. *Two hours a week.* Mr. Bricker

6. Persuasive Speech.—After Course 1, 1a, or 2a. Persuasion is especially stressed. Review of modern speeches; short original speeches. *Two hours a week.* Mr. Bailey, Mr. Bricker, Mr. Morris

11. Parliamentary Order.—This course should be taken by students who desire some knowledge of the rules governing assemblies. The class organizes as a Parliamentary Society, constructing and adopting a constitution and by-laws. The classroom sessions are conducted in parliamentary order, each member having an opportunity to preside as president and to act as secretary. Special reports concerning the sources of common parliamentary law are given by members of the class. *Two hours a week.*

Mr. Bricker

12. The Sales Talk.—A course considering the salesman problem in presenting his proposition. Special study of the preparation of the sales talk and of qualities necessary in personality in order to make speech convincing. Practice in presentation. Offered in 1930 and frequent intervals thereafter. *Two hours a week.* Mr. Morris

20. Intercollegiate Debating.—The subject of this course is the University debating questions of the year. Students who have passed Courses 3a, 4 or 4a or who have shown themselves especially proficient in debate are admitted to this course. *Two hours credit.*

Mr. Bricker, Mr. Morris

21. Great Orators.—A study of representative orators, English and American. The structure of the oration and the rhetoric of oratory. Longer original speeches. Prerequisite, four hours in public speaking. *Two hours a week.* Mr. Bailey

54. Advanced Public Speaking.—Course 13 or six hours in public speaking is prerequisite. The preparation and delivery of a public address of at least forty minutes is the major work in this course. *Two hours a week.* Mr. Bailey

Courses in Expression

7, 8. Interpretative Reading.—The reading and rendering of various selections of merit form the basis of this course. It aims to create the expressional and art side of reading and speaking. *Two hours a week.*

Mr. Bailey

13, 14. Shakespearean Reading.—An oral study of Shakespeare. Expressional reading of a number of great scenes. After Course 7 and 8. Offered in 1929 and alternate years. *Two hours a week.* Mr. Bailey

51, 52. Reading Seminar.—The interpretation of an entire play. Open only to advanced students who have shown marked ability in expression and desire to do serious platform work. The consent of the head of the department is necessary for enrollment. *Two hours a week.*

Mr. Bailey

56. Vocal Development.—A course designed for those interested in the voice. Aim: to improve the voice, to give ear training in distinguishing correct and defective sounds, to acquaint the student with speech defects and methods for their correction. Approach: breathing exercises, vocal exercises, nonsense dictation tests (the phonetic symbols of the International Phonetic Association are used), and lectures. *Two hours a week.*

Mr. Bricker

Courses in Acting

9. The One-Act Play.—The study and the presentation in class of several one-act plays. One or more public performances. *Two hours a week.* Mr. Bailey, Mr. Bricker, and Student Assistants

10. The Longer Play.—The study and presentation of one long and several shorter plays. *Two hours a week.*

Mr. Bailey, Mr. Bricker, and Student Assistants

15, 16. Play Production.—This course is for students who, having had Public Speaking 9 and 10, wish to continue study in play production. Plays selected to meet the needs of the class are presented in the chapel. Stress is laid upon the theory of dramatic art as well as the practical problems of production. *Two hours a week.* Mr. Bailey

17, 18. Play Direction.—The problems of the stage director are considered and practice is given in producing plays. Costuming, make-up, and stage craftsmanship are considered. Open only to a limited number of selected students who wish to learn how to produce plays. Special permis-

sion from the head of the department is required. *Two hours a week.*

MR. BAILEY, MR. BRICKER

SPANISH AND ITALIAN

PROFESSOR PETERSON; ASSISTANT PROFESSOR ARNOLD; MR. CABRERA

Spanish

Majors in this department are required to take History 11, 12 or 65, 66 and advised to elect both. An approved minor in Spanish consists of Courses 3, 4, 5, 6, and one additional course.

1, 2. ELEMENTARY SPANISH.—The basic principles of the grammar are studied, with attention to aural and oral practice and accurate translation. In the second semester the main stress is laid on reading. Credit is not given for less than a year's work to students registered in the College of Arts and Sciences. *Five hours a week.* MISS ARNOLD, MR. CABRERA

1a, 2a. ELEMENTARY SPANISH.—Similar to the preceding. Designed for upper class students but open to freshmen who are taking concurrently another foreign language. Credit is not given for less than a year's work to students registered in the College of Arts and Sciences. *Three hours a week.* MR. PETERSON

3, 4. INTERMEDIATE SPANISH.—For second year students. An attempt is made to secure facility in the reading of ordinary prose and to gain some acquaintance with present day literature. Collateral reading, review of grammar, and study of idioms. *Three hours a week.*

MR. PETERSON

5, 6. ELEMENTARY COMPOSITION AND CONVERSATION.—May be taken by properly qualified second-year students who are pursuing at the same time Courses 3 and 4. Stress is laid upon the acquisition of a practical vocabulary by means of exercises based upon Spanish newspapers. Review of the grammar and translation into Spanish. *Two hours a week.*

MISS ARNOLD, MR. CABRERA

7. COMMERCIAL SPANISH.—The object of the course is to acquaint the student with the forms of commercial correspondence and the vocabulary used in the business world. Reading of selections dealing with industrial and commercial life. Prerequisite: Courses 3, 4. Given in 1931-32 and alternate years. *Three hours a week.* MISS ARNOLD

For courses numbered above 50, Courses 1, 2 (or 1a, 2a); 3, 4; and 5, 6 or the equivalent are a prerequisite.

51. THE SPANISH NOVEL.—Selections from representative novelists of the modern period such as Fernán Caballero, Valera, Pérez Galdós, Pardo Bazán, and Palacio Valdés form the subject of study. Collateral reading, reports, and lectures on the history of the novel. Given in 1930-31 and alternate years. *Three hours a week.* MISS ARNOLD

52. THE SPANISH DRAMA.—The study of selected plays representing the "Golden Age" and the neo-classic period and the rapid reading of the work of more recent dramatists. Given in 1931-32 and alternate years. *Three hours a week.* MISS ARNOLD

53, 54. ADVANCED COMPOSITION AND CONVERSATION.—A continuation of Courses 5 and 6. Translation from English to Spanish, original compositions on assigned subjects, and oral work of different kinds to secure facility in expression form the basis of this course. Given in 1931-32 and alternate years. *Two hours a week.* MR. CABRERA

57, 58. HISTORY OF SPANISH LITERATURE.—The study of a textbook on the development of literature in Spain and Spanish America, and the reading of selections from representative authors of various periods. Given in 1930-31 and alternate years. *Two hours a week.* MR. CABRERA

70. SPANISH CLASSICS.—A study of selections from the work of Cervantes, Lope de Vega, Calderón, and other writers of the sixteenth and seventeenth centuries. Given in 1930-31 and alternate years. *Three hours a week.* MISS ARNOLD

102. OLD SPANISH.—A study of the laws governing the development of Spanish from popular Latin, and its growth from the beginning to the present day. Reading of selections from early authors. Offered occasionally. *Two hours a week.* MR. PETERSON

History

65, 66. LATIN-AMERICAN HISTORY.—The colonization, formation, and development of the twenty Hispanic-American republics. Emphasis on the salient features of their civilization, problems and possibilities, and relations with the United States. Given in 1931-32 and alternate years. *Two hours a week.* MR. PETERSON

Italian

1, 2. Elementary Italian.—A course in Italian grammar, reading, and composition with as much oral practice as time permits. Students will not be permitted to elect Elementary Italian and Elementary Spanish in the same year. Credit is not given for less than a year's work to students registered in the College of Arts and Sciences. *Three hours a week.*

Mr. Peterson

3, 4. Modern Italian Prose.—For second-year students. Selections from representative authors are studied in an endeavor to acquire as much facility in reading as possible. Review of the grammar, composition, and collateral reading. *Two hours a week.* Mr. Peterson

52. Dante.—Reading of portions of the *Inferno* and *Vita Nuova;* study of the life and times of Dante and his influence in literature. Given occasionally in place of Course 4. *Two hours a week.* Mr. Peterson

ZOOLOGY

Professor Young; Associate Professor Rice; Assistant Professor Bean; Miss Darby; Miss Bumpus; Mr. Giddings

1. General Zoology.—An introductory course in the fundamentals of zoology illustrated by studies of typical forms from the various groups of the animal kingdom; application of biological principles to daily life. Required of all students in the College of Agriculture. This course with Botany 2 may be taken to fulfill part of the Arts and Sciences science requirement. Classroom, *two hours a week;* laboratory, †*four hours a week.*

Mr. Young, Mr. Giddings, Miss Bumpus

2. Zoology.—A course similar to Zoology 1 but adapted to the needs of home-economics students. Classroom, *two hours a week;* laboratory, †*two hours a week.* Mr. Young

3, 4. Animal Biology.—In this course an attempt is made to give a broad view of the principles of life as applied to the animal kingdom. Emphasis is placed upon the application of biology to human welfare. Classroom, *two hours a week;* laboratory, †*four hours a week.*

Mr. Young, Miss Bean, Miss Darby, Miss Bumpus

5. Elementary Physiology and Hygiene.—Required of all first year women except those in the Department of Home Economics. The principles of anatomy, physiology, and hygiene applied especially to human

well-being. This course does not count for major credit nor as a science requirement. Classroom, *two hours a week.* MISS BEAN

12. HUMAN PHYSIOLOGY.—The anatomy, physiology, and hygiene of higher animals, especially related to man. Prerequisite, one semester of zoology or biology, not including Course 5. Required of all students in the Department of Home Economics, and open as an elective to qualified students. Classroom, *two hours a week;* laboratory, †*four hours a week.*

MISS BEAN

15. VERTEBRATE ZOOLOGY.—A study of the structure, origin, and history of the vertebrate organ systems. Prerequisites, Courses 1 and 2, or 3 and 4. Classroom, *two hours a week;* laboratory, †*four hours a week.*

MR. YOUNG, MISS DARBY

16. INVERTEBRATE ZOOLOGY.—A systematic study of the invertebrate animals. Prerequisites, Courses 1 and 2, or 3 and 4. Classroom, *two hours a week;* laboratory, †*four hours a week.* MR. YOUNG

18. VERTEBRATE EMBRYOLOGY.—A study of the development and formation of tissues, organs, and systems in vertebrates. Prerequisite, Course 15, passed with a grade of C or better. Classroom, *two hours a week;* laboratory, †*four hours a week.*

MR. YOUNG, MISS DARBY, MR. GIDDINGS, MISS BUMPUS

21. BIOLOGICAL THEORIES.—This course deals with those theories which have a bearing on modern thought and life. Designed especially for other than Biology majors. Does not count toward Biology major credit.

MR. YOUNG

37, 38. GENERAL PHYSIOLOGY.—A study of the physico-chemical forces of the vital processes of plants and animals: the more special phenomena in higher animals with their bearing on human physiology. Prerequisites, two years of chemistry, Biology 1 and 2. A year of physics is recommended. Classroom, *two hours a week;* laboratory, †*four hours a week.*

MR. RICE

39, 40. MAMMALIAN PHYSIOLOGY.—A study of respiration, nutrition, circulation, excretion, and the propagation of the nerve impulse as coördinating mechanisms in the mammalian organization. Prerequisites, Biology 15 and a year of chemistry. Classroom, *two hours a week;* laboratory, †*four hours a week.* MR. RICE

41. HISTOLOGICAL TECHNIQUE.—A course in the methods of preparing microscopic slides of plant and animal material. Admission by arrangement with the instructor. Prerequisites, two years of biology. Classroom, *one hour a week;* laboratory, **six hours a week.* MR. YOUNG

44. Biological Theories.—A discussion of the more important generalizations of the biological sciences. Designed to portray the growth and development of biological knowledge as a phase of intellectual culture, and to indicate the value of such knowledge to human welfare. Open only to Zoology majors in junior and senior years and to others upon the written approval of the instructor. Classroom, *two hours a week.* Mr. Rice

47, 48. Problems in Biology.—Open to juniors and seniors who may have special interest, and special qualification, in some phase of biology. The approval of the Staff in Biology and the written consent of the instructor concerned, must be obtained before registering for this work. Credit to be arranged in each case. Not to count toward graduate credit.

The Staff

54. General Cytology.—Study of cell phenomena. Admission by written consent of the instructor. Prerequisites, Courses 1, 2, and Botany 45. Classroom, *two hours a week;* laboratory and demonstration, †*two hours a week.* Mr. Young

55, 56. Zoological Seminar.—A consideration of the current and historical literature which expresses the trends of thought in this subject. Required of all senior majors and graduates majoring in Zoology. Classroom, *one hour a week.* The Staff

57. Teachers' Course.—A discussion of the aims and ideals of teaching and a critical analysis of the methods used in attaining these ideals in the teaching of zoological material. Emphasis is laid on both secondary-school problems and college teaching. Opportunity is provided in the laboratory for practice teaching. Classroom, *two hours a week;* laboratory, *one hour a week.* Mr. Rice

College of Technology

FACULTY OF INSTRUCTION

Paul Cloke, M.S., E.E., *Dean of the College of Technology and Director, Technology Experiment Station*
Charles Partridge Weston, C.E., M.A., *Professor of Mechanics*
William Edward Barrows, B.S., E.E. *Professor of Electrical Engineering*
William Jordan Sweetser, B.S., *Professor of Mechanical Engineering*
Charles Andrew Brautlecht, Ph.D., *Professor of Chemistry and Chemical Engineering*
Embert Hiram Sprague, B.S., *Professor of Civil Engineering*
Arthur St. John Hill, E.E., *Professor of Electrical Engineering*
Benjamin Calvin Kent, B.S., *Professor of Engineering Drafting*
Alpheus Crosby Lyon, B.S., C.E., *Associate Professor of Civil Engineering*
Bertrand French Brann, M.S., *Associate Professor of Chemistry*
Harold Walter Leavitt, C.E., M.S., *Associate Professor of Civil Engineering*
Walter Joseph Creamer, Jr., E.E., *Associate Professor of Electrical Communication*
Paul DeCosta Bray, B.S., Ch.E., *Associate Professor of Chemistry*
Weston Sumner Evans, M.S., *Associate Professor of Civil Engineering*
*Harry Dexter Watson, M.S., *Associate Professor of Mechanical Engineering*
†DeWitt McClure Taylor, B.S., *Associate Professor of Mechanical Engineering*
Carl Everett Otto, Ph.D., *Assistant Professor of Chemistry*
Everett Louis Roberts, B.S., *Assistant Professor of Electrical Engineering*
Irving Henry Prageman, Ph.B., M.E., *Assistant Professor of Mechanical Engineering*
Lyle Clayton Jenness, M.S., *Assistant Professor of Chemistry*
Everett Willard Davee, *Instructor in Mechanical Engineering*
Everett Joshua Felker, *Instructor in Civil Engineering*

*On leave of absence, spring semester, 1930-31.
†Appointment for spring semester, 1930-31 only.

Harry Roy Perkins, *Instructor in Mechanical Engineering*
John George Leslie Caulfield, M.S., *Instructor in Chemistry*
Kenneth Gerard Crabtree, B.S., *Instructor in Electrical Engineering*
Earl Maynard Dunham, M.A., *Instructor in Engineering Drafting*
Theron Alonzo Sparrow, B.S., *Instructor in Mechanical Engineering*
William Lester Gilliland, Ph.D., *Instructor in Chemistry*
Lawrence Lewis Osborn, M.A., *Instructor in Chemistry*
Edgar Junior Bogan, M.A., *Instructor in Chemistry*
Frederick John Guerin, Ph.D., *Instructor in Chemistry*
Ralph Albert Sawyer, B.S., *Instructor in Engineering Drafting*
Leonidas Dacosta Stephenson, Jr., B.S., *Instructor in Civil Engineering*
Joseph Conrad Twinem, B.S., *Instructor in Civil Engineering*
Wilbur Everett Tomlin, B.A., *Instructor in Chemistry*
Bernard Franklin Parr, B.S., *Instructor in Mechanical Engineering*
Herbert Burr Abbott, *Mechanician in Mechanical Engineering*
Ralph Freeman Bowden, *Electrician in Electrical Engineering*

GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry and in various branches of engineering. 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
General Engineering Curriculum

The following requirements for graduation are common to all curricula in this college:

1. A total of 150 semester hours exclusive of physical training. Three of these hours may be for thesis.
2. Drawing, four semester hours.

3. Language: English, six semester hours. Foreign language: If entrance conditions are fully satisfied, students in Civil, Electrical, and Mechanical Engineering are not required to take foreign language in college. Students in Chemistry and Chemical Engineering are expected to have a reading knowledge of both French and German. For specific requirements in these languages see the Chemical Engineering curriculum. Public Speaking, two semester hours.

4. Mathematics, eighteen semester hours.

5. Military science, seven semester hours. Physical Training, two years.

6. Science: Chemistry, eight semester hours; Physics, ten semester hours.

At graduation in any of these curricula 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 may receive the degree of Master of Science. Three or more years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive a professional degree.

MAINE TECHNOLOGY EXPERIMENT STATION

Staff and Assistants

Paul Cloke, M.S., E.E., *Director*
Harold Walter Leavitt, C.E., M.S., *Secretary*
Charles Andrew Brautlecht, Ph.D., *Professor of Chemistry and Chemical Engineering*
Embert Hiram Sprague, B.S., *Professor of Civil Engineering*
William Edward Barrows, E.E., *Professor of Electrical Engineering*
William Jordan Sweetser, B.S., *Professor of Mechanical Engineering*
Weston Sumner Evans, M.S., *Associate Professor of Civil Engineering*
Lyle Clayton Jenness, M.S., *Assistant Professor of Chemistry*
Andrew Adams, B.S., C.E., *Research Assistant for the State Highway Commission*
Horace Asa Pratt, B.S., *Assistant Engineer, Technology Experiment Station*
William Francis Scamman, B.A., *Editor of Bulletins*
Leo Edward Day, *Highway Laboratory Assistant*
Clayton Leonard Sawyer, *Highway Laboratory Assistant*

General Statement

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 Dean of the College of Technology and the heads of the departments.

Income

The income of the Station is derived from University appropriations and from the State Highway Department.

Object

The objects of the Station are to carry on practical research in engineering subjects, make investigations for State boards, and municipal authorities, furnish scientific information to the industries of the State, and distribute accurate scientific knowledge to the people of the State.

Equipment

Most of the Station offices and laboratories are at present located in Wingate Hall, described in the section on University buildings. The station is well equipped for the testing of concrete and highway materials, both bituminous and non-bituminous. Crosby Laboratory is available for researches in the fields of hydraulics, steam-engineering, gas-engineering, metallography, and strength of materials. The electrical laboratory in Lord Hall is equipped with a 150,000 volt testing transformer and standard instruments for calibration purposes. The Chemical Engineering Department in Aubert Hall is equipped for the testing of pulp and paper products. The highway materials laboratory in the basement of Wingate Hall is equipped jointly by the Civil Engineering Department and the Maine State Highway Department.

Investigations

The principal line of research has been in the field of concrete and concrete materials. Some work has also been started in the pulp and paper industry. Researches are also being conducted in the electrical, mechanical, and chemical fields. The State Highway Department uses the Station laboratories during the winter months to conduct special research projects. Two

men have been sent to the University for this purpose every year during the past seven years.

Publications

The Station issues two series of publications: Bulletins and Papers. It has issued twenty-six (26) Bulletins and nine (9) Papers. The papers have been issued as reprints from such technical journals and magazines as: Proc. Nat. Acad. of Sciences, Proc. Am. Soc. Testing Materials, Proc. Am. Conc. Inst., Proc. Am. Soc. Civil Eng.

CURRICULA

FRESHMAN YEAR

Common to all engineering courses and Chemistry.

Fall Semester				*Spring Semester*			
Subject		Hours		Subject		Hours	
		Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 1 (Gen. Chem. or Adv. Gen. Chem.)	2	4	4	Ch 2 (Gen. Chem. or Adv. Gen. Chem.)	2	4	4
Eh 1 (Comp. & Lit.)	3	0	3	Eh 2 (Comp. & Lit.)	3	0	3
Md 1 (Funds. Draft.)	0	4	2	Md 2 (Ely. Mach. Draft.)	0	4	2
Ms 1 (Trig.)	2	0	2	Ms 6 (Anal. Geom.)	4	0	4
Ms 3 (Alg.)	2	0	2	Mt 2 (Military)	2	1	1½
Mt 1 (Military)	2	1	1½	Ps 2 (Elec., Mag., Light & Sound)	4	2	5
Ps 1 (Mech. & Heat)	4	2	5	Pt 2 (Phy. Education)	0	2	0
Pt 1 (Phy. Education)	0	2	0				
	15	13	19½		15	13	19½

Chemical Engineering Curriculum

This curriculum is offered to furnish training in engineering and chemistry. The first two years are almost identical with those under the Chemistry curriculum, but in the junior and senior years the students enrolled take, in part, fundamental courses in mechanics, mechanical and electrical engineering, etc., while in the Chemistry curriculum students take subjects having a chemical and general scientific objective. Chemical engineering

graduates will be prepared to enter the profession of chemical engineering and to occupy positions as production foremen, research chemists, chemists and engineers in industrial plants and in Federal and other government civil service laboratories, also as superintendents' assistants in metallurgical works, bleacheries, dye houses, chemical plants, rubber works, gas works, sugar refineries, pulp and paper mills, rayon plants, lacquer plants, etc.

Students interested in pulp and paper chemistry and technology pursue a chemical engineering course with some specialization in this field.

Option I. Regular Curriculum

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours Rec.	Lab.	Cr.	Subject	Hours Rec.	Lab.	Cr.
Ch 31 (Qual. Anal.)	2	8	5	Ch 40 (Quant. Anal. and Computation)	2	8	5
Ch 37 (Hist. Chem.)	1	0	1	(Foreign Lang.)	5	0	5
(Foreign Lang.)	5	0	5	Me 28 (Kinematics)	2	0	2
Ms 7 (Diff. Calculus)	5	0	5	Ms 8 (Int. Calculus)	5	0	5
Mt 3 (Military)	2	1	2	Mt 4 (Military)	2	1	2
Pb 1 (Pub. Speak.)	2	0	2	Ps 54 (Elec. Meas.)	0	6	3
Pt 3 (Phy. Education)	0	2	0	Pt 4 (Phy. Education)	0	2	0
	17	11	20		16	17	22

JUNIOR YEAR

Ch 51 (Organ. Chem.)	3	4	5	Ch 52 (Organ. Chem.)	3	4	5
Ch 61 (Adv. Quant. Anal.)	1	8	4	Ch 72a (Phys. Chem.)	3	0	3
Ch 71a (Phys. Chem.)	3	0	3	Ch 74 (Phys. Ch. Lab.)	0	4	2
(Foreign Lang. or Economics)	3	0	3	Ee 30 (Dir. Cur. Mchy.)	2	0	2
Mn 51 (Mechanics)	5	0	5	(Foreign Lang. or Economics)	3	0	3
				Mn 52 (Mechanics)	5	0	5
	15	12	20		16	8	20

SENIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 77 (Ind. Chem.)	3	0	3	Ch 78 (Ind. Chem.)	3	0	3
Ch 93 (Economics of Ch. and Ch.E.)	1	0	1	Ch 80 (Inspect. Trips)	0	2	1
Ch 95 (Electrochem.)	3	0	3	Ch 94 (Economics of Ch. and Ch.E.)	1	0	1
Ch 99 (Thesis)	Arr		1	Ch 96 (Electrochem.)	3	0	3
Ee 31 (Alt. Currs.)	2	0	2	Ch 100 (Thesis)	Arr		2
Ee 33 (Elec. Lab.)	0	3	1½	Eh 10 (Modern Lit.)	2	0	2
Eh 5 (Tech. Comp.)	2	0	2	Me 76 (Mech. Lab.)	0	3	1½
Gm 15 (Sci. German or				Me 98 (Management)	2	0	2
Gy 3 (Economic Geol.)	2	0	2				
Me 83 (Heat. Eng.)	3	0	3				
	16	3	18½		11	5	15½

Students in Chemistry and Chemical Engineering are expected to demonstrate that they have a reading knowledge of French and German. Students who receive entrance credit in both elementary and intermediate German are expected to take elementary and intermediate French and Scientific German. Students who receive entrance credit in elementary and intermediate French are expected to take elementary, intermediate, and Scientific German. Students receiving entrance credit in both elementary French and German are expected to take intermediate and Scientific German. Students receiving entrance credit for two, three, or four years of Latin as their only foreign language credit and all others will be treated as special cases.

Option I. Paper and Pulp Curriculum

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Bl 43 (Wood Ident.)	0	3	1	Ch 40 (Quan. Anal. and Computation)	2	8	5
Ch 31 (Qual. Anal.)	2	8	5	(Foreign Lang.)	5	0	5
Ch 37 (Hist. Chem.)	1	0	1	Me 28 (Kinematics)	2	0	2
(Foreign Lang.)	5	0	5	Ms 8 (Int. Calculus)	5	0	5
Ms 7 (Diff. Calculus)	5	0	5	Mt 4 (Military)	2	1	2
Mt 3 (Military)	2	1	2	Ps 54 (Elec. Meas.)	0	6	3
Pb 1 (Pub. Speak.)	2	0	2	Pt 4 (Phy. Education)	0	2	0
Pt 3 (Phy. Education)	0	2	0				
	17	14	21		16	17	22

JUNIOR YEAR

Ch 51 (Organ. Chem.)	3	4	5	Ch 52 (Organ. Chem.)	3	4	5
Ch 65 (Pulp Tech.)	2	0	2	Ch 66 (Paper Tech.)	2	0	2
Ch 67 (Pulp Lab.)	0	4	2	Ch 68 (Paper Mfg.)	0	4	2
Ch 71b (Phys. Chem.)	3	0	3	Ch 72b (Phys. Chem.)	3	0	3
(Foreign Lang. or Economics)	3	0	3	Ch 74 (Phys. Ch. Methods)	0	4	2
Mn 51 (Mechanics)	5	0	5	Ee 30 (Dir. Cur. Machy.)	2	0	2
				Mn 52 (Mechanics)	5	0	5
	16	8	20		15	12	21

SENIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 75 (Cellulose)	0	4	2	Ch 78 (Ind. Chem.)	3	0	3
Ch 77 (Ind. Chem.)	3	0	3	Ch 80 (Inspect. Trips)	0	2	1
Ch 87 (Paper Test.)	0	4	2	Ch 82 (Paper Color. 9 wks.)	0	8	2
Ch 93 (Economics of Ch. and Ch.E.)	1	0	1	Ch 86 (Pulp Bleach. 9 wks.)	0	8	2
Ch 99 (Thesis)	Arr		1	Ch 94 (Economics of Ch. and Ch.E.)	1	0	1
Ee 31 (Alt. Currs.)	2	0	2	Ch 100 (Thesis)	Arr		2
Ee 33 (Elec. Lab.)	0	3	1½	Eh 10 (Modern Lit.)	2	0	2
Eh 5 (Tech. Comp.)	2	0	2	Me 76 (Mech. Lab.)	0	3	1½
Gm 15 (Sci. German or				Me 98 (Management)	2	0	2
Gy 3 (Economic Geol.)	2	0	2				
Me 83 (Heat Eng.)	3	0	3				
	13	11	19½		8	21	16½

Chemistry Curriculum

This curriculum is designed to give the student not only a thoro 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 secondary courses having a general scientific objective instead of secondary courses of an engineering type. The curriculum is a broad one and prepares the student to teach; or for the profession of analytical or research chemist in experiment stations, food laboratories, dye, chemical, fertilizer, and tanning plants; metallurgical, rubber, and electric machinery manufactories; many branches of the government civil service; and the general consulting and analytical work of a professional chemist.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 31 (Qual. Anal.)	2	8	5	Ch 40 (Quan. Anal. and Computations)	2	8	5
Ch 37 (Hist. Chem.)	1	0	1	Ch 48 (Mineral. & Crys.)	1	3	2
(Foreign Lang.)	5	0	5	Eh 10 (Mod. Lit.)	2	0	2
Ms 7 (Diff. Calculus)	5	0	5	(Foreign Lang.)	5	0	5
Mt 3 (Military)	2	1	2	Ms 8 (Int. Calculus)	5	0	5
Pt 3 (Phy. Education)	0	2	0	Mt 4 (Military)	2	1	2
Pb 1 (Pub. Speak.)	2	0	2	Pt 4 (Phy. Education)	0	2	0
	15	13	20		17	14	21

JUNIOR YEAR

Bv 1 (Bacteriology)	0	6	3	Ch 42 (Gen. App. Chem.)	1	0	1
Bv 3 (Bacteriology)	2	0	2	Ch 52 (Organ. Chem.)	3	4	5
Ch 51 (Organ. Chem.)	3	4	5	Ch 62 (Tech. Anal.)	1	8	4
Ch 61 (Adv. Quant. Anal.)	1	8	4	Ch 72b (Phys. Chem.)	3	0	3
Ch 71b (Phys. Chem.)	3	0	3	Ch 74 (Phys. Ch. Methods)	0	4	2
(Foreign Lang. or Economics)	3	0	3	(Foreign Lang. or Economics)	3	0	3
	12	18	20		11	16	18

SENIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Bc 51 (Biochem.)	3	0	3	Ch 78 (Ind. Chem.)	3	0	3
Ch 77 (Ind. Chem.)	3	0	3	Ch 80 (Inspect. Trips)	0	2	1
Ch 89 (Organ. Anal.)	0	4	2	Ch 84 (Metallurgy)	3	0	3
Ch 91 (Adv. Org'n. Ch.)	3	0	3	Ch 90 (Organ. Prep.)	0	4	2
Ch 93 (Economics of Ch. and Ch.E.)	1	0	1	Ch 92 (Adv. Org'n. Chemistry)	3	0	3
Ch 97 (Teaching Ch.)	1	0	1	Ch 94 (Econ. of Ch.)	1	0	1
Ch 99 (Thesis)	Arr		1	Ch 98 (Teaching Ch.)	1	0	1
Eh 5 (Tech. Comp.)	2	0	2	Ch 100 (Thesis)	Arr		2
Es 55 (Business Law)	3	0	3				
Gm 15 (Sci. German or Gy 3 (Economic Geol.)	2	0	2				
	18	4	21		11	6	16

Civil Engineering Curriculum

The object of the curriculum in Civil Engineering is to give the student as thoro a knowledge as possible of the principles underlying the profession. It is not possible in the time usually devoted to a college curriculum to take up more than the most important technical subjects, hence the time devoted to those subjects, designed to cultivate and broaden the mind, is necessarily limited. The attempt is made, however, 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 create him an engineer, and to make him see that he has received only the basic mental training which will fit him to follow the profession, and that he must begin at the bottom of the ladder of practice in order to obtain experience and judgment, without which he can never become a successful engineer.

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. During each year it is the practice to have several lectures by engineers from other institutions and by those

engaged only in practical work. These lectures tend to increase the interest of the student and to bring him in touch with men from outside his own institution. During the spring semester of the senior year an inspection trip of about a week's duration is required. The students, under the guidance of their instructors, visit large industrial plants and come in contact with the actual work in many lines of engineering.

The work of the first year is the same for all engineering students. 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 senior year, when it is nearly all professional. At the beginning of the senior year an opportunity is offered to specialize to a certain extent along one of four 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; the third, Option 3, consists of work in highway engineering; while Option 4 is specialized along the lines of sanitary engineering.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ce 1 (Surveying)	3	0	3	Ce 4 (Field Work, 6 wks.)	0	9	1
Ce 3 (Field Work and Plotting)	0	9	3	Ce 32 (Sanitary Eng.)	2	0	2
Es 1b (Prin. of Econ.)	2	0	2	Es 2b (Prin. of Econ.)	2	0	2
Md 3 (Des. Geometry)	0	6	2	Md 4 (Adv. Mach. Draft.)	0	6	2
Ms 7 (Diff. Calculus)	5	0	5	Ms 8 (Int. Calculus)	5	0	5
Mt 3 (Military)	2	1	2	Mt 4 (Military)	2	0	2
Pb 1 (Pub. Speak.)	2	0	2	Pb 4 (Debate)	2	0	2
Pt 3 (Phy. Education)	0	2	0	Ps 52 (Mech. & Heat)	0	4	2
				Pt 4 (Phy. Ed.)	0	2	0
	14	18	19		13	15	18

JUNIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours Rec.	Lab.	Cr.	Subject	Hours Rec.	Lab.	Cr.
As 11 (Pract. Astron.)	2	0	2	Ce 20 (Structural & Hgwy. Mater'ls)	1	4	3
Ce 9 (R.R. Curves & Earthwork)	3	0	3	Ce 22 (Adv. Survey'g)	1	0	1
Ce 21 (R.R. Field & Office Wk.)	0	6	2	Ce 24 (Junior Fld. Wk., 6 dys.)	0	9	1
Ce 25 (Eng. Geology)	2	2	3	Ce 26 (Hydraulics)	3	0	3
Ce 29 (Hgwy. Cons.)	2	0	2	Ce 28 (Theory of Structures)	5	0	5
Mn 51 (Mechanics)	5	0	5	Mn 52 (Mechanics)	5	0	5
(Elective)	3	0	3	(Elective)	2	0	2
	17	8	20		17	13	20

SENIOR YEAR

Ce 57 (Conc. Structures & Foundations)	5	0	5	Ce 60 (Drafting)	0	9	3
Ce 59 (Drafting)	0	12	4	Ce 98 (Thesis—optional)	Arr		3
Ce 97 (Thesis—optional)	Arr		3	Ee 36 (Alt. Currs.)	2	0	2
Ee 35 (D. C. Machy.)	2	0	2	Ee 38 (Elec. Lab.)	0	3	1½
Me 73 (Mech. Lab.)	0	2	1	Eh 6 (Tech. Comp.)	2	0	2
				Es 16 (Bus. Law)	3	0	3
Highway Option				Highway Option			
Ce 53 (Hyd. Fld. Wk.)	0	2	1	Ce 68 (Hgwy. Design)	0	4	2
Ce 63 (Hgwy. Econ.)	3	0	3	Ce 72 (Hgwy. Eng.)	2	0	2
Hydraulic Option				Hydraulic Option			
Ce 51 (Hyd. Fld. Wk.)	0	4	2	Ce 56 (Hyd. Eng.)	0	4	2
Ce 55 (Hydrology)	2	0	2	Me 94 (Hyd. Machy.)	2	0	2
Railroad Option				Railroad Option			
Ce 53 (Hyd. Fld. Wk.)	0	2	1	Ce 64 (R.R. Design)	0	4	2
Ce 65 (R.R. Econ.)	3	0	3	Ce 66 (R.R. Eng.)	2	0	2
Sanitary Option				Sanitary Option			
Bv 3 (Bacteriology)	2	0	2	Bv 4 (Bacteriology)	0	6	3
Ce 71 (Water Supply)	2	0	2	Ce 74 (San. Eng.)	2	0	2
Total Required	*	*	16		*	*	16½

*Depends upon Option chosen

Electrical Engineering Curriculum

This curriculum is intended to provide the student with a thoro 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.

Courses in telephone and radio engineering are offered to those wishing to continue work in communication engineering after graduation.

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

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ee 1 (Els. Elec. Eng.)	3	2	4	Ee 2 (Els. Elec. Eng.)	3	2	4
Es 1b (Prin. Econ.)	2	0	2	Es 2b (Prin. Econ.)	2	0	2
Md 3 (Des. Geometry)	0	6	2	Md 4 (Adv. Mach. Draft.)	0	6	2
Ms 7 (Diff. Calculus)	5	0	5	Ms 8 (Int. Calculus)	5	0	5
Mt 3 (Military)	2	1	2	Mt 4 (Military)	2	1	2
Pb 1 (Pub. Speak.)	2	0	2	Pb 4 (Debate)	2	0	2
Py 61 (App. Psychol.)	3	0	3	Py 62 (App. Psychol.)	3	0	3
Pt 3 (Phy. Education)	0	2	0	Pt 4 (Phy. Education)	0	2	0
	17	11	20		17	11	20

JUNIOR YEAR

Ee 13 (Elec. Test.)	1	2	2	Ee 16 (El. Cir. & Mach.)	4	0	4
Ee 15 (El. Cir. & Mach.)	3	0	3	Ee 18 (Elec. Lab.)	1	3	2½
Ee 17 (Elec. Lab.)	1	3	2½	Ee 22 (Tel. Comm.)	3	0	3
Eh 5 (Tech. Comp.)	2	0	2	Ee 24 (Tel. Lab.)	0	3	1½
Me 9 (Mach. Work)	0	4	1½	Es 44 (Banking & Investment)	3	0	3
Me 27 (Kinematics)	3	0	3	Me 10 (Mach. Work)	0	4	1½
Mn 51 (Mechanics)	5	0	5	Me 84 (Heat Eng.)	3	0	3
	15	9	19		14	10	18½

SENIOR YEAR

Fall Semester

Subject	Hours Rec.	Lab.	Cr.
Ee 51 (Alt. Cur. Appar.)	5	0	5
Ee 75 (Elec. Lab.)	1	3	2½
Me 85 (Heat Eng.)	3	0	3
Options (Two subjects required)			
Ee 61 (Illum. Eng.)	3	0	3
Ee 63 (Elec. Transp.)	3	0	3
Ee 81 (Comm. Eng.)	2	3	3
Ee 83 (Comm. Lab.)	0	3	1½
Es 45 (Corp. Finance)	3	0	3
Me 77 (Mech. Lab.)	0	3	1½
	14	6	17

Spring Semester

Subject	Hours Rec.	Lab.	Cr.
Ee 78 (Inspect. Trip)	0	0	0
Options (Six subjects required)			
Ee 54 (Tech. Reviews)	0	2	1
Ee 56 (Elec. Power Plants)	3	0	3
Ee 58 (Elec. Transm.)	3	0	3
Ee 60 (Adv. Elec. Mach.)	3	0	3
Ee 76 (Elec. Lab.)	1	3	2½
Ee 84 (Tel. Transm.)	2	3	3
Ee 86 (Radio Eng.)	3	0	3
Ee 88 (Radio Lab.)	0	3	1½
Ee 90 (Thesis)	Arr.		3
Es 16 (Business Law)	3	0	3
Me 98 (Management)	2	0	2
	13	8	16½

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 classroom 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. Lectures by practical engineers and trips of inspection to engineering works help to bring before the student the conditions existing in practice.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Es 1b (Prin. Econ.)	2	0	2	Es 2b (Prin. Econ.)	2	0	2
Md 3 (Des. Geometry)	0	6	2	Md 4 (Adv. Mach. Draft.)	0	6	2
Me 1 (Foundry & Forging)	0	6	2	Me 2 (Pattern Work)	0	6	2
Me 21 (Els. Mech. Eng.)	2	0	2	Me 38 (Mech. Lab.)	0	3	1½
Ms 7 (Diff. Calculus)	5	0	5	Me 52 (Mats. Eng.)	2	0	2
Mt 3 (Military)	2	1	2	Ms 8 (Int. Calculus)	5	0	5
Pb 1 (Pub. Speak.)	2	0	2	Mt 4 (Military)	2	1	2
Ps 51 (Mech. & Heat)	0	4	2	Pb 4 (Debate.)	2	0	2
Pt 3 (Phy. Education)	0	2	0	Pt 4 (Phy. Education)	0	2	0
	13	19	19		13	18	18½

JUNIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Es 21 (Economics or Option)	3	0	3	Eh 6 (Tech. Comp.)	2	0	2
Me 7 (Mach. Work)	0	6	2	Me 8 (Mach. Work)	0	6	2
Me 55 (Kinematics)	3	3	4	Me 56 (Valve Gears)	2	3	3
Me 69 (Mech. Lab.)	0	3	1½	Me 66 (Mach. Des.)	3	0	3
Me 79 (Heat Eng.)	3	0	3	Me 70 (Mech. Lab.)	0	3	1½
Mn 51 (Mechanics)	5	0	5	Me 80 (Heat Eng.)	3	0	3
				Mn 52 (Mechanics)	5	0	5
	14	12	18½		15	12	19½

SENIOR YEAR

Ce 35 (Hydraulics)	2	0	2	Ee 36 (Alt. Currs.)	2	0	2
Ee 35 (D. C. Machy.)	2	0	2	Ee 38 (Elec. Lab.)	0	3	1½
Me 89 (Dynamics of Machines)	2	0	2	(Inspect. Trip)	0	0	0
Me 71 (Mech. Lab.)	0	3	1½	Me 72 (Mech. Lab.)	0	3	1½
Me 81 (Heat Eng.)	2	3	3	Me 86 (Power Plants)	3	3	4
Me 87 (Mach. Des.)	0	6	2	Me 92 (Heat & Vent. or Me 94 (Hyd. Machy.)	2	0	2
Me 93 (Gas Engs.)	3	0	3	Me 96 (Seminar)	1	0	1
Py 61 (App. Psychol.) (or Option)	3	0	3	Me 98 (Management)	2	0	2
				Me 100 (Thesis)	Arr		3
	14	12	18½		10	9	17

General Engineering Curriculum

The primary purpose of this course is to afford an opportunity to a selected few outstanding students to develop themselves along certain specific lines, not afforded by the other engineering curricula, in which they have great interest or are particularly capable. Opportunity is afforded for electives in economics, engineering, foreign languages, history, mathematics, physics, psychology, and subjects elected in the sophomore year would be largely the so-called humanistic studies and should be pursued to the end of the course. In the junior year engineering or scientific studies would be elected, all of which would bear on some particular branch of engineering

or have some functional objective such as design or research or management according to the leaning or capability of the candidate. The Dean of the College is the adviser and registering officer for students in this course.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 187.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 31 (Qual. Anal.)	2	8	5	(Biology)	2	0	2
Ce 25 (Eng. Geol.)	2	2	3	Ch 40 (Quan. Anal.)	2	8	5
Es 1b (Prin. Econ.)	2	0	2	Ch 84 (Metallurgy)	3	0	3
Md 3 (Desc. Geom.)	0	6	2	Es 2b (Prin. Econ.)	2	0	2
Mt 3 (Military)	2	1	2	Mt 4 (Military)	2	1	2
Pt 3 (Phy. Education)	0	2	0	Pt 4 (Phy. Education)	0	2	0
Pb 1 (Pub. Speak.)	2	0	2	Pb 4 (Debate)	2	0	2
(Elective)			3	(Elective)			3
			19				19

JUNIOR YEAR

Ee 1 (Els. Elec. Eng.)	3	2	4	Ee 2 (Els. Elec. Eng.)	3	2	4
Me 79 (Heat Eng.)	3	0	3	Me 80 (Heat Eng.)	3	0	3
Mn 51 (Mechanics)	5	0	5	Mn 52 (Mechanics)	5	0	5
(Elective)			6	(Elective)			6
			18				18

SENIOR YEAR

(Elective)			19	(Inspect. Trip)	0	0	0
				(Thesis)			Arr
				(Elective)			18
			19				18

Departments of Instruction

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 51-100 are for graduates and undergraduates; courses numbered above 100 are for graduates.

CHEMISTRY AND CHEMICAL ENGINEERING

PROFESSOR BRAUTLECHT; ASSOCIATE PROFESSOR BRANN; ASSOCIATE PROFESSOR BRAY; ASSISTANT PROFESSOR OTTO; ASSISTANT PROFESSOR JENNESS; MR. CAULFIELD; DR. GILLILAND; MR. OSBORN; DR. GUERIN; MR. BOGAN; MR. TOMLIN

1, 2. GENERAL CHEMISTRY.—This course deals with the general principles of the science and the elements of qualitative analysis. Lecture, *one hour a week;* recitation, *one hour a week;* laboratory, *four hours a week.* Courses 1, 2 or 1a, 2a constitute the first year's work in chemistry. *Four credit hours.* MR. BRAUTLECHT and members of the Department Staff

1a, 2a. ADVANCED GENERAL CHEMISTRY.—A course similar to Courses 1, 2, but for students who have had a thoro course in elementary chemistry. To enroll in Courses 1a and 2a a student must, shortly after reporting with the Chemistry 1 group with whom the student is registered, present his original laboratory note book in elementary chemistry. approved by and having the signature of his previous chemistry instructor, and show fitness to pursue the work planned. The student must also make a satisfactory grade in a placement test. Lectures and recitations, *two hours a week;* laboratory, *four hours a week* in inorganic preparations, and elementary qualitative analysis. *Four credit hours.*

MR. BRAUTLECHT and members of the Department Staff

31. QUALITATIVE ANALYSIS.—This course includes a thoro and extended study of the general reactions of substances with their qualitative separation and identification and the examination of industrial and commercial products. Lectures and recitations, *two hours a week;* laboratory, *eight hours a week. Five credit hours.* MR. OTTO and assistants

37. History of Chemistry.—Recitation, *one hour a week. One credit hour.* Mr. Gilliland

40. Quantitative Analysis and Computation.—An introductory course illustrating the fundamental principles of gravimetric, volumetric, and electrolysis methods. Prerequisite, Course 31. Chemical and fundamental engineering computation procedures including use of slide rule, logarithms, etc.; classroom, *two hours a week;* laboratory, *eight hours a week. Five credit hours.* Mr. Otto, Mr. Jenness

42. General Applications of Chemistry.—Lecture course. Not given during semester when the department gives the General Lecture Course. Lecture, *one hour a week. One credit hour.*

Staff and outside lecturers

48. Mineralogy and Crystallography.—Prerequisite, Chemistry 31. Classroom, *one hour a week;* laboratory, *three hours a week. Two credit hours.* May be given in alternate years.

Mr. Brautlecht, Mr. Bogan

51, 52. Organic Chemistry.—Lectures, recitations, and laboratory work. Course 31 is prerequisite. For juniors. Classroom, *three hours a week;* laboratory, *four hours a week. Five credit hours.*

Mr. Gilliland, Mr. Osborn

61. Advanced Quantitative Analysis.—A study of calibration methods, the further application of volumetric methods, etc. Course 40 is a prerequisite. Classroom, *one hour a week;* laboratory, *eight hours a week. Four credit hours.* Mr. Brann, Mr. Bogan

62. Technical Analysis.—Application of gravimetric and volumetric methods of analysis to some of the more difficult problems of separation and determination, and to technical products, such as fuels, gases, and alloys. Course 61 is a prerequisite. Classroom, *one hour a week;* laboratory, *eight hours a week. Four credit hours.* Mr. Brann, Mr. Bogan

65. Pulp Technology.—A lecture course on the manufacture of pulp and the chemical engineering involved in present day pulp making. Course 40 is a prerequisite. Classroom, *two hours a week. Two credit hours.* Mr. Bray

66. Paper Technology.—A lecture course on the processes of manufacturing paper. Course 65 is prerequisite. Classroom, *two hours a week. Two credit hours.* Mr. Bray

67. Pulp Manufacture.—Laboratory work. Semi-commercial scale production of pulps, analysis of pulp makers' supplies, etc. Course 65 must

be taken in conjunction. Laboratory, *four hours a week. Two credit hours.*
MR. BRAY, MR. CAULFIELD

68. PAPER MANUFACTURE.—A laboratory course in which papers of various kinds are made. Laboratory, *four hours a week. Two credit hours.*
MR. BRAY, MR. CAULFIELD

71a, 72a. 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 7, 8, and Physics 1 and 2. Classroom, *three hours a week. Three credit hours.* MR. BRANN

71b, 72b. PHYSICAL CHEMISTRY.—Similar to 71a, 72a, except that the subject is treated less mathematically and is devoted more to the interests of future chemistry teachers and premedical students. Prerequisites, Chemistry 40, Mathematics, and Physics. Recitation, *three hours a week. Three credit hours.* MR. JENNESS

74. PHYSICO-CHEMICAL METHODS.—The purpose of this course is to illustrate the topics considered in Courses 71 and 72, as well as to furnish training in physico-chemical laboratory procedure. Determination of molecular weights; the study of solutions thru conductivity and other methods; rate of reaction and chemical equilibrium; potential and electro-motive force; calorimetry; the use of the more important instruments, such as the refractometer, polariscope, and spectroscope; etc. Laboratory, *four hours a week. Two credit hours.* MR. BRANN, MR. OSBORN

75. CELLULOSE.—A course in which cellulose is studied including laboratory work dealing with the characteristics and derivatives of cellulose. Laboratory, *four hours a week. Two credit hours.* MR. CAULFIELD

77, 78. INDUSTRIAL AND ENGINEERING CHEMISTRY AND CHEMICAL LITERATURE.—General processes of technical chemistry and selected topics, including the principal manufactured products together with general equipment and the engineering procedure employed. Reviews and discussions of important general articles in current American, English, German, and French chemical literature. Lectures and recitations. Courses 51, 52, and 40 are prerequisites. Classroom, *three hours a week. Three credit hours.*
MR. GUERIN

80. INSPECTION TRIPS.—Local trips (32 hours) to manufacturing plants of a chemical nature are taken; also about a week's trip in and about Boston during the spring, when about twenty industrial and chemical plants are visited. A report is required. The cost of these trips to students for the past few years has been about $40. Boston trip, *no credit;* local trips, *one credit hour.* MR. BRAUTLECHT, MR. BRAY, MR. GUERIN

82. Paper Coloring.—Course 75 is prerequisite. Laboratory, *eight hours a week for first nine weeks. Two credit hours.*

Mr. Bray, Mr. Caulfield

84. Metallurgy.—An introductory study dealing with iron, steel, and the common metals and alloys. Classroom, *three hours a week. Three credit hours.* Mr. Guerin

86. Bleaching of Pulp.—A laboratory course dealing with the methods of bleaching various kinds of pulp including use of bleaching powder, of chlorine directly, electrolytic bleach production, and efficiency testing. Courses 65 and 67 are prerequisite. Laboratory, *eight hours a week for last nine weeks. Two credit hours.* Mr. Bray, Mr. Caulfield

87, 88. Paper Testing and Analysis.—A laboratory course involving physical, microscopical, and chemical work. The work taken up is that ordinarily carried on in a paper mill. It includes the testing of papers for bursting, tensile, folding and tearing strength, stretch, glare, opacity, degree of sizing, etc. Methods for estimating the quality and quantity of different fibres are also studied in the laboratory. Course 40 is prerequisite. Laboratory, *four hours a week. Two credit hours.* Mr. Bray, Mr. Caulfield

89. Organic Analysis.—Qualitative and quantitative determination in organic compounds of carbon, hydrogen, oxygen, nitrogen, sulphur, phosphorus, the halogens, etc. Courses 51, 52, and 40 are prerequisites. Laboratory, *four hours a week. Two credit hours.* Mr. Gilliland

90. Organic Preparations.—The preparation of a large number of typical organic compounds. Courses 51, 52 are prerequisites. Laboratory, *four hours a week. Two credit hours.* Mr. Gilliland

91, 92. Advanced Organic Chemistry.—A course involving the general and also special topics of organic chemistry. Prerequisite, Courses 51, 52. Recitation, *three hours a week. Three credit hours..* Mr. Gilliland

93, 94. Economics of Chemical and Chemical Engineering Industries and Activities.—*One hour a week.* Mr. Brautlecht

95, 96. Electrochemistry.—A lecture and textbook course on the theory and general principles of the subject and its application in industrial work, including electrolytic bleach. Courses 71 and 72 are prerequisites. Recitation, *three hours a week. Three credit hours.* Mr. Jenness

97, 98. Methods of Teaching Chemistry.—Course 40 is a prerequisite. Administration, supervision, costs, discipline, subject matter, questioning, the project method, true and false question tests, tests, examinations, lesson planning, grading or scoring, high-school chemistry, history of the teaching of chemistry, kinds of courses, laboratory arrangement, purchase of

supplies and equipment, laboratory instruction, etc. Classroom, *one hour a week. One credit hour.* MR. BRAUTLECHT

99, 100. THESIS.—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. Hours arranged. *Zero to three credit hours.* STAFF

101, 102. INVESTIGATIONS IN ORGANIC CHEMISTRY.—*Time and credit hours arranged.* MR. BRAUTLECHT OR MR. GILLILAND

103, 104. INVESTIGATIONS IN PHYSICAL CHEMISTRY. MR. BRANN

105, 106. INVESTIGATIONS IN PULP AND PAPER CHEMISTRY AND TECHNOLOGY. MR. BRAY

107, 108. INVESTIGATIONS IN ANALYTIC CHEMISTRY. MR. OTTO

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 a few 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 charge slips and for replacing broken articles, or obtaining permanent equipment and special chemicals and supplies on charge slips or breakage cards. Breakage cards may be obtained only at the Treasurer's office and all students taking chemical laboratory courses are required to have one. The unused balance is redeemable at the Treasurer's office, after obtaining clearance at the storeroom.

For courses in biological and agricultural chemistry, see the description of courses given by the Department of Biological and Agricultural Chemistry.

For chemistry courses in the Summer Session, see the Summer Session Bulletin.

For requirements leading to the degree of Bachelor of Arts in chemistry, see College of Arts and Sciences.

CIVIL ENGINEERING

PROFESSOR SPRAGUE; ASSOCIATE PROFESSOR LYON; ASSOCIATE PROFESSOR LEAVITT; ASSOCIATE PROFESSOR EVANS; MR. FELKER; MR. STEPHENSON; MR. TWINEM

1. PLANE SURVEYING.—Recitations and lectures covering the general theory of plane surveying and plotting. A study of surveying instruments, their adjustment and use, followed by a study of the methods commonly

used for surveying and plotting. Required of all students in the Department of Civil Engineering. Classroom, *three hours a week; three credit hours.*

MR. FELKER, MR. STEPHENSON

3. FIELD WORK AND PLOTTING.—This course consists of practice in the use of the chain, tape, compass, transit, and level, followed by practice in the common methods of map drawing. Field and drawing room, *nine hours a week. Three credit hours.* MR. FELKER, MR. STEPHENSON

4. FIELD WORK IN SURVEYING.—A continuation of Course 3. This course consists of original surveys, problem work, and note keeping. Courses 1 and 3 are prerequisites. Field work, *nine hours a week* for last six weeks. *One credit hour.* MR. FELKER, MR. STEPHENSON

9. RAILROAD CURVES AND EARTHWORK.—A course of recitations and lectures investigating the geometry of railroad curves, switches, and turnouts; also the field and office practice of staking out and computing earthwork, and the methods and materials of railroad construction, subgrade, roadbed, track and track work. Courses 1 and 3 are prerequisite. Classroom, *three hours a week. Three credit hours.* MR. TWINEM

20. STRUCTURAL AND HIGHWAY MATERIALS.—Laboratory and recitations covering the methods of testing, characteristics of and specifications for the materials commonly used for structural and highway purposes. Laboratory and recitation to be arranged. *Three credit hours.*

MR. LEAVITT, MR. EVANS, MR. FELKER, MR. STEPHENSON

21. RAILROAD FIELD AND OFFICE WORK.—The first part of this course consists of making preliminary and location surveys for a railroad about two miles long. Grades are established and slope stakes set. The latter part of the course consists of plotting the notes previously taken and calculating the requisite amount of earthwork. Courses 1, 3 and 9 or 27 are prerequisite. *Six hours a week. Two credit hours.* MR. LYON, MR. TWINEM

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 sextant, the theory and application of least squares, and map projection. It is a preparation for Course 24. Course 21 is prerequisite. Lecture, recitation, and problems, *one hour a week. One credit hour.*

MR. LYON

24. JUNIOR 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. Field work, *nine hours a day for six days. One credit hour.* ALL THE STAFF

25. Engineering Geology.—This course makes a study and classification of the common rocks and minerals of paramount importance to the engineer, combined with a map-reading course to study the origin and structure of the crustial movements of the United States. It is a course especially suitable to the needs of the engineering student, offering as well a study of cultural value. Classroom, *two hours a week;* laboratory or field, *two hours a week. Three credit hours.* Mr. Twinem

26. Hydraulics.—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow thru orifices, weirs, tubes, pipes, and conduits; dynamic pressure of water. Prerequisite, Mechanics 51. Classroom, *three hours a week. Three credit hours.* Mr. Lyon

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 Course 21. Courses 1 and 3 are prerequisites. Lecture, *one hour a week. One credit hour.* Mr. Leavitt

28. Theory and Design of Steel Structures.—This course involves the determination of stresses and strain in beams, girders, and trusses under the usual systems of loading. Students are required to make a complete design of several types of structures. Mechanics 51 is prerequisite. *Five hours a week. Five credit hours.* Mr. Evans

29. Highway Construction.—The construction and maintenance of city pavements and country roads under various conditions of traffic, climate, soil, etc. Courses 1, 9, and 21 are prerequisite. Recitation, *two hours a week. Two credit hours.* Mr. Leavitt

32. Sanitary Engineering.—The general principles of sewer design and construction, and sewage disposal; a study of city sanitation. Course 1 is prerequisite. Classroom, *two hours a week. Two credit hours.* Mr. Sprague

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. Mechanics 51 is prerequisite. Classroom, *two hours a week. Two credit hours.* Mr. Lyon

51. Hydraulic Field Work.—The measurement of the flow of rivers is 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 stu-

dents. Required of students taking Options 1 and 4. Course 26 is prerequisite. Field work, *four hours a week. Two credit hours.* MR. LYON

53. HYDRAULIC FIELD WORK.—A short course similar to Course 51. Required of students taking Options 2 and 3. Course 26 is prerequisite. Field work, *two hours a week. One credit hour.* MR. LYON

55. HYDROLOGY.—A study of stream-flow as applied to water-power development; rainfall; evaporation; run-off; methods of obtaining data with a study of their use. Required of students electing Option 1. Course 26 is prerequisite. Classroom, *two hours a week. Two credit hours.*

MR. LYON

56. HYDRAULIC ENGINEERING.—A continuation of Course 51 and 55. The development and utilization of water power; the modern turbine; inspection of hydro-electric plants. Drawing room, *four hours a week. Two credit hours.* MR. LYON

57. CONCRETE STRUCTURES AND FOUNDATIONS.—This course covers the design and construction of plain and reinforced concrete structures with due consideration for preparing the foundation to receive such structures. Mechanics 51 is prerequisite. *Five hours a week. Five credit hours.*

MR. EVANS

59. DRAFTING.—This course consists of detailing the structures designed in Course 28. Drawing room, *twelve hours a week. Four credit hours.* MR. SPRAGUE

60. DRAFTING.—The structures designed in Course 57 are detailed in this course. *Nine hours a week. Three credit hours.* MR. SPRAGUE

63. HIGHWAY ECONOMICS.—State highway and municipal highway management as they affect organization, administration, and finance of streets and highways; economic factors of highway location, design, and operation; traffic and operation expenses; the locomotive and its work as *credit hours.* MR. LEAVITT

64. RAILROAD DESIGN.—A map reconnaissance for a railroad about five or six miles in length is made, applying the theories of Course 65. 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 21 and 65 are prerequisites. Drawing room, *four hours a week. Two credit hours.*

MR. EVANS

65. RAILROAD ECONOMICS.—This course is devoted to a discussion of the railroad corporation and its rights; economics of railroad location and operation. Courses 9 and 29 are prerequisite. *Three hours a week. Three*

affected by distance, curves, and grades. Course 9 is prerequisite. *Three hours a week. Three credit hours.* MR. SPRAGUE

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 65 is prerequisite. Classroom, *two hours a week. Two credit hours.* MR. EVANS

68. HIGHWAY DESIGN.—Drawing room study of highway location and relocation, including plans of proposed improvement and construction of about five miles of highway with detailed estimates and specifications for the same. Also design of street intersections. Required of students electing Option 3. Course 63 is prerequisite. Drawing room, *four hours a week. Two credit hours.* MR. LEAVITT

71. MUNICIPAL WATER SUPPLY.—This course deals with the requirements of a community for pure drinking water. It makes a study of sources of supply, quality, and purification of water; the engineering works necessary for its transportation; water-borne diseases; fire service. Course 32 is prerequisite. Required of students electing Option 4. Classroom, *two hours a week. Two credit hours.* MR. SPRAGUE

72. HIGHWAY ENGINEERING.—An advanced course of lectures and recitations on various highway problems; general survey of higher types of pavements; city planning; specifications; cost keeping; maintenance and repair work as discussed in engineering periodicals. Required of students electing Option 3. Course 63 is prerequisite. Classroom, *two hours a week. Two credit hours.* MR. LEAVITT

74. SANITARY ENGINEERING.—Lectures and recitations dealing with municipal and rural sanitation. Sanitation of swimming pools. Sanitation of milk and other foods. Collection and disposal of refuse. Control of mosquitoes, flies, and rodents. Course 32 is prerequisite. Required of students electing Option 4. Classroom, *two hours a week. Two credit hours.* MR. SPRAGUE

INSPECTION TRIP.—A visiting trip of about one week's duration to various manufacturing and power plants. Required of seniors.

97, 98. THESIS WORK.—The study of and report upon some original investigation or design. *Time to be arranged.* See regulations regarding degrees. *Three credit hours.* MR. SPRAGUE

ELECTRICAL ENGINEERING

PROFESSOR BARROWS; PROFESSOR HILL; ASSOCIATE PROFESSOR CREAMER; ASSISTANT PROFESSOR ROBERTS; MR. CRABTREE; MR. BOWDEN

1, 2. ELEMENTS OF ELECTRICAL ENGINEERING.—Fundamental laws and principles of electricity; series and parallel circuits; the magnetic circuit; dielectric circuit; conduction thru electrolytes and gases; thermionics; electrical instruments; electrical measurements. Recitations and problems. Classroom, *three hours a week;* laboratory, *two hours a week. Four credit hours.* MR. BARROWS, MR. CREAMER

13. ELECTRICAL TESTING.—Electrical tests. Instrument calibration and other electrical measurements fundamental to electrical engineering. Application of Course 1 and 2. Course 2 is prerequisite. Classroom, *one hour a week;* laboratory, *two hours a week. Two credit hours.* MR. CRABTREE

15, 16. ELECTRIC CIRCUITS AND MACHINERY.—Fundamental theory of sinusoidal alternating currents, including representation by vectors and solutions by trigonometric and algebraic methods. Underlying principles and circuit problems common to all types of electrical apparatus; design and performance of direct-current machinery. Theory of polyphase alternating-current systems, non-sinusoidal wave forms, and electrical transmission. Introduction to the analysis of transient phenomena. Lectures, recitations, and problems. Course 2 is prerequisite. Fall semester: classroom, *three hours a week. Three credit hours.* Spring semester: classroom, *four hours a week. Four credit hours.* MR. HILL

17, 18. ELECTRICAL LABORATORY.—Electrical measurements; operation and testing of direct-current generators and motors. Introductory experiments of alternating-current circuits and machines. Application of the work of Courses 1, 2, 15, and 16. Course 2 is prerequisite; Courses 15 and 16 are concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* MR. ROBERTS, MR. CRABTREE

22. TELEPHONE COMMUNICATION.—Characteristics of speech: the hearing mechanism; mechanical and electrical characteristics of telephone apparatus; the subscriber's set; common battery and local battery circuits; dial systems; repeaters; traffic studies. Lectures and recitations. Course 2 is prerequisite. Course 24 is required concurrently. Classroom, *three hours a week. Three hours credit.* MR. CREAMER, MR. CRABTREE

24. TELEPHONE LABORATORY.—Microphonic efficiency of telephone apparatus; measurements of articulation, and audition; local and common battery systems; phantom circuits; filters; transmission testing; vacuum tubes.

Course 22 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Creamer

30, 35. 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. Classroom, *two hours a week. Two credit hours.*

Mr. Barrows, Mr. Crabtree

31, 36. Alternating Currents.—Alternating current measurements and calculations; operation of generators and motors. Lectures, recitations, and problems. Course 30 or 35 prerequisite. Classroom, *two hours a week. Two credit hours.* Mr. Roberts, Mr. Crabtree

33, 38. Electrical Laboratory.—These courses are based on Courses 30, 31, 35, and 36. Operations of direct-current and alternating-current generators and motors; electrical power measurements. Course 30 or 35 prerequisite. Course 31 or 36 concurrent. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Roberts

51. Alternating Current Apparatus.—Continuation of Course 16. Theory, construction, and operating characteristics of alternating current apparatus and machinery. Polyphase apparatus; generation, distribution, and utilization of polyphase power. Lectures, recitations, and problems. Course 16 is prerequisite. Classroom, *five hours a week. Five credit hours.*

Mr. Barrows

54. Technical Reviews.—A study of some special phase of electrical engineering and the presentation of it to the class. Course 51 or 81 is prerequisite. Laboratory, *two hours a week. One credit hour.* Mr. Barrows

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. Courses 15, 16, and 51 are prerequisites. Classroom, *three hours a week. Three credit hours.* Mr. Barrows

58. Electrical Power Transmission.—Theory, design, and operation of power transmission systems. Calculation of circuits, wire spans, and supporting structures. Use of hyperbolic functions, equivalent circuits, and circle diagrams. Problems of inductive interference, insulation, protection, stability, and control. Lectures, recitations, and supervised problem work. Courses 16 and 51 are prerequisites. Classroom, *two hours a week;* computation, *three hours a week. Three credit hours.* Mr. Hill

60. Advanced Electrical Machinery.—Analysis of windings and magnetic circuits of electric power apparatus. Advanced problems on flux

distribution, commutation, heat paths, air flow, and mechanical stresses. Design of alternating-current machinery. Predetermination of performance characteristics. Lectures and problems. Course 51 is prerequisite. Classroom, *three hours a week. Three credit hours.* MR. HILL

61. ILLUMINATING ENGINEERING.—Different types of lamps; light, photometry, illumination calculations, and problems of interior and exterior illumination. Lectures, recitations, and problems. Classroom, *three hours a week. Three credit hours.* MR. BARROWS

63. ELECTRICAL TRANSPORTATION.—Mechanics of vehicle movement; estimates of power and energy requirements of trains and other transportation units. Principles governing the selection and design of electric motive power equipment for railways, busses, elevators, and ships. Distribution of power to moving loads. Engineering and economic problems involved in steam-railroad electrification. Elements of railway signaling. Lectures, recitations, and problems. Courses 15 and 16 are prerequisites. Course 51 is concurrent. Classroom, *three hours a week. Three credit hours.* MR. HILL

75, 76. ELECTRICAL LABORATORY.—Alternating-current instruments and measurements; experimental work on single-phase circuits and polyphase systems. Operation and testing of alternating-current generators, motors, transformers, and converters. Courses 15, 16, 17, and 18 are prerequisites. Courses 51 and 52 are concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* MR. ROBERTS

78. INSPECTION TRIP.—About a week's trip visiting some of the electrical and industrial plants of New England. MR. BARROWS

81. COMMUNICATION ENGINEERING.—Theory of apparatus; equivalent circuits; passive networks; elementary transmission and design problems; public-address systems; sound pictures; acoustics of auditoriums; carrier current systems. Lectures, recitations, and problems. Courses 22 and 24 are prerequisite. Classroom, *two hours a week;* computation, *three hours a week. Three credit hours.* MR. CREAMER

83. COMMUNICATION LABORATORY.—Advanced measurements; the condenser microphone; repeaters; carrier current systems; electromechanical and cathode ray oscillographs; filters, transformers; public-address systems; neon tubes; photoelectric cells. Courses 22 and 24 are prerequisite. Course 81 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* MR. CREAMER

84. TELEPHONE TRANSMISSION.—Application of hyperbolic functions to transmission line problems; transmission of speech over cable and open

wire circuits; loaded lines; design of artificial lines. Recitations and problems. Course 81 is prerequisite. Classroom, *two hours a week;* computation, *three hours a week. Three credit hours.* MR. CREAMER

86. RADIO ENGINEERING.—Detailed study of inductance coils, condensers, and resistors for radio frequencies; vacuum-tube theory; extended analysis of oscillatory circuits and methods of excitation; radiation and transmission phenomena; comparisons of methods of transmission and reception; theory of modulation; radio measurements. Lectures, recitations, and design problems. Course 22 is prerequisite. Classroom, *three hours a week. Three credit hours.* MR. CREAMER

88. RADIO LABORATORY.—Use of wave-meters; tube-characteristics; audio- and radio-frequency amplifiers; tests of tube transmitters and receivers; continuous wave and radiophone transmission at various frequencies; radio directionals. Course 86 is concurrent. Laboratory, *three hours a week. One and one-half credit hours.* MR. CREAMER

90. THESIS WORK.—The study of and report upon some original investigation or design. *Time to be arranged.* See regulations regarding degrees. *Zero to three credit hours.*

MR. BARROWS, MR. HILL, MR. CREAMER

111, 112. THEORY OF ELECTRICITY.—A study of the more advanced mathematical and physical theories of electricity with reference to their engineering applications. Wave propagation, radiation, gaseous conduction, and the analysis of transient phenomena by the methods of Heaviside's operational calculus. Problems, conferences, and seminar. Either or both semesters. *Two credit hours.* MR. CLOKE, MR. HILL

156. ADVANCED ELECTRICAL POWER PLANTS.—Study of the latest designs and methods of central station practice. Location, parallel operation, super-power practice, and economics. Lectures, studies, and problems. Courses 52, 56, and 76 are prerequisite. Classroom, *two hours a week. Two credit hours.* MR. BARROWS

157, 158. ADVANCED ELECTRICAL POWER TRANSMISSION.—A detailed study of the advanced theory of electric power circuits in the normal steady state and under transient and unbalanced conditions. Analysis of the performance of transmission systems, distribution networks, and connected apparatus. Engineering and economic problems of design, construction, and operation. Lectures, analytical studies, and problems. Course 58 is prerequisite. Classroom, *three hours a week. Three credit hours.* MR. HILL

165. ADVANCED THEORY OF ELECTRICAL MACHINERY.—Analytical study of electrical machinery with emphasis on methods useful in research and

development. Application of advanced mathematical and physical theory to problems of electrical and mechanical design, insulation, heat flow, ventilation, and control. Analysis of behavior in transient states, during disturbances, and under abnormal conditions of operation. Lectures, problems, seminar papers, and reviews. Course 60 is prerequisite. Course 175 is concurrent. Classroom, *two hours a week. Two credit hours.* Mr. Hill

175. Electrical Laboratory.—Continuation of Courses 75 and 76, consisting of more advanced tests of electrical machines and circuits as related to design and development. Performance studies involving the use of the oscillograph. Course 165 is concurrent. Courses 52, 60, and 76 prerequisite. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* Mr. Barrows

185. Communication Circuits.—Advanced study of substation circuits; passive networks, including filters and attenuation equalizers; transformer and transition losses; high quality circuits used as an adjunct to radio broadcasting; advances in communication from study of current technical literature. Lectures, reports, and problems. For graduate students who have specialized in electrical communication. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

188. Circuits Laboratory.—Experimental work based on theory treated in Course 185; oscillographic study of speech sounds and modulation; detection and elimination of speech distortion in amplifiers. Course 185 is prerequisite. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Creamer

ENGINEERING DRAFTING

Professor Kent; Mr. Dunham; Mr. Sawyer

1. Fundamentals of Drafting.—Instruction and practice in technical sketching and lettering, in the care of drawing instruments, and their use in elementary problems involving right lines, circles, irregular curves, and orthographic projections. Drawing room, *four hours a week. Two credit hours.* Mr. Kent, Mr. Dunham, Mr. Sawyer

2. Elementary Machine Drafting.—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. Drawing room, *four hours a week. Two credit hours.* Mr. Kent, Mr. Dunham, Mr. Sawyer

3. Descriptive Geometry.—The elementary principles and problems of descriptive geometry, including intersections and developments. Recitation and drawing room, *six hours a week. Two credit hours.*

Mr. Kent, Mr. Dunham, Mr. Sawyer

4. Advanced Machine Drafting.—A continued study of the making of working drawings of simple machines, together with instruction and practice in blueprinting. Drawing room, *six hours a week. Two credit hours.* Mr. Kent, Mr. Dunham, Mr. Sawyer

5. Graphical Methods in Business.—An introduction to the methods of constructing and interpreting graphic charts. Instruction and practice are given in elementary drafting principles and in lettering. Pictorial, bar, rectilinear, trilinear, ratio, logarithmetic, polar, isometric, probability, alignment and nomographic charts are studied as well as the more specialized business forms. This course is designed for students of economics and the methods used are applicable to industrial management, executive control, and to statistical preservation and prediction. Open to Economics majors only. Drawing room, *six hours a week; two hours credit.*

Mr. Dunham

6. Graphical Analysis in Business.—The practical application of the methods studied in Course 5 to the analysis of statistical and economic problems as well as to industrial and office management. Course 5, prerequisite. Drawing room, *four hours a week. Two credit hours.* Mr. Dunham

9. Agricultural Drafting.—A course designed especially for students in Agriculture and for others who are not engineers. It combines the fundamental principles of Courses 1 and 2. Drawing room, *six hours a week. Two credit hours.* Mr. Kent

LECTURE COURSES

Tc 2. Applied Engineering.—A general lecture course, open to seniors in the College of Technology and given Thursday afternoons at 4:15 thruout the second semester, consisting of addresses by engineers, business and professional men. *One credit hour.*

MECHANICAL ENGINEERING

PROFESSOR SWEETSER; ASSOCIATE PROFESSOR WATSON; ASSISTANT PROFESSOR PRAGEMAN; MR. DAVEE; MR. PERKINS; MR. SPARROW; MR. PARR

1. FOUNDRY AND FORGE WORK.—Foundry instruction is given in bench and floor molding, mixing of materials, core making, operation of cupolas, etc. Forge instruction is given in drawing, upsetting, forming, welding, and tool dressing. Shop work, *six hours a week. Two credit hours.* MR. DAVEE

2. PATTERN WORK.—Bench work and wood turning to familiarize the student with the tools used in modern woodworking practice, and to give him experience in working from dimensioned drawings. Pattern work, consisting of making complete patterns and core boxes from drawings. Shop work, *six hours a week. Two credit hours.* MR. DAVEE

7, 8. MACHINE WORK.—A small piece of machinery is manufactured which involves a study of the principles and operation of the various machine tools, at the same time including an insight into that phase of manufacturing which requires one part to fit another properly and the entire machine to be readily assembled. Shop work, *six hours a week. Two credit hours.* MR. PERKINS

9, 10. MACHINE WORK.—A shorter course than 7, 8, for electrical engineers. Shop work, *four hours a week. One and one-half credit hours.* MR. PERKINS

21. ELEMENTS OF MECHANICAL ENGINEERING.—A course designed to familiarize the student with the mechanical apparatus of manufacturing and power plants, and elementary mechanical engineering calculations. Classroom, *two hours a week. Two credit hours.* MR. SWEETSER AND STAFF

27. KINEMATICS.—A shorter course than 55, arranged for electrical engineers. Recitation, *three hours a week. Three credit hours.* MR. PRAGEMAN, MR. PARR

28. KINEMATICS.—A shorter course than 27, given to chemical engineers. Recitation, *two hours a week. Two credit hours.* MR. SPARROW

38. MECHANICAL LABORATORY.—Elementary experimental work such as calibration of instruments, use of steam and gas engine indicators, mechanical efficiency tests, etc. Laboratory, *three hours a week. One and one-half credit hours.* MR. WATSON, MR. SPARROW

52. Materials of Engineering.—Properties of the metals; production from ores; heat treatment; methods of testing. Classroom, *two hours a week. Two credit hours.* Mr. Sweetser

55. Kinematics.—A study of motion, velocity, and acceleration of machine parts, supplemented by drawings of cams, gear teeth, and graphical studies of kinematical problems. Classroom, *three hours a week;* drawing room, *three hours a week. Four credit hours.* Mr. Prageman, Mr. Parr

56. Valve Gears.—A study of the principles of the steam engine, steam turbine, and gas-engine valve motions; construction and use of valve diagrams; solution of practical problems in the drawing room. Classroom, *two hours a week;* drawing room, *three hours a week. Three credit hours.* Mr. Prageman, Mr. Parr

66. Machine Design.—A study of the design of machines; proportioning of parts for strength, rigidity, etc. Mechanics 51 is prerequisite. Recitation, *three hours a week. Three credit hours.* Mr. Prageman, Mr. Parr

69. Mechanical Laboratory.—Thermal efficiency and economy tests of steam engines, steam turbines, and gasoline engines; valve setting, steam calorimetry, etc. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Watson

70. Mechanical Laboratory.—Tests of materials, heating value of liquid fuels, heat balance tests of steam and gasoline engines. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Watson, Mr. Sparrow

71, 72. Mechanical Laboratory.—Tests of condensers, boilers, air compressors, fans, hydraulic testing. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Watson, Mr. Sparrow

73. Mechanical Laboratory.—A course arranged for students in Civil Engineering. Testing of strength of materials; measurement of flow of water over weirs, thru orifices and nozzles; calibration of venturi meters. Laboratory, *two hours a week. One credit hour.* Mr. Sparrow

76. Mechanical Laboratory.—A course arranged for students in Chemical Engineering. Calibration of instruments; tests of engines; measurement of flow of water; tests of lubricants. Course 83 is prerequisite. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Sparrow

77. Mechanical Laboratory.—A course arranged for students in Electrical Engineering. Calibration of instruments; testing strength of materials; testing of steam engines, gas engines, hydraulic testing. Course 84

is prerequisite. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Sparrow, Mr. Parr

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; illustrative practical problems. Mathematics 8 and Physics 1 and 2 are prerequisites. Recitation, *three hours a week. Three credit hours.* Mr. Watson

80. Heat Engineering.—Simple and compound steam engines, flow of steam; air compressors; flow of air; refrigeration. Course 79 is prerequisite. Recitation, *three hours a week. Three credit hours.* Mr. Watson

81. Heat Engineering.—A continuation of Courses 79 and 80 dealing with steam turbines; considerations affecting the design and efficiency of operation of the various types. Recitation, *three hours a week. Three credit hours.* Mr. Sweetser, Mr. Watson

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. Recitation, *three hours a week. Three credit hours.* Mr. Prageman

84. Heat Engineering.—A course similar to Course 79, given to electrical engineers. Recitation, *three hours a week. Three credit hours.* Mr. Sparrow

85. Heat Engineering.—Simple and compound steam engines; steam turbines; gas engines; gas producers; fuels and combustion; steam and gas power plant equipment and operation. For students in Electrical Engineering. Course 84 is prerequisite. Recitation, *three hours a week. Three credit hours.* Mr. Sparrow

86. 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. Classroom, *three hours a week;* drawing room, *three hours a week. Four credit hours.* Mr. Sweetser, Mr. Prageman

87. Machine Design.—A continuation of Course 66, including the execution of the design of some typical machines. Courses 55 and 66 are prerequisites. Drawing room, *six hours a week. Two credit hours.* Mr. Prageman, Mr. Parr

89. Dynamics of Machines.—A study of the forces due to reciprocating and rotating masses with special application to balancing high-speed

machinery, designing governors and flywheels. Recitation, *two hours a week. Two credit hours.* MR. SWEETSER, MR. PRAGEMAN

92. HEATING AND VENTILATION.—Heat resistance of building materials, calculation of heat losses thru various types of walls, windows, etc., heating systems, ventilating systems, humidification. Recitation, *two hours a week. Two credit hours.* MR. WATSON

93. GAS ENGINES.—Types, operation, fuels and combustion, carburetion, governing, determination of cylinder sizes for given fuel and horsepower and of flywheel weights for given regulation. Courses 79 and 66 are prerequisite. Classroom, *three hours a week. Three credit hours.* MR. SWEETSER, MR. WATSON

94. HYDRAULIC MACHINERY.—Hydraulic turbines; water wheels, various features of hydraulic power plant development. Recitation, *two hours a week. Two credit hours.* MR. PRAGEMAN

96. SEMINAR.—Preparation, presentation, and discussion of papers on leading engineering topics. Recitation, *one hour a week. One credit hour.* MR. SWEETSER

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. Recitation, *two hours a week. Two credit hours.* MR. PRAGEMAN

100. 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. Laboratory, *six hours a week. Three credit hours.* MR. SWEETSER

101 or 102. METALLOGRAPHY.—Polishing, etching, and a microscopic study of the crystalline structure of metals. A study of the effect of heat treatment on the crystalline structure and physical properties of steel. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.* MR. SWEETSER

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 fifty dollars. A complete schedule of the trip is prearranged and a member of the department staff is in charge of the party.

MECHANICS

PROFESSOR WESTON

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 credit hours.*

101, 102. 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. Not given in 1930-31. *Three credit hours.*

School of Education

FACULTY OF INSTRUCTION

Olin Silas Lutes, Ph.D., *Dean and Professor of Education*
Ava Harriet Chadbourne, Ph.D., *Associate Professor of Education*
Ernest Jackman, M.A., *Associate Professor of Education*
John Raymond Crawford, M.A., *Assistant Professor of Education*
Lindsay Jackson March, M.A., *Instructor and Critic Teacher*
Veysey Hiram Robinson, B.Pd., *Critic Teacher*
Grace Stetson Grant, B.A., *Critic Teacher*
Helen Louise Hathorne, B.A., *Critic Teacher*
Alice Lowe Brown, B.A., *Critic Teacher*

Coöperating Departments of the Colleges of Arts and Sciences and Technology.

Charles Andrew Brautlecht, Ph.D., *Professor of Chemistry and Chemical Engineering*
Milton Ellis, Ph.D., *Professor of English*
François Joseph Kueny, L. ès L., *Professor of French*
Caroline Colvin, Ph.D., *Professor of History and Government*
George Davis Chase, Ph.D., *Dean of Graduate Study and Professor of Latin*
Harley Richard Willard, Ph.D., *Professor of Mathematics*
Albert Lewis Fitch, Ph.D., *Professor of Physics*
Charles Alexius Dickinson, Ph.D., *Professor of Psychology*
Donnell Brooks Young, Ph.D., *Professor of Zoology*

GENERAL INFORMATION

The School of Education offers professional training to secondary teachers, superintendents, principals, and supervisors. Students will ordinarily enter with Junior standing, having had the first two years of work in either a liberal arts college or a normal school. Those with a different type of training may enter as special students until Junior standing is attained.

ADMISSION

Students in the College of Arts and Sciences

Those students in the College of Arts and Sciences of the University of Maine who plan to teach are given the opportunity to transfer to the School of Education at the beginning of their Junior year. Such students should take the regular course as prescribed by the College of Arts and Sciences during the freshman year. Then instead of starting a major during the sophomore year they should take General Psychology and choose courses which will lay a foundation for the field of concentration required for the degree in Education.

At the beginning of the sophomore year such students should register their intention to teach in the office of the Dean of the School of Education and secure his approval as well as the approval of the Dean of the College of Arts and Sciences for their courses of study.

To be admitted to the School of Education students must have made a grade of C or better in at least three-fourths of their entire work during the freshman and sophomore years.

These students will be candidates for the degree of Bachelor of Arts in Education on the completion of their program in the School of Education.

Normal School Graduates

Graduates of the two-year course in normal schools who rank in the upper half of their graduating class, and who are recommended for college work by their principal, will be admitted to the School of Education with Junior standing. These graduates will be given fifty-four semester hours of advanced credit and by carrying a full program may graduate on the completion of two years of work. This rule is subject to modification if experience should warrant it. Successful teaching experience will be taken into consideration in passing on qualifications for admission.

Graduates of three-year training courses for junior high school teachers may be admitted in the same manner and be given eighty hours of credit and Senior standing. This will make it possible to complete the requirements for graduation in a year and one or two summer sessions, depending on how heavy a program is carried.

All normal school graduates will be expected to meet the requirement of a field of concentration in academic subjects except that those who plan to enter administrative or supervisory work may be permitted to take this work in Education and Psychology. In either case any work previously

taken at the normal school which lies within the field chosen will be given due credit toward the requirements.

Normal school graduates who are interested in entering the School of Education should request their principal to send a transcript of their record together with a statement giving their class rank to the Registrar of the University. These should be accompanied by a recommendation of the candidate by the principal.

Students who come from the normal schools will ordinarily be candidates for the Bachelor of Science in Education degree.

GRADUATION REQUIREMENTS

A total of 125 semester hours of college work is required for graduation. Of this total, 24 hours will be required in Education and Psychology, and 40 to 50 hours in the field of concentration, all of which must be carried with a grade of C or better.

Professional Subjects Required

Ed 29 (or 30)—Practice Teaching
Ed 51, 53 or 54—History of Education
Ed 59—Principles of Secondary Education
Ed 65 (or 66)—Educational Measurement
Ed 77 (or 78)—Principles and Methods of High School Teaching
Py 1, 2—General Psychology
Py 66—Educational Psychology
Special Methods (one such course to be selected in a subject within the field of concentration)

Besides these specific requirements in strictly professional subjects, students will be strongly advised to take general courses in a number of subjects of vital importance as a part of the background of any teacher or educator, such as Biology, Economics, English, History and Government, and Sociology.

Field of Concentration

In order to better meet the needs of the typical high school situation the traditional requirement of a single major subject will be replaced by

that of a field of concentration in the academic subjects. This field of concentration must include a minimum of 40 to 50 semester hours in a group of related subjects commonly taught in the secondary schools, the exact amount to depend on the number and character of the subjects combined, and the quality of the work done. This work must be carried with a grade of C or better to qualify for a degree in Education.

This requirement applies to all students whether working for the Bachelor of Arts in Education or the Bachelor of Science in Education degree. However, those who have had teaching experience and who plan to enter administrative or supervisory work may be permitted to carry their field of concentration in Education and Psychology instead of academic subjects.

Combinations of subjects which occur frequently in the secondary schools are as follows:

French and Latin
English and History
Mathematics and the Natural Sciences
English and Latin
English and French
History and Latin
English, French, and Latin
English, History, and Latin
English, History, and French
History, Civics, Economics, and Sociology.

Subjects which occur in a large variety of combinations are Physical Education, Music, Debating, and Dramatics. Each student will be expected to take sufficient work to attain proficiency in at least one of these fields.

RESIDENCE REQUIREMENT

A minimum of thirty semester hours of credit must be earned while in residence at the University to qualify a candidate for a degree. This requirement may be met by one academic year of residence, or in case of teachers by attendance in summer sessions. Four summer sessions may be accepted as the equivalent of one academic year provided the work is of distinctly high quality.

Exceptions to these rules will not be permitted except by a vote of the faculty.

DEGREES

(1) Bachelor of Arts in Education. This degree shall be given to students who do the first two years of work in the College of Arts and Sciences, meet their entrance requirements, and their curricular requirements of ten semester hours in each of the following groups: Foreign language, mathematics and science, English, social science. Candidates for this degree will be required to complete a minimum of 40 to 50 hours in a group of related academic subjects which are commonly taught in the public schools, with a grade of C or better.

(2) Bachelor of Science in Education. This degree shall be given to students who are admitted from normal schools with advanced standing. Requirements for the degree will include a field of concentration in the academic subjects as for the B.A. degree, and the same professional courses. In meeting both these requirements, however, due credit will be given for the courses which have been previously taken in the normal school course.

PROFESSIONAL CERTIFICATES

On the successful completion of the above program students will be recommended to the State Department of Education for the Professional Secondary Certificate.

Students will be recommended for the various Special Certificates on the satisfactory completion of programs of study which have been approved by the State Department. Such programs are now under preparation in Physical Education, Music, and Junior High School Education.

Courses of Instruction

For courses in Psychology, see Department of Psychology

29 (30). Supervised Student Teaching.—A course in student teaching in academic subjects. Open to a limited number of seniors recommended by the Dean of the School of Education. Preference is given to those who have completed Education 77 or 78. *Five hours a week* for nine weeks. *Two hours credit.* Mr. Jackman

51. History of Education in the United States.—Evolution of education, educational institutions, school systems and practices of the American people. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

52. History of Education in Maine.—A study of the evolution of the educational system in the State from its earliest period to the present time. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

53. Foundations of Modern Education.—Historical analysis and interpretation of the more important elements in modern education derived from the Hebrews, Greeks, Romans, Middle Ages, and Renaissance. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

54. History of Modern Education.—Evolution of present day educational theory; institutions and practices of modern civilizations from the time of the Reformation up to the present. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

56. History of Education of Women.—A study of the development of the education of women from the time of the Greeks to the present, with an especial emphasis on American education. To be given in 1931-32. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

59. Principles of Secondary Education.—A course in the application of the principles of education with special reference to the problem of high-school teaching. The aims of secondary education in a democracy in terms of skills, knowledges, tastes, and ideals which are demanded in modern life. Primarily for juniors and seniors. Open to sophomores by permission. *Three hours a week.* Mr. Lutes

61. School Administration.—The general problems of school organization and administration in the United States. Primarily for seniors. Open by permission. *Three hours a week.* Mr. Lutes

62. Secondary School Administration and Supervision.—A practical course for those who are looking forward to positions as high-school

principals or supervisors. Problems of organization, teacher selection and rating, improvement of teachers in service, salary schedules, extra-curricular activities, testing programs, and techniques of supervision will be emphasized. Primarily for seniors. Open by permission. *Three hours a week.*

MR. LUTES

65 (66). EDUCATIONAL MEASUREMENTS.—An introduction to the principles and practices underlying the various types of educational measurements. Open to juniors and seniors. This course will be required for the Professional State Certificate. *Two hours a week.* MR. CRAWFORD

√ 68. VOCATIONAL AND EDUCATIONAL GUIDANCE.—The aim is to present to prospective teachers the general problem of guidance in junior and senior high schools, with especial reference to the vocational phase, organization for guidance, necessary materials and techniques of counseling. Open to juniors and seniors. *Three hours a week.* MR. JACKMAN

71. PSYCHOLOGY OF SECONDARY EDUCATION.—A study of the adolescent age and its characteristics. Psychological principles which determine the scope and character of secondary education. Open to students who have passed Psychology 1, 2 with a grade of C; to others by permission. *Three hours a week.* MR. LUTES

75. TEACHING THE SOCIAL SCIENCES IN SECONDARY SCHOOLS.—The purpose of the course is to acquaint the prospective teacher of the social sciences with a point of view and vital methods of presentation that will tend to make these subjects effective in the everyday problems of living. Geography, biology, psychology, economics, political science, ethics, history and sociology are considered, the greater emphasis being placed on the subjects likely to appear in the average high-school curriculum. Open to juniors and seniors. *Two hours a week.* MR. JACKMAN

77 (78). PRINCIPLES AND METHODS OF TEACHING IN SECONDARY SCHOOLS.—A general course in methods for prospective high-school teachers. Open to seniors and juniors who have had General Psychology. *Three hours a week.* MR. JACKMAN

81. SUPERVISION IN THE ELEMENTARY SCHOOL.—This course will attempt to define the duties of the administrative officer of the elementary school in so far as such duties are concerned with supervision and improvement of instruction. The theory of supervision in general and specific methods of supervision of the prominent elementary-school subjects will be considered. Open to normal-school graduates, and students with teaching experience. Others by permission. *Two hours a week.* MR. CRAWFORD

82. Administration of the Elementary School.—A course for prospective superintendents and elementary school principals. The following topics will be considered: Origin of the elementary school, the meaning of elementary education, the place of the elementary school in our total school system, and duties of the administrative officer, such as, personnel problems, curricular and instructional material selection, time allotment, and reports. Open to normal school graduates and students with teaching experience. Others by permission. *Two hours a week.* Mr. Crawford

95, 96. Philosophy of Education.—A course for seniors and graduate students designed primarily for the reading and discussion of conflicting factors in education with a view to their criticism and coördination. *Two hours a week.* Miss Chadbourne

97, 98. Current Problems in Education.—Each student is assigned special problems in the field of education. One semester is required of majors in education. Open by permission to others. Seniors only. *Two hours a week.* Mr. Lutes and Staff

99, (100). Current Literature in Education.—A course designed to acquaint students with the discussion of present-day problems in education as revealed in current literature. *Two hours a week. One hour of credit.* Mr. Crawford and Staff

MILITARY SCIENCE AND TACTICS

Major Oliver; Captain McFarland; Captain Stewart; Captain Wear; Sergeant Ogilvie; Sergeant Strother

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, the purpose of which is to train officers for infantry. The students are organized into an infantry battalion, including band, officered by cadets selected for character, soldierly bearing, and military efficiency. Instruction is carried on under rules and regulations prescribed by the Secretary of War in accordance with law.

Uniforms (except shoes, white shirts, and collars), arms, and equipment of the latest model of the U. S. Army are furnished by the government.

Each student is required to have a pair of regulation shoes and, to insure uniformity, as well as reduce the cost to the minimum, he is required to secure these from the University. They are issued with the uniform, become the student's property, and the cost is deducted from his military deposit. These shoes are purchased direct from the manufacturers and are charged to the student at cost.

The uniform prescribed is as follows:

For cadet commissioned officers, the olive-drab service uniform prescribed for infantry officers of the United States Army, except that "R.O.T.C." 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." insignia are used.

Cadets are required to wear the uniform when on military duty.

In the following schedule of courses, numbers 1 to 4, inclusive, are required of all physically fit male freshmen and sophomores, except students in the Two-Year Course in Agriculture. Courses 5 and 6 are elective for juniors; and Courses 7 and 8 are elective for seniors. The required courses cover two years' instruction as laid down in War Department regulations. The elective courses also cover two years, and once entered upon become a prerequisite for graduation. Having completed Courses 1 to 4, inclusive, students electing to continue their military training who comply with the

requirements of law and regulations are entitled to money commutation of subsistence at a rate fixed by the Secretary of War.

Three percent of the total number of students who on March 1st of each year are enrolled in the second year of the Advanced Course (Mt 7 and 8), may be designated by the institution as honor graduates. The term "honor graduate" is understood to apply to a graduate whose attainments in scholarship have been so marked as to receive the approbation of the head of the University and whose proficiency in military training and intelligent attention to duty have invited the approbation of the professor of military science and tactics.

The general object of the courses of instruction of the Reserve Officers' Training Corps is to qualify students for positions of leadership in time of a national emergency.

The basic course includes those subjects necessary to qualify the student to perform the duties of a non-commissioned officer of the lowest grade of the branch in which he is trained. The first year of the course includes those subjects appropriate to training of the student in the duties of a private.

The object of the advanced course is to qualify for a commission in the Officers' Reserve Corps a limited number of students who have completed the basic course and who have demonstrated exceptional qualities of leadership. The first year of the course should prepare the student to derive the maximum benefit from the advanced R.O.T.C. camp.

The completion of the first three years of the course should qualify the student to perform, with reasonable efficiency, the duties of a non-commissioned officer of the highest grade. Graduates of the four years' course including the advanced camp should be reasonably qualified to perform the duties of a second lieutenant of infantry.

Courses of instruction outlined below have been arranged in progressive order.

BASIC COURSE—THREE HOURS A WEEK

Freshman year, Courses 1 and 2; sophomore year, Courses 3 and 4.

1. Military Training—
   (a) The National Defense Act and the R.O.T.C.:
   Orientation of the student in the provisions of the National Defense Act and the mission of the R.O.T.C. in the military system provided in the Act.
   General outline of the organization of the R.O.T.C. and the

objectives of the R.O.T.C. course; institutional regulations governing the conduct of the unit.

(b) Military Courtesy and Discipline: To inculcate respect for, and loyalty to, constituted authority; instruction in selected extracts from the regulations; and lectures, demonstrations, and practical application.
Instruction to be extended in connection with the course in Drill and Command.

(c) Military Hygiene and First Aid: Instruction in personal hygiene, first aid, and prevention of disease.

(d) Drill and Command: Theoretical and practical instruction to qualify the student to participate as a private in close and extended order drill, physical drills and ceremonies and to inculcate precision, soldierly bearing, and the spirit of discipline.

2. Military Training—

(a) Rifle Marksmanship: Practical instruction and training with a view to forming proper shooting habits and methods preliminary to and during small bore firing, nomenclature, care and cleaning of the rifle.

(b) Scouting and Patrolling: Theoretical and practical instruction in the duties of a member of a patrol and a scout in small tactical exercises.

(c) Drill and Command: Continuation of Course 1 (d).

3. Military Training—

(a) Scouting and Patrolling: Theoretical and practical instruction covering the conduct of patrols and the duties of scouts and patrol leaders. Applicatory exercises using maps, sand table, and terrain with a view to the practical training of the student in the duties of a patrol leader.

(b) Automatic Rifle: Practical instruction in mechanical functioning, positions, and combat use of the automatic rifle.

(c) Drill and Command: Review of first year course (Mt 1 and 2). Additional theoretical and practical instruction to qualify the student to perform the duties of a squad leader in close and extended order drill, in ceremonies, and physical drill.

4. Military Training—

(a) Musketry: Theoretical and practical instruction covering small problems and exercises in musketry using sand table, landscape targets, and terrain with a view to training the student in conducting the fire of a squad.

(b) Combat Principles: Theoretical instruction covering combat principles of the rifle squad. Practical instruction on varied ground with a view to training the student to lead a squad in attack and defense and on security missions.

(c) Drill and Command: Continuation of Course 3 (c).

ADVANCED COURSE—FIVE HOURS A WEEK

Junior year, Courses 5 and 6; senior year, Courses 7 and 8.

5. Military Training—

(a) Map Reading and Military Sketching: Theoretical instruction necessary to qualify the student to read military maps with facility and prepare them for practical work in sketching, visibility of points and areas; practice in making simple road and position sketches.

(b) Machine Gun: Theoretical knowledge of the capabilities of the weapon, the theory of machine-gun fire, machine-gun mathematics, use of instruments, direct and indirect laying, and combat principles. Practical application with a view to preparation of the student for machine-gun firing at camp and training him to act as a squad and section leader in drill and combat. Instruction to cover determination of fire data and methods and means of fire control in direct laying, stripping and assembling the gun, commands going into and out of position on varied ground, and so much of indirect laying as will acquaint student with methods of obtaining firing data for guns controlled singly.

(c) Drill and Command: A review of the previous drill and command courses and additional theoretical and practical instruction to qualify the student to perform the duties of a sergeant of all grades in close and extended order drills, ceremonies, and physical drill, and to act as an instructor of basic students at practical drill.

6. Military Training—

(a) Machine Gun: Continuation of Course 5 (b).

(b) The 37 mm Gun and 3 inch Trench Mortar: Theoretical knowledge of the capabilities of the weapon, care and cleaning, mechanism, technique of direct and indirect laying of 37 mm gun, technique of 3 inch Trench Mortar fire, combat principles of the two weapons. Practical application with a view to

preparation of student for firing at camp and to training him to act as member of a squad and as squad leader in drill and combat. Instruction to cover the determination of fire data, methods and means of fire control, fire orders, field stripping and assembling, going into action and out of action.

(c) Combat Principles: Theoretical instruction covering combat principles of a Rifle section and platoon. Application of principles taught to tactical situations by means of map problems, sand table or relief map exercises, and exercises on varied ground with a view to training the student in duties of the several grades of rifle company N.C.O.'s. in combat and service of security.

(d) Drill and Command: Continuation of Course 5 (c).

7. Military Training—

(a) Combat Principles: Theoretical instruction covering combat principles of the rifle company, machine gun company, howitzer company and battalion in attack and defense. Applicatory exercises on map, sand table, or relief map and terrain. Elementary instruction in infantry signal communications.

(b) Field Engineering: Elements of Field Engineering to include: standard types of field works, organization of working parties and tasks, selection of location of trenches, concealment and camouflage applied to infantry, stream crossing expedients.

(c) Drill and Command: A review of the previous drill and command course and additional practical instruction to qualify the student to perform the duties of platoon and company commanders and instructors of basic students in close and extended order drills, ceremonies, and physical drills; especial attention to the development of leadership qualities and methods of instructing and handling men.

8. Military Training—

(a) Military History and Policy: Reference study of available publications on the outlines of the history of the wars of the American Republic and illustrative campaigns and battles; evolution of the military policy of the United States.

(b) Administration: To acquaint the student with the administrative problems of a Company Commander, and regulations governing company administration. Conferences and practical work on the following: Morning report, sick report, duty roster, company fund, military correspondence, orders, company

discipline, property, messing, company sanitation, and care of men.

(c) Military Law and Officers' Reserve Corps Regulations: To give the student a general knowledge of procedure of courts-martial and of military law to which he will be subject when called into active service as a reserve officer. To acquaint the student with the conditions of service in the Organized Reserve.

(d) Drill and Command: Continuation of Course 7 (c).

PHYSICAL EDUCATION AND ATHLETICS

PROFESSOR WALLACE; PROFESSOR CURTIS; PROFESSOR BRICE; PROFESSOR JENKINS; MR. KENYON

Men's Division

Athletics for men are under the supervision of the Athletic Board, composed of members of the faculty, alumni, trustees, and students. The management of athletics is in the hands of a faculty manager, who carries out the policies of the Athletic Board.

The schedules of all sports are arranged with the interest of both the University and the individual members of teams in mind. Letters and numerals are awarded by the Athletic Board to those men who earn them in competition in various sports. Admission to all contests held on Alumni Field is included in the blanket tax which is paid by each student at the time of registration.

Student managers are elected in each sport and their work is carried on under the direction of the Faculty Manager. They are awarded a letter in their sport at the satisfactory completion of their duties.

Teams are maintained in freshman and varsity football, cross-country, relay, track, baseball, and freshman basketball.

The field house, which is one of the largest and best in the world, offers a fine opportunity for the athletic teams to practice and participate during inclement weather.

The organization of the Physical Education Department has been planned to give the student such experience and instruction as will enable him to establish habits of recreation which will serve to promote healthful physical activity while in college and in his life after graduation. Especial emphasis will be placed upon athletics and out-of-door recreational exercises rather than routine work in the gymnasium, altho the latter will be utilized during cold weather.

In addition to these viewpoints, that of individual instruction in hygiene will be continually kept in mind.

1, 2. PHYSICAL TRAINING.—Required of all freshmen. Setting up exercises, corrective exercises, supervised mass games, elementary apparatus work. *Two hours a week.*

3, 4. PHYSICAL TRAINING.—Required of all sophomores. Practical class work consists of volley ball, soccer, and baseball during the fall and

spring. Apparatus and formal gymnastics, boxing, wrestling, fencing, basketball, and winter sports during the winter. *Two hours a week.*

Teachers' Courses in Physical Education for Men

The following courses are for students who wish to teach physical education and who have completed Courses 1, 2, 3, and 4. The complete program is classed as a minor subject.

5. Physical Education.—First aid and massage, and the principles of training athletes and athletic injuries. Practice teaching of games and mass athletics, supplemented by outside reading on physical education and hygiene. Football and basketball coaching course. *Five hours a week. Two hours credit.*

6. Physical Education.—Apparatus work, formal and schoolroom gymnastics, practice teaching. Games. Methods of promoting grammar and high-school programs in physical education and health. Baseball and track-coaching course. *Five hours a week. Two hours credit.*

7, 8. Physical Education.—A continuation of Courses 5 and 6 covering the ground more fully and with a deeper understanding of the principles and methods of teaching physical education. *Five hours a week. Two hours credit.*

The following courses are also required: Psychology 1, 2. General Psychology; Education 59, 60. Principles of Secondary Education; Education 47, (48). Methods of Teaching in Secondary Schools; Zoology 12. Human Physiology and Applied Anatomy.

The State Department of Physical Education is working on this program, and it is expected that a State Certificate in Physical Education will be granted beginning the fall semester of 1931.

Women's Division

Assistant Professor Lengyel; Miss Rogers

It is the purpose of this department to develop good physical condition among college women by providing opportunity for the formation of wholesome habits and for relaxation and recreation.

A medical examination by a woman physician and a physical examination by the director of physical education are given each entering student during the first week of school, and thereafter as often as seems advisable.

These are intended: to assist in the placement of the student with reference to her college program in the light of her physical ability and limitations; to inform the student as to her exact physical condition, so that she can intelligently conduct her mental and physical activity; and to discover as soon as possible any organic and physical defects in order to hasten their treatment.

Instructors in all activities are placing particular emphasis on two important aspects: the physical needs of the individual and the fun of the game. To stimulate a wholesome competitive interest on the part of the student, the Maine Athletic Association Women's Branch conducts a series of intergroup activities in hockey, basketball, archery, tennis, baseball, soccer, and other sports.

Regulation gymnasium uniforms, described elsewhere in the catalog, are required for this work.

1, 2. Elementary Physical Education.—Required of all freshmen. Consists of postural and developmental gymnastics and physical efficiency tests for endurance, strength, and agility. Hockey, tennis, basketball, baseball, archery, track, and winter sports may be substituted for this in season. *Two hours a week.*

1a, 2a. Elementary Dancing.—This may be substituted for Courses 1, 2. The elements of dancing, folk dancing, simple combination of technique, a few classic dances, and simple rhythms. *Two hours a week.*

3, 4. Advanced Physical Education.—Required of all sophomores. A continuation of Courses 1, 2, with advanced gymnastics and apparatus work, and more difficult physical efficiency tests. The sports listed above may be substituted for this in season, for the purpose of developing greater skill and accuracy, as well as providing recreation. *Two hours a week.*

3a, 4a. Advanced Dancing.—A continuation of Courses 1a and 2a with more advanced technique and classic dances. Prerequisites 1a, 2a. *Two hours a week.*

5, 6. Tumbling.—This may be substituted for Courses 1, 2, 3, 4.

Individual Gymnastics.—Required of all freshmen and sophomores referred to the department by the medical examiner or by their family physician for special work. Prescribed exercises for body building, posture, foot work, etc. Students who are required to take this work substitute it for Courses 1, 2 and 3, 4. *Two hours a week.*

Teachers' Certificate Courses in Physical Education for Women

The following courses are for students who wish to minor in Physical Education and thus obtain a secondary State Teachers' Certificate, from the State Department of Education.

Prerequisites: Physical Education 1, 2, 3, 4 without credit; General Zoology, *four hours credit;* Elementary Physiology and Hygiene, *two hours credit;* Human Physiology, *four hours credit.*

7. The Principles of Physical Education and Hygiene.—An introductory course in the interpretation and objectives of physical education. Open to juniors who are preparing to teach. *Three hours a week and field work.*

8. Physical Examination and Measurements.—This course covers the purposes, management, and technique of physical examination with the exception of the determination of organic capacity for activities. Open to juniors who have fulfilled the requirements of Zoology 1, 5, 12.

9, 10. Methods for Teaching Physical Education.—This course deals with the methods of teaching physical education activities thru the grades and high school. It also gives opportunity for practice teaching. Open to seniors who have passed Physical Education 7, 8. *Three hours a week and field work.*

It is recommended that students enrolling in the above courses should have at least six hours of each of the following departments: education, psychology, sociology, and public speaking.

Maine Agricultural Experiment Station

COUNCIL

Harold Sherburne Boardman, C.E., Eng.D., LL.D.	*President*
Fred Griffee, Ph.D.	*Secretary*
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Edgar Brackett Lord, W. Lebanon	*Maine Livestock Breeders' Association*
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James Monroe Bartlett, Sc.D.	*Members of the Station Staff*
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Elmer Robert Tobey, Ch.E.	
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Charles Henry Merchant, Ph.D.	
Pearl Stuart Greene, M.A.	
Clarence Ritchie Phipps, Ph.D.	
William Franklin Dove, Ph.D.	
Charles Harry White, Ph.C.	
Reiner Bonde, M.S.	
George Farrington Dow, M.S.	
Marion Deyoe Sweetman, Ph.D.	
Joseph Anthony Chucka, Ph.D.	

*Also a member of the Council *ex-officio* as Commissioner of Agriculture.

STAFF

ADMINISTRATION

Warner Jackson Morse, Sc.D., Ph.D., Director
Fred Griffee, Ph.D., Assistant Director
Charles Clyde Inman, Administrative Assistant
Mary Norton Cameron, Secretary
Irvill Harry Cheney, B.S., Superintendent of Highmoor Farm
Silas Oneal Hanson, Superintendent of Aroostook Farm

AGRICULTURAL ECONOMICS

Charles Henry Merchant, Ph.D., Head of Department
George Farrington Dow, M.S., Associate
William Ernest Schrumpf, M.S., Assistant
Merton Stanley Parsons, B.S., Assistant

BIOLOGY

Fred Griffee, Ph.D., Head of Department
John Whittemore Gowen, Ph.D., Collaborating Biologist, Animal Breeding
William Franklin Dove, Ph.D., Associate, Animal Breeding and Nutrition
Joseph Anthony Chucka, Ph.D., Associate, Plant Breeding and Nutrition
Frederick Barker Chandler, B.S., Assistant, Blueberry Investigations
Iva Merchant Burgess, M.S., Assistant
Mildred Rebecca Covell, Assistant
Elizabeth Florence Murphy, B.A., Assistant, Animal Breeding and Nutrition
Delmar Boynton Lovejoy, B.S., Assistant, Plant Breeding and Nutrition
Emmeline Wilson Kenney, Laboratory Assistant
Madeleine Frances Cotter, Laboratory Assistant

CHEMISTRY

James Monroe Bartlett, Sc.D., Head of Department, Inspection Analyses
*Elmer Robert Tobey, Ch.E., Research Chemist
Charles Harry White, Ph.C., Associate, Inspection Analyses
Bernie Elliott Plummer, Jr., M.S., Assistant, Inspection Analyses

ENTOMOLOGY

†Edith Marion Patch, Ph.D., Head of Department

Clarence Ritchie Phipps, Ph.D., Associate
John Henry Hawkins, M.S., Assistant
Alice Woods Averill, Laboratory Assistant

HOME ECONOMICS

Pearl Stuart Greene, M.A., Head of Department
Marion Deyoe Sweetman, Ph.D., Associate
Myrtle Walker Dow, B.S., Assistant
Merna Myrtha Monroe, B.S., Assistant

PLANT PATHOLOGY

Donald Folsom, Ph.D., Head of Department
*Reiner Bonde, M.S., Associate
Florence Lydia Markin, M.S., Assistant
Gladys Elizabeth Babbin, Seed Analyst and Laboratory Assistant

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*On leave of absence 1930-31.
†On leave of absence for three months, beginning January 15, 1931.

GOVERNMENT OF THE STATION

By authority of the Trustees the affairs of the Station are considered by the Station Council, composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads and associates 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 Breeders' Association, and the Maine 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 is derived from the following sources: Federal and State appropriations, payments for inspection analyses made for the Commissioner of Agriculture and from the sale of farm produce. Thru appropriations to the University the State provides for the cost of printing Station publications.

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 the 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 or 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 and 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 of 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 or Territories." The object of the Purnell Act is stated as follows: "The funds appropriated pursuant to this Act shall be applied only to paying the necessary expenses of conducting investigations or making experiments bearing directly on the production, manufacture, preparation, use, distribution, and marketing of agricultural products and including such scientific researches as have for their purpose the establishment and maintenance of a permanent and efficient agricultural industry, and such economic and sociological investigations as have for their purpose the development and improvement of the rural home and rural life."

EQUIPMENT

Most of the Station offices and laboratories are in Holmes Hall, described in the section on University buildings. The station is well equipped in laboratories and apparatus, particularly in the lines of biological, chemi-

cal, 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 nearly 7000 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 original farm contains 225 acres, about 200 of which are in orchards, fields, and pastures. The Legislature in 1925 provided an appropriation for the purchase of 30 acres adjoining the farm for a demonstration orchard. There are in the neighborhood of 2500 apple trees upon the place. Fields that are not in orchards are well adapted to experiments with corn, potatoes, and similar farm crops. The house 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.

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 one of the main roads to Houlton. The Bangor and Aroostook Railroad crosses the farm.

The farm contains about 275 acres, somewhat more than half of which is cleared. The eight-room house provides an o..ce and a home for the farm superintendent. The large barn affords storage for hay and grain and has a 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 thoroly

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, entomological, agricultural, and home economics 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 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 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 foods 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. These 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.

Graduate Study

FACULTY OF GRADUATE STUDY

George Davis Chase, Ph.D., LL.D., *Dean of Graduate Study and Professor of Latin*
Lucius Herbert Merrill, Sc.D., *Professor Emeritus of Biological and Agricultural Chemistry*
James Norris Hart, Sc.D., Ph.D., *Professor of Mathematics*
James Stacy Stevens, LL.D., Litt.D., *Professor of Physics and Dean of the College of Arts and Sciences*
Caroline Colvin, Ph.D., LL.D., *Professor of History and Government*
Warner Jackson Morse, Ph.D., Sc.D., *Director of the Experiment Station*
Leon Stephen Merrill, M.D., Sc.D., *Dean of the College of Agriculture*
*Edith Marion Patch, Ph.D., *Entomologist, Experiment Station*
Lamert Seymour Corbett, M.S., *Professor of Animal Industry*
William Jordan Sweetser, B.S., *Professor of Mechanical Engineering*
Roy Merle Peterson, Ph.D., *Secretary of the Faculty and 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 and Chemical Engineering*
Milton Ellis, Ph.D., *Professor of English*
Embert Hiram Sprague, B.S., *Professor of Civil Engineering*
Albert Lewis Fitch, Ph.D., *Professor of Physics*
Donald Folsom, Ph.D., *Plant Pathologist, Experiment Station*
François Joseph Kueny, L. ès L., *Professor of French*
Charles Henry Merchant, Ph.D., *Professor of Agricultural Economics and Farm Management*
James Howard Waring, M.S., *Professor of Horticulture*
Paul Cloke, M.S., E.E., *Dean of the College of Technology*
Olin Silas Lutes, Ph.D., *Dean of the School of Education and Professor of Education*
Charles Alexius Dickinson, Ph.D., *Professor of Psychology*
Pearl Stuart Greene, M.A., *Professor of Home Economics*

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*On leave of absence for three months beginning January 15, 1931.

Ferdinand Henry Steinmetz, Ph.D., *Professor of Botany and Entomology*
Donnell Brooks Young, Ph.D., *Professor of Zoology*
William Edward Barrows, E.E., *Professor of Electrical Engineering*
Arthur St. John Hill, E.E., *Professor of Electrical Engineering*
Fred Griffee, Ph.D., *Biologist and Assistant Director of the Experiment Station*
Ronald Bartlett Levinson, Ph.D., *Professor of Philosophy*
*Elmer Reeve Hitchner, M.S., *Professor of Bacteriology*
Marion Deyoe Sweetman, Ph.D., *Professor of Home Economics*
Maurice Daniel Jones, M.S., *Professor of Agricultural Economics and Farm Management*
Paul DeCosta Bray, Ch.E., *Associate Professor of Chemistry*
Ava Harriet Chadbourne, Ph.D., *Associate Professor of Education*
Charles Burton Crofutt, Ph.D., *Associate Professor of Physics*
Clifford Stetson Parker, Ph.D., *Associate Professor of French*
William Franklin Dove, Ph.D., *Associate Biologist, Experiment Station*
George William Small, Ph.D., *Associate Professor of English*
Walter French, Ph.D., *Assistant Professor of German*

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*On leave of absence 1930-31.

ADMINISTRATION

Graduate work is administered by the Faculty and Dean of Graduate Study. The details of administration are in the hands of an executive committee consisting of the Dean, one member from the Experiment Station, one from the School of Education, and two from each of the three colleges—Agriculture, Arts and Sciences, and Technology.

ADMISSION

Students who hold a bachelor's degree from the University of Maine, or from an institution granting a fully equivalent degree, and who desire to pursue advanced studies, are admitted as graduate students and are under the direction of the faculty of graduate study, whether they are candidates for a degree or not.

REGISTRATION

At the beginning of each semester all graduate students, whether candidates for a degree or not, are required to register with the head of the de-

partment in which they propose to do their major work, obtain the approval of the Dean, and complete their registration by filing their program of study at the Registrar's office. A fee of two dollars is charged for registration after two weeks have elapsed.

TUITION AND FEES

The tuition charges for graduate students are the same as for undergraduates.

Candidates for professional degrees are required to pay a fee of $5.00 at the time of registration, and a fee of $10.00 upon the presentation of the thesis.

SCHOLARSHIPS

The Trustees have established three competitive graduate scholarships, one for each college, of the value of a year's tuition, open to members of the senior class or to graduates of earlier classes, and in addition have designated three similar scholarships, apportioned in the same manner among the colleges of the University, for the benefit of graduates of institutions located in the maritime provinces of Canada.

Applications for the scholarship awarded by the College of Technology should be made not later than April 1. It is expected that applications for all other scholarships shall be in the hands of the Dean of Graduate Study by May 1.

THE COE RESEARCH FUND

The Trustees of the University have set aside the sum of $100,000 to form a permanent fund the proceeds of which are to be used for carrying on various kinds of research work within the University. Applications for grants from this fund should be addressed to Professor Charles H. Merchant, Secretary. It is hoped that this fund may later be increased by grants from other sources.

DEGREES

The degrees of Master of Arts, Master of Science, Master of Arts in Education, and Master of Science in Education are granted to candidates

who hold corresponding bachelor's degrees and fulfill the requirements of residence and scholarship.

A candidate for an advanced degree must give evidence by his previous record that he is qualified to do graduate work of a satisfactory grade. If he is a graduate of another institution he is required to submit, with his plan of study, credentials covering the courses pursued and the standing attained.

REQUIREMENTS FOR THE MASTER'S DEGREE

A candidate for the master's degree is required to devote at least one year to resident graduate study and to complete work amounting to fifteen hours per week thruout the college year (thirty semester hours). In the case of summer session students, four sessions, or the equivalent, are normally accepted as equivalent to a year of residence.

At least one year must elapse between the conferring of the bachelor's and the master's degree. No work done before the recommending for the bachelor's degree shall be counted toward the master's degree.

As soon after registration as practicable, the student, in conference with his major instructor, will plan his entire course of study for the master's degree. The major instructor will present the proposed curriculum for approval to a committee, which consists of the Dean of Graduate Study and the representatives of the candidate's college on the Executive Committee of the faculty.

The curriculum shall include work in a major department or subject in which the candidate has already completed the equivalent of at least two years of undergraduate study. The work may all be done in one department, or it may include not more than two minor subjects which bear a distinct relation to the general plan or purpose of the major subject. All of the work must be of advanced character and must be tested by examinations which the candidate shall pass with distinction.

Courses of study intended primarily for graduate work are numbered above 100 in the catalog, but courses numbered 51 to 100 inclusive may be counted upon approval. Courses numbered 50 or under may not be accepted for graduate credit.

Each candidate for a degree is furnished with a registration book containing the names and number of the courses which have been approved for his degree, and spaces for entering the date of beginning and completing each course, to be filled in by the instructor. This book is the student's official record of his course and should be carefully preserved and presented at the time of his final examination.

The candidate shall prepare, as a part of his curriculum, a satisfactory thesis on some topic connected with his major subject. The subject of the thesis must be submitted by the end of the first semester of study. The thesis must be deposited in completed form with the Dean of Graduate Study before the final examination. It must have been previously approved by a committee composed of his major instructor, the head of the major department, and the members of the Executive Committee from the candidate's college.

At the end of the course of study for the master's degree, after his thesis has been approved, the candidate will be required to pass an oral examination covering his work, including the thesis. The time for such examinations will be arranged by the Dean to accord, so far as possible, with the convenience of the candidate and the major instructor; they will ordinarily be held in the month of May, but, at the discretion of the Executive Committee, may be held at other times. About May 15, the Dean will notify the heads of all departments of the University of the dates set for the public oral examinations of the candidates of the year. Examinations are open to all voting members of the faculty. While, as a matter of course, the examination will be conducted chiefly by the members of the departments in which the work has been done, any member of the faculty present at the examination has the privilege of questioning the candidate.

Further information about the administration of graduate work and detailed requirements for the form and arrangement of theses may be found in a pamphlet entitled "Degrees and Theses."

PROFESSIONAL DEGREES

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, Civil 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.

UNIVERSITY OF MAINE STUDIES

The *University of Maine Studies,* Second Series, are issued under the direction of the Faculty of Graduate Study, for the purpose of publishing

notable pieces of research work produced by graduate students and members of the faculty. The numbers issued to date are:

No. 1 The Life and Work of John Davis (1774-1853)
By Thelma Louise Kellogg, M.A. 1924

No. 2 Economic Feminism in American Literature prior to 1848
By A. Genevieve Violette, M. A. 1925

No. 3 Roumanian Folk Tales Retold from the Original
By Dr. Jacob Bernard Segall 1925

No. 4 Life of Thomas Green Fessenden
By Porter Gale Perrin, M.A. 1925

No. 5 Mental Attainment of College Students in Relation to Previous Training, Environment, and Heredity
By Dr. John Whittemore Gowen and Marjorie Eunice Gooch, M.A. 1925

No. 6 The Formal Eclogue in Eighteenth Century England
By Marion Kathryn Bragg, M.A. 1926

No. 7 Indian Remains of the Penobscot Valley and their Significance
By Walter B. Smith 1926

No. 8 Stephen Duck, the Thresher-Poet
By Rose Mary Davis, M.A. 1927

No. 9 Methods Used in Growing Peas for Canning in Maine and the Problems Connected with their Economical Production
By Maurice Daniel Jones, M.S. 1927

No. 10 Vacuum Tube Amplifiers for Audio-Frequency Currents
By Walter Joseph Creamer, E.E. 1927

No. 11 A Lesser Hartford Wit, Dr. Elihu Hubbard Smith (1771-1798)
By Martha Edgerton Bailey, M.A. 1928

No. 12 An Economic Study of Production, Destination, and Farm Price of Maine Potatoes
By Eldwin Atwell Wixson, M.S. 1929

No. 13 A Study of the Vector Impedance of Two Parallel Circuits
By Walter Joseph Creamer, E.E. 1929

No. 14 The Vibratory Sense and Other Lectures
By Dr. David Katz 1930

No. 15 Additional Chapters on Thomas Cooper
By Maurice Kelley, M.A. 1930

No. 16 Whittier's Use of the Bible
By Dr. James Stacy Stevens 1930

Summer Session

Since 1895, with the exception of the years 1898-1902 and 1918-19, the University has conducted an annual summer session of six weeks, beginning usually the first Monday after the Fourth of July. The registration has steadily increased, and also the number and range of courses. Instruction is given in nearly all departments of the College of Arts and Sciences, principally by heads of departments and other teachers of professorial rank in that college or by visiting professors from other institutions. Courses are also offered in Physical Education, Pulp and Paper Making, and Home Economics. A large amount of work is available in Education.

The Summer Session is primarily for the benefit of teachers and superintendents in Maine and from other states who desire to improve themselves by taking professional courses required by the State Department of Education, or by pursuing subjects which may be helpful to them in connection with their work; and for students in the University or other colleges who desire advanced credit toward the bachelor's or master's degree. Especial attention is given to teachers' courses in the various subjects offered. Normal school graduates who are admitted to advanced standing in the University as candidates for a bachelor's degree may do a part of their work in the Summer Session. Properly qualified graduates of colleges or universities may complete graduate work in certain departments leading to the degree of Master of Arts by attendance at four summer sessions, or preferably at two summer sessions and during one regular semester. An increasing number of Summer Session students are candidates for an advanced degree. Under ordinary circumstances the summer session student is expected to carry not more than three courses, each of which in most cases gives two hours of University credit.

The opening and closing dates for 1931 are July 6 and August 14. Students who are planning to attend the Summer Session should send for the Summer Session Bulletin, to be issued about March 1, and should plan their courses in advance, consulting, if possible, the instructors concerned. For additional information address Dr. Roy M. Peterson, Director of the Summer Session, Orono, Maine.

Alumni Associations

GENERAL ASSOCIATION

President, Raymond H. Fogler, 1915, 1441 Broadway, New York, N. Y.
Vice-President, Arthur L. Deering, 1912, Orono
Clerk, B. C. Kent, 1912, Orono
Executive Secretary, Charles E. Crossland, 1917, Fernald Hall, Orono
Treasurer, Paul D. Bray, 1914, Orono

ALUMNI COUNCIL

Members at Large

	Term expires
Marshall B. Downing, 1899, 140 West St., New York, N. Y...	1931
Henry F. Drummond, 1900, Box 4, Bangor.....	1931
Lynwood B. Thompson, 1912, 22 Miller St., Belfast.....	1931
George S. Williams, 1905, 221 State St., Augusta.....	1932
Harry A. Emery, 1906, 78 Exchange St., Bangor.....	1932
Harold A. Cooper, 1915, 77 Davis St., Auburn.....	1932
C. Parker Crowell, 1898, 36 Howard St., Bangor.....	1933
Louis Oakes, 1898, Greenville Jct.....	1933
J. L. Ober, 1913, 49 Federal St., Boston, Mass.....	1933
Mrs. W. F. Schoppe, 1908, R.F.D. 4, Auburn.....	1933
Harry E. Sutton, 1909, 161 Devonshire St., Boston, Mass.....	1933

College of Agriculture

W. Ray Thompson, 1914, Caribou.....	1932

College of Arts and Sciences

A. Lincoln King, 1914, 15 Clifford St., Portland.....	1933

College of Law

Robert W. DeWolfe, 1907, 102 Exchange St., Portland.....	1931

College of Technology

Arthur E. Silver, 1902, 360 No. Fullerton Ave., Upper Montclair, N. J..... 1932

Ex-Officio Members

R. H. Fogler, 1915, 1441 Broadway, New York, N. Y.
President of the General Alumni Association
A. L. Deering, 1912, Orono
Vice-president of the General Alumni Association

Executive Committee

A. L. Deering, Chairman
H. F. Drummond
R. H. Fogler *(ex-officio)*
A. L. King
Harry Sutton
G. S. Williams
H. A. Cooper

ALUMNI REPRESENTATIVE TO BOARD OF TRUSTEES

Hosea B. Buck, 1893, 1 Columbia Bldg., Bangor..... 1933

ALUMNI MEMBERS OF THE ATHLETIC BOARD

	Term expires
Clifton A. Hall, 1910, Box 778, Bangor.....	1931
J. Harvey McClure, 1905, 45 Sixth St., Bangor.....	1932
Clifford Patch, 1911, 83 Grove St., Bangor.....	1933

SPECIAL ASSOCIATIONS

COLLEGE OF LAW

President, James M. Gillin, L1913, 12 Columbia Bldg., Bangor; Secretary, Mark A. Barwise, 1913, 39 Columbia St., Bangor

Short Course Alumni

President, Bertram Tomlinson, 1918sc, Barnstable, Mass.; Secretary, H. Styles Bridges, 1918sc, Patriot Bldg., Concord, N. H.

Maine Teachers

President, Norman Mathews '16, 95 Western Avenue, Waterville; Secretary, C. E. Crossland, 1917, Orono; Treasurer, Louise Kincade, 1923, 66 Irving St., Portland.

LOCAL ASSOCIATIONS

Androscoggin Valley—President, Stanley B. Attwood, 1911, 31 Winter St., Lewiston; Secretary, Mrs. Mary L. Kavanagh, 45 Eastern Ave., Lewiston.

Aroostook County—President, Frank Hussey, 1925, Presque Isle; Secretary, Kingdon Harvey, 1930, Fort Fairfield.

Boston—President, T. W. Monroe, 1924, 50 Federal St., Boston, Mass.; Secretary, H. C. Crandall, 1921, 517 Fellsway East, Malden, Mass.

Boston Club University of Maine Women—Secretary, Mrs. Harry C. Robbins, 1918, 33 Manton Road, Beach Bluff, Mass.

Chicago—President, M. C. Wiley, 1903, 1347 Estes Ave., Chicago, Illinois; Secretary, George E. LaMarche, 1911, 6380 Osceola Ave., Chicago, Ill.

Central Maine—President, M. F. McCarthy, 1911, 61 Benton Ave., Waterville; Secretary, C. A. Blackington, L1914, 120 Main St., Waterville.

Cleveland—President, R. B. Cruickshank, 1910, 3217 Sycamore Road, Cleveland Heights, Ohio; Secretary, Basil Barrett, 1916, 600 Citizens Bank Bldg., Cleveland, Ohio.

Eastern New York—President, Roger C. Castle, 1921, 1040 Phoenix Ave., Schenectady, N. Y.; Secretary, C. M. Flint, 1928, 1059 Wendall Ave., Schenectady, N. Y.

Hancock County—President, Guy E. Torrey, 1909, Bar Harbor; Secretary, David O. Rodick, 1917, Bar Harbor.

Hartford—President, E. Hyland May, 1918, Phoenix Mut. Life Ins. Co., 79 Elm Street, Hartford, Conn.; Secretary, Carroll Osgood, 1928, 20 Townley St., Hartford, Conn.

Kennebec County—President, George S. Williams, 1905, 9 Green St., Augusta; Secretary, Brooks Brown, 1917, 30 Sewall St., Augusta.

Knox County—President, Alan L. Bird, 1900, Rockland; Secretary, R. S. Sherman, 1906, Rockland.

Lehigh Valley—President, Ray Porter, 1906, 462 Columbia Ave., Palmerton-Pa.; Secretary, L. E. Curtis, Jr., 1923, 1209 Union Blvd., Allentown, Pa.

New York—President, Daniel Chase, 1908, 342 Madison Ave., New York, N. Y.; Secretary, G. A. Potter, 1920, 10 East 40th St., New York, N. Y.

Northwestern—President, A. G. Eaton, 1914, 254 Macalister Ave., St. Paul, Minn.; Secretary, Ralph Hamlin, 1898, 4004 Colfox Ave. S., Minneapolis, Minn.

Oxford County—President, Alden Chase, 1913, Bryants Pond; Secretary, Peter McDonald, 1913, 351 Franklin St., Rumford.

Penobscot Valley—President, L. P. Libby, 1920, 14 Garland St., Bangor; Secretary, Philip R. Hussey, 1912, 15 State St., Bangor.

Philadelphia—President, W. A. Fogler, 1909, 2301 Market St., Philadelphia, Pa.; Secretary, C. B. Eastman, 1925, 1500 Walnut St., Upper Darby, Pa.

Pittsburgh—President, H. W. Hinkley, 1913, Rennerdale, Pa.; Secretary, C. P. Larrabee, 1919, 210 Semple St., Pittsburgh, Pa.

Portland Club University of Maine Women—President, Mrs. Charles Morton, 1917, 127 Coyle St., Portland; Secretary, Miss R. Louise Kincade, 1923, 66 Irving St., Portland

Providence—President, Charles W. Pennell, 1905, 283 California Ave., Providence, R. I.; Secretary, J. W. Chandler, 1916, 16 What Cheer Ave., Providence, R. I.

Sagadahoc County—Secretary, H. E. Pratt, 1921, 7 Everett St., Brunswick.

Somerset County—President, LeRoy Folsom, 1895, Norridgewock; Secretary, Gerald C. Marble, 1917, 3 Spring St., Skowhegan.

Southern California—President, F. E. Trask, 1887, 5026 Echo St., Los Angeles, Calif.; Secretary, E. L. Chase, 1926, 949 N. Ridgewood Place, Hollywood, Calif.

Southern New Hampshire—President, Roy Peaslee, 1914, 15 Carter St., Concord, N. H.; Secretary, H. Styles Bridges, 1918, Patriot Bldg., Concord, N. H.

Waldo County—President, N. S. Donahue, 1915, 11 Grove St., Belfast; Secretary, Agnes M. Massé, 1928, 36 High St., Belfast.

Washington, D. C.—President, Frank S. Dow, 1910, 6405 Ridgewood Ave., Chevy Chase, Md.; Secretary, W. B. Emerson, 1912, 415 Aspen St., Takoma Park, D. C.

Western Maine—President, George F. Dudley, 1928, 50 West St., Portland; Secretary, Simon W. Moulton, 1918, 98 Exchange St., Portland.

Western Massachusetts—President, E. E. Hobson, L1900, 11 Brown St., Palmer, Mass.; Secretary, H. R. Clark, 1914, 32 Spring St., Springfield, Mass.

Western New York—President, W. L. MacBride, 1919, 358 Hamilton Ave., Kenmore, N. Y.; Secretary, Miss Flora Howard, 1917, 245 Elmwood Ave., Buffalo, N. Y.

White Mountain—President, S. S. Lockyer, 1909, 15 Cedar St., Berlin, N. H.; Secretary, Walter W. Webber, 1916, 133 Clark St., Berlin, N. H.

Worcester County—President, John H. Mahoney, 1927, 2 Hammond St., Worcester, Mass.; Secretary, Miss Mary Copeland, 1924, Shrewsbury High School, Shrewsbury, Mass.

York County—President, R. E. Rendall, 1916, Alfred; Secretary, R. H. Lovejoy, 1918, 9 Maple St., Sanford.

CLASS SECRETARIES

1872
1873 John M. Oak, 13 Third St., Bangor
1874
1875 Dr. W. H. Jordan, Orono
1876 E. M. Blanding, 46 Madison Avenue, Bangor
1877 E. F. Danforth, Skowhegan
1878 C. C. Chamberlain, Enderlin, N. D.
1879 C. A. Morse, Windermere Hotel, Chicago, Ill.
1880 A. H. Brown, Brunswick St., Old Town
1881
1882 W. R. Howard, Belfast
1883 Professor L. H. Merrill, 178 Main St., Orono
1884 L. W. Cutter, 65 State St., Bangor
1885 Dean J. N. Hart, 123 Main St., Orono
1886 H. S. French, 230 Walnut St., Newtonville, Mass.
1887 J. S. Williams, Guilford
1888 H. F. Lincoln, Ariel, Wash.
1889 Dr. J. S. Ferguson, Malba, Queensboro, New York, N. Y.
1890 Edward H. Kelley, Alumni Hall, Orono
1891 W. M. Bailey, 81 Rockland Avenue, Malden, Mass.
1892 E. W. Danforth, 468 Medford St., Somerville, Mass.
1893 Harry M. Smith, 41 Hammond St., Bangor
1894 Frank Gould, Orono
1895 Dr. H. S. Boardman, Orono
1896 Perley B. Palmer, Woodland
1897 W. L. Holyoke, 706 Yadkin St., Kingsport, Tenn.

1898 W. L. Ellis, 63 Berkeley St., Nashua, N. H.
1899 Rufus H. Carleton, 1145 Avon Road, Schenectady, N. Y.
1900 W. N. Cargill, 7 Woodland St., Arlington, Mass.
1901 Fred M. Davis, 7 So. Dearborn St., Chicago, Ill.
1902 H. E. Cole, 6100 Stanton Ave., Pittsburgh, Pa.
1903 Paul D. Simpson, Seal Harbor
1904 Leslie E. Little, 61 East Elm St., Wollaston, Mass.
1905 Professor A. W. Sprague, 217 Union St., Bangor
1906 Harry Emery, 78 Exchange St., Bangor
1907 Elmer J. Wilson, 90 Exchange St., Lynn, Mass.
1908 J. A. Gannett, Orono
1909 Deane S. Thomas, 443 Congress St., Portland
1910 H. W. Wright, 188 Elm St., Bangor
1911 B. O. Warren, 381 4th Ave., New York, N. Y.
1912 A. L. Deering, Orono
1913 Ernest T. Savage, 15 State St., Bangor
1914 Marion Buzzell, 222 No. Brunswick St., Old Town
1915 R. F. Thurrell, East Wolfboro, N. H.
1916 W. W. Webber, 133 Clark St., Berlin, N. H.
1917 F. O. Stephens, 21 Academy St., Auburn
1918 Thelma Kellogg, Carbondale, Illinois
1919 Oscar Whalen, 105 Water St., Eastport
1920 W. W. Chadbourne, 51 College Ave., Orono, Me.
1921 Winthrop L. MacBride, 358 Hamilton Ave., Kenmore, N. Y.
1922 Ian M. Rusk, West Townsend, Mass.
1923 Mary C. Perkins, 37 Tremont St., Portland
1924 Eric O. Berg, Cumberland Ave., So. Portland
1925 Mrs. F. C. Bannister, 85 Capitolian Blvd., Rockville Center, N. Y.
1926 Cora E. Emery, 251 Park Avenue, Palm Beach, Fla.
1927 Crystal S. Hughes, Skowhegan
1928 Mrs. Spofford Giddings, State St. Apts., Augusta
1929 George F. Mahoney, 20 Somerset St., Bangor
1930 Pauline Hall, 59 Fletcher St., Kennebunk

Honors and Prizes Awarded

Members of Phi Kappa Phi

Frances Harriet Babb, Bangor; James Francis Booker, Gardiner; Laurence Buzzell Boothby, Livermore Falls; Roland Dwighton Butler, Dover-Foxcroft; Kenneth Richardson Haskell, Deer Isle; Frieda Wardwell Hatch, Castine; Charles Keith Hooper, Camden; Jenny Robinson Hutchinson, Orono; Harold Howard Inman, Orono; Fred Lincoln Lamoreau, Presque Isle; Lillian Frances Loveitt, South Portland; Rosella Adeline Loveitt, South Portland; Clifford Guy McIntire, Perham; Helen Amanda MacLaughlin, Brewer; Rachel Matthews, Hampden Highlands; Rebecca Matthews, Hampden Highlands; Harry Ripley Mayers, Hallowell; Elizabeth Florence Murphy, Van Buren; Horace Asa Pratt, Hinckley; Thomas Boyd Smith, Washburn; Warren Atwood Stickney, Brownville.

Members of Tau Beta Pi

1930

James Francis Booker, Gardiner; Gerald Whitney Butler, Dover-Foxcroft; Roland Dwighton Butler, Dover-Foxcroft; Roland Joseph Cyr, Waterville; Howard Frederick Donald, Franklin, Mass.; Wilbur Keith Foster, Rumford; Charles Keith Hooper, Camden; Winslow Larrabee Jones, Portland; Milton Francis Kent, Woodland; Frank William McCann, Poughkeepsie, N. Y.; Lloyd McCollum, West Jonesport; David Stillman Marr, Millinocket; Harry Ripley Mayers, Hallowell; Harrison Landis Moyer, Caribou; Horace Asa Pratt, Hinckley; Warren Atwood Stickney, Brownville.

1931

Paul Marshall Elliott, Beverly, Mass.; Henry Hayes Favor, Norway; Edwin Charles Guptill, East Baldwin; Donald Bishop Henderson, Bath; Elwin Thornton Howard, Dixfield; Paul Elder Nason, Houlton; Richard Tucker Page, Waterville; Timothy James Ryan, Portland; Sebastian Louis Scheffer, Bogota, N. J.; Lincoln Orrin Spencer, Biddeford.

Members of Alpha Zeta

1930

George Henry Barnes, Fort Fairfield; Laurence Buzzell Boothby, Livermore Falls; Horace Lester Caler, Addison; Ralph Ashton Corbett, South Paris; Kenneth Richardson Haskell, Deer Isle; Edward Arthur Herrick, Bangor; Clifford Guy McIntire, Perham; Paul Wadsworth, Hiram.

1931

Richard Francis Blanchard, Cumberland Center; Paul Joseph Findlen, Fort Fairfield; Elmer Chandler Hodson, Roslindale, Mass.; Darius Dicky Joy, Addison; Lewis Elnathan Parlin, New Sharon; Melzor Stetson Smith, Steuben.

1932

Frank Edwin Evans, Bridgton; Maynard Alton Hincks, Portland.

Members of Phi Beta Kappa

1930

Frances Harriet Babb, Bangor; Charles Munro Getchell, Oakland; Frieda Wardwell Hatch, Castine; Harold Howard Inman, Orono; Fred Lincoln Lamoreau, Presque Isle; Lillian Frances Loveitt, South Portland; Rosella Adeline Loveitt, South Portland; Helen Amanda MacLaughlin, Brewer; Rachel Matthews, Hampden Highlands; Rebecca Matthews, Hampden Highlands; Elizabeth Florence Murphy, Van Buren; Thomas Boyd Smith, Washburn.

General Honors

James Peery Ashworth, Orono; Frances Harriet Babb, Bangor; Louise Augusta Bates, Portland; Doris Louise Beasley, North Vassalboro; James Francis Booker, Gardiner; Laurence Buzzell Boothby, Livermore Falls; Richard Sylvester Bradford, Carmel; Roland Dwighton Butler, Dover-Foxcroft; Evelyn Virginia Cole, Biddeford; Dorothy Mary Culley, Bangor; Charles Munro Getchell, Oakland; Kenneth Richardson Haskell, Deer Isle; Frieda Wardwell Hatch, Castine; Charles Keith Hooper, Camden; Donal-

son Elmer Horne, Belfast; Jenny Robinson Hutchinson, Orono; Cyril Irving Hutner, New York, N. Y.; Harold Howard Inman, Orono; Fred Lincoln Lamoreau, Presque Isle; Lillian Frances Loveitt, South Portland; Rosella Adeline Loveitt, South Portland; Lloyd McCollum, West Jonesport; Clifford Guy McIntire, Perham; Helen Amanda MacLaughlin, Brewer; Rachel Matthews, Hampden Highlands; Rebecca Matthews, Hampden Highlands; Harry Ripley Mayers, Hallowell; Albert Joseph Modery, Orono; Elizabeth Florence Murphy, Van Buren; Carleton Ermon Nims, Keene, N. H.; Horace Asa Pratt, Hinckley; Charles Schlosberg, Boston, Mass.; Thomas Boyd Smith, Washburn; Edward Stern, Bangor; Warren Atwood Stickney, Brownville; Edward Rich Vose, East Eddington.

Scholarships and Prizes

Kidder Scholarship, Paul Marshall Elliott, Beverly, Massachusetts.

New York Alumni Association Scholarship No. 1, Harry Ripley Mayers, Hallowell.

New York Alumni Association Scholarship No. 2, Clement Donworth Dolan, No. Bucksport.

Pittsburgh Alumni Association Scholarship, Lincoln Orrin Spencer, Biddeford.

Prize of the Class of 1873, Donald Eugene Pressey, Bangor.

Central District Alumni Association Scholarship, John Millbury Chandler, South Paris.

Elizabeth Abbott Balentine Scholarship, Abigail Louise Sargent, Sargentville.

Phi Mu Scholarship, Lona Alice Mitchell, Milo.

Joseph Rider Farrington Scholarship, Paul Joseph Findlen, Fort Fairfield.

Stanley Plummer Scholarship, Ernest LaRoy Percival, Dexter.

Walter Balentine Prize, Winthrop Charles Libby, Caribou.

Franklin Danforth Prize, Jenny Robinson Hutchinson, Orono.

Washington Alumni Association Watch, Milton Francis Kent, Woodland.

Victoria Weeks Hacker Watch, Pauline Hall, Kennebunk.

Penobscot Valley Alumni Association Scholarship, No. 1, Keith Weston Percival, Bangor.

Penobscot Valley Alumni Association Scholarship, No. 2, Melzor Stetson Smith, Steuben.

Alpha Omicron Pi Alumnae Prize, Violet Lillian Morrison, Orono.

Chi Omega Sociology Prize, Frances Maynard Füger, Cape Elizabeth.

William Emery Parker Scholarship, Maynard Alton Hincks, Portland.

Class of 1905 Scholarship, Arthur Albert Brown, Bangor.

Sigma Theta Rho Prize, Jennie Marjorie Davidson, Old Town.

Trustee Undergraduate Scholarships—At Large, Hazel Luella Hammond, Stillwater; Agriculture, Charles Lowell Stewart, Minturn; Arts and Sciences, Fanny Fineberg, Portland; Technology, Malcolm Graham Long, East Bluehill.

Trustee Graduate Scholarships—Agriculture, Vernon Alfred Gamage, Litchfield; Arts and Sciences, Harold Howard Inman, Orono; Technology, Glenn Harold Perkins, Sanford.

Henry L. Griffin Prize, Edward Jamieson Milne, Fall River, Mass.

Track Club Scholarship, Harry Edward Booth, Lewiston.

Greek Culture Prize, Ruth Dow, Cornish.

Agricultural Club Membership Cup, Class of 1930.

Charles Rice Cup, Phi Eta Kappa.

Twentieth Century Commencement Cup, Class of 1905.

Class of 1908 Commencement Cup, Class of 1880.

Pan-Hellenic Sorority Cup, Sigma Theta Rho.

Senior Skull Scholarship Cup, Phi Kappa Sigma.

The Maine Campus Freshman Scholarship Cup, Phi Kappa Sigma.

Deutscher Verein Prize, to be divided between Hyman William Emple, Bangor, Rose Snider, Portland.

Phi Sigma Scholarship, Linwood Jules Bowen, Bangor.

Kappa Psi Music Prize, Harold Howard Inman, Orono.

Women's Student Government Scholarship, No. 1. Martha Louise Smith, Saco.

Women's Student Government Scholarship, No. 2, Esther Moore, McKinley.

Commencement 1930

THURSDAY, JUNE 5

5:00 P.M. Phi Kappa Phi Initiation
6:00 P.M. Phi Kappa Phi Banquet
7:30 P.M. "The Swan", a production given by The Maine Masque—Alumni Hall

FRIDAY, JUNE 6

9:30 A.M. Annual Meeting of Alumni Council—Library
2:30 P.M. Class Day Exercises—The Oval
7:30 P.M. President's Reception—Alumni Hall
9:00 P.M. Student Hop, Gymnasium, Alumni Hall

SATURDAY, JUNE 7

9:00 A.M. General Alumni Association Meeting—Library
11:15 A.M. Class Meetings in class headquarters rooms
12:30 P.M. Alumni Luncheon—Hannibal Hamlin Hall
1:45 P.M. Band Concert—Oval
2:45 P.M. Class Frolics—Alumni Field
3:15 P.M. Baseball Game—Two Alumni Nines
4:00 P.M. Pageant—On the green—South of Coburn Hall
6:00 P.M. Alumni Banquet—Alumni Hall
9:00 P.M. Alumni Hop—Alumni Hall

SUNDAY, JUNE 8

10:30 A.M. Baccalaureate Address—Alumni Hall

MONDAY, JUNE 9

9:30 A.M. Commencement Exercises—Indoor Field
8:00 P.M. Commencement Ball—Alumni Hall

Degrees Conferred

College of Agriculture

Bachelor of Science

IN AGRICULTURAL EDUCATION

Arthur Leon Brooks.....South Paris

IN AGRONOMY

George Henry Barnes.....Fort Fairfield
Ralph Arthur Burke.....Fort Fairfield
Clifford Guy McIntire, *With High Distinction*.....Perham
Andrew Orcutt Smith.....York Village
Oscar Earl Webb.....Houlton

IN ANIMAL HUSBANDRY

Laurence Buzzell Boothby, *With Distinction*.....Livermore Falls
George Clyde Dodge.....Troy
Kenneth Richardson Haskell, *With Distinction*.....Deer Isle

IN BOTANY

Irvin Carrol Mason.....Locke's Mills
Franklin Earl Pearce.....Malden, Mass.
Fred Alton Sylvester, Jr.....Mars Hill

IN DAIRY HUSBANDRY

Daniel Elmer Connelly.....Hartland
Ralph Ashton Corbett.....South Paris
Harry Levi Richardson.....Lee

IN ENTOMOLOGY

Horace Lester Caler.....Addison
Arthur Merton Gillespie.....Meddybemps

IN FORESTRY

Stanley Chapman Frost.....Portland
John Martin Gavin.....Madison

Harold Polleys Hamilton.....Baring
Charles Carleton Hardy.....Oakland
Frank Russell Hinkley.....Westbrook
Kenneth Abbott Hinkley.....Rangeley
Frank Addison Knight.....Brunswick
Harland Lee Knight.....South Paris
Virgil Mark Lancaster.....Pittsfield
George Wallace McComb.....Westfield, N. J.
Robinson Mann.....Houlton
Robert Brewster Marsh.....Machias
Carleton Ermon Nims.....Keene, N. H.
Henry Almon Plummer.....South Paris
Sylvester Mason Pratt.....Oxford
Earl Davison Taft.....Uxbridge, Mass.
Lee Eugene Wescott.....Sebago Lake
George Henry Winter.....Bangor
Kenneth Henry Young.....Brookline, Mass.

IN HOME ECONOMICS

Eunice Dorothy Barrows.....Orono
Dora Louise Colomy.....Upper Gloucester
Ruth Heald.....Union
Barbara Higgins.....Dennysville
Jenny Robinson Hutchinson, *With Highest Distinction*.....Orono
Blanche Evelyn McLaughlin.....Mapleton
Thelma Pauline Nickerson.....Bar Harbor
Sarah Moody Pike.....Bridgton

IN HORTICULTURE

Howard Otis DeCoster.....Norway

IN POULTRY HUSBANDRY

Edward Arthur Herrick.....Bangor
Paul Wadsworth.....Hiram

College of Arts and Sciences

BACHELOR OF ARTS

IN BOTANY

Alice Houghton Bagley.....Portland

Lucile Walsh Buckley.....Bangor
Vivian Maude Veysey.....Mercer

IN CHEMISTRY

Horace Alcander Croxford.....Hampden Highlands
Arnold Kingsley Muzzey.....South Berwick
Royal Allison Roulston.....Stillwater

IN ECONOMICS AND SOCIOLOGY

Lyman Abbott, Jr.....Old Orchard
George Ankeles.....Peabody, Mass.
Edmund Franklin Black.....Bailey's Island
Richard Sylvester Bradford.....Carmel
John Herbert Crowell.....Bangor
Horton Flynt.....Augusta
Robert Mantor French.....Solon
Pauline Hall.....Kennebunk
Edwin Chapin Hanscom.....Newtonville, Mass.
Arthur Vaughn Hatch.....Belfast
Donalson Elmer Horne.....Belfast
Helena Evelyn Johnson.....Bar Harbor
David Raymond Kingman.....South Hanover, Mass.
Saul Lait.....Old Town
George Franklin Larrabee.....Rockwood
Russell Vernard Lathrop.....Ipswich, Mass.
Helen Amanda MacLaughlin, *With High Distinction*.....Brewer
Norwood Walter Mansur.....Augusta
Bradford Francis Merrill.....Madison
Edward Stern.....Bangor
Lindsay Wendell Sutherland.....Brunswick
Edward Wesley Tolman.....Carroll
Franklyn Albert Towne.....Norway
Eugene Libbey Vail.....Manchester, N. H.
John Douglas Walker, Jr.....Millinocket
Whitney Long Wheeler.....Tenant's Harbor
Reginald Burgis Wilson.....Bangor
Francis Clair Wright.....Bangor

IN EDUCATION

George William Crimmins.....Brunswick
Hector Alphy Hebert.....Van Buren
John Philip MacCaffrey.....Patten

IN ENGLISH

Frances Harriet Babb.....Bangor
Bertha Faustina Carter.....Washburn
Paulene Marguerite Dunn.....Bangor
Charles Munro Getchell.....Oakland
Ermond Frederick Lewis.....Springfield
Marguerite Louise Lewis.....Stillwater
Mary Theresa Quinn.....Bangor
Margaret Warren.....Bangor
Jennie Annis Waterman.....Buxton
Lavon Zakarian.....Portland

IN ENTOMOLOGY

Herbert Eldon Randall.....Wakefield, Mass.

IN FRENCH

Miriam Sylvia Anderson.....Monson
Brenna Hope Blaisdell.....Corinth
Lois Adelaide Burr.....Old Town
Ruth Florence Grossman.....Brewer
Erna Christine Norwood.....Rockland
Milford Adelbert Payson.....Rockport
Dorothy Morton Ross.....Auburn
Athalie Pearl Sweatt.....Andover
Carrie Janet Williams.....Stonington

IN GERMAN

Harold Masha Cutler.....Old Town
Marthe Cleo DeGagné.....Portland

IN HISTORY AND GOVERNMENT

James Peery Ashworth.....Orono
Milledge Merrithew Beckwith.....Caribou
Bernard Martin Berenson.....Portland
Arthur Bradley Conner.....Castine
Clara Gertrude Floyd.....New Sharon
Kingdon Harvey.....Fort Fairfield
Frieda Wardwell Hatch, *With High Distinction*.....Castine
Harold Howard Inman, *With Distinction*.....Orono
Lillian Frances Loveitt, *With Distinction*.....South Portland

Rosella Adeline Loveitt, *With Distinction*.....South Portland
Rebecca Matthews.....Hampden Highlands
Jeanette Marie Roney.....Portland
Thomas Boyd Smith.....Washburn
Elwood Sawyer Toothaker.....Bath

IN LATIN

Angela Aileen Burr.....East Millinocket
Evelyn Virginia Cole.....Biddeford
Mary Cecelia Crowley.....Bangor
Lydia Myers Douglas.....Brunswick
Vera Isabelle Hill.....Orono

IN MATHEMATICS

Marion Aline Campbell.....Seal Harbor
Dorothy Mary Culley.....Bangor
Fred Lincoln Lamoreau.....Presque Isle
Francis Costello Lindsay.....Orono
Rachel Matthews, *With Distinction*.....Hampden Highlands
Ellen Mary Mullaney.....Bangor
Ralph Lorenzo Perkins.....North Waterford
Ivan Homer Poole.....Mill City, Pa.
Theodore Francis Robinson.....Island Falls
Minnie Emily Runnels.....Howland
Ross Patterson Spear.....Rockport
Katherine Abbie Veazie.....Rockland

IN PHYSICS

John Henry Sweatt.....Andover

IN PSYCHOLOGY

Louise Augusta Bates.....Portland
Marguerite Winslow Plummer.....New York, N. Y.
William Robert Riddiough.....Bucksport

IN PUBLIC SPEAKING

Sylvia Gould.....Bangor
Thelma Shea Lapworth.....Orono
Asa Vernon Wasgatt.....Bar Harbor

IN SPANISH AND ITALIAN

Phyllis Phenelia DeBeck.....Franklin
Ruth Dow.....Cornish
Dorothy Arnold Mayo.....Orono

IN ZOOLOGY

Kathleen Doris Andrews.....Hallowell
Prescott Börs Baker.....South Dartmouth, Mass.
Elliott Eveleigh Barker.....Bridgewater
Doris Louise Beasley.....North Vassalboro
Philip Arthur Beckler.....Bethel
Ella Crowell Bolan.....Winterport
Charles Gilbert Burr.....East Millinocket
William Adrian Cassidy.....Bangor
Francis Joseph Claffey.....Holyoke, Mass.
Harold Cohen.....Roxbury, Mass.
Carl Munro Flynn.....Orono
Thomas Gray Harvey.....Fort Fairfield
Cyril Irving Hutner.....New York, N. Y.
Elizabeth Ayers Mason.....Bethel
Olin Cates Moulton.....Bangor
Elizabeth Florence Murphy.....Van Buren
Anthony Damas Joseph Pelletier.....Lewiston
William David Roche.....Marlboro, Mass.
Marion Elizabeth Rogers.....Orono
Charles Schlosberg.....Boston, Mass.

College of Technology

BACHELOR OF SCIENCE

IN CHEMISTRY

Edward Foster Bishop.....Yarmouth
Glenn Harold Perkins.....Sanford
Charles Raymond Stover.....Eastport
Edward Rich Vose.....Bangor

IN CHEMICAL ENGINEERING

Willard Parker Baker, Jr.....Millinocket
John William Batchelder.....Charleston

James Francis Booker, *With High Distinction*.....Gardiner
William Philip Churchill.....Augusta
Kenton Rich Condon.....Sabattus
Howard Frederick Donald.....Franklin, Mass.
Ralph Leslie Drisko.....Harrington
Edward DeHart Hunt.....Coshocton, Ohio
Martling Barnet Jones.....Gardiner
Everett Carlton Lary.....Saco

IN CIVIL ENGINEERING

Niran Carrollton Bates, Jr.....Calais
William Winthrop Blaisdell.....Franklin
Wyatt Clinton Burke.....Boothbay Harbor
Robert Cutts.....Kittery Point
Roland Joseph Cyr.....Waterville
Vaughan Merrill Daggett.....Bangor
Stewart William Donahue.....Presque Isle
Wilbur Keith Foster.....Rumford
Rufus Guy Jasper.....Auburn
Charles Bertrand Martin.....Hudson, N. Y.
Horace William Means.....Sedgwick
Albert Joseph Modery.....Orono
Henry Clarence Webb Nottage.....Solon
Edward Everett Palmer, Jr.....Braintree, Mass.
Horace Asa Pratt, *With Distinction*.....Hinckley
Prescott Oulton Spalding.....Wells
Emerson Ames Stymiest.....Rumford
James Warren Wiggins.....Houlton
Gerald York.....Loon Lake

IN ELECTRICAL ENGINEERING

Emory Parker Bailey.....Bangor
Leaman Staples Berry.....Stillwater
Gerald Whitney Butler.....Dover-Foxcroft
Roland Dwighton Butler, *With Distinction*.....Dover-Foxcroft
Thurlow Abbott Chandler.....Bangor
Russell Donald Coyne.....Auburn
Alton Eugene Crockett.....North Bridgton
Charles Ambrose Cutting.....Andover
Horace Scott Estey.....Ellsworth

Verrill Byron Gilmore.....Brewer
William Heagan Goodell, Jr.....Searsport
Elmer Robinson Higgins.....Wiscasset
Edward Barry Holt, Jr.....Corinna
Charles Keith Hooper, *With High Distinction*.....Camden
Richard Porter Ireland.....Dover-Foxcroft
Milton Francis Kent.....Woodland
Lloyd McCollum, *With Distinction*.....West Jonesport
David Stillman Marr.....Millinocket
Harry Ripley Mayers, *With Highest Distinction*.....Hallowell
Maxwell Kerr Murphy.....Eastport
Philip Herbert Rand.....Augusta
Robert Miller Scott.....East New Portland
Warren Atwood Stickney, *With Distinction*.....Brownville
Panayiotis Theodore Tsiales.....Manchester, N. H.
Kenneth Robert Webber.....Bowdoinham
Otto Rupert White.....Woodland

IN MECHANICAL ENGINEERING

Perley Everett Armitage.....Sanford
Gilbert Ellsworth Austin.....Springvale
Dexter Leslie Avery.....Woodland
Charles Gerald Coughlin.....Rockland
William Henry Daley.....Bangor
Harold Albert DeWolfe.....St. Stephen, N. B.
William Norcross Flynt.....Augusta
Earle Rayworth Gowell.....South Portland
Alfred Frank Howard.....Rumford
Lewis Waldo Hutchinson.....Old Town
Winslow Larrabee Jones.....Portland
Burleigh Wood Lapworth.....Orono
John Finlay MacKenzie.....Rumford
Harrison Landis Moyer.....Caribou
John Marsh Palmer.....Braintree, Mass.
Elmer Philip Sawyer.....Milbridge
Wilson Grant Seavey.....Kennebunkport
Eric Louis Roland Soderberg.....Orono
John Theodore Stanley.....Cranberry Isles

Advanced Degrees

Master of Arts

IN BACTERIOLOGY

Abraham Louis Rubin (B.A., Maine, 1929) ..... Bangor
An Investigation of the Incidence of Agglutinins for Brucella Abortus in the Blood Sera of a Group of Persons at the University of Maine

IN ECONOMICS

Alfred Geer Hempstead (B.A., Maine, 1923) ..... Brownville Junction
The Penobscot Boom and the Development of the West Branch of the Penobscot River for Log Driving Purposes

IN EDUCATION

Howard Raymond Houston (B.A., Bates, 1913) ..... Brewer
An Investigation of the Personnel of School Boards in Maine

IN ENGLISH

Jessie French Bryan (B.A., Wellesley, 1910) ..... Orono
Sarah Orne Jewett's Interpretation of Maine Life

Margaret McManus Carroll (B.A., Maine, 1911) ..... Bangor
A Bibliography of Aesthetic Theory in the "Spectator", the "Guardian", and the "Tatler"

Ruth Thorndike Clough (B.A., Goucher, 1925) ..... Bangor
A Study of the Life and Works of Robert Treat Paine, Jr.

Frederick Gardiner Fassett, Jr. (B.A., M.A., Colby, 1923, 1927) ..... Orono
The Press of Maine, 1785-1820

Laura Green Pedder (B.A., Maine, 1928) ..... Orono
An Edition of the Letters of Joseph Dennie

William Francis Scamman (B.A., Maine, 1908) ..... Orono
A Bibliography of the Works of Horace Walpole

IN FRENCH

Kathryn Schanley Woodbury (B.A., Elmira, 1924) ..... Elmira, N. Y.
The Psychological Background of the "Miracles de Notre Dame"

IN GERMAN

Ada Cohen (B.A., Maine, 1926) ..... Bangor
A Study of the *Stoffe und Charaktere* by Franz Grillparzer and Its Relation to His Completed Works

IN PHYSICS

Karl Davis Larsen (B.A., Maine, 1929) ..... Bangor
A Study of the Aluminum Rectifier on Open Circuit

MASTER OF SCIENCE

IN AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

William Ernest Schrumpf (B.S., Maine, 1928) ..... Orono
An Economic Study of the Organization of Potato Farms in Aroostook County

IN CHEMICAL ENGINEERING

Millard George Moore (B.S., Maine, 1919) ..... Old Town
Synthesis of Glycine and Some of Its Closely Related Hydantoins

IN EDUCATION

Samuel Henry White (B.S., Massachusetts Agricultural, 1924) ..... Amenia, N. Y.
An Investigation of the Prevention of Failures in High School

IN PHYSICS

Grant Garnsey Lavery (B.S., Middlebury, 1928) ..... Orono
An Investigation of the Acoustic Properties of Quartz Plates

MECHANICAL ENGINEER

Harvey Cyrus Waugh (B.S., 1917) ..... Hammond, Ind.

Certificate

IN THE TWO-YEAR COURSE IN AGRICULTURE

Otis Dana Dudley ..... Bryant Pond
Frank Carroll Kendrick ..... Biddeford

(As of the Class of 1914)

Philip Trumbull Lane.....Newton Center, Mass.
Neal Farwell York.....Walnut Hill

Departmental Honors

IN ECONOMICS AND SOCIOLOGY

Helen Amanda MacLaughlin

IN ENGLISH

Frances Harriet Babb

IN HISTORY AND GOVERNMENT

Frieda Wardwell Hatch

Honorary Degrees

Charles Morse Allen, Doctor of Laws
Marion John Bradshaw, Doctor of Divinity
Nathan Clifford Grover, Doctor of Engineering
Allan Crosby Hardison, Doctor of Laws
Charles Frederick Hughes, Doctor of Laws
Richard Campbell Raines, Doctor of Divinity

The following received commissions as Second Lieutenant, Officers' Reserve Corps

INFANTRY

Milledge Merrithew Beckwith
Howard Otis DeCoster
Charles Carleton Hardy
Frank Russell Hinkley
Fred Lincoln Lamoreau
Russell Vernard Lathrop
George Albert Ramsdell
Robert Miller Scott
John Henry Sweatt

Catalog of Students

Major subjects are indicated as follows: Ae. Agricultural Education, Ag. Agronomy, Agr. Agriculture, An. Animal Industry, Bc. Biological Chemistry, By. Bacteriology, Ch. Chemistry, Ch.Eng. Chemical Engineering, Ce. Civil Engineering, Dh. Dairy Husbandry, Ed. Education, Ee. Electrical Engineering, Eh. English, En. Entomology, Eng. Engineering (Course not specified), Es. Economics and Sociology, Fm. Agricultural Economics and Farm Management, Fy. Forestry, Fr. French, Gm. German, Hy. History and Government, He. Home Economics, Ht. Horticulture, Lt. Latin, Me. Mechanical Engineering, Ms. Mathematics, Pb. Public Speaking, Pc. Physiological Chemistry, Pg. Physiology, Ph. Poultry Husbandry, Pl. Philosophy, Pp. Plant Pathology, Ps. Physics, Py. Psychology, Sp. Spanish and Italian, Zo. Zoology. Botany, Chemistry, Education, and Entomology in the College of Arts and Sciences are indicated by Bt.A., Ch.A., Ed.A., and En.A.

GRADUATE STUDENTS

Adams, Amy Belle, B.A., Eh. Maine, 1927	*Patten*	Balentine Hall
Allen, Hubert Werts, B.S., Ps. Parsons, 1929	*Russell, Iowa*	38 Oak Street
Batchelder, John William, B.S., Ch.Eng. Maine, 1930	*Charleston*	College Road
Bedelle, Adrienne Gabrielle, B.A., Fr. Barnard, 1929	*Mamaroneck, N. Y.*	University Inn
Bryant, Herbert Lorenzo, B.A., Ed. Bowdoin, 1912	*Round Pond*	243 Union Street, Bangor
Bumpus, Alta Miriam, B.A., Pg. Brown, 1930	*Plymouth, Mass.*	172 Main Street
Clapp, Roger, B.S., Ht. Cornell University, 1928	*Orono*	6 Mill Street
Cook, Arlin Miller, B.A., M.A., Eh. Western Reserve, 1927; Columbia, 1928	*Orono*	University Inn

Foster, Elizabeth Sophia, B.A., M.A., Eh. Texas, 1922, 1923	*Orono*	University Inn
Giddings, Paul Dudley, B.A., Pg. Maine, 1929	*Augusta*	B Θ Π House
Grindle, Rufus Manley, B.A., Eh. Colby, 1927	*Bangor*	79 Second Street, Bangor
Hartwell, Mary Josephine, B.A., Hy. Maine, 1929	*Old Town*	110 No. Fourth St., Old Town
Haskell, Kenneth Richardson, B.S., Fm. Maine, 1930	*Deer Isle*	60 Park Street
Hawkins, John Henry, B.S., M.S., En. Illinois, 1926; Maine, 1927	*Orono*	College Road
Inman, Harold Howard, B.A., Hy. Maine, 1930	*Orono*	40 Middle Street
Jenkins, Chester Albert, B.S., Ch. Dartmouth, 1911	*Orono*	56 Forest Ave.
Lamoreau, Fred Lincoln, B.A., Ms. Maine, 1930	*Orono*	67 North Main Street
Lefler, Glenn Quenton, B.A., Ps. Indiana, 1929	*Orono*	38 Oak Street
Leland, Lowell Pond, B.A., Eh. Colby, 1929	*Bangor*	43 Pier Street, Bangor
Lengyel, Helen Anna, B.A., Py. Maine, 1927	*Orono*	31A Mill Street
Magee, John Henry, B.A., Es. Maine, 1917	*Bangor*	130 Cedar Street, Bangor
Marsh, Philip Merrill, B.A., Eh. Maine, 1929	*Portland*	45 Mill Street
Marvin, Katherine, B.S., Py. Maine, 1929	*Kennebunk*	55 Bennoch Street
Mason, Irvin Carrol, B.S., Bt. Maine, 1930	*Locke's Mills*	356 College Road
Matthews, Annette Susan, B.A., Pg. Maine, 1927	*Hampden Highlands*	Eastern Maine General Hospital, Bangor
Mee, John Franklin, B.A., Py. Miami, 1930	*Oxford, Ohio*	86 Mill Street
Merrill, Richard Wilder, B.S., Gm. Bowdoin, 1928	*Old Town*	395 Center Street, Old Town

Moore, Helen, B.A., Ps. Maine, 1929	*Orono*	66 College Road
Moreland, James, B.A., Eh. Georgetown College, 1924	*Orono*	11 Main Street
Morris, Delyte Wesley, B.A., Eh. Park, 1928	*Orono*	86 Mill Street
Murphy, Elizabeth Florence, B.A., Zo. Maine, 1930	*Bangor*	57 Pearl Street, Bangor
Norton, Ivy Lillian, B.A., Ch. American University, 1930	*Boothbay*	9 Forest Avenue
Parsons, Merton Stanley, B.S., Fm. Maine, 1929	*South Paris*	A Γ P House
Perkins, Glenn Harold, B.S., Ch. Maine, 1930	*Sanford*	26 Myrtle Street
Pratt, Horace Asa, B.S., Ce. Maine, 1930	*Hinckley*	34 Pine Street
Quinn, Mary Theresa, B.A., Eh. Maine, 1930	*Bangor*	167 Maple Street, Bangor
Rogers, Marion Elizabeth, B.A., Py. Maine, 1930	*Orono*	162 College Road
Roulston, Royal Allison, B.A., Ch. Maine, 1930	*Stillwater*	Stillwater
Spoerl, Howard Davis, B.S., Py. Tufts, 1925	*Orono*	8 Juniper Street
Waring, Iva Stanley, B.A., Eh. Maine, 1927	*Orono*	College Road
Welch, Andrew Bartlett, B.S., Dh. Maine, 1929	*Bradley*	Bradley
Whitney, Walter Reginald, B.S., Eh. Bowdoin, 1923	*Bangor*	230 State Street, Bangor
Wood, Katherine Alma, B.A., Lt. New Hampshire, 1927	*Orono*	58 Main Street
Wright, Raymah Twining, B.A., Ms. Wheaton, 1927	*Andover, Mass.*	66 College Road

SENIORS

Adams, Melvin Walls, Es.	*Millinocket*	Φ K Σ House
Allen, Herbert Stanley, Fy.	*Bridgton*	25 Grove Street
Allen, Herman Curtis, Ch.Eng.	*Freeport*	B K House
Annis, Roger Lee, Ch.Eng.	*North Berwick*	Σ N House
Armstrong, John Norris, Ch.Eng.	*Saco*	B Θ Π House
Avery, Marion Gertrude, Eh.	*Old Town*	24 Willow Street, Old Town
Bangs, Olaf Augustus, Me.	*North Lubec*	20 Grove Street
Barker, David Emmons, Es.	*Dover-Foxcroft*	B Θ Π House
Barker, Elliott Rensselaer, Jr., Ch.Eng.	*Bangor*	32 Coombs Street, Bangor
Barrows, Franklyn Foster, Eh.	*West Hartford, Conn.*	Σ X House
Barton, Erma Patty, Hy.	*Butler, Pa.*	Balentine Hall
Baston, Lawrence Goodwin, Ht.	*North Berwick*	Δ T Δ House
Bates, William Lewis, Ce.	*Abbot*	B K House
Beasley, Helen Wales, Py.	*North Vassalboro*	Mt. Vernon House
Bennett, Paul Edwin, Fy.	*Auburn*	A T Ω House
Bernard, Leo Romeo, Ms.	*Lewiston*	Φ K House
Bickmore, Theodore Roland, Fy.	*Stockton Springs*	211 H. H. Hall
Billings, Stacy Ford, Me.	*North Berwick*	B K House
Bither, Margaret Harriet, Hy.	*Houlton*	Δ Δ Δ House
Blaisdell, Maynard Preble, Me.	*York Village*	14 Pond Street
Blanchard, Richard Carleton, Fy.	*Portland*	A X A House
Blanchard, Richard Francis, An.	*Cumberland Center*	A Γ P House
Blocklinger, Warren Stanley, Es.	*Portland*	B Θ Π House
Bohnson, John Charles, Jr., Ms.	*Portland*	Δ T Δ House
Bowman, Charlotte Rose, Zo.	*Bangor*	240 State Street, Bangor
Bradstreet, Ernest Raymond, Hy.	*West Peabody, Mass.*	Σ N House
Branch, John Balch, Hy.	*Portland*	Φ H K House
Breton, Clovis, Jr., Ee.	*Bangor*	54 Pine Street
Brockway, Philip Judd, Eh.	*Quebec, Canada*	Σ A E House
Brofee, Linwood Harold, Ht.	*Madison*	Σ A E House
Brooks, Carl Ara, Ce.	*Columbia Falls*	47 Mill Street
Brooks, Eugene Burgess, Ht.	*Watertown, Mass.*	B Θ Π House
Brown, Charles Augustus, Ee.	*Cumberland Mills*	B K House
Brown, Roger Johnson, Me.	*North Berwick*	B K House
Brown, William Wirt, Jr., Ms.	*Old Town*	26 No. Fourth Street, Old Town

Bryant, Beryl Ellison, Py.	*Bangor*	Mt. Vernon House
Bryant, Edward Creighton, Es.	*No. Woburn, Mass.*	Φ Γ Δ House
Budden, Erma Frances, He.	*Greenville*	North Hall
Burr, Alice Evelyn, He.	*Eastport*	North Hall
Calder, Katherine Sarah, Eh.	*Oakland*	90 Park Street
Campbell, Jean, Es.	*Brewer*	Colvin Hall
Carter, Mary Rich, Lt.	*Thomaston*	Balentine Hall
Caulfield, Donald Robert, Fy.	*Pawtucket, R. I.*	Φ K House
Chaplin, Stuart Carlysle, Ms.	*Cornish*	Φ H K House
Cheney, Linwood Goodwin, Py.	*Portland*	Σ N House
Chopelas, George Christopher, Es.	*Malden, Mass.*	20 Peters Street
Clark, Lester Martin, Fy.	*Ellsworth*	Σ N House
Cleaves, Charlotte Elizabeth, He.	*Sangerville*	North Hall
Cleaves, Ward Bartlett, Zo.	*Addison*	Θ X House
Clem, Peter Richard, Ht.	*Norwood, Mass.*	Φ K House
Coffin, Victor Halford, Ms.	*Bucksport*	H N H House
Conant, Helena Gladys, Eh.	*Old Town*	7 Seventh Street, Old Town
Conant, Thornton French, Ch.	*Skowhegan*	404 H. H. Hall
Copeland, Eunice Emma, Zo.	*Brewer*	Δ Δ Δ House
Crocker, Paul Leavitt, Eh.	*Vanceboro*	69 Mill Street
Crocker, Thomas Edward, Ee.	*Portland*	Φ K House
Crozier, Freda Sara, Lt.	*Brownville*	Δ Δ Δ House
Cullinane, William Francis, Ch.Eng.	*Auburn*	Φ K House
Cuozzo, George Vincent, Me.	*Bangor*	Broadway, Bangor
Curtis, Clifton Edward, Me.	*Springfield, Mass.*	Σ X House
Curtis, Doris Buford, Py.	*Winterport*	Colvin Hall
Cushman, Charles Farnham, Me.	*Portland*	A T Ω House
Cushman, Parker Grindell, Ce.	*Ellsworth*	Σ X House
Cutler, John Levi, Eh.	*Bangor*	261 Essex Street, Bangor
Daniels, Charles Frederick, Jr., Es.	*Wellesley Hills, Mass.*	Σ Φ Σ House
Davidson, Jennie Marjorie, He.	*Old Town*	North Hall
Davis, Ralph Latimer, Ce.	*Wellesley Hills, Mass.*	Σ X House
Day, Linwood Blanchard, Ce.	*Shirley Mills*	Φ H K House
Dean, Leon Arthur, Eh.	*Bangor*	192 Forest Avenue, Bangor
Devine, Malcolm Edward Chisholm, Ee.	*Portland*	A X A House

Dolan, Clement Donworth, Me.	*Bucksport*	384 College Road
Doughty, Earl Waterman, Ce.	*Portland*	Φ H K House
Dow, Frances Winnifred, Zo.	*Portland*	Balentine Hall
Downes, Frances Cole, Zo.	*Winterport*	Balentine Hall
Draper, William Maynard, Fy.	*Hopedale, Mass.*	Φ M Δ House
Drinkwater, Vivian Marie, Eh.	*Brewer*	26 E. Summer Street, Brewer
Durgan, Louise Dorothy, Ms.	*Lubec*	Colvin Hall
Eaton, Stanley Boyd, Ee.	*Belfast*	Φ M Δ House
Elliot, James Edmond, Me.	*North Andover, Mass.*	A T Ω House
Elliott, Paul Marshall, Ch.Eng.	*Beverly, Mass.*	Σ Φ Σ House
Emerson, Alberto Charles, Ch.Eng.	*White Horse Beach, Mass.*	Σ N House
Evans, Philip Lancaster, Ce.	*South Portland*	47 Mill Street
Fales, James Nellson True, Me.	*Thomaston*	B K House
Farnsworth, George Alton, Ce.	*Jonesport*	Λ X A House
Farrar, George Otis, Me.	*Brookline, Mass.*	Λ X A House
Farris, Willard Austin, Ee.	*Eastport*	A T Ω House
Favor, Henry Hayes, Ch.Eng.	*Norway*	Φ K Σ House
Fellows, Margaret, Es.	*Bangor*	Balentine Hall
Files, Morton Clifton, Fy.	*Gorham*	Σ N House
Findlen, Paul Joseph, Fm.	*Fort Fairfield*	A Γ P House
Fineberg, Fanny, Lt.	*Portland*	Balentine Hall
Fisher, Dean Henry, Zo.	*Bangor*	7A Boynton Street, Bangor
Flint, Ogden, Ee.	*Roslindale, Mass.*	Σ N House
Flynn, Horace Foster, Fy.	*Orono*	227 Main Street
Fogg, Donald Herbert, Eh.	*Bangor*	Φ H K House
Fox, Evelyn Cora, Py.	*Bangor*	163 Parkview Avenue, Bangor
Fraser, Jessie Landy, Eh.	*Bangor*	44 Spring Street, Bangor
Freeman, Leonard Knapp, Ce.	*North Windham*	Φ H K House
French, Lucille Adeline, Eh.	*Solon*	Colvin Hall
Frisbie, James Austin, Hy.	*Harrison*	Σ N House
Frost, Gerald Oliver, Ee.	*Monmouth*	Σ A E House
Füger, Frances Margaret, Py.	*Cape Elizabeth*	Colvin Hall

Galaher, Mary Adams, Ms.	*North Andover, Mass.*	Colvin Hall
Gales, Eunice Parker, Hy.	*Ashland*	Balentine Hall
Gallagher, Blakeley, Fy.	*Newtonville, Mass.*	Φ Γ Δ House
Gallison, Elmer Herbert, Me.	*Vanceboro*	Σ Φ Σ House
Garland, David Corson, Ee.	*Waterville*	H N Π House
Gatcomb, Ernest Kenneth, Jr., Me.	*East Machias*	Φ K Σ House
Gehring, John Richard, Es.	*Westfield, Mass.*	86 Mill Street
Giffin, Alvin Hitchcock, Me.	*Bristol, Conn.*	Δ T Δ House
Goode, Robert Donald, Es.	*Bangor*	228 Palm Street, Bangor
Goodwin, Paul Russell, Fy.	*Eliot*	Stillwater
Gorham, George William, Es.	*Houlton*	Σ N House
Gould, Phyllis, Zo.	*Bangor*	Balentine Hall
Gowans, Horace Robert, Me.	*Belmont, Mass.*	Σ A E House
Gray, Lawrence Milton, Fy.	*Fryeburg*	76 Main Street
Greely, Edward Joseph, Dh.	*South Portland*	15 State Street, Bangor
Gross, Doris Lane, Eh.	*Stonington*	Balentine Hall
Groves, Laurence Wade, Zo.	*East Millinocket*	Δ T Δ House
Guilfoil, Myrilla Nickerson, Eh.	*Augusta*	Colvin Hall
Gunnarson, Herbert John, Ms.	*Camden*	8 Mayo Street
Guptill, Edwin Charles, Ee.	*East Baldwin*	34 Pine Street
Hamblet, William Paige, Me.	*Lawrence, Mass.*	Δ T Δ House
Hammond, Hazel Luella, Ms.	*Stillwater*	Stillwater
Hanson, Edward Fellows, Me.	*Bangor*	96 Otis Street, Bangor
Hargreaves, George Milton, Hy.	*New Bedford, Mass.*	Φ K Σ House
Harwood, Waldo Earle, Jr., Fy.	*Portland*	A X A House
Haskell, Dorothy Bowker, He.	*Lee*	North Hall
Hawkins, Laurence Avery, Hy.	*Dexter*	107 H. H. Hall
Heald, Francis Edmund, Ee.	*Anson*	25 Grove Street
Heald, Franklin Varney, Me.	*Buckfield*	84 Park Street
Heckman, Albert Carlisle, Me.	*Bangor*	48 Vernon Street, Bangor
Henderson, Donald Bishop, Ee.	*Bath*	H N Π House
Herrick, Carl Everett, Es.	*Rockland*	Φ K Σ House
Higgins, Leslie Alonzo, Ee.	*Bar Harbor*	10 Mill Street
Hoar, Clinton Herbert, Me.	*East Machias*	20 Grove Street
Hoar, Walter Damon, Dh.	*Rangeley*	Farm Boarding House
Hodson, Elmer Chandler, En.	*Roslindale, Mass.*	B K House
Holbrook, Arthur Capen, Ee.	*Holbrook, Mass.*	Φ M Δ House

Holdridge, Leslie Rensselaer, Fy.	*Ledyard, Conn.*	10 Beech Street
Holmes, Jacob Shuman, Ce.	*Belfast*	15 Park Street
Hopkins, Bernice Augusta, Hy.	*Camden*	Colvin Hall
Horne, Cecil William, Ce.	*Berwick*	B Θ Π House
Howard, Elwin Thornton, Me.	*Dixfield*	Φ M Δ House
Hunt, Barbara Simms, Zo.	*Portland*	Colvin Hall
Huston, Donald Philip, Es.	*Portland*	Φ M Δ House
Jackson, Katherine Owen, Es.	*Houlton*	Balentine Hall
Jackson, Seth Purvis, Ce.	*Old Town*	43 High Street, Old Town
Jensen, William Henry, Jr., Ce.	*South Portland*	Σ A E House
Johnson, Phyllis Moore, He.	*Portland*	Colvin Hall
Jones, Alonzo Leighton, En.	*Berwick*	Φ M Δ House
Joy, Darius Dicky, An.	*Addison*	201 Oak Hall
Keeney, Kenneth Andrews, Fy.	*New York, N. Y.*	Σ A E House
Keirstead, Kathryn Jean, Ms.	*Westfield*	Δ Δ Δ House
Kelleher, Harold Eugene, Hy.	*Bangor*	87 Walter Street, Bangor
Kilby, Merrill Eastman, Ch.Eng.	*Dennysville*	312 H. H. Hall
Kneeland, Verne Hill, Es.	*Princeton*	Φ H K House
Knox, Florence Laura, He.	*Richmond*	Balentine Hall
Kourevesis, Peter Antonio, Ee.	*Biddeford*	54 Pine Street
Krieger, Louis Joseph, Ee.	*No. Vassalboro*	Φ M Δ House
Lamb, Norton Haskell, Es.	*Portland*	B Θ Π House
Lancaster, Mabel Clide, He.	*Old Town*	North Hall
Lang, Katherine Bradley, Zo.	*Belfast*	Colvin Hall
Lapworth, Kenneth Ervin, Fy.	*Hopedale, Mass.*	Φ M Δ House
Lear, Raymond Kenneth, Ch.Eng.	*Bar Harbor*	Θ X House
Lemoine, Grace Alice, Py.	*Kennebunk*	Balentine Hall
L'Heureux, Germaine Jeannette, Fr.	*Lewiston*	Balentine Hall
Libby, Henry Earl, Fy.	*Gorham*	Φ H K House
Libby, Paul Twombly, Me.	*Biddeford*	Λ X A House
Light, Elden Everett, Ch.Eng.	*Waldoboro*	H N Π House
Lincoln, Marguerite Helen, Hy.	*Washington*	Balentine Hall
Liscomb, Helen Elsie, He.	*Salisbury's Cove*	North Hall
Livingstone, Elizabeth, Bt.	*Winchester, Mass.*	Balentine Hall
Lobikis, Vitolia, Ps.	*Rumford*	Colvin Hall
Longley, Polly Marie, Eh.	*Plymouth*	26 Myrtle Street
Lovely, Donald Carson, Ce.	*Houlton*	Σ X House

McCann, Frank William, Ce.	*Poughkeepsie, N. Y.*	K Σ House
MacCormick, Donald Munroe, Hy.	*Orono*	55 North Main Street
McCormick, Francis Benedict, Ch.A.	*Gardiner*	Φ K House
MacFarland, Chester Carey, Ce.	*Orono*	184 Main Street
McGuire, Francis Stephen, Ce.	*Stonington*	Δ T Δ House
MacKenzie, William Donald, Es.	*Marlboro, Mass.*	Φ Γ Δ House
McLoon, Mary Lilian, Ed.A.	*Houlton*	Δ Δ Δ House
Mahoney, Eleanor Margaret, Eh.	*Biddeford*	Colvin Hall
Malone, Carl Bryan, Ch.Eng.	*Bristol, Va.*	Φ Γ Δ House
Mank, Steven Thomas, Ce.	*North Waldoboro*	Φ H K House
Marble, Donovan Wallace, Ce.	*Harmony*	A T Ω House
Marks, Sophia Estelle, Eh.	*Bangor*	25 Pierce Street
Marsh, Raymond Edward, Ce.	*South Portland*	14 Mill Street
Marshall, Donald Forbes, Zo.	*Portland*	204 H. H. Hall
Marshall, Harrison Greenlaw, Ee.	*Deer Isle*	Σ A E House
Mendall, Howard Lewis, Zo.	*Augusta*	A Γ P House
Merrifield, Mildred Ellis, Hy.	*Washington*	Balentine Hall
Merrill, Edward Arthur, Es.	*Old Town*	Old Town
Michaud, Hector Corverlie Frank, Zo.	*Waterville*	College Road, Stillwater
Modes, Goldie, Gm.	*Portland*	Colvin Hall
Mooers, Marjorie Helen, Lt.	*Bangor*	90 Wiley Street, Bangor
Moon, Monroe Emery, Ee.	*Hancock*	86 Mill Street
Moran, John William, Es.	*Brewer*	Φ Γ Δ House
Morse, Robert Cushman, Es.	*Marlboro, Mass.*	Φ Γ Δ House
Morton, Paul, Fy.	*Barre, Mass.*	111 Park Street
Mossler, Frederick Linnell, Ms.	*South Brewer*	Φ M Δ House
Munce, Richard Thomas, Zo.	*Bangor*	81 Birch Street, Bangor
Nason, Charles Philip, Hy.	*York Village*	Φ K Σ House
Nason, Paul Elder, Ee.	*Houlton*	Θ X House
Nickerson, Victor Wasson, Me.	*Orono*	105 Main Street
O'Connor, Charles Eugene, Pb.	*Millinocket*	205 H. H. Hall
O'Loughlin, James Patrick, Es.	*Bangor*	264 Mt. Hope Avenue, Bangor
O'Neil, Leo Francis, Ms.	*Lewiston*	Φ K House
Osgood, Doris Blanche, Eh.	*Prentiss*	Colvin Hall
Otto, Irene Gustava, Ch.A.	*Covington, Ky.*	37 Pine Street

Packard, George Victor, Es.	*Lewiston*	B Θ Π House
Packard, Oveid Baptist, Ed.	*Dexter*	55½ Bennoch Street
Page, Richard Tucker, Ce.	*Waterville*	Σ X House
Painter, Stanley LeRoy, Ht.	*Orono*	College Road
Parkhurst, Hazel Jennie, Eh.	*Portland*	Balentine Hall
Parlin, Lewis Elnathan, An.	*New Sharon*	A Γ P House
Patterson, Irving Robinson, Ht.	*Hampden Highlands*	K Σ House
Perkins, Alfred Warren, Ms.	*North Brooksville*	Φ H K House
Perry, Willard Joseph, Ed.	*Livermore Falls*	37 Pond St.
Pickering, Emery Walker, Ee.	*Deer Isle*	Σ A E House
Pike, Helen, Zo.	*Fryeburg*	Δ Δ Δ House
Poole, Lyman Curtis, Fy.	*Pemaquid*	Φ M Δ House
Porter, Norman Augustus, Eh.	*Waban, Mass.*	Φ Γ Δ House
Prescott, Robert Ball Edes, Zo.	*Jamaica Plain, Mass.*	Φ Γ Δ House
Purinton, Viola Nellie, He.	*Bangor*	North Hall
Ramsdell, George Albert, Ce.	*Melrose, Mass.*	Δ T Δ House
Rand, Scott Jay, Ht.	*Wilton*	A Γ P House
Rawnsley, Ewart, Zo.	*Springvale*	Stillwater
Ray, Medley Porter, Ee.	*Calais*	B K House
Richardson, Clara Pray, Bt.	*Jewett City, Conn.*	23 Park Street
Ricker, Elizabeth Louise, He.	*Turner*	North Hall
Riley, Madeliene Alden, He.	*Livermore Falls*	North Hall
Roberts, Charles Alonzo, Ms.	*Woodfords*	Δ T Δ House
Roberts, John Alden, Es.	*Alfred*	Φ K Σ House
Roberts, Lewis Pollard, Ag.	*Sherman Mills*	Θ X House
Roberts, Mildred Elizabeth, Sp.	*Easton*	Balentine Hall
Rubin, Philip, Ch.	*Bangor*	312 French Street, Bangor
Rufo, Frank, Ce.	*South Boston, Mass.*	Φ K House
Ryan, Timothy James, Ce.	*Portland*	Φ K House
Sansoucy, Jerome Aime, Zo.	*Lewiston*	Φ K House
Saunders, Ethel Stover, Ed.	*Bucksport*	9 Forest Avenue
Savage, Allen Estabrooks, Ce.	*Wells*	A T Ω House
Sawyer, Hazel Blanche, Sp.	*South Portland*	Balentine Hall
Scheffer, Sebastian Louis, Ee.	*Bogota, N. J.*	K Σ House
Schiro, Julia Adele, Gm.	*Bangor*	134 Cumberland Street, Bangor
Schneider, Bernard, Ce.	*Brookline, Mass.*	16 Pine Street
Schultz, Joseph, Gm.	*Chelsea, Mass.*	10 Beech Street

Schwarzmann, Theodore Wolfgang, Ce.	*Longmeadow, Mass.*	Φ K House
Scott, Dorothy Marie, He.	*Portland*	36 Myrtle Street
Scott, Ermo Houston, Ed.A.	*Bangor*	19 First Street, Bangor
Scribner, Russell Orin, Ce.	*Bangor*	142 Norway Road, Bangor
Seville, Joseph Sydney, Me.	*Hopedale, Mass.*	Σ A E House
Sezak, Samuel, Ed.	*Wellesley, Mass.*	112 H. H. Hall
Smith, George Algernon, Me.	*Bangor*	8 Spring Street, Bangor
Smith, Lyndell Emma, Eh.	*Brewer*	106 So. Main Street, Brewer
Smith, Melzor Stetson, Dh.	*Steuben*	Δ T Δ House
Smith, William Eaton, Ch.Eng.	*Bucksport*	Σ Φ Σ House
Smith, William Hudson, Ee.	*Portland*	384 College Road
Snow, Verne Stanley, Ce.	*North Yarmouth*	Σ X House
Snyder, Bernard Lemont, Ee.	*Gouldsboro*	Φ H K House
Solander, Arvo Axel, Ce.	*Winchendon, Mass.*	412 H. H. Hall
Sparrow, Hazel Easter, Ed.A.	*Gardiner*	Balentine Hall
Spear, Parker Hudson, Es.	*Warren*	207 H. H. Hall
Spencer, Lincoln Orrin, Ee.	*Biddeford*	40 Middle Street
Spiller, Beatrice Margaret, Ms.	*Portland*	Balentine Hall
Springer, Vance Gerald, Es.	*Danforth*	Σ X House
Spurling, Nelson Eliot, Me.	*Calais*	B K House
Stalmuke, Michael Harold, Fy.	*Rumford*	Φ K House
Stearns, Pauline Janet, Ed.A.	*Millinocket*	Colvin Hall
Stevens, Marjorie Elizabeth, Ch.A.	*Portland*	Balentine Hall
Stewart, Mason Joseph, Es.	*Rangeley*	Λ X A House
Stiles, Willis Leroy, Es.	*Portland*	Φ H K House
Stipek, Charles William, Es.	*Westfield, Mass.*	86 Mill Street
St. Lawrence, Leslie Henry, Me.	*Waban, Mass.*	Σ Φ Σ House
Stone, Richard Harry, Ce.	*Gardiner*	Λ X A House
Strecker, Edward Whitman, Ch.Eng.	*Greenfield, Mass.*	Θ X House
Sturgis, John William, Es.	*Portland*	Σ A E House
Sullivan, Harry Ray, Ee.	*Old Town*	403 Stillwater Avenue, Old Town
Sullivan, Jeremiah Francis, Ch.Eng.	*Bangor*	69 Walter Street, Bangor
Sylvester, Mary Edwina, Ed.A.	*Rockland*	Balentine Hall
Teague, Everett Walter, Me.	*Newburyport, Mass.*	A T Ω House
Thomas, Ethel Jordan, Eh.	*Rockland*	Balentine Hall

Thompson, Eleanor Isobel, He.	*Prentiss*	North Hall
Thurston, George Milton, Me.	*Bangor*	35 Harvard Street, Bangor
Titcomb, Byron Emerson, Ag.	*Monticello*	41 Pine Street
Tracy, Hubert, An.	*Lincoln*	Α Γ Ρ House
Tweedie, Charles Henry, Ms.	*Rockland*	Σ Ν House
Twombly, James Lamson, Ce.	*Monroe*	88 Park Street
Twombly, Kenneth Percia, Es.	*Portland*	Λ Χ Α House
Van Tassel, Vivian Madeline, Ms.	*Brewer*	35 Maple Street, Brewer
Vaughan, Basil Wyman, Ce.	*Orono*	60 Park Street
Veayo, Galen Irving, Ed.A.	*Bangor*	34 Spring Street, Bangor
Vickery, John Ainslee, Es.	*Belfast*	Λ Χ Α House
Wadleigh, Gloria Emma, Py.	*Old Town*	127 Fourth Street, Old Town
Walker, Allston Ulysses, Ce.	*Orono*	38 Penobscot Street
Walker, William Cecil, Ht.	*Norway*	Α Τ Ω House
Ward, Florence Louise, He.	*South Windham*	North Hall
Wareham, Ellen, He.	*Vinalhaven*	North Hall
Warren, Arthur Carlton, Ch.A.	*Chelmsford, Mass.*	Φ Η Κ House
Wasgatt, Martha Gray, He.	*Rockland*	North Hall
Watters, Inez Evelyn, He.	*Brewer*	North Hall
Webber, Norman Wheeler, Zo.	*Hartland*	Α Τ Ω House
Webster, Arvard Vernon, Hy.	*Dark Harbor*	8 Mayo Street
Webster, Francis Billings, Me.	*Veazie*	Veazie
Weeks, Gilbert Edward, Ee.	*Springfield, Mass.*	384 College Road
Weimer, Mary Ethel, Hy.	*New Portland*	Balentine Hall
Wells, William Carl, Hy.	*South Hanover, Mass.*	207 H. H. Hall
Whitcomb, Katherine Winnifred, He.	*Orono*	North Hall
White, Raymond Earl, Ht.	*North Oxford, Mass.*	Κ Σ House
Whitten, Richard Walker, Ce.	*Farmington*	Α Τ Ω House
Whitten, Robert Reed, Ce.	*Lee*	Φ Η Κ House
Williams, Edwin Ruthven, Ce.	*Guilford*	Φ Γ Δ House
Winslow, Elwood Coffin, Me.	*Ashland*	Σ Φ Σ House
Winslow, Evelyn Louise, Zo.	*Ashland*	Colvin Hall
Wiswell, Carlton Francis, Ce.	*South Brewer*	South Brewer
Wright, Frank Harding, Ee.	*Bangor*	263 French Street, Bangor
Wyman, Lena Lois, He.	*Gorham*	Balentine Hall

JUNIORS

Abbott, Edward Delmont, Fy.	*Freeport*	Φ M Δ House
Achorn, Donald Tillson, Ch.	*Saco*	Σ A E House
Adams, Hazel Fisher, He.	*Boothbay Harbor*	Colvin Hall
Adams, John Samuel, An.	*Gorham, N. H.*	A Γ P House
Ames, Kenneth Green, Me.	*Bridgton*	Φ M Δ House
Andrews, George Hayes, Ch.Eng.	*Augusta*	Λ X A House
Anliker, Walter James, Ee.	*Bath*	Φ Γ Δ House
Armstrong, Margaret June, Hy.	*Vanceboro*	56 North Main Street
Asali, Louis Anthony, Zo.	*Portland*	Φ K House
Ashworth, Bentley Parker, Ce.	*Wenham, Mass.*	Φ K Σ House
Atwood, Jack Sanden, Ee.	*Bangor*	K Σ House
Austin, Frank Willis, Hy.	*South Berwick*	Σ N House
Austin, Ronald Ermont, Me.	*Springvale*	Θ X House
Bagley, Fernald Stumbles, Es.	*Augusta*	A T Ω House
Bailey, Edna Madison, Eh.	*Wiscasset*	Balentine Hall
Baker, Doris Mae, Hy.	*Westbrook*	56 North Main Street
Baker, Dorothy Ethel, He.	*Auburn*	Colvin Hall
Baldwin, Thomas Henry, Jr., Es.	*New Britain, Conn.*	B Θ Π House
Barrett, Lewis William, Ee.	*Bangor*	103 Howard Street, Bangor
Barry, John Thomas, Pb.	*Bangor*	K Σ House
Bates, James Clement, Zo.	*Calais*	Σ X House
Battles, Francis Jaques, Es.	*Lowell, Mass.*	K Σ House
Bean, Mary Gilman, Eh.	*Bangor*	Balentine Hall
Beaulieu, Marie Louise, Ed.	*Lewiston*	24 Pierce Street
Beechler, Austin Dexter, Es.	*So. Manchester, Conn.*	A X A House
Berry, Merton Edward, Hy.	*Dover-Foxcroft*	Σ A E House
Bird, Richard Philbrook, Es.	*Rockland*	B Θ Π House
Bittner, Robert Louis, Ch.Eng.	*Brooklyn, N. Y.*	B Θ Π House
Booth, Henry Gibson, Ch.Eng.	*Bradford, Mass.*	Σ X House
Bowden, Kathryn Stover, He.	*Lucerne-in-Maine*	90 Park Street
Bowen, Linwood Jules, Bt.	*Bangor*	Λ X A House
Boynton, Francis Hamlen, Es.	*Melrose Highlands, Mass.*	Σ X House
Boynton, Mildred Helena, He.	*Millinocket*	Colvin Hall
Bradbury, Beulah Marie, Fr.	*Bangor*	542 Hammond Street, Bangor

Bratton, Allen Wheeler, Fy.	*Williamstown, Mass.*	Φ Γ Δ House
Brooks, Ralph Conway, Ee.	*Ogunquit*	9 Peters Street
Bryant, Harold Earle, Fm.	*Fort Fairfield*	B K House
Buchan, Malcolm Leslie, Ce.	*North Andover, Mass.*	A T Ω House
Buck, Margaret Anna, Zo.	*Bangor*	Colvin Hall
Burnham, Aubert Porter, Ee.	*Old Town*	12 Seventh Street, Old Town
Burnham, Harry James, Ch.Eng.	*Saco*	Φ H K House
Burns, Bruce Balentine, Fy.	*Waterville*	B K House
Burrill, Margaret Estelle, Es.	*Bangor*	Balentine Hall
Burris, Chester Whitfield, Ch.Eng.	*North Sullivan*	54 Pine Street
Butler, Paul Grant, Ch.Eng.	*Portland*	384 College Road
Buzzell, Edward Wiley, Me.	*Fryeburg*	Φ K Σ House
Calderwood, Neil Moody, Ce.	*Vinalhaven*	Φ Γ Δ House
Carbone, Josephine Albina, Lt.	*Boothbay Harbor*	Colvin Hall
Chase, Geraldine, Eh.	*Limestone*	Balentine Hall
Chase, Lovell Converse, Ce.	*Houlton*	101 Oak Hall
Churchill, Margaret Collins, Zo.	*Houlton*	Δ Δ Δ House
Churchill, Newton Collins, Fm.	*Houlton*	K Σ House
Clark, Fred Bernard, Ce.	*Clarks Mills*	Φ K Σ House
Clark, Ruth Mabelle, He.	*Castine*	Balentine Hall
Coffin, Clarine Mildred, Eh.	*Bangor*	Balentine Hall
Cogswell, Vaughan Herbert, Me.	*Fort Fairfield*	B K House
Cohen, Philip Rupert, Zo.	*Bangor*	10 Beech Street
Cole, Stanley Goodman, Fy.	*West Hartford, Conn.*	111 Park Street
Cousins, Caroline Helen, Hy.	*Bangor*	73 Summer Street, Bangor
Cross, Harriette Elizabeth, Ms.	*Bangor*	96 Garland Street, Bangor
Crowe, James Hartley, Zo.	*Woodland*	Φ H K House
Crowell, Elsie Mary, Ms.	*Corinna*	25 Myrtle Street
Currie, Robert, Jr., Ee.	*Eastport*	Φ K Σ House
Darvill, Reginald Edgar, Es.	*Sanford*	Λ X A House
Davis, Marian Louise, Lt.	*Port Clyde*	Δ Δ Δ House
Davis, Wilfred Stanley, Fy.	*Mechanic Falls*	B Θ Π House
Davis, William Scott, Ee.	*Brunswick*	H N Π House
Dearth, Robert Davee, Zo.	*West Upton, Mass.*	Φ M Δ House
Dekin, Albert Arch, Ch.Eng.	*Milford*	Milford

Denaco, Alden Frank, Es.	*Bangor*	Σ A E House
Desjardins, Jules Anthony, Me.	*Old Town*	122 South Brunswick Street, Old Town
Despres, Urban Henry, Me.	*Auburn*	87 Park Street
Dickson, John Doyle, Jr., Ch.Eng.	*Waterford, N. Y.*	K Σ House
Doyle, John Preston, Ag.	*Caribou*	Φ Γ Δ House
Duncan, Madelene Ellen, Ed.	*Presque Isle*	41 Pine Street
Dunlap, William McKee, Fy.	*Canonsburg, Pa.*	7 Pleasant Street
Elliot, Katherine Clara, Eh.	*Rumford Point*	Balentine Hall
Elliott, Linwood Shaw, Hy.	*Portland*	84 College Road
Ellis, Enright Augustus, Ch.Eng.	*Downington, Pa.*	K Σ House
Elmore, John Henry, Ee.	*Orono*	104 Main Street
Ewan, Marion Ruth, Eh.	*Eastport*	Balentine Hall
Fahey, William Henry, Pb.	*Lewiston*	Φ K House
Fairchild, Arthur Stone, Py.	*Buzzards Bay, Mass.*	Σ A E House
Fickett, Lester Calvin, Ms.	*Skowhegan*	B Θ Π House
Field, Madeline Hazel, Eh.	*Vanceboro*	31A Mill Street
Finley, George Byron, Ph.	*Washington*	A Γ P House
Fisher, Curtis Albert, Me.	*South Portland*	B K House
Fittz, Austin Hervey, Jr., Ae.	*Natick, Mass.*	A T Ω House
Fitzgibbon, William James, Me.	*Old Orchard*	Δ T Δ House
Flanders, Merton Newcomb, Zo.	*Portland*	A X A House
Fleming, Agnes Cecelia, Ed.	*Milltown*	66 Park Street
Foley, William, Ch.Eng.	*Bar Harbor*	3 Park Street
Fowles, Margaret Esther, Hy.	*Belfast*	Colvin Hall
Frame, Ellen Hawley, He.	*Searsport*	Balentine Hall
Freeman, Muriel, Eh.	*North Windham*	Colvin Hall
French, Norman Lufkin, Fm.	*Rumford Center*	B Θ Π House
Friend, Philip Stearns, Ce.	*Bangor*	23 Charles Street, Bangor
Fuller, James Wilson, Ch.	*Hartland*	Φ Γ Δ House
Gatti, Anthony James, Zo.	*Rockland*	Θ X House
Gerry, Albert Francis, Ce.	*Brewer*	Φ Γ Δ House
Gibbs, Thelma Pike, Eh.	*Kent's Hill*	25 Myrtle Street
Giddings, Kathryn Storer, Sp.	*Bangor*	78 Sanford Street, Bangor
Gilbert, Rachel Louise, Sp.	*Bangor*	Colvin Hall
Gillis, Hugh Allan, Eh.	*West Baldwin*	25 Grove Street

Gilmore, Willard Myron, Me.	*Waterville*	Σ X House
Glaser, Leo, Es.	*Gardiner*	35 Grove Street
Goodwin, Carlton Littlefield, Ch.Eng.	*Springvale*	H N H House
Goodwin, Frank Rich, Ee.	*Brooks*	B Θ Π House
Gross, Erma Davis, Eh.	*Belfast*	Colvin Hall
Gross, Laura Keller, Eh.	*Stonington*	Colvin Hall
Gross, Virgil Tyler, Fy.	*Portland*	Φ M Δ House
Gunning, Everett Albert, Ee	*Waterville*	401 Oak Hall
Hacker, Jerre Frank, Ag.	*Fort Fairfield*	A Γ P House
Hall, Arthur Whittier, Me.	*Bath*	Stillwater
Hall, Walter Louis Henry, Zo.	*Orono*	64 Mill Street
Ham, Eric Rodney, An.	*Springfield*	Farm Boarding House
Hanaburgh, David Henry, Fy.	*Buchanan, N. Y.*	111 Park Street
Hardison, Clayton Haines, Ce.	*Caribou*	Δ T Δ House
Hawes, Edmund Thacher, Fy.	*Fairhaven, Mass.*	B Θ Π House
Hayes, Gordon Sampson, Ce.	*Oxford*	Φ K Σ House
Hayter, Stanley Greene, Me.	*Clinton, Mass.*	Σ A E House
Hermann, Florence Whitney, Eh.	*Cumberland Mills*	66 Park Street
Hesse, Lawrence Stewart, Me.	*Orono*	Σ A E House
Hickson, Sylvia Lorraine, Fr.	*Bangor*	72 Cedar Street, Bangor
Higgins, Richard Fernald, Me.	*Portland*	Λ X A House
Hilborn, Merle Tyson, Fy.	*Philadelphia, Pa.*	7 Pleasant Street
Hilton, Ethel Mary, He.	*Athens*	Colvin Hall
Hincks, Maynard Alton, Fm.	*Portland*	Δ T Δ House
Hodgkin, Vernon Lloyd, Ht.	*New Gloucester*	25 Grove Street
Hooper, Cleveland Holbrook, Me.	*Brewer*	8 Silk Street, Brewer
Howes, Albert Henry, Me.	*Bingham*	A X A House
Howes, Henry Frank, Ee.	*Ashland, Mass.*	38 Crosby Street
Huddilston, Homer Woodbridge, Py.	*Orono*	Σ A E House
Hughes, Hildred Louise, Sp.	*Bangor*	105 Third Street, Bangor
Hunter, Raymond Additon, Ee.	*Unity*	37 Pond Street
Huot, Laurence Hubert, Me.	*Saco*	Σ A E House
Hutchinson, Charles Wisner, Fy.	*Pepperell, Mass.*	K Σ House
Ingalls, Charles Carroll, Ce.	*Bar Harbor*	Λ X A House
Jack, Arthur Templeton, Ch.	*Brunswick*	Σ X House
Jaques, Marion Lee, Ed.	*Bath*	24 Pierce Street
Jenks, Robert Fletcher, Ce.	*Roslindale, Mass.*	Σ X House

Johnson, Harold Ingalls, Me.	*Milo*	Λ X A House
Johnson, William Whidden, Es.	*Portland*	Σ N House
Kane, Eleanor, Ed.	*Eastport*	37 Forest Avenue
Kangas, Karlo Kristian, Zo.	*Gardner, Mass.*	Θ X House
Kazutow, Alexander, Me.	*Bangor*	224 State Street, Bangor
Kelley, Benedict Augustine, Ce.	*Brooks*	2 Forest Avenue
Keresey, Thomas Edward, Zo.	*Gardner, Mass.*	Θ X House
Kick, Samuel Adam, Ms.	*Lisbon Falls*	Φ K House
Kinney, Gerald Lewis, Ht.	*South Paris*	111 Park Street
Kiszonak, Amel Francis, Zo.	*Lisbon Falls*	Φ K House
Knight, Vaughn Douglas, Ee.	*Limestone*	20 Peters Street
Knowlton, Thomas Anson, Es.	*Bangor*	15 Park Street
Kuntz, Peter Julian, Me.	*Treichler, Pa.*	55 North Main Street
Landers, Neal Hammond, Fm.	*Easton*	A Γ P House
Lane, Delphine Marylyn, He.	*West Paris*	38 Forest Avenue
Lane, John Murchie, Me.	*Calais*	A T Ω House
Lapp, Julius Edwin, Me.	*Hudson, N. Y.*	Σ X House
Leach, Walter Rayford, Hy.	*Penobscot*	15 Park Street
Leathers, Harland Francis, Eh.	*Bangor*	15 Park Street
Lépine, Jeanne, Fr.	*Biddeford*	Balentine Hall
Lester, Donald Leroy, Ce.	*Woodfords*	Φ K Σ House
Levensaler, Atwood, Eh.	*Rockland*	B Θ Π House
Lewis, Florence Marion, Ms.	*Springfield*	Δ Δ Δ House
L'Heureux, Marcel Francois, Ch.Eng.	*Lewiston*	Θ X House
Libby, Elton James, Es.	*Portland*	K Σ House
Libby, Winthrop Charles, Ag.	*Caribou*	Φ H K House
Loane, George Holland, Es.	*Presque Isle*	Σ N House
Lothrop, Clayton Roger, Ch.Eng.	*Pine Point*	K Σ House
Lufkin, Arthur Raymond, Jr., Py.	*Medford, Mass.*	A T Ω House
Lyon, Anna Matilda, Es.	*Bar Harbor*	25 Myrtle Street
McCabe, Francis Joseph, Zo.	*South Berwick*	Δ T Δ House
McCarthy, Joseph Paul, Me.	*Biddeford*	Δ T Δ House
McCobb, Edgar Emerson, Ee.	*Camden*	A T Ω House
MacCormick, Malcolm Young, Py.	*Orono*	55 North Main Street
McCray, Roy Hayden, Fy.	*Madison*	Σ A E House
McCready, Pauline Isabel, Eh.	*Bangor*	Δ Δ Δ House
McIntire, Smith Charles, Fm.	*Perham*	A Γ P House

McIntosh, Carolyn Elizabeth, Fr.	*Bangor*	9 Dole Court, Bangor
McLaughlin, William Grinnell, Ch.	*Corinna*	50 Mill Street
McLean, Alfred Perley, Ch.	*Houlton*	B K House
McNamara, Richard Wentworth, Zo.	*Winthrop*	Θ X House
Mann, Eulalie Letitia, He.	*Livermore Falls*	Colvin Hall
Martin, Alexander MacPhail, Zo.	*Portland*	Θ X House
Masterman, Roscoe Chaney, Ch.Eng.	*Jay*	Φ M Δ House
Matheson, Hildreth, Fr.	*Bangor*	306 Essex Street, Bangor
Matheson, Murdock Scribner, Ed.	*St. Francis*	80 North Main Street
Meacham, Eleanor Clark, Ed.	*Bowdoinham*	9 Forest Avenue
Mead, Katherine Kilgore, He.	*Bangor*	382 College Road
Merriam, Wheeler Godfrey, Me.	*Framingham, Mass.*	K Σ House
Merrill, Laura Abigail, He.	*Bangor*	18 Jefferson Street, Bangor
Merrill, Margaret Annette, Eh.	*Old Town*	395 Center Street, Old Town
Miller, Louise Cecelia, He.	*Worcester, Mass.*	24 Pierce Street
Miller, Stacy Ross, An.	*Carmel*	Farm Boarding House
Miniutti, Angela, Ms.	*North Berwick*	Balentine Hall
Montgomery, Hildreth, Es.	*Bucksport*	Δ Δ Δ House
Moore, Esther, Eh.	*McKinley*	Colvin Hall
Moore, John Redman, Me.	*Ellsworth*	Σ A E House
Morrison, Thomas, Ee.	*Inverness, Scotland*	29 Forest Avenue
Morton, Hugh Hayden, Me.	*South Paris*	Φ M Δ House
Mowat, John Harold, Ch.	*Houlton*	23 Spencer Street
Munroe, Ralph Gladding, Me.	*Attleboro, Mass.*	H N Π House
Murphy, Francis Davidson, Me.	*Oakfield*	Θ X House
Murphy, William, Ms.	*Bangor*	Φ K House
Noddin, Priscilla, Hy.	*North Anson*	56 North Main Street
Nolan, James Carroll, Ed.	*Bar Harbor*	Σ N House
Nutting, Theodore Ernest, Ms.	*South Paris*	Φ M Δ House
Osier, Albion Vernon, Ch.	*New Harbor*	Σ A E House
Overlock, Fred Vernard, Ce.	*Thomaston*	45 Mill Street
Paul, Harry, Ch.	*Chelsea, Mass.*	15 Park Street
Pearson, John Joseph, Zo.	*Middleboro, Mass.*	Θ X House

Pease, Stanley Curtis, Fy.	*North New Portland*	K Σ House
Percival, Keith Weston, Ch.Eng.	*Bangor*	Φ M Δ House
Perkins, Olive, Eh.	*Kennebunk Beach*	Balentine Hall
Perkins, Raymond Everett, Ed.	*Castine*	80 No. Main Street
Phair, Mariel Marsh, Ed.	*Limestone*	37 Forest Avenue
Pike, Merle Ernest, Ce.	*Livermore Falls*	Φ K Σ House
Poland, Harland Oscar, Ee.	*Stillwater*	Φ M Δ House
Pooler, Marvia Mae, He.	*Stillwater*	Stillwater
Porter, Horace Chase, Ms.	*Searsport*	Φ H K House
Pratt, Margaret Grover, Eh.	*Clinton*	34 Pine Street
Pressey, Donald Eugene, Me.	*Bangor*	Φ K Σ House
Prince, Ralph Nelson, Ch.	*Kittery*	Σ X House
Puffer, Charles Loring, Jr., Ed.	*Weld*	7 Park Street
Rand, Clarence Winslow, Fy.	*Andover*	Σ X House
Rand, John Howard, Me.	*Livermore Falls*	Σ X House
Randall, Lawrence Carlton, Ee.	*Freeport*	B K House
Randall, Philip Hatherly, Fy.	*Richmond*	6 Mill Street
Randall, Rosella Evelyn, Zo.	*Westbrook*	Balentine Hall
Randall, Willis Shaw, Me.	*Freeport*	A T Ω House
Ray, Jesse Everett, Me.	*Old Town*	186 North Fourth Street, Old Town
Ricker, Cyrus Lunt, Es.	*Waterboro*	Σ N House
Ricker, Francis Galarneaux, Py.	*Hempstead, N. Y.*	Σ N House
Riley, Walter Edgar, Me.	*Portland*	K Σ House
Robbins, Winston Churchill, Ce.	*Brewer*	Φ H K House
Robinson, Harold Stanley, Hy.	*Brownville Junction*	7 Pleasant Street
Robinson, Isabelle Avesia, Eh.	*Old Town*	203 North Fourth Street, Old Town
Rubin, Max, Ch.Eng.	*Bangor*	55 Elm Street, Bangor
Rumazza, Orestes Lawrence, Fy.	*Boothbay Harbor*	Φ K House
Russ, Ida Roselle, He.	*Mount Vernon*	Balentine Hall
Russell, John Weldon, Me.	*Millinocket*	Δ T Δ House
Russell, Thomas, Fy.	*Millinocket*	10 Free Street, Stillwater
Sargent, Abigail Louise, Lt.	*Sargentville*	56 North Main Street
Savage, Leon Emery, Ce.	*Fairfield*	B K House

Sawyer, Matthias Plant, Dh.	*West Minot*	Α Γ Ρ House
Scamman, Chester Herbert, Ch.Eng.	*West Scarboro*	Φ Μ Δ House
Scelfo, Alfred John, Ce.	*Newark, N. J.*	Φ Κ House
Schultz, Norman Laurence, Ms.	*Lisbon Falls*	40 Middle Street
Scott, Donis Averill, Ed.	*Bangor*	19 First Street, Bangor
Segal, Lillian Hillson, Gm.	*Bangor*	Colvin Hall
Seltzer, Joseph Percy, Ee.	*Fairfield*	Θ Χ House
Senechal, Joseph Louis, Ms.	*Stafford Springs, Conn.*	Box 54, Orono
Senuta, Joseph Francis, Ch.Eng.	*Fitchburg, Mass.*	Κ Σ House
Shapero, Clarence, Ch.	*Bangor*	30 Adams Street, Bangor
Shaw, Linwood Zina, Ch.Eng.	*Old Town*	457 South Main Street, Old Town
Shean, Geraldine Elizabeth, Eh.	*Bangor*	Balentine Hall
Shean, Robert Stevens, Es.	*Bangor*	Φ Γ Δ House
Sherman, Ivan Cecil, Eh.	*Union*	184 Main Street
Sims, James Milton, Es.	*Andover, Mass.*	102 H. H. Hall
Sinclair, Guy Vincent, Es.	*Westbrook*	Λ Χ Α House
Smalley, Francis Elmer, Fy.	*Morrisville, Vt.*	Κ Σ House
Smith, Albert James, Ch.Eng.	*Hempstead, N. Y.*	Φ Κ Σ House
Smith, Raymond Antone, Fy.	*Combined Locks, Wis.*	Α Τ Ω House
Snow, Myrtleen Frances, He.	*Old Town*	20 Somerset Street, Old Town
Somers, Dorothy Marie, He.	*Bangor*	89 Howard Street, Bangor
Sparrow, Ernest Elliot, Me.	*Hampden*	11 Main Street
Spencer, Rebecca Tarbox, Eh.	*Biddeford*	Balentine Hall
Spruce, Wilfrid Lewis, Eh.	*Milford*	Milford
Spurling, Leon Eugene, Me.	*Gouldsboro*	Δ Τ Δ House
Stanley, Asa Herbert, Jr., Sp.	*Springfield*	301 H. H. Hall
Staples, Robert Lyman, Fy.	*Ogunquit*	Κ Σ House
Starrett, Beulah Maude, Ch.A.	*Warren*	20 Forest Avenue
Stearns, Helen Ward, Eh.	*Millinocket*	25 Myrtle Street
Stern, Arthur David, Es.	*Bangor*	416 Hancock Street, Bangor
Stevens, Edward John, Jr., Me.	*Portland*	Κ Σ House
Stevens, Marjorie Deane, Py.	*Bangor*	24 Oak Street
Steward, Robert Bruce, Ee.	*Monson*	Φ Η Κ House
Stewart, Charles Lowell, Fy.	*Minturn*	111 Park Street

Stone, Kenneth Berry, Fy.	*Augusta*	Φ Γ Δ House
Stone, Paul, Ch.Eng.	*Bangor*	239 Pine Street, Bangor
Sullivan, Clayton Jefferson, Ed.	*Houlton*	Λ X Λ House
Sullivan, Cornelius Joseph, Es.	*Bangor*	Θ X House
Sullivan, Eustis Francis, Fy.	*Newburyport, Mass.*	Λ T Ω House
Sundstrom, Walter Nelson, Ms.	*North Berwick*	Δ T Δ House
Swain, Loring Raymond, Me.	*Weld*	Σ N House
Sweetser, Lawrence Richardson, Ee.	*Presque Isle*	Φ H K House
Talbot, Edith Akers, He.	*Orono*	40 Forest Avenue
Taplin, Paul Lewis, Ch.	*Middlesex, Vt.*	B K House
Thompson, Margaret Lord, He.	*Kennebunk*	Colvin Hall
Thompson, Oscar Thomas, Ch.Eng.	*Lincoln*	Φ K Σ House
Tibbetts, Roland James, Ee.	*Vanceboro*	Σ X House
Timberlake, Robert Eugene, Ce.	*South Portland*	Σ X House
Trask, Herbert Irving, Es.	*Mechanic Falls*	301 Oak Hall
Trickey, Katherine Woodworth, Hy.	*Bangor*	Δ Δ Δ House
Umphrey, George Nelson, Fm.	*Washburn*	Σ X House
Vernon, Hubert Allen, Ee.	*Vanceboro*	Λ T Ω House
Wadleigh, Moses Beverly, Zo.	*Old Town*	K Σ House
Wakefield, Charles Edwin, Hy.	*Cherryfield*	Σ Φ Σ House
Washburn, Louise Annette, He.	*Perry*	Colvin Hall
Wass, Una Eleanor, Eh.	*Addison*	Balentine Hall
Watters, Gilberta Phoebe, He.	*Bangor*	Colvin Hall
Wear, Lydia Erickson, Ed.	*Orono*	36 Myrtle Street
Weiner, William Wolf, Zo.	*Bangor*	35 Grove Street
Wendell, Raymond Thomas, Ce.	*Oakland*	Φ H K House
Weston, Robert Theodore, Me.	*Madison*	25 Grove Street
Weymouth, Philip Alan, Zo.	*West Medford, Mass.*	Σ X House
Whitmore, Avery Heath, Ee.	*Bangor*	35 Grove Street
Whitney, Elna Aldrich, Eh.	*Milford, Mass.*	Balentine Hall
Whitten, James Francis, Zo.	*Farmington*	Σ N House
Willets, Harold Kenneth, Ch.Eng.	*West Hartford, Conn.*	Φ Γ Δ House
Williams, Philip Manson, Me.	*Oakland*	Φ H K House
Williamson, Paul Clifford, Es.	*National Soldiers Home*	Σ A E House

Wilson, Donald Burns, Fy.	*Bath*	Φ Γ Δ House
Wood, Benjamin Thomas, Ee.	*Waterville*	Φ Γ Δ House
Woodbury, Walter Henry, Ch.Eng.	*Oakland*	47 Mill Street
Woodman, Bernice Ruth, Eh.	*Washburn*	Balentine Hall
Yates, David Adelbert, Ee.	*Boothbay Harbor*	A T Ω House
Yerxa, Philip Radcliffe, Es.	*Bangor*	Φ H K House
Young, Ronald Everett, Ee.	*Northeast Harbor*	A T Ω House

SOPHOMORES

Abbott, Clark Luce, Es.	*No. New Portland*	Σ A E House
Ackroyd, Whiteley Innes, Ce.	*Needham, Mass.*	Σ Φ Σ House
Adelman, Marcia Ada, Es.	*Bangor*	Colvin Hall
Akeley, Robert Vinton, Agr.	*Presque Isle*	80 North Main Street
Allen, Adell Mae, Ms.	*New York, N. Y.*	56 North Main Street
Alley, Alton Wadsworth, Ce.	*Calais*	Φ M Δ House
Anderson, Philip Warren, Zo.	*South Portland*	B Θ Π House
Ansur, Annie Petrone, Eh.	*Dover-Foxcroft*	Balentine Hall
Ashton, Vincent Hobson, Ps.	*Norway*	A T Ω House
Ashworth, William Bruce, Me.	*Orono*	88 North Main Street
Avery, Byron George, Ch.Eng.	*Woodland*	Σ Φ Σ House
Babbidge, Carlton Mayo, Ee.	*Mt. Desert*	Φ M Δ House
Ball, John Rodney, Jr., Es.	*Lawrence, Mass.*	Δ T Δ House
Bankus, John Thomas, Fy.	*Lynn, Mass.*	Θ X House
Barrett, Harold Joseph, Fy.	*Pittsfield*	Φ K House
Barrows, Elizabeth Sale, Lt.	*Brunswick*	Balentine Hall
Barry, Jane, Lt.	*Thomaston*	Balentine Hall
Bates, Howard Carleton, Me.	*Bath*	12 Park Street
Bates, John Earle, Py.	*Portland*	Φ Γ Δ House
Beazley, Edward Hutchins, Ch.Eng.	*Bucksport*	10 Free Street, Stillwater
Bell, Priscilla Ann, Fr.	*Bangor*	Colvin Hall
Berry, Clarence Frederick, Es.	*Island Falls*	Θ X House
Berry, Florence Ruth, He.	*Island Falls*	Colvin Hall
Berry, Virginia Irene, He.	*Portland*	Colvin Hall
Blair, Dorothy Whidden, Eh.	*Westbrook*	Balentine Hall
Blaisdell, Robert Woodruff, Fy.	*Franklin*	10 Free Street, Stillwater

Blake, Donald Corydon, Es.	*Dexter*	Δ T Δ House
Boddy, Edwin Chauncey, Ee.	*Millinocket*	Φ K Σ House
Bolan, Edith May, Zo.	*Winterport*	Balentine Hall
Booker, Guy Allen, Me.	*Gardiner*	Λ X A House
Booth, Harry Edward, Fy.	*Lewiston*	Φ H K House
Bottger, William Carl, Me.	*Winchester, Mass.*	Σ A E House
Bradbury, Clarence Henry, Me.	*Bangor*	Φ K House
Bradstreet, Mildred Cordelia, Fr.	*Orono*	No. Main Street
Bratton, William VanDeusen, Es.	*Williamstown, Mass.*	Φ Γ Δ House
Briggs, Pauline Beatrice, Eh.	*North Anson*	Balentine Hall
Brigham, Austin DeWitt, Fy.	*Bridgton*	Σ A E House
Brock, Philip Stanton, An.	*Waterboro*	A Γ P House
Brown, Annie Lora, Ms.	*Lubec*	Balentine Hall
Brown, Arthur Albert, Ms.	*Bangor*	Λ X A House
Brown, Benjamin Edgar, Fy.	*Machiasport*	Φ H K House
Brown, Charles Durward, Me.	*Raymond*	56 High Street, Old Town
Brown, Everett Philip, Es.	*Millinocket*	Δ T Δ House
Brown, Paul Louis, Es.	*Norway*	Λ X A House
Brown, Polly Frances, Eh.	*Bangor*	Δ Δ Δ House
Brown, Robert Stanton, Fy.	*Poquonock, Conn.*	47 Mill Street
Brown, Walter David, Es.	*Harmony*	81 Mill Street
Bullen, George, Ee.	*Lee*	Φ H K House
Bunker, Charles Eugene, Es.	*Bangor*	Λ X A House
Burgess, Donald Merle, Ph.	*Washburn*	Φ M Δ House
Burk, Frederick Carlton, Fy.	*Swampscott, Mass.*	Σ X House
Burton, Leroy Austin, Fy.	*Thomaston*	A Γ P House
Burton, Luthera Hilt, Eh.	*Thomaston*	Balentine Hall
Busse, Frances Alfreda, Eh.	*Belfast*	Balentine Hall
Calderwood, Samuel Henry, Es.	*Roxbury, Mass.*	Σ A E House
Callaghan, Ruth Isabel, He.	*South Brewer*	Δ Δ Δ House
Carter, Marian Ada, Ms.	*Bangor*	15 Morse's Court, Bangor
Chandler, John Millbury, Ch.Eng.	*South Paris*	Φ M Δ House
Chase, Hobart Holbrook, Ch.Eng.	*Waterbury, Conn.*	43 Main Street
Chetley, Lloyd Warren, Ce.	*Richmond*	Σ A E House
Clark, Gordon Augustus, Es.	*Houlton*	Φ Γ Δ House
Clement, Irving Herbert, Me.	*Milo*	A X A House
Clement, Louise, Eh.	*Portland*	Balentine Hall
Clements, Helen Carolyn, He.	*Winterport*	25 Myrtle Street

Clifford, Robert Lincoln, Ce.	*Dexter*	18 Oak Street
Cloutier, Wallace Edmund, Ae.	*Lewiston*	Φ K House
Coggins, Donald Irving, Ee.	*Malden, Mass.*	B Θ Π House
Cohen, Pauline Anna, Gm.	*Bangor*	50 E. Summer Street, Bangor
Cole, Rosamond Emily, Eh.	*Augusta*	Colvin Hall
Collins, Eulalie Bernice, He.	*Bangor*	Balentine Hall
Comins, Jerome Harris, Ee.	*Rockland*	Φ Γ Δ House
Conklin, Henry Gilder, Me.	*New London, Conn.*	Φ Γ Δ House
Cook, Edward Hatfield, Zo.	*Calais*	55 Bennoch Street
Cook, James Egan, Ce.	*Mohawk, N. Y.*	A T Ω House
Cook, John Joseph, Fy.	*Bar Harbor*	Φ Γ Δ House
Cota, Charles Lee, Fr.	*Orono*	19 Water Street
Cotter, John Bradley, Me.	*Orono*	Λ X A House
Craig, Charlotte Isabelle, He.	*Old Town*	19 Pine Street, Old Town
Craig, Francis Albert, Me.	*Worcester, Mass.*	Φ Γ Δ House
Crocker, Harold Keene, Ms.	*Vanceboro*	69 Mill Street
Cronkright, Arthur Bradford, Ce.	*Arlington, N. J.*	B K House
Crouse, Roberta June, Arts	*Orono*	188 Main Street
Cunningham, John Symonds, Me.	*Portland*	Σ Φ Σ House
Currie, Clayton Moores, Me.	*Houlton*	43 Main Street
Currie, Frank Sherman, Me.	*Cambridge, Mass.*	Σ X House
Cyr, Lawrence Ambrose, Ch.Eng.	*Stockholm*	Φ K House
Daggett, Edmond Arthur, Ee.	*North Anson*	Θ X House
Dane, Edwin Moore, Es.	*Skowhegan*	Φ M Δ House
Davis, Elisabeth Holbrook, He.	*Vanceboro*	Balentine Hall
Davis, Emil Arthur, Me.	*Bangor*	124 Kenduskeag Avenue, Bangor
Davis, Margaret Louise, Ms.	*Woodland*	Balentine Hall
Deane, Edith Lillias, He.	*North Anson*	Balentine Hall
Decker, Lawrence Franklin, Ce.	*Clinton*	Φ H K House
DeMeyer, Daisy Alberta, Eh.	*Eastbrook*	Balentine Hall
Dennison, Maurice Bartol, Zo.	*Bangor*	46 Norway Road, Bangor
Denton, Margaret Eloise, Lt.	*Caribou*	Balentine Hall
Desmond, Thomas Joseph, Jr., Ch.Eng.	*Portland*	Θ X House
Dickerson, Kenneth John, Me.	*Biddeford*	Σ Φ Σ House
Dickson, James Kerr, Fy.	*Ridlonville*	B Θ Π House
Dickson, Marion Smart, He.	*Ridlonville*	Balentine Hall
Doane, William Holman, Ce.	*Portland*	384 College Road

Dodge, Elmer Blake, Es.	*Bowdoinham*	Σ A E House
Dorr, Gertrude Neal, Ms.	*Bangor*	Balentine Hall
Downing, Robert Briggs, Me.	*Hampden Highlands*	10 Main Street
Doyle, John Peter, Ce.	*Portland*	Θ X House
Dunn, Merrita Lizzie, Eh.	*Bangor*	Balentine Hall
Duplisea, Garald Chase, Ce.	*Houlton*	Θ X House
Dyer, Edward Arthur, Me.	*North Baldwin*	H N Π House
Eldridge, Dana Alvah, Ee.	*Gardiner*	Φ K Σ House
Elliott, Richard Edwin, Fy.	*Patten*	Φ K Σ House
Elmendorf, George Minard, Ch.Eng.	*Belfast*	A T Ω House
Emple, Hyman William, Es.	*Bangor*	146 Cumberland Street, Bangor
Erickson, Emil Roderick, Ee.	*Rockport*	Σ Φ Σ House
Eskenas, Victor Harry, Es.	*Peabody, Mass.*	10 Beech Street
Fall, Ward Moulton, Ce.	*Sanford*	Θ X House
Farnsworth, John Pullman, Ce.	*South Portland*	Φ K House
Findlay, Dorothy May, He.	*Portland*	Colvin Hall
Findlay, Helen Emma, He.	*Portland*	Colvin Hall
Fitzgerald, Millard Fillmore, Fm.	*Presque Isle*	Δ T Δ House
Fitzgerald, Walter Benjamin, Ce.	*Canaan*	23 Spencer Avenue
Fleischer, Harold William, Zo.	*Chelsea, Mass.*	10 Beech Street
Foggia, Amedeo, Es.	*Woodland*	Σ Φ Σ House
Follett, Herbert Gordon, Es.	*Pottersville, Mass.*	Φ Γ Δ House
Folsom, Beatrice Luella, Fr.	*Newport*	Balentine Hall
Forrestall, Arthur Thomas, Es.	*Portland*	Φ K Σ House
Frazier, Donald Edward, Ch.Eng.	*Norwood, Mass.*	K Σ House
Frohock, Warren Stoddard, Ee.	*Augusta*	66 College Road
Gamage, Russell Winslow, Ht.	*Litchfield*	A Γ P House
Gersoni, Henry Bernard, Ee.	*Jamaica, L. I., N. Y.*	18 Myrtle Street
Giddings, Edwin Lathrop, Fy.	*West Hartford, Conn.*	Φ K Σ House
Gillen, Fred Eugene, Es.	*Bangor*	64 Fifth Street, Bangor
Gillson, Sam, Es.	*Newport, R. I.*	10 Main Street
Gleason, Evelyn May, Es.	*Bedford, Mass.*	Balentine Hall
Glickman, George, Hy.	*Maynard, Mass.*	18 Oak Street
Gonzals, John Peter, Ee.	*Syracuse, N. Y.*	Θ X House

Goode, Dorothea Jane, Ms.	*Bangor*	228 Palm Street, Bangor
Goodwin, Lloyd Edwin, Ch.Eng.	*East Corinth*	111 Park Street
Gordon, John Lee, Ch.	*Portland*	384 College Road
Gould, Horace Hill, Zo.	*Bucksport*	Φ H K House
Govrin, Solomon, Hy.	*New Haven, Conn.*	1 Middle Street
Grange, Edna Louise, Eh.	*Smyrna Mills*	Colvin Hall
Graves, Lorimer Arbury, Ch.Eng.	*Wollaston, Mass.*	Σ N House
Green, Walter Irving, Eh.	*Bradford, Mass.*	35 Grove Street
Gregory, Philip Orson, Ch.A.	*Boothbay Harbor*	Φ H K House
Grua, Alys Marie, He.	*Augusta*	Balentine Hall
Hagan, Frank Wilbur, An.	*Bath*	Φ Γ Δ House
Haggett, Edward Grant, Jr., Ee.	*Portland*	Δ T Δ House
Hall, Harold Mathews, Es.	*Auburn*	B Θ Π House
Hall, Harry A, Ce.	*Peaks Island*	Φ H K House
Hallgren, Swen Eugene, Fy.	*Portland*	Σ A E House
Halsted, Edwin Voorhees, Fy.	*Dover-Foxcroft*	Σ N House
Hanaburgh, Miriam Turner, Zo.	*Buchanan, N. Y.*	Balentine Hall
Hand, Carl Gordon, Ce.	*West Medford, Mass.*	A T Ω House
Harding, Phyllis Marguerite, He.	*Brewer*	140 Church Street, Brewer
Hargreaves, Reginald Lester, Es.	*New Bedford, Mass.*	Φ K Σ House
Harmon, William Everleth, Ee.	*Bridgton*	56 High Street, Old Town
Harrison, Margaret Winona, He.	*Portland*	37 Forest Avenue
Harvey, Barbara Meade, Fr.	*North Fairfield, Ohio*	No. Main Street
Hasey, Harry Everett, Me.	*Bangor*	15 Poplar Street, Bangor
Haskell, Madison Bowler, Fy.	*Lee*	Φ H K House
Hathaway, William Fee, Ch.Eng.	*Kalamazoo, Mich.*	Φ H K House
Havey, Philip Andrew, Ce.	*Sullivan*	Φ H K House
Hendrickson, Karl Thornton, Ce.	*Cumberland Mills*	Φ H K House
Hendrickson, Warren Maynard, Ph.	*Waterville*	A Γ P House
Henry, Blanche Isabelle, Hy.	*Thomaston*	Balentine Hall
Herrick, Samuel Eldridge, Ee.	*Dexter*	B Θ Π House
Hill, Louise Marcia, He.	*Orono*	162 College Road
Hilliker, Elizabeth Stewart, Es.	*Corinna*	Balentine Hall
Hilton, Helen Alma, Es.	*Bangor*	Balentine Hall
Hinton, Frederick Weeks, Ee.	*Millinocket*	Φ Γ Δ House

Hoar, Newton Sellman, Fy.	*Rangeley*	Φ H K House
Hodgkins, Roger Wallace, Ee.	*Bar Harbor*	Θ X House
Hoffman, Abraham, Zo.	*Dorchester, Mass.*	1 Middle Street
Holly, Norman Joseph, Zo.	*Portland*	Φ K House
Holman, Howard Childs, Me.	*Bangor*	103 Poplar Street, Bangor
Holmes, Muriel Ethelyn, He.	*Augusta*	Balentine Hall
Hoos, Sidney Samuels, Es.	*Old Town*	64 Veazie Street, Old Town
Howe, Inez Lubel, Eh.	*Bryant Pond*	Balentine Hall
Hoyt, Winston Sedgeley, Ee.	*Phillips*	H N Π House
Humphrey, Margaret Gertrude, He.	*Pittsfield*	Balentine Hall
Humphrey, Wallace Harlow, Fm.	*Greenwood, Mass.*	Δ T Δ House
Hunnewell, Harold Nathaniel, Ch.Eng.	*Bingham*	Λ X A House
Hurd, Carl Dean, Me.	*Augusta*	B Θ Π House
Hurd, Marguerite Littlefield, Eh.	*Orono*	66 Park Street
Hurd, Richard, Zo.	*Jamaica Plain, Mass.*	51 Forest Avenue
Hurry, Irving James, Ee.	*Ocean Grove, N. J.*	Σ X House
Hussey, Freeman Lincoln Otis, Ch.	*Old Town*	290 South Main Street, Old Town
Hutchinson, Doris Alberta, Eh.	*Dexter*	Balentine Hall
Ide, Horton Frank, Es.	*West Roxbury, Mass.*	Σ N House
Ingraham, Robert James, Ch.Eng.	*Portland*	Θ X House
Irwin, Ruth Elinor, He.	*Newtonville, Mass.*	Balentine Hall
Ives, Robert Southwick, Ch.Eng.	*Topsfield, Mass.*	College Road
Jackson, Alpheus, Ph.	*Norway*	Φ M Δ House
Jackson, Raymond Andrew, Ce.	*Portland*	Φ M Δ House
Jagels, Carl Alvin, Es.	*Camden*	Σ A E House
Jamieson, Dora Mae, He.	*East Machias*	Colvin Hall
Janney, Charles Theodore, Es.	*Orono*	33 Main Street
Jellison, George Edward, Es.	*North Sullivan*	Φ M Δ House
Johnson, Kenneth Boyden, An.	*Perry*	A Γ P House
Johnson, Philip Leonard, Ch.A.	*Machias*	Σ A E House
Johnson, Richard Lyman, Ee.	*West Hartford, Conn.*	Σ X House
Jose, Bryce Hight, Es.	*Newtonville, Mass.*	Φ Γ Δ House
Kane, Warren Stevens, Jr., Ee.	*Eastport*	Φ K Σ House
Keene, Burt Moran, Zo.	*Bangor*	118 Royal Road, Bangor

Keirstead, Lloyd Garrison, Ch.Eng.	*Oakland*	K Σ House
Kelloch, Roger Arnold, Sp.	*Portland*	Φ Γ Δ House
Kendall, Russell Irving, Me.	*Waterville*	Φ Γ Δ House
Kennedy, Jeanne Reddington, Py.	*Boston, Mass.*	56 North Main Street
Kidder, James Harrison, Ce.	*Houlton*	Σ N House
Kingsbury, Emmons Edward, Ch.Eng.	*Bangor*	9 Norway Road, Bangor
Knight, William Beedle, Ce.	*New Haven, Conn.*	Σ X House
Ladner, Marion Alyce, He.	*Orono*	Park Street
Lampropoulos, Charles Louis, Es.	*Ipswich, Mass.*	Θ X House
Landon, Bertha Rose, Es.	*Bangor*	Colvin Hall
Larrabee, Charles Frederic, Zo.	*Washburn*	36 College Road
Leighton, Dwight Hannaford, Ce.	*Cape Elizabeth*	66 Park Street
Leland, Hollis Littlefield, Ch.Eng.	*Bangor*	43 Pier Street, Bangor
Leveroni, Herbert Charles, Es.	*Chelsea, Mass.*	Φ K House
Lewis, Herbert Webster, Me.	*Wollaston, Mass.*	B Θ Π House
Lincoln, Roger Bates, Ce.	*Houlton*	Θ X House
Linn, Philip Holman, Me.	*Bangor*	K Σ House
Linskey, William Henry, Es.	*South Portland*	18 Oak Street
Lombard, Maynard Erwin, Fy.	*Caribou*	Φ H K House
Lord, Wallace Wendell, Ce.	*East Lebanon*	Stillwater
Lorimer, Robert Vinton, Zo.	*Bangor*	21 Newton Street, Bangor
Lovell, Horace Allen, Es.	*Brunswick*	K Σ House
Lovely, Margaret Jane, He.	*Presque Isle*	Colvin Hall
Lucas, Ludger Antile, Ch.Eng.	*Hallowell*	36 College Road
Luce, Cecil Richard, Me.	*Farmington*	Φ Γ Δ House
Lull, Eloise Cleveland, Sp.	*Fort Williams*	Balentine Hall
Lutts, Herbert Warren, Ee.	*Kittery*	Σ X House
McBrady, William Henry, Fy.	*South Portland*	Φ K House
McCallum, Philip Dolloff, Es.	*Saco*	Σ A E House
McCarthy, John James, Ch.A.	*Elmhurst, N. Y.*	Φ K House
McClure, James Wiley, Es.	*Bangor*	B Θ Π House
McCracken, Howard Franklin, Fy.	*Brewer*	231 Center Street, Brewer
McGown, Lauris Patten, Ee.	*Bangor*	21 Sixth Street, Bangor
McGuire, Robert Joseph, Me.	*Stonington*	Δ T Δ House
McGuire, Thomas George, Me.	*Stonington*	Δ T Δ House
McKiniry, Donald Lewis, Fy.	*Portland*	K Σ House
McLean, James Albert, Me.	*Millinocket*	B K House
McLean, Roderick Kenneth, Me.	*Bar Harbor*	Σ A E House

McMichael, Albert Edward, Fy.	*Pittsfield*	Φ H K House
McMichael, Alfred Newman, Fy.	*Pittsfield*	Φ H K House
McNair, Hester Margaret, He.	*Sangerville*	46 North Main Street
Macuen, Marguerite Louise, Eh.	*Milford, Mass.*	Main Street
Means, Melbourne Franklin, Es.	*Biddeford*	Λ X A House
Merrifield, Arthur Louis, Ch.Eng.	*Stoneham, Mass.*	H N II House
Merrill, Ernestine Louise, Pb.	*Orono*	80 Main Street
Millar, Richard Hardy, Fy.	*Springfield, Mass.*	Σ N House
Miller, Harold Delwin, Zo.	*Bangor*	25 Grove Street
Miller, Lauris Craig, Zo.	*Newport*	19½ Mill Street
Milliken, William Franklin, Jr., Me.	*Old Town*	14 Oak Street, Old Town
Mills, Evelyn June, He.	*Brewer*	74 Washington Street, Brewer
Mitchell, Lona Alice, He.	*Milo*	76 Main Street
Moody, Charles True, Es.	*Portland*	Σ A E House
Moors, Forest Kenneth, Ch.Eng.	*Old Town*	200 Stillwater Avenue, Old Town
Moors, Vivian Imogene, Lt.	*Orono*	36 College Road
Morrison, Richard Plaisted, Es.	*Bangor*	26 Kenduskeag Avenue, Bangor
Morrison, Violet Lillian, Hy.	*Orono*	44 Peters Street
Moulton, Elwin, Me.	*Hiram*	Φ H K House
Moulton, Marjorie, He.	*Hiram*	Balentine Hall
Murch, Rexford Donald Kent, Me.	*Orono*	28 Peters Street
Murphy, Dorothy Mae, He.	*Bangor*	Balentine Hall
Mutty, Marie Josephine, Zo.	*Old Town*	60 Fourth Street, Old Town
Nason, Marion Lucille, Fr.	*Readfield*	Balentine Hall
Neal, Franklin Martin, Ee.	*North Berwick*	B K House
Newell, Raymond Franklin, Ch.Eng.	*Bangor*	59 Kenduskeag Avenue, Bangor
Noyes, Carlton Franklin, Ee.	*Waterville*	Φ Γ Δ House
Nunn, Kenneth Pressley, Ch.Eng.	*Quincy, Mass.*	Σ A E House
Odiorne, Philip Wendell, Es.	*Cooper's Mills*	36 College Road
Offinger, Martin William, Fy.	*Pelham, N. Y.*	29 Pond Street
Orcutt, Ralph Amos, Ph.	*Bucksport*	A Γ P House
Osgood, Helen Berniece, Pb.	*Orono*	134 College Road

Page, Edwin Sherman, Me.	*Derby*	H N Π House
Page, Roland Lincoln, Ch.Eng.	*Orono*	37 Forest Avenue
Palmer, Donald Rich, Es.	*Dexter*	B Θ Π House
Palmer, John Elden, Ee.	*South Portland*	Φ K Σ House
Paquin, Leon John, Ch.Eng.	*Waterville*	7 Pleasant Street
Pasquale, Frank Lido, Zo.	*Jamaica Plain, Mass.*	Φ K House
Peabody, Helen Evangeline, Eh.	*Levant*	Balentine Hall
Peacock, Arnold Lane, Ee.	*Randolph*	Λ X A House
Pedder, Elbridge William, Eh.	*Northeast Harbor*	Φ H K House
Pendleton, Robert Erskine, Fy.	*Lewiston*	Φ M Δ House
Penley, Joseph Irving, Fy.	*West Paris*	Φ M Δ House
Percival, Ernest LaRoy, Fy.	*Dexter*	Φ H K House
Peterson, George Melville, Ce.	*Yarmouth*	Σ X House
Pickering, Carl Wyvern, Es.	*Deer Isle*	Σ A E House
Pike, Julius, Ch.Eng.	*Chelsea, Mass.*	10 Beech Street
Plummer, Philip Chase, Ph.	*South Paris*	Φ M Δ House
Pollard, Evelyn Arla, Hy.	*Cambridge, Mass.*	Balentine Hall
Pond, William Bartlett, Ee.	*Bangor*	199 Forest Avenue, Bangor
Porter, Addie Elizabeth, He.	*Presque Isle*	41 Pine Street
Prescott, Theodore William, Es.	*Island Falls*	Σ N House
Prout, Stanley Rishworth, Es.	*South Portland*	A T Ω House
Quarrington, Grace Adams, Lt.	*Pittsfield*	Balentine Hall
Randall, Coleman Cedric, An.	*West Appleton*	Farm Boarding House
Randall, Mavilla Annie, Eh.	*Bangor*	Balentine Hall
Raye, Henry Wadsworth, Ch.Eng.	*Eastport*	H N Π House
Reichley, Mildred, Zo.	*Bangor*	2 Bennoch Street
Resnick, Theodore Harold, Zo.	*Chelsea, Mass.*	10 Beech Street
Richards, Edna Hazel, Zo.	*Millinocket*	Δ Δ Δ House
Richardson, Gilbert Chamberlain, Fm.	*Island Falls*	A Γ P House
Roberts, Harriet Elisabeth, Eh.	*Alfred*	162 College Road
Robertshaw, Gilbert Turner, Ch.Eng.	*Union Village, R. I.*	A T Ω House
Robertson, James LaSalle, Jr., Eh.	*Unity*	25 Grove Street
Robinson, Paul Clifford, Eh.	*Greenfield Center, N. Y.*	27 Park Street
Romansky, Monroe, Zo.	*Hartford, Conn.*	10 Beech Street
Romero, Frederick Blanchard, Ee.	*Bangor*	32 North Street, Bangor
Rosenstein, Ann, Eh.	*Wells*	Balentine Hall

Russell, Marcus Crown, Es.	*Millinocket*	Δ T Δ House
Russell, Peter Alexander, Jr., Fy.	*Millinocket*	Δ T Δ House
Sampson, Joseph Willard, Es.	*Calais*	Σ X House
Sanborn, Fred McLellan, Ce.	*West Buxton*	B K House
Sawyer, Charles Kempton, Me.	*Searsport*	K Σ House
Sawyer, Ralph Herbert, Ee.	*Old Town*	23 Bradbury Street, Old Town
Scott, George William, Ee.	*Old Town*	5 Brunswick Street, Old Town
Scott, John Porter, Ce.	*Bangor*	85 Cumberland Street, Bangor
Scott, Mary Ellen, Lt.	*Corinna*	Balentine Hall
Sewall, Mary Braley, Pl.	*Old Town*	332 Stillwater Avenue, Old Town
Shaw, Leroy Frank, Ee.	*Milo*	Λ X Λ House
Shaw, Russell Wilson, Es.	*Portland*	Φ K Σ House
Siegel, Pauline, Fr.	*Bangor*	22 Hazel Street, Bangor
Simpson, Robert Otho, Ce.	*Berlin, N. H.*	Σ A E House
Small, Kathryn Marguerite, Pb.	*Westbrook*	50 Forest Avenue
Smart, Doris Annie, He.	*Cambridge*	Balentine Hall
Smith, Ethel May, Eh.	*Brewer*	24 Getchell Street, Brewer
Smith, Kenneth Edwin, Zo.	*Portland*	College Road
Smith, Martha Louise, He.	*Saco*	Balentine Hall
Smythe, Berla Margaret, Py.	*Bangor*	199 Pine Street, Bangor
Snare, Richard James, Ch.	*Hampden Highlands*	Φ H K House
Snider, Rose, Eh.	*Portland*	Balentine Hall
Soloman, George Colby, Es.	*Dorchester, Mass.*	Σ N House
Sorensen, Leif Irving, Es.	*Rumford*	B Θ Π House
Spencer, Raymond Eliot, Es.	*Bangor*	Σ A E House
Stanley, Sherwin Leavitt, Ms.	*Clinton*	81 Mill Street
Staples, Edward Malcolm, Ch.Eng.	*Bath*	H N Π House
Starbird, Philip Deering, Zo.	*Portland*	Φ H K House
Stevens, Laurice Myron, Ms.	*Plymouth*	87 Park Street
Stoddard, Joseph Rodney, Me.	*Lincolnville*	66 College Road
Stover, Courtney Earle, Ch.Eng.	*Bath*	H N Π House
Street, Malcolm Milledge, Fm.	*Bangor*	R.F.D. #4, Ohio Street, Bangor
Stubbert, Robert Walton, Fy.	*Waterville*	Σ A E House
Sylvester, Donald Maurice, Ch.Eng.	*Jefferson*	Σ X House

Talbot, Peter Austin, Ch.Eng.	*Woodland*	Φ K House
Thomas, Arthur James, Zo.	*Brewer*	142 North Main Street, Brewer
Thompson, Emily Dennison, Zo.	*Bangor*	Δ Δ Δ House
Thompson, Roy Elsworth, Ch.Eng.	*Fryeburg*	10 Beech Street
Thompson, William Walstrum, Ce.	*Portland*	Θ X House
Thurston, Carl Lynam, Me.	*North Haven*	Σ A E House
Toothaker, Holman Melcher, Ee.	*Portland*	3 Park Street
Towle, Carlton Haskell, Me.	*Oakland*	Φ K Σ House
Towle, Charles Albion, Fy.	*Newfield*	K Σ House
Tracy, Alicia Maude, He.	*Lincoln*	R.F.D. #7, Bangor
Traynor, Earl Joseph, Ee.	*Waterville*	A T Ω House
Tryon, Elizabeth, He.	*South Portland*	Δ Δ Δ House
Tule, Norman Hastings, Me.	*East Pepperell, Mass.*	K Σ House
Turbyne, John, Ch.Eng.	*Waterville*	Φ Γ Δ House
Umphrey, Lucia Mae, He.	*Washburn*	Balentine Hall
Varney, Kenneth Everson, Bt.	*Orono*	43 Peters Street
Vernon, Donald Edward, Ee.	*Vanceboro*	A T Ω House
Walker, Clifton Nathaniel, Ht.	*Wiscasset*	A Γ P House
Ward, Margaret Edyth, He.	*So. Windham*	North Hall
Ward, Prescott Reed, Pb.	*South Portland*	Δ T Δ House
Waterhouse, Frank Chester, Hy.	*Old Town*	7 Bradbury Street, Old Town
Webb, Freeman George, Fm.	*Houlton*	Θ X House
Webb, Reuel Weston, Ce.	*Groveton, N. H.*	Φ Γ Δ House
Webber, Phyllis Leoma, Es.	*Bangor*	Δ Δ Δ House
West, Eleanor DeAlbra, Es.	*Bangor*	146 Elm Street, Bangor
Wheeler, Paul Strange, Ce.	*Millinocket*	Σ X House
Whelden, Charles Marsh, Fy.	*Wellesley, Mass.*	Σ X House
Whicher, Theron Otis, Ph.	*Springvale*	88 Park Street
Whiting, Olive Louise, He.	*Hebron Station*	Campus
Whitman, Muriel, Eh.	*Stonington*	Balentine Hall
Whitmore, Tyler Allen, Ag.	*Wahiawa, Oahu, T. H.*	Λ X A House
Wiers, Frederick Eugene, Fy.	*Washburn*	A Γ P House
Wight, John Calvin, Ae.	*Hulls Cove*	Λ X A House

Williams, Florence Eloise, Lt.	*Topsham*	Balentine Hall
Williamson, Enoch Harry, Es.	*Stratton*	Σ N House
Wilson, Donald Henry, Me.	*Moosehead*	Σ A E House
Wilson, Edward Haven, En.	*Cape Elizabeth*	B K House
Wilson, John Forbes, Me.	*Lowell, Mass.*	Σ A E House
Wilson, Keith Douglass, Me.	*Guilford*	Λ T Ω House
Wiseman, Edith Estelle, Eh.	*Newport*	Colvin Hall
Wood, Ashley Burr, Jr., Ch.Eng.	*Bangor*	30 Catell Street, Bangor
Worcester, Lillian Ethne, Ms.	*Belfast*	Balentine Hall
Works, Carroll Newton, Ee.	*Portland*	Φ M Δ House
Yates, Lester Raymond, Ee.	*Bangor*	124 Webster Avenue, Bangor
Young, Elizabeth Janet, Es.	*Bangor*	44 Boutelle Road, Bangor
Young, Eloise Smith, Eh.	*Fort Fairfield*	Δ Δ Δ House
Young, Paul Alvin, Me.	*South Brewer*	Φ Γ Δ House
Young, Ruth French, Eh.	*Orono*	56 Park Street
Young, Virginia Florence, Sp.	*Newton Highlands, Mass.*	56 North Main Street
Zottoli, Robert Angelo, Me.	*Quincy, Mass.*	Σ X House

FRESHMEN

Abbott, David Kelsey, Ch.Eng.	*Brooks*	411 Oak Hall
Aceto, Thomas, Ce.	*Portland*	110 H. H. Hall
Adams, Alfred Augustus, Arts	*Boothbay Harbor*	7 Summer Street
Adams, Rachel Louise, He.	*Ellsworth*	Mt. Vernon House
Adams, Robert Gray, Me.	*Portland*	88 Park Street
Adkins, Lawrence Richmond, Ch.Eng.	*Auburn*	202 H. H. Hall
Alden, Richard Carter, Ch.Eng.	*Portland*	305 H. H. Hall
Aldrich, Adelbert Russell, Me.	*Bangor*	28 Webster Avenue, Bangor
Aldrich, Kenneth Elmer, Agr.	*Norway*	406 Oak Hall
Allan, Albert Sawyer, Ch.Eng.	*Machias*	134 College Road
Allen, Donald George, Fy.	*Portland*	Stillwater
Allen, Fern Elizabeth, Arts	*Bangor*	Hammond St., R.F.D. #2, Bangor

Allen, J. Henry, Ch.Eng.	*Portland*	60 Park Street
Alpert, Isadore Louis, Ch.Eng.	*Bangor*	137 State Street, Bangor
Anderson, Natalie Arline, Arts	*Bangor*	52 Grant Street, Bangor
Anderson, Peter, Jr., Fy.	*Topsfield, Mass.*	111 Park Street
Archambault, Aline Marie, Arts	*Fort Kent*	Mt. Vernon House
Attridge, James Milton, Fy.	*East Pepperell, Mass.*	210 H. H. Hall
Atwood, Fred Smith, Jr., Ee.	*South Portland*	212 H. H. Hall
Augenstein, Roy Bernard, Arts	*Newark, N. J.*	208 Oak Hall
Austin, Mary Eugenie, He.	*Ridlonville*	Mt. Vernon House
Austin, Thaddeus William, Ch.Eng.	*Brooks*	411 Oak Hall
Baker, Claude Kneeland, Me.	*Millinocket*	111 H. H. Hall
Baker, Ray Strout, Arts	*Gardiner*	88 Park Street
Ballard, Delmont Louis, Ee.	*Rockport*	204 H. H. Hall
Barker, Kenneth Richardson, Ce.	*E. Vassalboro*	101 H. H. Hall
Bartlett, Aldo Andrew, Ce.	*Stonington*	403 H. H. Hall
Bartlett, Norman Edward, Arts	*Foxboro, Mass.*	410 H. H. Hall
Bartlewski, Peter Paul, Arts	*New Britain, Conn.*	402 H. H. Hall
Baumann, Carl Spratt, Me.	*Bangor*	100 Sanford Street, Bangor
Bearce, Wesley Sayles, Arts	*Foxboro, Mass.*	203 H. H. Hall
Beatty, Earle Hastings, Arts	*Winthrop*	54 Pine Street
Beazley, William Ernest, Eng.	*Bucksport*	109 Oak Hall
Beers, Ralph Emerson, Me.	*Cambridge, Mass.*	209 Oak Hall
Bendtsen, Frederick Adolf, Ce.	*Lewiston*	306 H. H. Hall
Benn, Frank Edward, Agr.	*Houlton*	202 H. H. Hall
Berg, Robert, Arts	*Chelsea, Mass.*	310 H. H. Hall
Berman, James, Ce.	*Nantasket Beach, Mass.*	104 H. H. Hall
Berry, Leslie Murch, Ee.	*South Portland*	209 H. H. Hall
Bickford, Albert Elmer, Fy.	*Lewiston*	310 H. H. Hall
Bisbee, Eva Myrtle, Arts	*Portland*	Mt. Vernon House
Bittner, Alfred John, Arts	*Brooklyn, N. Y.*	B Θ Π House
Black, Frederick Ross, Ee.	*Searsport*	304 H. H. Hall
Black, Russell Stuart, Arts	*West Sullivan*	134 College Road
Blaisdell, Frank Rodwell, Jr., Ee.	*Bangor*	283 Forest Avenue, Bangor
Blaisdell, William Bradley, Arts	*North Sullivan*	403 H. H. Hall
Blanch, Ella Louise, Arts	*Lubec*	Mt. Vernon House

Blanchard, Stanley Hayes, Agr.	*Cumberland Center*	103 Oak Hall
Bornstein, Joseph, Arts	*Chelsea, Mass.*	402 Oak Hall
Boyd, Harry Colby, Eng.	*Bangor*	251 French Street, Bangor
Brackett, Marjorie Anne, He.	*Marblehead, Mass.*	Mt. Vernon House
Bradbury, Kent Fairfield, Ch.Eng.	*Fort Kent*	308 Oak Hall
Bradford, Robert Bruce, Me.	*Orono*	66 Park Street
Bragdon, Merle Henry, Arts	*Westfield*	301 Oak Hall
Briggs, Florence Geneva, He.	*Auburn*	Mt. Vernon House
Briggs, Margaret Rose, Arts	*Caribou*	Mt. Vernon House
Brill, Miriam, Arts	*Bangor*	88 Palm Street, Bangor
Brown, Darrell Enthia, Arts	*Arlington, Mass.*	The Maples
Brown, Earl Dresser, Arts	*South Paris*	406 H. H. Hall
Brunn, Ewart Marcellin, Jr., Arts	*Arlington, Mass.*	110 Oak Hall
Buckley, Richard Lane, Arts	*Bangor*	307 Oak Hall
Buker, George Haskell, Ch.	*Auburn*	101 H. H. Hall
Bullock, Fred Stanley, Ch.Eng.	*Hallowell*	207 Oak Hall
Bunker, Madelene Weeks, Arts	*Calais*	Mt. Vernon House
Burnham, Eleanor Frances, He.	*Bridgton*	The Maples
Burr, Lloyd Weatherbee, Me.	*Mattawamkeag*	123½ Main Street
Burrill, Josephine Dorr, Arts	*Brewer*	32 School Street, Brewer
Bussell, Mary Luella, He.	*Old Town*	11 Oak Street, Old Town
Butcher, Clayton Edmund, Eng.	*Lisbon Falls*	412 Oak Hall
Canders, William Ernest, Jr., Ee.	*Rumford*	302 H. H. Hall
Cannan, Albert Joseph, Arts	*Fort Kent*	209 H. H. Hall
Carr, Malcolm Frederick, Me.	*Hartland*	109 H. H. Hall
Carter, Hester Louise, Arts	*Mt. Desert Ferry*	Balentine Hall
Caswell, Willard Stearns, Arts	*Gray*	404 H. H. Hall
Chatto, Lawrence Alfred, Agr.	*South Brooksville*	101 H. H. Hall
Christensen, Robert William, Agr.	*Portland*	112 H. H. Hall
Clapp, Cecil Earl, Fy.	*West Brooklin*	410 H. H. Hall
Clark, Hope Wilkinson, Arts	*Orono*	124 Main Street
Cleaves, Kenneth Sharrock, Eng.	*Bar Harbor*	405 Oak Hall
Cleveland, Merton Eugene, Ee.	*Stonington*	411 H. H. Hall
Cobb, Elmer Winfred, Jr., Arts	*Falmouth Foreside*	203 H. H. Hall
Cobb, George Lane, Arts	*Auburn*	201 H. H. Hall
Coffin, John Rodney, Ee.	*Ashland*	101 H. H. Hall
Colburn, Marie Palmer, Arts	*Bangor*	Union St., R.F.D. #3, Bangor

Collamore, Edson Leavitt, Arts	*Great Works*	Jameson Street, Great Works
Colman, George Edward, Arts	*South Brewer*	12 Harris Street, South Brewer
Cooney, Wilfred Omara, Me.	*Brownville Junction*	80 North Main Street
Cope, Samuel Morton, Arts	*Portland*	402 Oak Hall
Corban, Paul Johnson, Ch.Eng.	*Hartford, Conn.*	302 H. H. Hall
Corbett, Donald Philip, Agr.	*East Parsonsfield*	312 H. H. Hall
Cormier, Fred Joseph, Jr., Ee.	*Newcastle*	205 Oak Hall
Cornellier, Doris Eleanor, Arts	*Westfield, N. J.*	37 Forest Avenue
Cousins, Maurice Long, Ce.	*Bangor*	73 Summer Street, Bangor
Covell, Muriel Tewksbury, Arts	*Monmouth*	Bennoch Street
Cox, Gilbert Merton, Me.	*New Sharon*	209 H. H. Hall
Coy, Methyl Bernice, He.	*Mechanic Falls*	Balentine Hall
Crandall, Aldice Kermit, Arts	*Presque Isle*	309 H. H. Hall
Crane, Lois Richardson, Agr.	*Medford, Mass.*	Balentine Hall
Crockett, Robert Earle, Ee.	*Millinocket*	305 Oak Hall
Crockett, Wilbury Arthur, Arts	*Brewer*	90 Union Street, Brewer
Crosby, Norris Wilfred, Eng.	*Bangor*	871 Hammond Street, Bangor
Crosson, John Wayne, Ch.Eng.	*Millinocket*	305 Oak Hall
Crowell, Lorenzo Mayo, Me.	*Bangor*	406 Center Street, Old Town
Crowley, Harry Alfred, Eng.	*Bangor*	1 Haynes Court, Bangor
Cumming, Irvin Robert Alexander, Ce.	*Houlton*	403 H. H. Hall
Cummings, Beatrice, Arts	*Lewiston*	Mt. Vernon House
Cuozzo, Roscoe Franklin, Agr.	*Bangor*	Broadway, Bangor
Cushing, Winifred Virginia, Arts	*Freeport*	Mt. Vernon House
Cutter, Ivel Helen, Arts	*Bangor*	237 Parkview Avenue, Bangor
Cyr, Roland Francis, Arts	*Old Town*	118 Bosworth Street, Old Town
Davis, Carleton Frederic, Me.	*Biddeford*	14 Pond Street
Davis, Dorothy Fuller, He.	*Lexington, Mass.*	24 Oak Street
Davis, Harold Arthur, Arts	*Calais*	16 Pine Street
Davis, William Holmes, Ch.Eng.	*York Village*	210 Oak Hall
Dean, Francelia Pearl, He.	*Waterville*	Balentine Hall

Deane, Stuart Leslie, Ce.	*Milo*	303 H. H. Hall
DeCourcy, James Edward, Arts	*Darien, Conn.*	206 Oak Hall
Desjardins, Lionel Louis, Arts	*Old Town*	122 South Brunswick Street Old Town
Dick, Kathryn Marion, He.	*Gardiner*	The Maples
DiVenuti, Frank Anthony, Agr.	*Everett, Mass.*	16 Pine Street
Doane, Stanley Russell, Ee.	*South Brewer*	37 Elm Street, South Brewer
Dodge, Frances Marguerite, He.	*Brewer*	132 Church Street, Brewer
Dougherty, Ralph Millar, Ee.	*Houlton*	312 Center Street, Old Town
Douglas, Walter Louis, Agr.	*Westbrook*	86 Mill Street
Dow, Millard George, Ee.	*Stillwater*	Stillwater
Dow, Wayne Burchard, Ee.	*Skowhegan*	311 Oak Hall
Dow, Wilmot Stevens, Agr.	*Presque Isle*	309 H. H. Hall
Doyle, John Andrew, Arts	*Woodland*	201 Oak Hall
Durgin, Carroll Allen, Ch.Eng.	*Brownfield*	402 H. H. Hall
Dyer, Alice Carolyn, Arts	*Freeport*	Balentine Hall
Earl, Theodore Alexander, Eng.	*Winter Harbor*	36 College Road
Eaton, Hilda Titus, Arts	*Little Deer Isle*	Mt. Vernon House
Eaton, Rosalie Barbara, Arts	*Camden*	The Maples
Edes, Barbara, Arts	*Dexter*	Balentine Hall
Edwards, Joseph Stuart, Me.	*Hingham, Mass.*	104 H. H. Hall
Ellsworth, Edward Charles, Ch.Eng.	*West Hartford, Conn.*	412 H. H. Hall
Elmore, Mary Elizabeth, Arts	*Orono*	104 Main Street
Evans, Richard Edward, Fy.	*Milford*	Milford
Favor, Donald Emerson, Fy.	*South Gray*	210 H. H. Hall
Feero, Rebecca Hazel, Arts	*Bath*	Mt. Vernon House
Fellows, Oscar, Arts	*Bangor*	312 Oak Hall
Field, Edmund Ellsworth, Jr., Ce.	*Hasbrouck Heights, N. J.*	302 Oak Hall
Fife, Rodney Alexander, Ce.	*Kittery*	307 Oak Hall
Findlen, Thomas John, Agr.	*Fort Fairfield*	212 Oak Hall
Finks, Charles Edward, Arts	*Portland*	309 Oak Hall
Finks, Henry, Arts	*Portland*	309 Oak Hall

Flaschner, Ira, Arts	*Dorchester, Mass.*	311 H. H. Hall
Floring, William Freeman, Arts	*Newton Centre, Mass.*	108 Oak Hall
Folsom, Parker Lowell, Ch.Eng.	*Biddeford*	411 H. H. Hall
Foss, Phyllis Cleveland, Arts	*Bangor*	175 State Street, Bangor
Foster, Kenneth Colley, Arts	*Augusta*	42 Forest Avenue
Fox, Thomas Butler, Ce.	*Skowhegan*	15 Park Street
Franzew, Anna Josephine, Arts	*Boston, Mass.*	224 State Street, Bangor
Freeman, Pearl Roger, Ce.	*Mount Desert*	70 Pine Street
Frost, Orissa Erma, Arts	*Dexter*	Balentine Hall
Gagnon, Lorenzo Arthur, Ce.	*Brunswick*	51 North Main Street
Gallagher, Erwin Ames, Me.	*Limestone*	307 H. H. Hall
Gallop, Richard Alfred, Ce.	*Ridlonville*	207 Oak Hall
Gary, Inez Martha, He.	*Caribou*	Mt. Vernon House
Gavin, Roy Joseph, Me.	*Springvale*	32 Pierce Street
Gifford, Melba Nord, He.	*South Portland*	Balentine Hall
Giguere, Armand Marc, Ee.	*Rumford*	103 H. H. Hall
Gilman, John Taylor, Arts	*Newport*	111 Oak Hall
Good, Jack Charles, Arts	*Portland*	60 Park Street
Goodwin, Malcolm Falconer, Fy.	*Parker Head*	410 H. H. Hall
Gordon, Patricia Ellen, Arts	*Sullivan Harbor*	23 Pond Street
Gray, Norman Heald, Fy.	*Lovell*	407 H. H. Hall
Greaney, John Charles, Arts	*Houlton*	86 Mill Street
Green, Donald Thomas, Agr.	*North Waterford*	406 Oak Hall
Greenlaw, George Ellery, Jr., Ch.Eng.	*Masardis*	401 Oak Hall
Griffin, Mardelle Eugene, Ee.	*Milbridge*	4 Peters Street
Grinnell, Eleanor Estes, Arts	*Bath*	Balentine Hall
Grodinsky, Irving Leavitt, Ch.Eng.	*Bangor*	189 Ohio Street, Bangor
Grossman, Arthur Milton, Arts	*Brewer*	15 Brimmer Street, Brewer
Grunwald, Ruth Evelyn, He.	*Bucksport*	Mt. Vernon House
Hadlock, Wendell Stanwood, Ms.	*Ellsworth*	29 Pond Street
Hamilton, Neil Ardell, Arts	*Portland*	103 H. H. Hall
Hamlin, Norris Burt, Fy.	*Farmington*	209 H. H. Hall
Hammond, Frances Melvina, Arts	*So. Gouldsboro*	Balentine Hall
Hamor, Ruth Elizabeth, He.	*Hulls Cove*	Mt. Vernon House
Haney, Mildred Mae, Arts	*Bangor*	176 Ohio Street, Bangor

Harding, Maxine Ward, He.	*Brewer*	140 Church Street, Brewer
Hardison, Lewis Merrill, Agr.	*Caribou*	307 H. H. Hall
Hardy, Kathleen Eda, Arts	*Bangor*	560 Ohio Street, Bangor
Harris, Wallace Henry, Arts	*Bar Harbor*	134 College Road
Harvey, Irving Wilson, Ch.Eng.	*Saco*	311 H. H. Hall
Hastings, Waldon Houston, Ch.Eng.	*Bangor*	41 Linden Street, Bangor
Hatch, Shirley Libby, Arts	*Shirley, Mass.*	The Maples
Haycock, Wallace McLeod, Ee.	*Calais*	212 H. H. Hall
Hayes, Carlton Arthur, Arts	*Kennebunk*	211 H. H. Hall
Heald, Alvin Lyman, Ce.	*Winthrop*	184 Main Street
Hefler, Roger Hartwell, Arts	*Hyde Park, Mass.*	202 Oak Hall
Hersey, Thomas Merrill, Ce.	*Bangor*	202 Oak Hall
Higgins, Errol Verlane, Arts	*Mapleton*	74 North Main Street
Hildreth, Edward Merle, Me.	*Milford*	Milford
Hill, Richard Laurence, Me.	*Malden, Mass.*	408 Oak Hall
Hill, Robert Arthur, Me.	*Orono*	162 College Road
Hillman, Donald Edgar, Ch.Eng.	*Bangor*	96 Highland Street, Bangor
Hinkley, Philip Joseph, Eng.	*Westbrook*	404 H. H. Hall
Hitchings, Ralph Livingstone, Ee.	*Caribou*	308 Oak Hall
Hodson, George, Ce.	*Camden*	29 Forest Avenue
Holman, Wendall Howard, Ce.	*Mexico*	306 Oak Hall
Holyoke, Charles Everett, Jr., Me.	*Brewer*	269 Wilson Street, Brewer
Hoos, Harold Wolfe, Ee.	*Old Town*	64 Veazie Street, Old Town
Hopkins, Franklin Wooster, Ce.	*Camden*	36 College Road
Howard, William Woodbury, Arts	*Hingham Center, Mass.*	311 H. H. Hall
Hoyt, Arthur Elbert, Jr., Ce.	*Presque Isle*	309 H. H. Hall
Hughes, Marion Esther, Arts	*Bangor*	105 Third Street, Bangor
Humphreys, Enid Mary, Arts	*Jackman Station*	Mt. Vernon House
Hunt, Leonard Roberts, Ce.	*Portland*	404 H. H. Hall
Hunter, Norris Waldo, Agr.	*Unity*	37 Pond Street
Ingerson, Allegra Maxine, He.	*Vinalhaven*	Balentine Hall
Ingraham, Carl Franklin, Ch.Eng.	*Portland*	103 Oak Hall
Ingraham, William Enos, Arts	*Rockport*	204 H. H. Hall
Iverson, Andrew Percy, Me.	*Portland*	College Road

Jackson, Holden Francis, Ee.	*Livermore Falls*	111 H. H. Hall
Jackson, James Murphy, Me.	*Bath*	310 H. H. Hall
Jackson, Laurence Burdette, Ce.	*Old Town*	43 High Street, Old Town
Jackson, Merle Everett, Fy.	*Bradley*	302 H. H. Hall
Jalbert, Evelyn Edna, Arts	*Fort Kent*	Mt. Vernon House
Jarrett, Vincent Raymond, Arts	*Stamford, Conn.*	403 Oak Hall
Jewett, Mayland Lester Delano, Ce.	*Augusta*	204 H. H. Hall
Johnson, Carl James, Fy.	*West Poland*	43 Main Street
Johnson, John Edward, Ee.	*Milford*	Milford
Johnson, Rudolph Bernard, Fy.	*Sanford*	88 Park Street
Jones, Frederick Henry, Fy.	*Darien, Conn.*	206 Oak Hall
Jones, Kenneth Edgar, Fy.	*Bangor*	10 Clinton Court, Bangor
Jones, Mary Vaughan, Arts	*Veazie*	Veazie
Jordan, Colgate Stanley, Ee.	*Seal Harbor*	410 Oak Hall
Jordan, Edward Clarence, Me.	*Portland*	408 H. H. Hall
Judd, Morris Henry, Fy.	*South Paris*	310 Oak Hall
Judkins, Wesley Parkhurst, Agr.	*Waterville*	405 H. H. Hall
Kaminsky, Leah Esther, Arts	*Bangor*	46 Jefferson Street, Bangor
Karalekas, Peter Charles, Eng.	*Dorchester, Mass.*	102 Oak Hall
Kenney, James Edwin, Ee.	*Bangor*	67 Bowdoin Street, Bangor
Keyes, Henry Morgan, Ee.	*Stony Creek, Conn.*	201 H. H. Hall
Keyser, Ambrose Mathias, Eng.	*Pewaukee, Wis.*	412 H. H. Hall
Kimball, Elizabeth Gardner, He.	*Pittsfield*	2 Gilman Falls Avenue, Old Town
Klaman, Louis, Arts	*Boston, Mass.*	108 Oak Hall
Knight, Howard Franklin, Agr.	*Richmond*	10 Beech Street
Ladd, Everett Clifford, Arts	*Rockland*	211 Oak Hall
Lancto, Rita Eleanor, Arts	*Springfield, Mass.*	9 Forest Avenue
Lane, Lewis Samuel, Arts	*Portland*	88 Park Street
Langlois, Paul Raymond, Fy.	*Springfield, Mass.*	212 H. H. Hall
Larrabee, Allan Merton, Eng.	*Winthrop*	303 Oak Hall
Lawrence, Robert Edward, Ee.	*Augusta*	206 H. H. Hall

Leadbetter, Robert Arthur, Fy.	*Bangor*	398 Hammond Street, Bangor
Libby, Leland Robb, Arts	*Mainstream*	104 Oak Hall
Libby, Russell Fullum, Eng.	*Westbrook*	43 Main Street
Lizotte, John Creden, Ee.	*National Soldiers Home*	208 H. H. Hall
Longfellow, Bruce Spruance, Ee.	*Machias*	134 College Road
Longley, John Godfrey, Arts	*Plymouth*	103 H. H. Hall
Lord, Francis Jordan, Ch.	*Old Town*	238 Main Street, Old Town
Lord, Judson Purinton, Arts	*Camden*	304 Oak Hall
Lord, Ruth Esther, Arts	*East Lebanon*	Mt. Vernon House
Lowell, Donald Keith, Arts	*Gardiner*	105 Oak Hall
Ludden, Walter Edwin, Arts	*Bangor*	5 Wingate Court, Bangor
Lull, Richard Glenn, Arts	*Fort Williams*	310 H. H. Hall
Lynch, Elizabeth Esther, Arts	*Lawrence, Mass.*	The Maples
Lynch, Lawrence Craft, Arts	*Bangor*	201 H. H. Hall
Lyon, Alpheus Crosby, Jr., Ce.	*Bangor*	204 Oak Hall
Lyon, Emily, Arts	*Bangor*	Mt. Vernon House
Lyons, Harold Lemuel, Ce.	*Houlton*	242 Essex Street, Bangor
McCloskey, Francis Hartley, Ch.Eng.	*Howland*	Milford
McCusker, Henry James, Arts	*East Braintree, Mass.*	312 H. H. Hall
McEachern, Joseph Earl, Ce.	*Greenville Junction*	410 H. H. Hall
McNally, Dana Ralph, Ce.	*Ashland*	403 H. H. Hall
McNeeland, Robert Alton, Agr.	*Bridgewater, Mass.*	410 H. H. Hall
McRae, Carol Edson, He.	*Mansfield, Mass.*	The Maples
Macaulay, Kenneth Earl, Ch.Eng.	*Rumford*	College Road
Maden, William Frederick, Agr.	*Ashland, Mass.*	102 H. H. Hall
Mahar, Dwight Edwin, Arts	*Dennysville*	310 H. H. Hall
Maines, Thomas Arthur, Agr.	*Limestone*	B K House
Marble, Richard Henry, Ce.	*Harmony*	312 Oak Hall
Marcho, Henry Edmund, Agr.	*Orono*	25 Myrtle Street
Marsh, Henry Stacy, Arts	*Rockland*	211 Oak Hall
Marson, Chester Joseph, Ee.	*Gardiner*	88 Park Street
Martikainen, Elmer John Tauno, Ee.	*Harrison*	102 Oak Hall
Massaro, Joseph, Ch.Eng.	*South Manchester, Conn.*	412 H. H. Hall

Mathews, Edna Louise, Arts	*Belfast*	Colvin Hall
Mayberry, Effie Adelaide, He.	*Auburn*	Balentine Hall
Meade, Elizabeth Genevieve, Arts	*Bangor*	Balentine Hall
Mercier, Ardon Clark, Ch.Eng.	*Portland*	60 Park Street
Merrill, James Walker, Ce.	*Fryeburg*	407 H. H. Hall
Merrill, Lucius Robert, Ee.	*Orono*	178 Main Street
Merrill, Philip Andrew, Fy.	*Madison*	210 H. H. Hall
Merrow, Clarence Leon, Arts	*Hartland*	109 H. H. Hall
Miller, Woodrow William, Arts	*Bangor*	46 Blackstone Street, Bangor
Milliken, Louise Caryl, He.	*Corinna*	Mt. Vernon House
Mitchell, Paul Edward, Fy.	*Kittery*	109 H. H. Hall
Moore, Ernestine Sophia, Arts	*Freedom*	Colvin Hall
Moore, Evelyn Dolliffe, Arts	*Old Town*	Center Street, Old Town
Moore, Montgomery Dunham, Agr.	*Brighton, Mass.*	3 Park Street
Moore, Richard Edwin, Ch.Eng.	*Rangeley*	305 H. H. Hall
Morin, James Rodolph, Arts	*Old Town*	21 Carroll Street, Old Town
Morneault, Jeanne Irene, Arts	*Bangor*	65 Curve Street, Bangor
Morrison, Frances Estella, Arts	*Orono*	44 Peters Street
Morrison, Vinal Addison, Arts	*Bangor*	R.F.D. #2, Bangor
Morse, Nathan Stanley, Ch.	*Islesford*	86 Mill Street
Morse, Thomas Smyth, Ch.	*Islesford*	86 Mill Street
Mosher, Charles Henry, Ee.	*Weeks Mills*	401 H. H. Hall
Moyer, Charles Bruce, Arts	*Caribou*	104 Oak Hall
Moynihan, Dorothy Helen, Arts	*Madison*	Balentine Hall
Murray, Roberta Daphyne, He.	*Deep River, Conn.*	Balentine Hall
Myers, Elizabeth Mary, He.	*Orono*	25 Myrtle Street
Nahra, John Joseph, Arts	*Old Town*	378 North Main Street, Old Town
Nelder, Donald Oscar, Ee.	*Houlton*	29 Forest Avenue
Ness, Gordon Dorland, Agr.	*Auburn*	308 H. H. Hall
Newman, Doris Ober, Arts	*Prospect Harbor*	Balentine Hall
Nickerson, Clyde Billings, Ee.	*Belfast*	401 H. H. Hall
Norwood, Ralph Ludwig, Ee.	*Warren*	210 Oak Hall
Nowland, Helen, Arts	*Medway, Mass.*	37 Forest Avenue
Noyes, Rodney Everett, Ch.Eng.	*Dover-Foxcroft*	303 Oak Hall

Nuite, Frank Elwin, Agr.	*Dover-Foxcroft*	Farm Boarding House
O'Connell, Lawrence Joseph, Me.	*Bangor*	Stillwater
O'Donnell, Clifford Leo, Fy.	*Bangor*	148 Garland Street, Bangor
Oliver, Ferguson Mactier, Fy.	*Boston, Mass.*	209 Oak Hall
Osgood, George Everett, Agr.	*Peabody, Mass.*	310 Oak Hall
Osgood, George Markey, Agr.	*Easton*	106 Oak Hall
Packard, Darel Oakley, Ce.	*Hull, Mass.*	202 H. H. Hall
Page, James Hampton, Jr., Ce.	*Fort Kent*	308 Oak Hall
Parsons, Kenneth Langmaid, Ee.	*Orono*	42 Penobscot Street
Parsons, Philip Stewart, Ee.	*South Paris*	406 H. H. Hall
Pasanen, Otto Oswald, Ce.	*Fitchburg, Mass.*	301 H. H. Hall
Pascarelli, Romeo Francis, Arts	*Dorchester, Mass.*	110 H. H. Hall
Paul, John Norton, Fy.	*Michigan City, Ind.*	81 Mill Street
Paul, Mildred Gladys, He.	*Bangor*	29 E. Summer Street, Bangor
Pearson, John Edward, Me.	*Lyme, Conn.*	210 H. H. Hall
Pennell, Robert Alton, Fy.	*Welchville*	102 H. H. Hall
Perkins, Donald Oliver, Me.	*Oxford*	202 H. H. Hall
Perkins, Gerald Edward, Me.	*Tarrytown, N. Y.*	104 H. H. Hall
Perkins, Harold Vincent, Arts	*Orono*	80 North Main Street
Perry, Gertrude, Arts	*No. Wilmington, Mass.*	Mt. Vernon House
Perry, Ralph Louis, Ee.	*Brownville Junction*	212 Oak Hall
Pierce, William Bela, Ce.	*Harpswell*	23 Spencer Lane
Pisco, James John, Ce.	*Waterbury, Conn.*	40 Middle Street
Plumpton, George Gordon, Agr.	*South Eliot*	205 Oak Hall
Poland, Mildred Helena, Arts	*Orono*	Stillwater
Pollock, John Alexander, Ch.Eng.	*Fitchburg, Mass.*	311 H. H. Hall
Porter, Herbert Granville, Arts	*Palmerton, Pa.*	204 Oak Hall
Pratt, Norman Gilman, Ee.	*Kezar Falls*	304 H. H. Hall
Prinn, Charles Edward, Jr., Eng.	*Portland*	410 Oak Hall
Profita, Carmela Frances, Arts	*Bangor*	4 Essex Street, Bangor
Pullen, Kenneth Elliott, Me.	*Milo*	402 H. H. Hall

Quimby, Charlotte Chipman, Arts	*Bar Harbor*	The Maples
Quinn, John Brèchemin, Fy.	*Wilmington, Del.*	35 Grove Street
Ramsdell, Freeland Lewis, Ee.	*Augusta*	111 H. H. Hall
Ray, Theodore Roosevelt, Agr.	*New Gloucester*	401 H. H. Hall
Reed, Amaziah Marble, Ch.Eng.	*Harmony*	203 Oak Hall
Reed, Charles Howe, Fy.	*Lewiston*	105 Oak Hall
Reed, Robert Wilbur, Ee.	*Weeks Mills*	401 H. H. Hall
Reichel, John Westridge, Arts	*Lewiston*	88 Park Street
Reichert, Walter Adolf, Arts	*Mamaroneck, N. Y.*	304 H. H. Hall
Reid, Elliott Austin, Ch.Eng.	*Bangor*	8 Blackstone Street, Bangor
Rice, James Herbert, Arts	*Lynn, Mass.*	88 Park Street
Rice, Richard Lindley, Arts	*Bangor*	17 Winter Street, Bangor
Rich, Wayne Schermerhorn, Agr.	*Charleston*	405 Oak Hall
Richards, Milburn Loring, Ch.Eng.	*Millinocket*	111 H. H. Hall
Richardson, Gordon Twichell, Ce.	*Beverly, Mass.*	304 Oak Hall
Ring, Donald Winston, Arts	*Bath*	409 Oak Hall
Ripley, Robert Samuel, Eng.	*Augusta*	208 H. H. Hall
Robbins, Paul Louis, Ch.Eng.	*Melrose, Mass.*	102 H. H. Hall
Robinson, Mabel Elizabeth, He.	*Old Town*	203 North Fourth Street, Old Town
Roderick, Drusilla Martha, He.	*Augusta*	Colvin Hall
Rogers, Hayden Sewall, Eng.	*Bath*	302 H. H. Hall
Romero, Dorothy Edith, Arts	*Bangor*	32 North Street, Bangor
Rosen, Abraham Everett, Arts	*Bangor*	438 Hammond Street, Bangor
Rosen, Doris Eleanor, He.	*New Sweden*	Balentine Hall
Rossing, William, Fy.	*Atlantic, Mass.*	407 Oak Hall
Rowe, Evelyn Margaret, Arts	*Bar Harbor*	The Maples
Roylance, Herbert Mark, Ch.Eng.	*Hasbrouck Heights, N. J.*	302 Oak Hall
Russ, Robert Crossland, Arts	*Bangor*	205 H. H. Hall
Russell, Lillian Mae, Arts	*Bar Harbor*	Mt. Vernon House
Russell, Ruth Richard, Arts	*Brownville*	Balentine Hall
Ryan, Hugh Edward, Arts	*Stamford, Conn.*	403 Oak Hall
Ryder, Georgia Belle, Arts	*Brooks*	4 Peters Street

Sanders, Irene Roxanna, Arts	*Portland*	20 Forest Avenue
Sargent, Robert Jewett, Fy.	*South Brewer*	109 Oak Hall
Sargent, Walter Field, Agr.	*Auburn*	112 H. H. Hall
Scheller, Arthur Peter, Me.	*Newark, N. J.*	208 Oak Hall
Scully, Hazel Mae, He.	*Mechanic Falls*	Colvin Hall
Searles, Stanwood Rowe, Arts	*Cumberland Center*	111 Oak Hall
Seekins, Leslie Reed, Me.	*Richmond*	402 H. H. Hall
Seigal, Harold Leonard, Ch.Eng.	*Portland*	409 H. H. Hall
Shapero, Benjamin, Arts	*Bangor*	30 Adams Street, Bangor
Sherburne, Arthur Philip, Ee.	*Winthrop, Mass.*	104 H. H. Hall
Shesong, Ruth Virginia, Arts	*Old Town*	178 Center Street, Old Town
Shiro, Dorothy Thelma, Arts	*Old Town*	30 South Fourth Street, Old Town
Shubert, Merle, Arts	*Ocean Grove, N. J.*	The Maples
Sidelinger, Leonard Reid, Fy.	*Detroit*	25 Grove Street
Simmons, Maurice Edwin, Agr.	*Glenmere*	86 Mill Street
Simpson, Lucille Powers, Arts	*Oakland*	Balentine Hall
Sinclair, Charles Arthur, Ee.	*Westbrook*	3 Park Street
Skillin, Franklin Johnson, Eng.	*South Portland*	203 H. H. Hall
Small, Charles Fremont, Ch.Eng.	*Caribou*	404 Oak Hall
Small, Laurence Towle, Fy.	*Madison*	411 H. H. Hall
Small, Thaxter Weymouth, Jr., Ch.Eng.	*Madison*	103 H. H. Hall
Smith, John Eldrid, Arts	*Calais*	212 H. H. Hall
Somers, Dwight LeRoy, Me.	*Waterbury, Conn.*	301 H. H. Hall
Spear, Bert Dyer, Arts	*South Portland*	Σ X House
Sprague, Frederick Nelson, Ch.	*Bangor*	223 Maple Street, Bangor
Sproul, Mary Wilson, Arts	*Livermore*	Balentine Hall
Stern, Abraham, Arts	*Bangor*	416 Hancock Street, Bangor
Stevens, Howard Winchester, Me.	*Portland*	408 H. H. Hall
Stinchfield, John Eastwood, Arts	*Orono*	190 Main Street
Stinson, Elwin Bruce, Arts	*Wilton*	301 H. H. Hall
Stone, Milon Thomas, Me.	*Stratford, Conn.*	410 H. H. Hall
Stone, Parker Wooster, Ce.	*North Haven*	52 Park Street
Stone, Rita Arnold, Arts	*Pomfret Center, Conn.*	Balentine Hall
Stone, Winfred Lee, Ce.	*Augusta*	107 Oak Hall
Stratton, Boyd Bennett, Agr.	*Hancock*	9 Peters Street

Striar, Abraham, Ch.Eng.	*Bangor*	14 Adams Street, Bangor
Striar, Bernard, Arts	*Bangor*	118 Maple Street, Bangor
Striar, Louis, Arts	*Bangor*	118 Maple Street, Bangor
Sulkowitch, Isaac David, Arts	*Portland*	110 H. H. Hall
Sweetnam, George Holmes, Arts	*Bedford, Mass.*	36 Forest Avenue
Swett, Alyce Isabelle, Arts	*South Portland*	Balentine Hall
Sylvester, Robert Edgar, Me.	*Brewer*	190 Center Street, Brewer
Taylor, Kenneth Earl, Arts	*Dead River*	88 Park Street
Taylor, Winfield Lewis, Agr.	*Rangeley*	305 H. H. Hall
Tear, John Paul, Fy.	*Old Town*	29 Seventh Street, Old Town
Temple, Dorothea Louise, Arts	*Richmond Corner*	Mt. Vernon House
Thayer, Alpha Powers, Arts	*South Paris*	303 H. H. Hall
Thomas, Allan Moses, Agr.	*Caribou*	112 Oak Hall
Thomas, Robert Atwood, Agr.	*Dexter*	112 Oak Hall
Thompson, Louis Dorr, Fy.	*Woodfords*	110 Oak Hall
Thorne, Raymond Burgess, Me.	*St. Albans*	109 H. H. Hall
Thorner, Isadore Nelson, Eng.	*Biddeford*	409 H. H. Hall
Tompkins, John Wiley, Me.	*Bangor*	16 Lincoln Street, Bangor
Tompkins, Lawrence Ellwood, Agr.	*Sherman Mills*	Stillwater
Topolosky, Francis Lawrence, Arts	*Woodland*	110 H. H. Hall
Towle, Charles Edgar, Eng.	*Fort Fairfield*	309 H. H. Hall
Tuell, Virginia Lois, Arts	*Dennysville*	Mt. Vernon House
Tuomi, Martha Ilona, Arts	*Monson*	Mt. Vernon House
Turner, Norman Webb, Ce.	*Isle au Haut*	411 H. H. Hall
Varnam, Doris Elizabeth, He.	*Limington*	20 Forest Avenue
Varney, Lewis Bishop, Me.	*Gorham*	11 Main Street
Vaughan, Ruth Isabel, He.	*Belfast*	Mt. Vernon House
Vaughn, Remsen Stoddard, Ch.	*Pleasantville, N. Y.*	201 H. H. Hall
Vautour, Thomas Doyle, Ee.	*Hallowell*	107 Oak Hall
Venskus, John Paul, Ee.	*Mexico*	306 Oak Hall
Viner, Sara Judith, Arts	*Bangor*	Mt. Vernon House
Wadleigh, Jesse Remington, Ee.	*Old Town*	10 High Street, Old Town
Wadsworth, Clarence Kirby, Ee.	*Gardiner*	211 H. H. Hall
Walenta, Ruth Sherlock, Arts	*South China*	66 Park Street

Walton, Russell Archer, Me.	*Wellesley, Mass.*	112 H. H. Hall
Ward, Ierdell Clark, Me.	*Caribou*	404 Oak Hall
Warren, George William, Ee.	*Dover-Foxcroft*	409 Oak Hall
Watson, Andrew Elwell, Agr.	*Oakland*	405 H. H. Hall
Webber, Charles Bradbury, Arts	*Orono*	36 Forest Avenue
Weeks, Edward Warren, Ee.	*Springfield, Mass.*	203 H. H. Hall
Wescott, Mary Eleanor, Arts	*Castine*	Balentine Hall
Wessell, Linwood Anderson, Arts	*Stockholm*	88 Park Street
Weymouth, Clifton Frank, Ce.	*Abbot*	303 H. H. Hall
Weymouth, Donna Victoria, Arts	*Abbot*	Mt. Vernon House
Wheeler, June McKinney, Arts	*Millinocket*	Mt. Vernon House
Whitcomb, Margaret Davis, Arts	*Orono*	394 College Road
Whitman, Carl Addison, Ce.	*East Auburn*	308 H. H. Hall
Wight, William Walton, Me.	*Bethel*	312 H. H. Hall
Wilbur, Herbert Tilden, Jr., Arts	*Bar Harbor*	87 Park Street
Willard, Robert Pierce, Me.	*Malden, Mass.*	408 Oak Hall
Williams, Roger Carleton, Fy.	*Brighton*	203 Oak Hall
Wilson, John Cameron, Ch.Eng.	*Augusta*	206 H. H. Hall
Winchenbaugh, Paul Hartly, Ce.	*Bedford, Mass.*	412 Oak Hall
Winton, Janet, He.	*Vassalboro*	Balentine Hall
Wood, Helen Gertrude, Arts	*Bridgewater*	Mt. Vernon House
Woodbury, Vivian May, Arts	*Burlington*	Mt. Vernon House
Wooster, Emery Joy, Jr., Ce.	*North Haven*	409 H. H. Hall
York, Alma Amanda, Arts	*Medway*	Mt. Vernon House
York, Alwyn Stafford, Ce.	*New Haven, Conn.*	311 Oak Hall
Young, Leslie Clough, Me.	*Onawa*	303 H. H. Hall
Young, Shirley Cynthia, Arts	*Orono*	56 Park Street
Young, Stanley Paul, Ce.	*Orono*	56 Park Street
Young, Willis Harold, Ce.	*Houlton*	101 Oak Hall
Zeitman, Minnie Sarah, Arts	*Portland*	The Maples

UPPERCLASS STUDENTS CONDITIONED FOR ADMISSION

Adams, Everett Kimball, Ee.	('32)	*Belfast*	Φ M Δ House
Bachrach, Samuel, Zo.	('33)	*Maynard, Mass.*	18 Oak Street
Barry, Stephen Ayrault, Me.	('33)	*Thomaston*	B K House
Berry, George Gavis, Eh.	('31)	*Presque Isle*	Φ H K House
Boyle, Donald James, Es.	('33)	*North Berwick*	B K House

Colby, Fred Bennett, Jr., Zo.	('33)	*Gardner, Mass.*	B Θ Π House
McLeod, Gregg Clarke, Me.	('33)	*Stillwater*	Stillwater
Mayers, Lyndon Oscar, Ee.	('33)	*Hallowell*	Λ X A House
Moore, Carl Freeman, Ch.Eng.	('33)	*Greenville Junction*	2 Bennoch Street
Partridge, George Almond, Zo.	('33)	*Ellsworth*	Θ X House
Patten, Frank Edward, Jr., Ce.	('31)	*Cherryfield*	Θ X House
Penley, Eugene Francis, Ch.	('33)	*West Paris*	Σ Φ Σ House
Petersen, Violet Marie, He.	('33)	*Hartford, Conn.*	10 Mill Street
Reed, George Bruce, Es.	('33)	*Hampden Highlands*	Σ X House
Roche, John William, Me.	('32)	*Portland*	Φ K House
Rubin, Mollie, Ed.	('32)	*Bangor*	55 Elm Street, Bangor
Smith, Clarence Dean, Es.	('33)	*Augusta*	A T Ω House
Vickery, Robert McCue, Ce.	('32)	*Hallowell*	Σ Φ Σ House
Webb, Frank Warren, Py.	('33)	*Arlington, Mass.*	Σ N House
Wilson, Eino Edward, Hy.	('33)	*Peabody, Mass.*	88 Park Street

SPECIAL STUDENTS

Atkinson, William Hibbert, Jr., Ee.	*Saxonville, Mass.*	Δ T Δ House
Butler, Carol Lord, Py.	*Bangor*	29 Montgomery Street, Bangor
Butler, Harry Wilson, Ce.	*Portland*	75 Bennoch Street
Cleaves, Isobel Narcissa, Arts	*Kennebunkport*	24 Oak Street
Davis, Harry Godfrey, Ch.Eng.	*Mechanic Falls*	Σ X House
Doe, Harold Oliver, Eh.	*Bangor*	100 Highland Street, Bangor
Freeman, Christine Gray, Arts	*Orono*	66 College Road
Harlow, Frank Berry, Arts	*Old Town*	38 High Street, Old Town
Hunt, Ruth Webb, Arts	*Bangor*	15 Grove Street, Bangor
Johnson, Lewis Olaf, Ce.	*Bangor*	131 Birch Street, Bangor
Johnson, Mildred Ethel, Arts	*Milford*	Milford
Kenyon, William Curtis, Es.	*Orono*	43 Pine Street
Leddy, John Davenport, Arts	*South Portland*	211 H. H. Hall
Littlefield, Eugene H., Ed.	*Orono*	90 Park Street
Long, Malcolm Graham, Ce.	*East Bluehill*	A T Ω House
Loring, Richard Willett, Ce.	*Brookline, Mass.*	A T Ω House
Lu, Po, Ch.Eng.	*Tientsin, China*	College Road
Mead, Hazel Stewart, Fr.	*Bangor*	106 Grove Street, Bangor

Moran, Lester Dwinel, Hy.	*Millinocket*	Θ X House
Peabody, Ruth Eugenia Alice, Sp.	*Levant*	8 Pine Street
Protas, Stanley Joseph, Fr.	*Biddeford*	Φ K House
Quine, Charles Frederick, Arts	*Greeba, Isle of Man, B. I.*	Bangor Theological Seminary, Bangor
Rees, George Raymond, Fm.	*Orono*	7 Gilbert Street
Rich, Della Josephine, Arts	*Orono*	15 Pleasant Street
Rudman, Irene Epstein, Eh.	*Bangor*	3 Fairmount Parkway, Bangor
Savage, Suzanne Boutelle, Arts	*Bangor*	133 Broadway, Bangor
Sawyer, Clayton Leonard, Ch.	*Orono*	Park Street
Seymour, Theodore Roland, Ch.	*South Brewer*	556 So. Main Street, So. Brewer
Stone, Willard Batchelder, Ch.	*Alfred*	38 Crosby Street
Thomas, Frank Stuart, Arts	*Camden*	36 College Road
Viola, Thomas Anthony, Jr., Ed.A.	*Orono*	Main Street
Wheaton, Arthur Herbert, Arts	*East Providence, R. I.*	407 Oak Hall
Whittemore, Priscilla Brooks, Agr.	*Mansfield, Mass.*	22 Myrtle Street

TWO-YEAR COURSE IN AGRICULTURE

Second Year

Cyr, William John	*Lille*	Θ X House
Lapham, George Mason	*Milo*	34 Pine Street
McLaughlin, Herman Gilbert	*Limestone*	A Γ P House
Weathern, Benjamin Harrison	*Farmington*	A Γ P House

First Year

Andersen, George John	*Portland*	10 Beech Street
Dickson, Bruce Evan	*Wiscasset*	19 Park Street
Ford, Lore Hemenway, Jr.	*Whitefield*	43 Peters Street
Jones, Robert Carroll	*Sabattus*	10 Beech Street
Jones, Ronald Beckler	*Sabattus*	10 Beech Street
MacLeod, Malcolm Graeme	*Dark Harbor*	52 Park Street
Pride, Thomas Henry	*Portland*	Veazie

SPRING SEMESTER, 1931

New Registrations

Graduates

Ashworth, Jessie Ellen, B.A., M.A., Hy. Maine, 1929; Clark, 1930	*Orono*	88 North Main Street
Bean, Achsa Mabel, B.A., M.A., Zo. Maine, 1922, 1925	*Orono*	University Place
Campbell, Louise Grace, B.A., Eh. Ohio State, 1929	*Orono*	180 Main Street
Fairman, Mary Evangeline, B.Ed., Eh. Rhode Island College of Education, 1924	*Pawtucket, R. I.*	48 Pierce Street
Gamage, Vernon Alfred, B.S., Fm. Maine, 1929	*Litchfield*	Α Γ Ρ House
Kirshen, Verona Ethel, B.S., Es. Whitman College, 1926	*Orono*	75 Forest Avenue
Trickey, Philip Harold, B.S., Ee. Maine, 1928	*Bangor*	17 Sixth Street, Bangor

Seniors

Burnham, Richard Trittene, Fy.	*Machias*	Φ K House
LaPlante, Antonio, Me.	*York Village*	Φ K House
Marks, Golden Grace, Ed.	*Limestone*	37 Forest Avenue
Nowland, James, Eh.	*Ashland*	Θ X House
Robbins, Colson Jay, Es.	*McKinley*	356 College Road
Theriault, Martin Harold, Ms.	*Millinocket*	86 Mill Street

Juniors

Andrews, Ruth Lubelle, Fr.	*Wytopitlock*	394 College Road
Arnold, Cedric Loring, Es.	*Swampscott, Mass.*	Θ X House
Carter, Donald Everett, Fy.	*Barre, Mass.*	111 Park Street
Crosby, Luthan Albert, Ms.	*Milo*	40 Middle Street
Dunphy, Doris Alexina, Ed.	*Freeport*	Balentine Hall
Greene, Dorothea Louise, Py.	*Pembroke*	Colvin Hall
McGowan, John Gay, Pb.	*Cambridge, Mass.*	Θ X House
Trueworthy, Leon Eugene, Ce.	*Bangor*	9 Catell Street, Bangor

Sophomores

Chapman, Douglas Thomas, Ce.	*Woodland*	Σ Φ Σ House
Feeley, John Robert, Zo.	*Orono*	43 Main Street
Frost, Alan Wesley, Ce.	*Brunswick*	Φ K House
Grady, Stephen Joseph, Py.	*Winthrop, Mass.*	K Σ House
Mayo, Robert Kenneth, Eh.	*Southwest Harbor*	33 Bennoch Street
Parker, Albert Freeman, Fy.	*East Pepperell, Mass.*	K Σ House
Stinchfield, William John, Ee.	*Phillips*	K Σ House

Freshmen

Porter, Harriet Richardson, Arts	*Old Town*	85 Middle Street, Old Town
Porter, Richard Cutter, Ce.	*Westbrook*	K Σ House
Stetson, Joseph Caldwell, Me.	*Brunswick*	K Σ House
Wall, Lillian Franck, Arts	*Bangor*	147 West Broadway, Bangor

Specials

Dymond, Anna Torrens, Arts	*Bangor*	86 Grove Street, Bangor
Ekonomer, Photis George, Arts	*Bangor*	113 Lincoln Street, Bangor
Merrill, Roger William, Ch.	*Bangor*	18 Jefferson Street, Bangor
Monroe, Merna Myrtha, Arts	*Orono*	32 Mill Street
Willis, Malcolm Ora, Bt.	*Bangor*	15 Prentiss Street, Bangor

SUMMER SESSION, 1930

Candidates for the Master's Degree

Adams, Amy Belle, B.A., Eh. Maine, 1927	*Patten*
Adriance, Sarah Ada, B.A., Ed. New York State College for Teachers, 1920	*Slingerlands, N. Y.*
Alley, Eva Lucille, B.A., Ed. Colby, 1925	*Calais*

Babb, Frances Harriet, B.A., Eh. *Bangor*
Maine, 1930
Bean, Phyllis Annie, B.S., Ed. *Old Orchard*
Simmons, 1926
Bonhard, Helen Mabel Wood, B.A.,
M.A., B.L.I., Ed. *Syracuse, N. Y.*
Syracuse, 1892; 1895;
Emerson College of Oratory, 1927
Bosworth, Marguerite Rose, B.S., He. *Holyoke, Mass.*
Massachusetts Agricultural, 1926
Brooks, Elizabeth Maude, B.A., Ed. *Madison, N. J.*
Illinois, 1915
Brown, Norton Claude, B.S., Ms. *Richmondville, N. Y.*
Cornell University, 1926
Bunker, Miriam Sarah, B.A., Ed. *Bangor*
Mount Holyoke, 1927
Burbank, Oren Abijah, B.S., Ed. *Arlington, Vt.*
Vermont, 1927
Caldwell, John Carroll, B.A., Ed. *Island Falls*
Maine, 1928
Chatwin, Dorothy Ruth, B.A., Ed. *New York, N. Y.*
Hunter, 1928
Clark, Lewis Bates, B.A., Es. *Rockland*
Maine, 1925
Clark, Ralph Merrill, B.S., Ed. *Pomfret, Conn.*
Trinity, 1922
Conley, Katherine Amanda, B.A., Eh. *Ellsworth*
Beaver, 1925
Cromwell, Pauline Keefer, B.A., Ed. *Brunswick, Md.*
Western Maryland, 1921
Cromwell, Robert Floyd, B.A., Ed. *Brunswick, Md.*
Western Maryland, 1922
Cunningham, Helen Frances, B.A., Es. *Cliftondale, Mass.*
Boston University, 1929
Davis, Alta Estelle, B.A. *Newport*
Colby, 1918
Dean, Dorothy Brown, B.A., Ed. *Bangor*
Smith, 1924
DeWitt, John Bailey, B.A., Ed. *LaGrange*
Colby, 1912

Dooey, Merrill Harmon, B.A., Hy. *Hartford, Conn.*
Maine, 1927

Eastman, Madeleine Gladys, B.A., Ed. *Old Town*
Maine, 1921

Eyre, Dorothy Jane, B.A., Eh. *East Saugus, Mass.*
Boston University, 1928

Fairman, Mary Evangeline, B.Ed., Eh. *Pawtucket, R. I.*
Rhode Island College of Education, 1924

Finley, Raymond Stevens, B.A., Ed. *Norridgewock*
Maine, 1925

Hahn, Patricia Marie, B.A., Ed. *New York, N. Y.*
Hunter, 1927

Hannegan, Elsa, B.S., Hy. *Melrose Highlands, Mass.*
Boston University, 1929

Hinchliffe, John Henry, B.S., Ed. *Orange, Conn.*
Maine, 1903

Hodgdon, Fernald, B.S., Ed. *Portland*
Maine, 1925

Hudson, Alice Louise, B.A., Ed. *Stillwater, N. Y.*
Syracuse, 1916

Hylan, John Coffey, B.S., Ed. *Kezar Falls*
Bates, 1926

Inman, Harold Howard, B.A., Hy. *Orono*
Maine, 1930

Jewett, Alice Bradford, B.A., Eh. *Head Tide*
Colby, 1929

Johnson, Margaret Elva, B.A., Ms. *Bangor*
Maine, 1927

Kelley, Linwood John, B.A., Ed. *Lewiston*
Maine, 1921

Keyes, Merle Roliston, B.S., Ed. *West Pembroke*
Colby, 1908

Kitchin, Elon Stanley, B.S., Ed. *Palermo*
Colby, 1923

Landers, Carleton Ames, B.A., Ed. *Stockholm*
Maine, 1920

Lee, Francis Gregory, B.A., LL.B., Ed. *Paterson, N. J.*
Boston College, 1917; American
Extension University, 1930

Leland, Lowell Pond, B.A., Eh. *Bangor*
Colby, 1929

McCue, Eleanor Lord, B.A., Eh. *Berwick*
Bates, 1925
Magee, John Henry, B.A., Es. *Bangor*
Maine, 1917
Mahoney, Nan Louise, B.S., Ed. *Caribou*
Maine, 1925
Mallett, Effie Barnum, B.S., Ed. *Bridgeport, Conn.*
New York University, 1928
Medlock, Clarence Alverna, B.S. in Ed., Ed. *Pittsburgh, Pa.*
Carnegie Institute of Technology, 1917
Merrill, J. Vey, B.S. in Ed., Ed. *Concord, Mass.*
Boston University, 1929
Monroe, John Read, B.S., Es. *Monroe*
Colby, 1925
Morse, Frank Leander Staples, B.A., Ed. *Rockland*
Maine, 1922
Nickerson, Kermit Spearin, B.A., Ed. *Winterport*
Dartmouth, 1926
Northrup, Christine Adelia, B.A., Ed. *Palermo*
Maine, 1919
Obenshain, Mary Eidson, B.A., Ed. *Roanoke, Va.*
Lynchburg, 1927
Osborne, Sidney, B.S., Ed. *Hingham, Mass.*
Maine, 1924
Otis, Edmund Lyman, B.S., Ed. *Bridgton*
Maine, 1928
Patterson, Robert Allen, B.A., Ed. *Bangor*
Harvard, 1919
Perkins, Arthur Chester, B.S. in Ed., Ed. *Princeton*
Boston University, 1929
Phillips, Evelyn Butler, B.A., Ed. *Dover-Foxcroft*
Bates, 1926
Prohaska, Ruth Evelyn, B.Ed., Hy. *West Roxbury, Mass.*
Teachers College, Boston, 1928
Quinn, Mary Theresa, B.A., Eh. *Bangor*
Maine, 1930
Reed, Angie Catherine, B.A., Ed. *Waterville*
Colby, 1927

Ross, John Stanley, B.A., Ms. *Rumford*
Maine, 1928
Ryder, Mildred May, B.A., Ed. *So. Brewer*
Bates, 1914
Salley, Florence Ulmer, B.A., Fr. *Providence, R. I.*
Maine, 1921
Smith, Geneva May, B.S. in Ed., Ms. *East Corinth*
Boston University, 1924
Smith, Marian Hesse, B.A., Py. *Watertown, Mass.*
Tufts, 1926
Snow, Charles Augustus, B.A., Ed. *Fryeburg*
Maine, 1920
Somerville, Phil Thaddeus, B.S., Ed. *Bangor*
Colby, 1921
Springer, William Glen, B.S., Ed. *Orono*
Colby, 1929
Thompson, George LeMar, B.A., Ed. *Asbury Park, N. J.*
Maine, 1926
Walker, Carleton Leslie, B.A., Ed. *Middletown, Conn.*
Bates, 1923
Waterhouse, Mary, B.S., He. *Biddeford*
Maine, 1925
Whitney, Walter Reginald, B.S., Eh. *Bangor*
Bowdoin, 1923
Winslow, Daphne Marguerite, B.A., Fr. *Rockland*
Maine, 1927
Wood, Hazel Ota, B.A., Ed. *Bridgewater*
Maine, 1927
Woods, Harold Spry, B.Ph., Ed. *Bangor*
Yale, 1909
Wright, Raymah Twining, B.A., Ms. *Andover, Mass.*
Wheaton, 1927

OTHER SUMMER SESSION STUDENTS

1930

Abbott, Francis George *Woodland*
Abbott, Lillian *Columbia*
Abrahams, William Charles *Bangor*

Alden, Francis Carter, B.A. Swarthmore, 1930	*Philadelphia, Pa.*
Ames, Smith Whittier	*Skowhegan*
Anderson, Lily	*Derby*
Anderson, Philip Warren	*So. Portland*
Anthony, Caris Vivien	*Apponaug, R. I.*
Ashworth, Jessie Ellen, B.A., M.A. Maine, 1929; Clark, 1930	*Orono*
Ayer, Louise May	*Lincoln*
Balentine, Dorothy Carolyn, B.A. Colby, 1930	*Fairfield*
Ballantyne, Ruth Hall	*Lincoln*
Ballin, Stanley Lawrence	*New York, N. Y.*
Barstow, Helen Marie	*Bangor*
Biggs, John, B.A. Virginia Military Institute, 1930	*Wichita Falls, Texas*
Blanchard, Dorothy Aileen	*Brewer*
Blanchard, Esther Hurd	*Whitman, Mass.*
Blocklinger, Warren Stanley	*Portland*
Boynton, Vernon Winship	*Weeks Mills*
Bradford, Emma Alice	*Dexter*
Brawn, Esther Merrifield	*Lincoln*
Brickett, Elsie Furbush, B.A., M.A. Bates, 1925; Maine, 1929	*Scranton, Pa.*
Briggs, Mary Lilla	*Auburn*
Brown, Georgie Mae	*Farmington*
Bucknam, George Wilson	*Columbia Falls*
Burke, M. Dorothy	*Bangor*
Caldwell, Jess Walters, B.S. Virginia Military Institute, 1923	*Radford, Va.*
Cameron, Alice Mary	*Portland*
Carle, Stanton	*Fostoria, Ohio*
Carter, Bertha Wheeler	*Etna*
Chapman, Robert Erskine	*Melrose, Mass.*
Chase, Julia Ardelle, B.A. Colby, 1927	*Houlton*
Clark, Warren Clifford, B.A. Dartmouth, 1928	*Belfast*
Clements, Helen Carolyn	*Winterport*
Cobb, Charles Edward	*Oakfield*
Coughlin, Charles Gerald	*Rockland*

Crocker, Alice Velma	*Lee*
Crombie, Marcia Hazel	*Bingham*
Cross, Harriette Elizabeth	*Bangor*
Crozier, Edgar Raymond	*Bangor*
Curran, Raymond Henry, B.A. George Washington, 1923	*Old Town*
Curtis, Doris Buford	*Winterport*
Cyr, Anne Marie	*Port Chester, N. Y.*
Cyr, Harvey S.	*Old Town*
Davey, Mildred Arline	*Hastings-on-Hudson, N. Y.*
Dawson, Jean Darby, B.A. Pittsburgh, 1925	*Greensburg, Pa.*
Day, Annie Viola	*Waterville*
Doane, Flora Ames	*Bangor*
Dooey, Mary Louise	*Brewer*
Douglas, Robert Livingston	*Rumford*
Downes, Frances Cole	*Winterport*
Drinkwater, Vivian Marie	*Brewer*
Drisko, Frank Eugene	*Harrington*
Dymond, Anna Torrens	*Bangor*
Eisnor, Doris Grace	*Bangor*
Evans, Emily Richardson	*Belfast*
Evans, Esther Frances	*Belfast*
Ewing, Arthur Rolland	*Peoria, Ill.*
Fanchoni, Elmore George	*So. Brewer*
Fellows, Margaret	*Bangor*
Fernald, Waldron Eaton, B.A. Maine, 1927	*East Boothbay*
Field, George Marion	*Detroit*
Fleming, Villa Leone	*Rockland*
Forte, Frances, B.S. in Ed. Teachers College, Boston, 1929	*Medford, Mass.*
Fox, Laura Bradbury	*Enfield*
Fredland, Ethel Swasey	*Lincoln*
Galaher, Mary Adams	*North Andover, Mass.*
Gale, Nellie Isabella	*Bangor*
Gales, Eunice Parker	*Ashland*
Garland, Bertha Lovina	*Old Town*
Gerrish, Henry Thomas	*Brownville*
Gillis, Nettie L.	*Calais*
Gilman, Stanwood Cushing	*Bath*

Gonyer, Lucille Therese	*New York, N. Y.*
Gordon, John Lee	*Portland*
Gould, Phyllis	*Bangor*
Gould, Sylvia, B.A. Maine, 1930	*Bangor*
Gove, Emily Jennie	*Boothbay*
Gowen, Mabel Hope	*So. Brewer*
Goyder, George Armin	*New York, N. Y.*
Graham, Lorrence Elbridge, B.S. Columbia, 1930	*El Paso, Texas*
Griffin, Elizabeth Rae	*Stockton Springs*
Griffin, William Frank	*Levant*
Guice, John Lawrence, B.A. Maine, 1929	*Orono*
Hadlock, Wendell Stanwood	*Ellsworth*
Hale, Lois Ellen	*Castine*
Hallowell, Marie Clare	*Dennysville*
Hanscom, William Asa, B.S. Maine, 1927	*Orono*
Harding, Phyllis Marguerite	*Brewer*
Hartshorn, Zenas Downs	*Belfast*
Hatch, Marcia Susan	*Washington*
Hathorne, Helen Louise, B.A. Maine, 1922	*Orono*
Hawkins, Laurence Avery	*Brewer*
Hermann, Florence Whitney	*Cumberland Mills*
Hews, Ruth Lanpher	*Mount Desert*
Higgins, Harold	*Jonesport*
Hinchliffe, Jr., John Henry	*Orange, Conn.*
Hinckley, Mildred Chase	*Blue Hill*
Hovis, Josephine Lucile, B. A. Allegheny, 1922	*Butler, Pa.*
Hodgman, Earle Lotton	*Orono*
Hodgkins, Phebe Applebee	*Enfield*
Holton, Rose	*Rushville, N. Y.*
Hoyt, Rachel Elzena	*Easton*
Huber, Leo Harold	*Mt. Vernon, N. Y.*
Huddilston, Homer Woodbridge	*Orono*
Hunter, Adele Georgia	*Wilkinsburg, Pa.*
Hunter, Alexia Bacon	*Alton*
Hunter, Nancy Lloyd	*Wilkinsburg, Pa.*

Hussey, Freeman Lincoln Otis	*Old Town*
Hussey, Madelene Eleanor, B.S. Maine, 1929	*Augusta*
Jackson, Myra Louise Sevey	*Dexter*
Jackson, Welford Hiram, B.A. Howard, 1924	*Washington, D. C.*
Jerardi, Peter Joseph, B.S. Massachusetts Institute of Technology, 1927	*Arlington, Mass.*
Johnson, Lewis Olaf	*Bangor*
Johnson, Martha Meserve	*Bangor*
Johnson, Miriam Callow	*South Orange, N. J.*
Jones, Clyde Percival	*Bangor*
Keddie, James, Jr.	*Wellesley, Mass.*
Keith, Edward William	*Old Town*
Kelley, Harold Frederick, B.S. Norwich, 1930	*Bellows Falls, Vt.*
Kennedy, Thomas Joseph	*Holyoke, Mass.*
Kenney, Ruth Butler, B.A. Middlebury, 1929	*Worcester, Mass.*
Kent, Frank Holmes	*Wytopitlock*
Keyes, Carolyn Hill	*West Pembroke*
Kick, Samuel Adam	*Lisbon Falls*
King, Inza Pearle	*Benton Station*
Kinney, Nita Jane	*Houlton*
Kneeland, Phyllis Amanda	*West Roxbury, Mass.*
Knowles, Jerome Henry, Jr.	*Northeast Harbor*
Knowlton, Sarah Dickinson Foster, B.A. Wheaton, 1923	*Bangor*
Knowlton, Thomas Anson	*Bangor*
Knox, Florence Laura	*Richmond*
LaPointe, Doris Elizabeth	*Orono*
Largay, John Edward	*Bangor*
Larson, Ruth Ingsborg	*Dorchester, Mass.*
Lawrence, James Moorman	*Bristol, Tenn.*
Libby, Herbert Morton	*Corinna*
Liscomb, Helen Elsie	*Salisbury's Cove*
Livingstone, Elizabeth	*Winchester, Mass.*
Love, Charles Budd	*Red Beach*
Lowell, Johnson Lombard	*Lee*
Ludwig, Margaret Evelyn	*Washington*
Lumpkin, Iva Mae	*Plymouth, Conn.*

Lunn, Beatrice Madeline	*Southbridge, Mass.*
MacCormack, Stanlie	*Millinocket*
MacIntire, Mildred	*Rumford*
Mackenzie, William McAlister	*Central Falls, R. I.*
McAloon, Eileen, B.A. Trinity, Washington, D. C., 1928	*North Andover, Mass.*
McCart, John Henderson	*Eastport*
McCready, Pauline Isabel	*Bangor*
McCue, Eleanor Lord, B.A. Bates, 1925	*Berwick*
McLean, Vera Irene	*Old Town*
Madden, Clarence Edwin, Jr.	*Warren*
Mansfield, Alwynne Etta	*So. Portland*
Mansfield, Laurence Ellis, B.S. Georgia Tech., 1916	*Atlanta, Ga.*
Marsh, Marion Faye, B.A. Maine, 1927	*Orono*
Martin, Donat B.	*St. Agatha*
Mason, Alice Eliza, B.A. Maine, 1922	*Mt. Desert*
Matthews, Ursula Carolyn	*Wells Beach*
Mead, Hazel Stewart	*Bangor*
Mead, Katherine Kilgore	*Bangor*
Merrifield, Mildred Ellis	*Washington*
Merrill, Ernestine Louise	*Orono*
Merrill, Roger William	*Bangor*
Miller, Louise Brookes	*Bangor*
Moore, Thelma Lucy	*Bangor*
Morrell, Marion Lois	*Fort Fairfield*
Morse, Eunice Tolman	*Rockland*
Motz, Doris Hallowell	*Mt. Desert*
Murch, Ada M.	*Milford*
Mutty, Carlista Louise, B.A. Maine, 1929	*Old Town*
Nelson, Winona Pollard	*Houlton*
Nickerson, Kermit Spearin, B.A. Dartmouth, 1926	*Winterport*
Nickerson, Vida Eleanor	*Hampden Highlands*
Northrup, Francis Farrington	*Bangor*
Packard, Hilda Maria	*Skowhegan*
Parker, Lucy Ella	*Winterport*

Parsons, Alta Louise	*Newport*
Parsons, Irene Guppy	*East New Portland*
Partridge, George Almon	*Ellsworth*
Patterson, Joanna Gertrude	*Rockland*
Pelletier, Ernest Joseph	*Caribou*
Perkins, Gerda Redderborg	*East Corinth*
Perkins, Philip Charles	*Castine*
Petersen, Violet Marie	*Hartford, Conn.*
Peterson, Robert Arnold, B.S. Colby, 1929	*New Sweden*
Phillips, Amy Eliza	*Waterville*
Phillips, Charles Cross, B.A., M.A. Bowdoin, 1899; Harvard, 1909	*Dover-Foxcroft*
Pidgeon, Delma Belle	*Swedesboro, N. J.*
Pierce, Florence Haynes	*Bangor*
Plummer, Jr., Bernie Elliot, B.S., M.S. Maine, 1924, 1925	*Orono*
Poole, Ivan Homer	*Vinalhaven*
Porter, Helen Mildred	*West Brooksville*
Porter, Percy Gowell	*Littleton*
Powers, Lillian Elsie	*East Millinocket*
Priestman, Mabel Ivy	*Brownville Junction*
Qualey, Margaret Frances	*Benedicta*
Quinn, Marion Frances	*Bangor*
Randall, Anthony LeRoy	*Cherryfield*
Redman, John Everett	*Boothbay Harbor*
Rhoades, Norton, B.A. Colby, 1927	*Belfast*
Riddiough, William Robert	*Bucksport*
Robbins, Carleton Morse	*Belfast*
Robbins, Colson Jay	*McKinley*
Robinson, Glenn Meredith	*Bangor*
Robinson, Helen Alta	*Bangor*
Robinson, Morris Reed	*Island Falls*
Robinson, Orett Forest, B.S. in Ed. Boston University, 1927	*Thomaston*
Rooney, Mary Elizabeth	*Brewer*
Ross, Dorothy Morton	*Auburn*
Roulston, Royal Allison	*Stillwater*
Rowe, Carrie Henrietta	*Bangor*

Rowell, Paulyne Frances, B.A. Maine, 1927	*Orono*
Rubin, Mollie	*Bangor*
Samways, Mary Isabel, B.A. Maine, 1926	*Orono*
Saunders, Ethel Stover	*Bucksport*
Schultz, Norman Laurence	*Lisbon Falls*
Searles, Marion Edith	*New Bedford, Mass.*
Shannon, Clayton William	*St. Petersburg, Fla.*
Sherwood, Clement Standish	*Hartford, Conn.*
Shesong, Ruth Virginia	*Old Town*
Small, Irving Wheelock	*Bangor*
Smith, Amy Louise	*Ellsworth*
Snow, Aubrey Hamilton	*Atkinson*
Snow, Blanche Gertrude, B.A. Brown, 1913	*Pawtucket, R. I.*
Snow, Myrtleen Frances	*Old Town*
Somes, Morris H.	*Mt. Desert*
Spaulding, Helen Constance, B.S. Simmons, 1913	*Orono*
Spear, Bert Dyer	*So. Portland*
Sprague, Ursula Elizabeth	*Bangor*
Steinert, Gertrude Florence, B.A. Hunter, 1928	*Flushing, N. Y.*
St. Lawrence, Leslie Henry	*Waban, Mass.*
Stone, Maudie Lorena, B.S., M.S. Chicago, 1897, 1903	*Brooklyn, N. Y.*
Studley, Millard Filmore	*Weeks Mills*
Syphers, Ansel James	*Mars Hill*
Thomas, William Parry	*Brownville*
Thompson, Eleanor Isabel	*Prentiss*
Thompson, Pearl Burke	*Lee*
Thurlow, Mary Eugenia	*So. Gardiner*
Thurston, Frederick Lovejoy, B.A. Bates, 1906	*Pittsfield*
Tolman, Edward Wesley	*Springfield*
Totman, Margaret	*Fairfield*
Totman, Virgil Connor, Jr.	*Oakland*
Towne, Franklyn Albert	*Norway*
Tuck, Alonzo Harry	*Wytopitlock*
Tupper, Ernest Grant	*Stockton Springs*

Tupper, Florence Preston	*Stockton Springs*
Tweedie, Charles Henry	*Rockland*
Ulmer, Walter Francis, B.S. Bates, 1928	*Bangor*
Veayo, Galen Irving	*Bangor*
Vickery, Robert Nickerson	*Brewer*
Vincent, Blanche	*Linkwood, Md.*
Wall, Lillian Frances	*Bangor*
Warren, Levinio Evelyn	*Machiasport*
Wasgatt, Asa Vernon	*Bar Harbor*
Waterhouse, Frank Chester	*Old Town*
Weaver, George Randolph	*Ashland*
Weed, Dorothy Alma	*Monticello*
Weston, Susan Houghton, B.A. Colby, 1906	*Wilton*
Weymouth, Frank L. Day, B.A. Clark, 1925	*Boston, Mass.*
White, George Kenneth	*East Orland*
Whitney, Elna Aldrich	*Milford, Mass.*
Whitney, Eva Amelia	*Kenduskeag*
Williams, Alice Eudora	*Islesboro*
Wolfe, Ida Lena	*Lisbon Falls*
Wood, Therese Elizabeth, B.S. Western Reserve, 1923	*Orono*
Woodbury, Laurence Carroll	*West Medford, Mass.*
Worthen, Jennie Ingraham	*East Corinth*
Youngs, Emily Bull	*Elizabeth, N. J.*

General Summary

1930-1931

FACULTY

President	1
Deans and Directors	10
Professors	45
Associate Professors	21
Assistant Professors	29
Lecturers	1
Instructors	49
Critic Teachers	4
Graduate Fellows and Scholars	14
Assistants	10
Agricultural Experiment Station Staff	28
Agricultural Extension Service Staff	51
Total	263

By Divisions

President	1
College of Agriculture	37
College of Arts and Sciences	74
College of Technology	40
School of Education	9
Agricultural Experiment Station	29
Agricultural Extension Service	52
Officers common to all colleges	21
Total	263

STUDENTS

1930-1931

	Total	Men	Women
Graduate Students	51	30	21
Seniors	323	236	87

Juniors		328	243	85
Sophomores		401	294	107
Freshmen		479	363	116
Specials		38	25	13
Upperclass Students Conditioned for Admission		20	18	2
Two-Year Course in Agriculture				
First Year	7			
Second Year	4	11	11	0
		1651	1220	431
Summer Session		351	153	198
Grand Total (omitting duplicates in Summer Session)		1946	1350	596

Classification by Colleges

Graduate Students	51	30	21
College of Agriculture	335	225	110
College of Arts and Sciences	642	354	288
College of Technology	601	601	—
School of Education	22	10	12
	1651	1220	431

Candidates for Degrees

Graduate Students	51	30	21
College of Agriculture	332	223	109
College of Arts and Sciences	618	342	276
College of Technology	591	591	—
School of Education	21	9	12
	1613	1195	418
Additional candidates for the M.A. degree in the Summer Session	69	33	36

Classification by Residence

Maine, by counties:	
Androscoggin	52
Aroostook	126
Cumberland	190
Franklin	22
Hancock	98
Kennebec	93
Knox	61
Lincoln	22
Oxford	59
Penobscot	534
Piscataquis	45
Sagadahoc	25
Somerset	57
Waldo	51
Washington	80
York	79
Maine	1594
Massachusetts	202
Connecticut	41
New York	36
New Jersey	15
Pennsylvania	13
Rhode Island	9
Maryland	4
Vermont	4
New Hampshire	3
Ohio	3
Virginia	3
Texas	2
Wisconsin	2
Delaware	1
District of Columbia	1
Florida	1
Georgia	1
Illinois	1
Indiana	1
Iowa	1
Kentucky	1

Michigan	1
Tennessee	1
British Isles	1
Canada	1
China	1
Hawaii	1
Scotland	1
	1946

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