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# UNIVERSITY OF MONTANA BULLETIN

State University Series

Number 338

# STATE UNIVERSITY

COLLEGE OF ARTS AND SCIENCES, SCHOOLS OF BUSINESS ADMINISTRATION, EDUCATION, FORESTRY, JOURNALISM, LAW, MUSIC AND PHARMACY

# CATALOGUE NUMBER For 1933-1934

INCLUDING
ANNOUNCEMENTS FOR
1934-1935

MISSOULA, MONTANA MAY, 1934

Published monthly at Missoula, Montana. Entered as secondclass matter at the postoffice at Missoula, Montana, under Act of Congress, August 24, 1912.

#### THE UNIVERSITY OF MONTANA

#### H. H. SWAIN, Executive Secretary of the University

The University of Montana is constituted under the provisions of Chapter 92 of the Laws of the Thirteenth Legislative Assembly, approved March 14, 1913 (effective July 1, 1913).

The general control and supervision of the University are vested in the State Board of Education. For each of the component institutions there is a local executive board.

#### Montana State Board of Education

FRANK H. COONEY, GOVERNOR. R. T. NAGLE, Attorney General	Ex-Officio President
ELIZABETH IRELAND, Supt. of Public I. W. M. Johnston, 1935Billings	nstructionEx-Officio Secretary FRANK ELIEL, 1937
M. Murray, 1935Glasgow E. C. Carruth, 1936Havre	A. O. GULLIDGE, 1937Baker P. T. McCarthy, 1938Missoula
W. S. Davidson, 1936Bozeman	EMMET J. RILEY, 1938Helena

The University comprises the following institutions, schools and departments:

#### The State University, Missoula

Established February 17, 1893, and consisting of

The College of Arts and Sciences The School of Law	The School of Business Administration The School of Education
The School of Pharmacy	The Summer Session
The School of Forestry	The Biological Station (Flathead Lake)
The School of Journalism	The Public Service Division
The School of Music	The Graduate Division

Charles H. Clapp, President

#### The State College, Bozeman

Established February 16, 1893, and consisting of

The College of Agriculture	The School of Music
The College of Engineering	The Secondary School of Agriculture
The College of Applied Science	The Agricultural Experiment Station
The College of Household and	The Agricultural Extension Service
Industrial Arts	ANTONIONO ISOL 100

Alfred Atkinson, President

#### The Montana School of Mines, Butte

Established February 17, 1893, and consisting of

The Course in Mining Engineering
The Bureau of Mines and Geology
Francis A. Thomson, President

The Course in Metallurgical Engineering
The Course in Geological Engineering

#### The State Normal College, Dillon

Established February 23, 1893, and consisting of

The Two-years Course
The Four-years Course
The Teachers' Service Division
Sheldon E. Davis. President

#### The Eastern State Normal School, Billings

Established March 12, 1925, and consisting of

The Two-years Course The Summer Quarter

Lynn B. McMullen, President

#### The Northern Montana College, Havre

Established March 8, 1913, and consisting of

The Two-years Liberal Arts and Pre-professional Courses G. H. Vande Bogart, President

For publications and detailed information concerning the different schools and colleges address the Registrar of the particular institution concerned. Communications intended for the Executive Secretary of the University should be addressed to the State Capitol, Helena, Montana.

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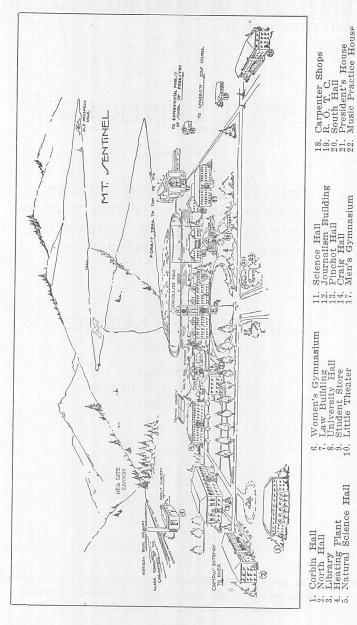
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# THE CAMPUS



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# STATE UNIVERSITY CALENDAR, 1934-35

#### 1934

Spring	Quarter
--------	---------

oping au	arter
March 20, Tuesday	Registration of New Charles
June 8, Friday	Spring Quarter Ends
	bring Quarter Ends

#### Summer Session

June 12 Tuesday	Registration
July 4. Wednesday	Instruction Begins
August 10, Friday	Session Ends

#### Autumn Quarter

September 25-29, Tuesday to SaturdayFreshman Week and Registration of Freshmen and New Students with Advanced Standing
October 1, Monday Registration of Former Students November 29, Thursday Registration Degins
December 17-20, Monday to Thursday

#### 1935

#### Winter Quarter

January 2, Wednesday January 3, Thursday February 17, Sunday	
March 18-21, Monday to Thursday	Charter Day
March 21, Thursday	

#### Spring Quarter

March 23, Saturday March 25, Monday May 15-17, Wednesday to Eriday.	Registration of New Students
June 2, Sunday 2:00 p. m	Baccalaureate Evenciaes
June 7, Friday	Spring Quarton Enda

#### Summer Session

June 10, Monday	Registration
July 4, Thursday	Instruction Begins
August 9, Friday	Independence Day, a Holiday

#### Autumn Quarter

September 24-28, Monday to Friday	
September 30. Monday	Registration of Former Students
November 28, Thursday December 16-19, Monday to Thursday December 19, ThursdayQuarte	Inanksgiving Day, a Holiday

## Official Directory

#### **Executive Board**

CHARLES H. CLAPP (ex-officio)	Missoula
L. E. Bunge (term expires 1935)	Missoula
S. J. Coffee (term expires 1937)	Missoula
J. B. Speer. Secretary	

## **Administrative Officers**

#### The Faculty

ADAMS, HARRY F	
AMES, WALTER R	1920.
Armsby, Lucille Jameson (Mrs.) Secretary to the Pr B.A., State University of Montana, 1922.	esident
*ARNOLDSON, LOUISE G. (Mrs.)Assistant Professor of	Foreign
Language	
B.A., University of Utah, 1919; Diplome d'Etudes Franca Touraine (Alliance Francaise—Universite de Poitiers), 1914	; Ph.D.,
University of Paris, 1934.  Atkinson, Ernst A	chology
B.A., University of Denver, 1920; M.A., State University of	of Mon-
tana 1099	
Badgley, E. KirkAssistant Professor of Business Adm tion, Assistant Business Manager and Athletic Manager	inistra-
B.A., State University of Montana, 1924.	0.0110.000
BATEMAN, ANNE	
B.A., State University of Montana, 1932.  BATEMAN, WILLIAM G	emistry
B.A., Stanford University, 1907; M.A., 1909; Ph.D., Yale	Univer-
city 1916	
BENNETT, EDWARD EAssistant Professor of History	ory and
Political Science B.A., University of Kansas, 1916; M.A., University of Wi	sconsin.
D.A., University of Ransas, 1910, M.M., Ohr, etale,	

<sup>\*</sup>Leave of absence, Autumn and Winter quarters, 1933-34.

1923; Ph.D., 1925.

- Bischoff, Paul A......Assistant Professor of Foreign Languages B.S., State University of Montana, 1927; B.A., 1928; M.A., Oberlin College, 1932. Brantley, Mrs. Theodore.....Social Director of North Hall Brien, Willetta......Instructor in Library Economy and Periodical Assistant B.A., State University of Montana, 1931. Carey, Eugene F. A.....Associate Professor of Mathematics B.S., University of California, 1905; M.S., 1914. Clapp, Charles H.....Professor of Geology and President B.S., Massachusetts Institute of Technology, 1905; Ph.D., 1910. CLARK, FAY G. Professor of Forestry B.A., University of Michigan, 1912; M.S.F., 1914. CLARK, WESLEY P......Professor of Latin and Greek M.A., University of Richmond, 1904; Diplome d'Etudes Francaises (Universite de Montpelier), 1921; Ph.D., University of Chicago, 1928. Cogswell, Andrew ..... Instructor in Journalism B.A., State University of Montana, 1927. Coleman, Rufus A......Associate Professor of English

- the School of Education B.A., Kansas Normal College, 1896; S.T.B., Philadelphia Divinity School, 1903; M.A., Columbia University, 1915; Ed.D., Intermountain Union College, 1933.
- Deiss, Charles F.......Associate Professor of Geology B.A., Miami University, 1925; Ph.D., University of Michigan, 1928.

- Feighner, M. Winnifred.......Assistant Professor of Library Economy and Assistant Librarian B.A., State University of Montana, 1908; B.S., Simmons College, 1909.

<sup>\*</sup>Autumn quarter, 1933.

<sup>\*\*</sup>Leave of absence, Autumn quarter, 1933.

Groff, Helen.....Assistant Business Director of Corbin Hall B.A., State University of Montana, 1926. Hardy, Charles W......Instructor in Journalism Hawkins, Elvera.....Assistant Business Director of North Hall B.A., State University of Montana, 1931. Hewitt, Barnard......Instructor in English B. A., Cornell University, 1928; M.A., 1929. Hitchcock, C. L. Assistant Professor of Botany B.A., Pomona College, 1927; M.A., Claremont College, 1929; Ph.D., Washington University, 1931. Hoffman, Rudolph O......Professor of Foreign Languages Ph.C., State University, Ghent, Belgium, 1910; M.A., University of Wisconsin, 1921; Diplome Superieur d'Etudes de Civilization Française (Universite de Paris), 1929. \*Housman, Robert L.....Professor of Journalism B.J., University of Missouri, 1922; M.A., 1925; Ph.D., 1934. Houston, John.....Graduate Assistant in English B.A., State University of Montana, 1932. Howard, Joseph W......Professor of Chemistry B.A., Shurtleff College, 1912; M.A., University of Illinois, 1913; Ph.D., 1915. Jesse, Richard H......Professor of Chemistry and Dean of the Faculty B.A., University of Missouri, 1902; M.A., Harvard University, 1907; Ph.D., 1909. Kast, Mattheus ......Associate Professor of Economics Ph.D., University of Munich, 1924. B.A., University of California, 1925; Certificate of Librarianship, 1927; M.A., University of Michigan, 1930. Kirkwood, Maywood......Assistant in Military Science and Tactics Sergeant, U. S. Army. LEAPHART, CHARLES W ...........Professor of Law and Dean of the School of Law B.A., University of Missouri, 1905; M.A., 1906; LL.B., Harvard University, 1913; S.J.D., 1929. Lennes, N. J. Professor of Mathematics B.S., University of Nebraska, 1931. LINE, ROBERT C.....Professor of Business Administration and Dean of the School of Business Administration B.A., State University of Montana, 1910; M.A., Harvard University, 1912. LITTLE, EDWARD M.....Associate Professor of Physics B.S., University of Washington, 1918; M.S., 1922; Ph.D., University of Illinois, 1926. \*\*Lowman, Lagreta.....Assistant Business Director of North Hall B.S., Purdue University, 1920; M.A., Columbia University Teachers' College, 1924. Maddock, William E.....Professor of Education and Director of Public Service Division and Board of Recommendations B.L., Earlham College, 1894; B.A., Harvard University, 1904; M.A., Stanford University, 1922.

B.A., State University of Montana, 1933.

Mansfield, Michael.....Graduate Assistant in History

<sup>\*</sup>Leave of absence, Winter and Spring quarters, 1933-34. \*\*Resigned January 13, 1934.

LL.B., University of South Dakota, 1924; B.A., 1926; S.J.D., Harvard University, 1927.

MILLER, J. EARLL......Professor of History and Political Science and Dean of Men B.A., University of Kansas, 1910; LL.B., 1912; M.A., University of Illinois, 1914; Ph.D., 1917.

Mirrielees, Lucia B......Professor of English B.A., Stanford University, 1909; Ph.D., 1924.

NICKEY, RUTH......Instructor in Physical Education B.A., State University of Montana, 1930.

Peterson, Clarence W. ......Assistant in Military Science and Tactics Sergeant U. S. Army.

PHILLIPS, PAUL C.......Professor of History and Political Science B.A., Indiana University, 1906; M.A., 1909; Ph.D., University of Illinois, 1911.

Ph.C., University of Washington, 1925; B.S., 1926; M.S., 1928; Ph.D., 1932.

<sup>\*</sup>Leave of absence, 1933-34.

나는 생생님 경기를 가게 되는 것이 되었다. 그는 사람들은 살아 되었다.
†RIEDELL, CLIFFORD H. Professor of Fine Arts
Gracial Diploma Tahor Academy Marion, Massachusetts, 1904,
Diploma, Swain School of Design, New Bedford, Massachusetts, 1907.
Rogers, Fred B Associate Professor of Military Science
and Tastics
Captain, U. S. Army. ROTHERMICK, A. EAssistant Professor of Military Science
ROTHERMICK, A. E. Assistant Professor of Military Science
and Tactics Captain, U. S. Army; Graduate U. S. Infantry School, 1928; U. S.
Tank School, 1931.  Rowe, Jesse P. Professor of Geology
- Drofoggor of Rusiness Administration
TO CONTRACT TO THE TOTAL AND THE PROPERTY OF MUNICIPAL AND THE PROPERTY OF MUNICIPAL AND THE PROPERTY OF THE P
1010. M A University of California C.P.A. (California), 1020.
Scheuch, Frederick C
Vice-President
M.E., Purdue University, 1893; A.C., 1894.
Schreiber, William E. Professor of Physical Education
B.A., University of Wisconsin, 1904. SEDMAN, HARRIET RANKIN (Mrs.)
Descended and Doon of Women
B.A., State University of Montana, 1903; M.A., Columbia Univer-
sity, 1930.
sity, 1930. Severy, Joseph W
B.A., Oberlin College, 1915; M.S., Washington University, 1926; Ph.D., University of Wisconsin, 1931.  SHALLENBERGER, GARVIN D
SHALLENBERGER, GARVIN D. Professor of Physics
D C Oblohomo Acricultural and Mechanical College, 1914, D.S.,
Tulane University, 1917; M.S., 1919; Ph.D., University of Chicago,
1923. SMITH, ALLEN K
B.A., University of North Carolina, 1927; J.D., 1930; LL.M., Co-
lumbia University 1931
Grand Delogs Professor of Music and Dean of the School of Music
CATTEL FLORENCE R (Mrs.) Professor of Organ
CASTRIC EDANGEIN O Professor of Psychology and Philosophy
B.A., State University of Iowa, 1906; M.A., 1907; Ph.D., 1912.
SMITH, GEORGE L
SNELL, HAMPTON K. Assistant Professor of Economics
B.A., University of Wisconsin, 1925; M.A., 1928. *Spaulding, Thomas CProfessor of Forestry and Dean of the
*SPAULDING, THOMAS CProfessor of Forestry and Dean of the School of Forestry
B.S., State University of Montana, 1906; M.S.F., University of
75: 1: 1000
Speer James B. Professor of Business Administration,
Registrar and Business Manager
B.A., State University of Montana, 1908; LL.B., University of Michigan, 1916.
Speer, Lucile Instructor in Library Economy and
Assistant Cataloguer
B.A., State University of Montana, 1924; M.A., University of
Chicago, 1925.

<sup>†</sup>Deceased, June 22, 1934. \*Leave of absence, 1933-34.

Stone, Arthur L.....Professor of Journalism and Dean of the School of Journalism B.S., Worcester Polytechnic, 1884.

Swearingen, Monica Burke (Mrs.)..........Associate Professor of Home Economics and Director of Residence Halls B.A., State University of Montana, 1918; M.A., Columbia University, 1924.

Swearingen, T. G......Assistant Professor of Forestry and Maintenance Engineer B.A., State University of Montana, 1920.

Tascher, Harold.......Assistant Professor of Economics and Sociology B.A., University of Illinois, 1920; M.A., 1926; Ph.D., 1932.

Teel, Stanley. Assistant Professor of Music B.M., Depauw University, 1925.

Vadnais, Irene Instructor in Journalism B.A., State University of Montana, 1932; M.A., 1934.

\*Warford, O. R......Professor of Religion and Director of the School of Religion B.A., Central College (Missouri), 1924; S.T.B., Yale Divinity School, 1928.

\*Warne, Martha......Assistant Business Director of South Hall B.A., State University of Montana, 1930.

WHITE, M. CATHERINE.....Assistant Professor of Library Economy and Reference Librarian B.A., State University of Montana, 1927.

Wilson, Brenda Farrell (Mrs.)....Instructor in Business Administration B.A., State University of Montana, 1932.

Young, R. T. Professor of Biology B.S., University of Pennsylvania, 1896; Ph.D., University of Nebraska, 1906.

\*\*Leave of absence, 1933-34.

<sup>\*</sup>Winter and Spring quarters, 1933-34.

## Special Appointments for Summer Session, 1933

Brooks, Wendell S., B.A., M.A., Ph.DVisiting Professor of Education
FEE, IRA B., B.A., M.A., Ed.MVisiting Professor of Education
FISHER, VARDIS, B.A., M.A., Ph.DVisiting Professor of English
REELY, ANN, B.ASocial Director
TIDBALL, LEWIS C., B.A., M.A., Ph.DVisiting Professor of Education

# Board of Examiners in Certified Public Accountancy

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ROSCOE L. THOMAS, Butte FRED S. JACOBSEN, Helena WILLIAM B. FINLEY, Great Falls

## THE UNIVERSITY OF MONTANA

A congressional grant was made in 1881 of seventy-two sections of the public domain for University purposes in Montana, and an additional congressional grant was made in 1889 of 100,000 acres for a school of mines, 100,000 acres for normal schools, and 140,000 acres for an agricultural college. The third Legislative Assembly of the state of Montana enacted laws in 1893 to establish the State University at Missoula, the State College at Bozeman, the State Normal College at Dillon, and the Montana School of Mines at Butte.

As the lands, or the timber and stone thereon, have been sold, the proceeds have gone into permanent funds, the interest on which, together with rentals of unsold lands, has been used for the support of the respective institutions. Each subsequent Legislative Assembly has voted appropriations to supplement those maintenance resources, and several assemblies have provided for the erection of new buildings.

In 1913 the four institutions were combined into the University of Montana under the executive control of an officer whose title is Chancellor. Edward C. Elliott of the University of Wisconsin, first Chancellor of the University of Montana, was appointed by the State Board of Education in 1915. He held the office until 1923, when he was succeeded by Melvin A. Brannon, former president of Beloit (Wisconsin) College. Dr. Brannon resigned July 1, 1933. Dr. H. H. Swain, executive secretary of the State Board of Education, has his office in the State Capitol, Helena.

The Legislative Assembly of 1927 provided for the organization of the Eastern Montana Normal School at Billings as the fifth unit of the University of Montana. A sixth unit, the Northern Montana College

at Havre, was opened September 24, 1929.

In November, 1930, the voters approved a measure adopted by the twenty-first Legislative Assembly which permits, during the succeeding ten years, an annual levy of a tax not exceeding three mills for maintenance of the University of Montana.

## The State University

The State University, located in Missoula, was formally opened in 1895. The local board was made up of J. H. T. Ryman, Hiram

Knowles, and Thomas C. Marshall.

The campus site was donated to the state by Edward L. Bonner and Frances G. Higgins of Missoula. In 1897 the Legislature authorized the issuance of bonds, in the amount of \$100,000, for construction purposes. With these funds University Hall and Science Hall were constructed. They were completed in 1899, at which time the State University occupied its permanent quarters. In 1901 an additional bond issue was authorized to construct Craig Hall and the Women's Gymnasium. In 1907 the Library building, now occupied by the Law School, was completed.

Oscar J. Craig of Purdue University was the first president. During his administration, from 1895 to 1908, the State University made remarkable progress. The faculty increased from five to thirty, and the proportional increase in the number of students was even greater.

In 1908 Clyde A. Duniway of Stanford University became president, and carried on a policy of vigorous development. The School of Law was established and the Summer Session was made a part of the State University.

Edwin B. Craighead, for eight years president of Tulane University, succeeded to the presidency in 1912. During the next few years Business Administration, Journalism, Pharmacy, Home Economics and Forestry were added to the schools and departments of the State

University.

From 1915 until the summer of 1917, Professor Frederick C. Scheuch, now vice-president and chairman of the Department of Foreign Languages, was acting president. Edward O. Sisson, who had been State Commissioner of Education in Idaho, was appointed president in 1917, and served until 1921. Upon his resignation, Charles H. Clapp was appointed.

From 1915 up to the present time eight new buildings have been erected on the campus, new equipment has been added and old equipment improved. The faculty has increased to ninety, enrollment has greatly increased, courses of instruction have been expanded and

strengthened, and scholarship standards have been raised.

Surroundings and Campus. The State University is situated at Missoula, county seat of Missoula county, and principal city in Western Montana. The city is easily reached by the main lines of the Northern Pacific and the Chicago, Milwaukee, St. Paul & Pacific railroads. In addition, there are branch lines from the Coeur d'Alenes, and the Bitter Root and Flathead valleys. Missoula is on the Yellowstone Trail and the International Parks Highway.

Missoula is a pleasant residence city with a population of seventeen thousand. It has an excellent climate and unsurpassed health condi-Many miles of paved streets and bus lines make the campus of the State University accessible from any part of the city. The surrounding country is a beautiful region of mountain ranges, easily reached by rail or auto, and furnishing excellent opportunity for recrea-

tion.

The campus, which has an area of approximately 100 acres, lies southeast of the town and at the foot of Mount Sentinel. In addition, the State University owns 520 acres extending from the campus to the summit of the mountain, an elevation of 2,000 feet above the campus.

The value of buildings, equipment and grounds is approximately

two and a quarter million dollars.

For buildings, see map of campus, page 2.

The Library and Museums. The general library, consisting of about 120,000 volumes and 34,000 pamphlets, is housed in the Library building. Admission to the shelves is restricted to the faculty, administrative officers and graduate students; other students may be admitted upon recommendation of their instructors. Students are allowed to withdraw books from the Library under reasonable regulations.

The Library receives over 600 periodicals, the current numbers of which are available in the reading room, as are newspapers and college

exchanges.

The biological collections of the State University, established in 1898, are on the second floor of the Natural Science building. attention has been given to local fauna and flora of the state.

The rocks, fossils, coals, minerals and ores are housed in the De-

partment of Geology in Main Hall.

The herbarium is in the Department of Botany, adjoining the museum in the Natural Science building.

The Treasure Room, for valuable historical materials, is on the third floor of the Library building.

The people of the state are invited to inquire about the loan

facilities of the Library, to visit the museums, and to make contributions to the Library and museums. All donations will be acknowledged and recorded under the donor's name. The articles will be properly labeled and preserved.

#### Requirements for Admission

Students applying for admission should send in the following credentials:

(a) An original transcript of high school credits, signed by the principal.

(b) Official transcript from each college attended.

(c) Statement of honorable dismissal from the last college regularly attended.

(d) An application for admission filled out on a form provided

by the State University.

Certificates and transcripts of records relating to admission should be sent to the Registrar a month in advance of registration so that there will be ample time for notice of acceptance for admission to the University. Prompt attendance to these details will avoid delay and the additional expense of telegraphing. Delay in sending certificates is likely to cause difficulty in registration, and frequently makes it impossible for the student to enroll in classes to which he might otherwise be admitted.

Applicants for admission who fail to present proper certificates will not be admitted to registration. Forms for applying for admission may be obtained on application to the Registrar.

#### General Admission

Applicants for admission must be at least sixteen years of age,

and must present evidence of good moral character.

The completion of a high school or preparatory course of four years, including at least fifteen units of work, is the standard for regular admission. A unit is the amount of work represented by the successful completion of one subject pursued for a school year of not less than thirty-six weeks, with five recitations per week, each recitation period being not less than forty-two minutes net. Two periods of laboratory, shop, or drawing work count as one recitation.

Students entering after September 1, 1927\*, must offer three units of English, one of American history and government and at least two other units from each of three of the following groups: (a) mathematics; algebra, plane and solid geometry, trigonometry, general mathematics; (b) history and social science: Greek, Roman, medieval, modern or English history, civics, community civics, economics, sociology, citizenship, economic or industrial history; (c) laboratory science: physics, chemistry, botany, zoology, biology, physiology, agriculture, astronomy, geology, physiography, general science; (d) foreign languages.

Note: If the civics is included in the one unit of American history and government, it may not be used to satisfy requirement (b). The two units offered in satisfaction of requirement (d) must be in one language.

Students who have not completed these required courses must: (1) pass an entrance examination in the subject in which they are deficient; or (2) earn eight college credits in the subject in which they

<sup>\*</sup>Students who graduated from high school before 1927, but who did not enter college prior to September 1, 1927, will be admitted under the old requirements.

are deficient, in addition to any college work in that subject required for a degree. Such credits may be counted toward the degree. Students remove all entrance deficiencies during their first year of attendance.

Students transferring from other colleges will be required to meet

these requirements.

#### Admission on Certificate

Graduates of any Montana high school or academy fully accredited by the State Board of Education, or of any high school or academy in another state accredited by the North Central Association or the Northwest Association, are admitted to regular standing by the presentation of an official certificate of graduation.

Graduates of any other secondary schools outside of Montana are admitted under similar conditions, if the school maintains, on the basis of regular inspection, accredited relationship with the State University or other university within the state included in the membership of

the Association of American Universities.

#### Admission by Examination

Any person not a graduate of an accredited high school must, in order to be admitted to regular standing, pass satisfactory examinations on not less than fifteen units\* of secondary school work; provided that any graduate of a Montana high school accredited by the State Board of Education for the work of only one, two, or three years, may receive entrance credit without examinations upon such work as has been successfully completed in such accredited courses, as shown by official certificates.

Those who expect to take entrance examinations must notify the Registrar in advance, stating what subjects they desire to offer by examination. For the academic year 1934-35 the examination days are September 20 and 21, and for the winter and spring quarters by special arrangement.

#### Conditional Admission

The entrance requirement of graduation from a four years' accredited high school course may be modified in individual cases by permitting the conditional admission of a student if he has at least fifteen entrance units and has been in regular attendance in a fully accredited high school for four years. To acquire regular standing such a student must present a total of sixteen entrance units. He must make up the number lacking in one year from the date of his first registration.

#### Admission by Transfer from Other Colleges and Universities

Students from other colleges and universities of recognized standing will be admitted on presentation of certificates from the registrar that they have completed the regular entrance requirements, and are eligible to return. Credit will be given for work of collegiate grade done in other institutions of approved standing.

A student suspended or dropped from one of the other institutions of the University of Montana will not be considered for admission without the approval of the president of the institution from which he

was suspended or dropped.

Graduates of an approved two-year normal course requiring fifteen units for entrance are admitted to junior standing. Students who complete only part of the two-year normal college course may receive credit

<sup>\*</sup>These fifteen units must include the required subjects listed on page 14. A student offering foreign languages as a part of his preparation must present at least two units in one language.

in the University for such work of college grade as may be found to represent the equivalent of courses required or permitted as electives in the University.

When credits are accepted from another college, grade points are evaluated at the time of transfer. (See page 25.) Students entering with fewer grade points than credits must earn enough additional grade points in the State University to satisfy the grade point requirement for graduation. A transfer student must meet the grade point requirement on credits earned at the State University as well as on his entire record.

#### **Admission of Special Students**

A student 21 years of age or more, not a candidate for a degree, may be admitted without the usual entrance units as a special student if he gives satisfactory evidence that he is prepared to pursue successfully special courses desired. Such a student shall be permitted to continue in the State University only in case he carries his work satisfactorily. If it becomes evident that he is unable to carry university work, his relations with the University may be severed at any time. In order to be eligible to register for his fourth or any succeeding quarter as a special student, the sum of his grade points (both positive and negative) must be at least equal to the number of credits for which he has received a grade. (See page 25.)

A special student may acquire status as a regular student and become a candidate for a degree either by taking entrance examinations, or by transferring to entrance credit sufficient credits earned in the University to make up all entrance units required for admission to regular standing, including the subjects listed on page 14. Before the student may register for his seventh quarter of residence, not including summer sessions, he must make up all entrance units required for admission to regular standing. The Registrar's office shall at that time transfer to entrance credit as many University credits as are necessary for such purpose at the rate of eight college credits for one entrance unit. In order to be eligible for a degree from the State University a special student must fulfill the same requirements for graduation as a regular student.

Special students must file application for admission on a form provided for this purpose, which may be obtained from the Registrar. This application must include certificates of such preparatory work as the applicant has done.

#### Admission to Junior Class

A student who, at the end of the quarter in which he acquired 96 credits, has 20 or more credits in excess of positive grade points, shall not be admitted to further work in the State University.

#### Admission to Graduate Standing

Candidates for admission to graduate standing must have a Bachelor's degree from the University of Montana or from another institution of approved standing. Admission to candidacy for the Master's degree is granted by the Graduate Committee to students, who, in addition to holding the baccalaureate degree from an institution of approved standing, have completed the requisite undergraduate work in the departments in which they wish to do graduate work and are enrolled in an approved schedule of graduate courses.

## **Requirements for Graduation**

#### **Degrees and Certificates**

The Bachelor's degree is awarded to regular students who complete any of the four-year courses offered by the University and who fulfill the other conditions required for graduation.

The degree of Bachelor of Arts is conferred upon graduates of the College of Arts and Sciences. Students doing major work in Law may also secure the Bachelor of Arts degree by meeting the requirements of the College of Arts and Sciences.

The degree of Bachelor of Arts in Business Administration is conferred upon graduates of the School of Business Administration.

The degree of Bachelor of Arts in Education is conferred upon graduates of the School of Education.

The degree of Bachelor of Arts in Journalism is conferred upon graduates of the School of Journalism.

The degree of Bachelor of Arts in Music is conferred upon graduates of the School of Music.

The degree of Bachelor of Laws is conferred upon graduates of the School of Law who have previously completed two years of college work.

The degree of Bachelor of Science in Forestry is conferred upon graduates of the School of Forestry.

The degree of Bachelor of Science in Pharmacy is conferred upon graduates of the four-year course in Pharmacy. Graduates of the three-year course receive the degree of Pharmaceutical Chemist.

The University certificate of qualification to teach may be obtained by graduates of any of the four-year courses of the University who meet the requirements set forth in the School of Education.

The University also issues a certificate for public accountancy under specified conditions. (See School of Business Administration.)

The degrees of Master of Arts, Master of Science in Forestry, Master of Science in Pharmacy and Master of Science with a combined major in Botany and Forestry are granted to those who complete a satisfactory course of one year in work beyond that required for a Bachelor's degree provided they comply with the regulations governing graduate work set forth on page 68.

#### Candidacy for a Degree

Students of the University who are admitted as candidates for a degree must have satisfied the following conditions: (a) they must have fulfilled the entrance requirements of regular students; (b) they must complete the general University requirements shown in the following paragraphs. Students who are candidates for a degree or certificate must file formal application with the Registrar not later than the eighth day of the quarter immediately preceding the quarter in which they expect to complete their requirements.

#### Credits Required for Graduation

The work in the State University is named in terms of credit. One credit represents three hours of time per week for one quarter of twelve weeks. The time required for each credit may be distributed in any combination among preparation, recitation, lecture or laboratory work.

Credits Required for a Degree. Candidates for the degree of Bachelor of Arts, Bachelor of Arts in Business Administration, Bachelor of Arts in Education, Bachelor of Arts in Journalism, Bachelor of Arts in

Music or Bachelor of Science in Pharmacy are required to complete 180 credits in addition to the required credits in Physical Education. Candidates for the degree of Bachelor of Science in Forestry must complete 186 credits in addition to two summers of approved field work and the regular requirements in Physical Education and Military Science. Candidates for the degree of Pharmaceutical Chemist must complete 141 credits including the requirements in Physical Education and Military Science. Candidates for the degree of Bachelor of Laws must complete three years of Law, totaling 126 credits, in addition to the entrance requirements of the School of Law.

Credits Required for a Major. A department or school may require that the major students complete from 40 to 55 credits in the chosen field. Not more than 65 credits in any one department or school may be counted toward graduation. These rulings do not apply in the Schools of Forestry, Journalism, Law or Pharmacy. Exceptions to these regulations may be made on the basis of entrance credits in the Departments of Foreign Language and Mathematics. Not more than 65 credits in one foreign language, nor more than 90 credits in all foreign languages, may be counted toward graduation. Not more than 21 credits in Military Science, nor 15 credits in Religion may be counted toward graduation. Except in the School of Music, not more than 12 credits in applied music nor three in ensemble music may be counted toward graduation.

#### Course Requirements for Graduation

Required Courses. All candidates for the Bachelor's degree must

meet the following requirements:
(1) Physical Education, 6 quarters (6 credits) required of all freshmen and sophomores less than 27 years of age, unless excused for cause.

Military Drill, 6 quarters (6 credits) required of all fresh-(2) men and sophomore men less than 27 years of age, unless

excused for cause.

English Composition, 2 quarters (6 credits). During Freshman Week all freshmen must take a placement examination in English composition. Students who achieve distinction in this examination will be excused from the necessity of taking the first quarter of required composition, 11a, and during their sophomore year may enroll in any of the three courses 11b. 30, or 32. Students failing to attain an acceptable college standard in this placement examination will be required to take English A without credit during their freshman year before enrolling in English 11a during the sophomore year. Both quarters of required composition, English 11ab, must be taken in the sophomore year, preferably consecutively. No work in required composition, except English A, may be taken in the freshman year. Students who obtain a grade of A in the first quarter of required composition will be exempted from the requirement of the second quarter.

Restricted Elective Courses. All candidates for the Bachelor's degree, except candidates for the degree of Bachelor of Laws or Bachelor of Science in Forestry, must meet the following requirements,

unless otherwise indicated:

Foreign Language, 5 quarters (25 credits) in one language or a reading knowledge of it, subject to the following conditions:

Entrance credit in foreign language may be offered in satisfaction

of this requirement, one unit being regarded as equivalent to two quarters of university work. Thus students who enter with one unit of language are normally required to complete only three quarters of the same language in the University; those who enter with two units, one quarter; and those who enter with three or more units in one foreign language shall be regarded as having fulfilled all foreign language requirements for graduation upon passing a reading test at the University. However, all students desiring to offer entrance credit in fulfillment of or toward this requirement or who wish to take further work in a language offered for entrance must take a placement examination preferably at the time of entrance, during Freshman Week. Those who are found by the placement examination to be unprepared for the class for which they are normally eligible will be placed in a lower class; such students may receive credit for only one quarter of a foreign language below the class for which their entrance credits would normally prepare them.

A reading knowledge of a foreign language at the level of attainment expected of a student who has passed at least four quarters in a foreign language as demonstrated by a suitable achievement test will be accepted as satisfying the foreign language requirement for graduation.

Foreign languages will not be required in the Schools of Business Administration, Education, and Journalism.

- (2) Biology, Botany, Chemistry, Geology, Mathematics, Physics; 3 quarters (12 credits, eight of which must be in one science or in mathematics) or one of the general courses, Biological Science 13, Introduction to Biological Science, and Physical Science 17, Introduction to Physical Science. The combined sciences for high school and the University must include not less than two different sciences of this group. In each of these two sciences the student must offer not less than one unit or eight credits. With the exception of the two general courses, science subjects in which laboratory work is not required shall not be considered as satisfying the restricted elective requirement in science. The amount of laboratory work necessary to the courses for fulfillment of the requirement is one laboratory period of not less than two hours per week.
- (3) Economics, History, Political Science, Sociology: 2 quarters (8 credits) or the course. Social Science 11abc, Introduction to Social Science.
- (4) English Literature, Philosophy, Psychology; 2 quarters (8 credits) or the course, Humanities 15abc, Introduction to the Humanities.

**Elective Courses.** The remainder of the credits required for graduation after the restricted electives and the divisional and major requirements have been completed are free electives.

#### Divisional, Departmental and School Requirements for Graduation

All candidates for a Bachelor's degree must comply with any requirements announced by the college or school from which the degree is to be granted, in addition to the general requirements included under "Requirements for Graduation."

#### Grade Points Required for Graduation

A candidate for a degree or certificate granted by the State University must obtain a number of grade points at least equal to the number of credits earned on courses taken to the end of the quarter in which he earns his 96th credit (i. e., freshman and sophomore years). This is equivalent to an average grade of C in all courses for which he has received credit. Grade points are computed as follows: 3 grade points for each credit of A; 2 grade points for each credit of B; 1 grade point for each credit of C. In a subject in which an "incomplete" grade has been received, grade points are counted only after the incomplete has been removed.

In the period succeeding the quarter in which the student receives his 96th credit (i. e., junior and senior years), he must obtain as many grade points as credits for which he has registered. Courses dropped without a grade (i. e., courses in which a "W" is given) are not counted. Courses graded F (failure), I (unremoved incomplete), E (condition), are given one negative grade point (-1) per credit. The negative grade points must be subtracted from the positive grade points earned to determine the number of grade points acquired toward meeting this requirement. In the case that a student who has failed to make a C average during the first period is admitted to the second period (see page 16), he must make up the deficiency under the regulations which are in force during the second period. However, deficiencies made in the second period cannot be removed by applying excess grade points earned in the first period.

When credits are accepted from another institution, grade points are evaluated at the time of transfer; however, a student must meet the above requirement on credits earned at this University as well as on his entire record.

#### Residence Requirements for Graduation

- 1. One year of residence, or four summer sessions of nine weeks each, in the State University, during which the student must complete forty-five credits of college work, is the minimum requirement.
- 2. Thirty-five of the last forty-five credits required for graduation must be earned in residence in the University.
- 3. Not more than forty-five credits earned by correspondence study may be counted toward graduation.

#### Senior Examinations

- 1. All students, before receiving the Bachelor's degree from the State University, may be required by the school or department in which they are majoring, to pass a special examination to be known as "Senior Examination" covering the field of concentration. Such examination shall not in any way replace the regular quarterly examination except that departments adopting these Senior Examinations may excuse their major students during the senior year from regular quarterly examinations in major department subjects. Each department or school must announce its intention with regard to Senior Examinations in the annual catalogue.
- 2. The field of concentration shall include the total major requirements and such additional subjects as the major department or school may determine. It is to be understood that the questions asked are not to be limited to the courses taken.
- 3. The examination shall be a written examination of at least three hours, and in addition further oral or written examinations may be given.

- 4. The examination in each case shall be in charge of the major department or school concerned. Such parts of the examination as lie outside of the major subjects shall be furnished by the departments whose work is represented.
- 5. The examinations shall be given in the last quarter of senior residence and may be arranged in each department or school at the convenience of the persons concerned. Reports on such examinations shall be made to the Registrar not less than four weeks prior to the close of the quarter.
- 6. The same grades shall apply as in the quarterly examinations. If a student fails to pass this special examination he shall be given another opportunity within six months without the necessity of taking additional courses. In case of a second failure further opportunity will be granted at the discretion of the department or school concerned and the Committee on Admission and Graduation.

#### Senior Examinations for Honors

A student who desires to become a candidate for honors must at the beginning of his last quarter have an average of two grade points for every credit for which a grade has been received; upon application within thirty days from the beginning of the quarter he shall be entitled to take Senior Examinations in his major department; he shall be awarded honors if he passes these examinations with a grade of A or B.

#### Registration

Not later than the junior year, every student must choose a major department or school. Regular students are required to follow a curriculum so that they will normally complete all the required courses and restricted electives by the end of their junior year. A student's registration is subject to the approval of an appointed faculty adviser until choice of a major department or school has been made; after this choice, the head of the department or school selected becomes the adviser.

Independent Work. Credit is allowed superior students of junior and senior standing for independent work in topics or problems chosen by themselves with the approval of the departments concerned and with the supervision of instructors. Such work must be registered for at the beginning of a quarter. The student cannot obtain a larger number of credits than he is registered for, but a smaller number may be completed and credit obtained upon the instructor's approval.

Rules Regarding Registration. Students in all divisions of the State University, except those registered in an approved curriculum shown in a Division or School, must follow the regulations outlined in the following table:

Classification	Number of	Restricted Elective Requirement (See p. 18)††	Maximum Credit**	Minimum Credit		
of Student	Courses Allowed*	In Addition to Required Phys. Ed. and Mil. Sci.				
Freshmen	3	2 courses from 2 different groups	15+2 Cr. Applied Music†	10		
Sophomores	4	1 course	17+1 Cr. Applied Music†	10		
Juniors	no limit	1 course until requirements are completed	16	10		
Seniors	no limit	1 course until requirements are completed	16	10		

<sup>\*</sup>Exclusive of the required physical education and military science and optional applied music. Two courses in fine arts or theoretical music to a maximum of 5 credits are counted as one course.

\*\*Juniors or seniors of distinctive ability may be permitted, by their adviser, to register for 18 credits.

†The additional work in applied music allowed only when the student maintained a C average during the previous quarter in residence. ††During a quarter in which a student is registered for required English, he may register for one less than the normal number of restricted elective courses.

#### Scholarship and Conduct

The University requires all its students to conform to the usual standards of society and law-abiding citizenship, and to manifest a serious purpose by maintaining satisfactory standing in the courses which they undertake. No student is permitted to continue his connection with the University who shows persistent unwillingness or inability to comply with these requirements.

The Student Handbook, which is published for the guidance of students, is an official memorandum of requirements. The student is held responsible for a knowledge of its contents.

#### Deans of Men and Women

The deans have general supervision and, subject to the rules of the faculty, final authority over scholarship honors and deficiencies, student affairs, the conduct, manner of living, and all other matters pertaining to the welfare of students. They are always ready to render any help in their power to any student, either in educational or personal matters. They work through instructors and advisers in scholarship matters, but in personal affairs they are always accessible to the student who desires conference or counsel.

#### Social Functions of the University

The approval of the Dean of Women is obtained for all social functions of student organizations at which women are present. The Dean of Women sees that approved chaperons are provided and schedules these functions for Friday and Saturday evenings only.

#### Advisers

Upon registration in the State University, each student is assigned to a faculty adviser. The assignment is made on the basis of the student's probable field of major endeavor. The adviser assists the student in the selection and arrangement of his course of study, and acts in an advisory capacity only; his approval of a student's registration does not legalize a change in faculty rules. In the professional schools the deans act as advisers of the students. In the College of Arts and Sciences, after the student has selected a major department (at the beginning of his junior year) the chairman of that department regularly becomes his adviser throughout his university work. The adviser is always ready to counsel with the student in any matter, whether or not directly connected with his work in the institution. The University rule requires that the student shall consult his adviser at the beginning of each quarter, but consultation should be more frequent. The adviser is consulted by the administrative authorities of the State University in matters of discipline affecting a student under his supervision.

#### Freshman Week

The first week of the autumn quarter is set aside exclusively for freshmen. They register during that week and are given the opportunity to become acquainted with the ways of university life; instruction in the use of the library is given, and everything practicable is done to prepare the freshman for his college course. No regular classes are held.

Freshman Week grew out of the need of making the transition from high school to college as smooth as possible, and the desirability of giving the freshman an idea of the proper attitude to be taken toward his college work. This is accomplished by giving the freshman time to become acquainted with the campus and the proper use of equipment before instruction begins. Methods and practice of college study are explained in order that, from the beginning, the student may obtain more from his courses.

#### Women in the University

The social welfare of all women students is under the guidance of the Dean of Women. Scholarship deficiencies of women students receive the personal attention of the Dean of Women.

The residence halls for women, one of which is reserved for freshmen, enable the Dean of Women and the social directors to give that personal attention to the individual girl which characterizes the freshman dormitory plan.

The sorority houses, in which many upper class women reside, are under the immediate social supervision of a housemother whose appointment is made with the approval of the Dean of Women. The private homes in which upper class girls obtain rooms must be approved.

All women in the State University are members of the Associated Women Students, an organization which has general direction of matters pertaining to student life not under the direct supervision of the faculty. This Association also has charge of many of the campus activities carried on by the women students, including the Big Sister Movement, the May Fete and the Co-ed Prom.

#### Student Marriages

Any marriage, either party to which is a student of the State University of Montana, must be publicly announced. For this purpose notice of the marriage must be promptly filed with the Registrar. Any attempt to keep the fact of the marriage secret will result in indefinite suspension effective from the date of the marriage.

All students on matriculation must indicate on the entrance blank whether married or single. Falsification or willful suppression of any information called for on the blank will be ground for cancellation of matriculation.

#### Attendance

Work which a student has missed through absence must be made up as his instructors direct,

All students compelled to be absent from Missoula should report their intended absence in advance to the Dean of Men, the Dean of Women, or to the Registrar.

Absences incurred when a student is on assigned departmental activity or representing the University in extra-curricular activities will be reported by those in charge of the activity.

#### Eligibility Rules

The State University is a member of the Pacific Coast Intercollegiate conference, and its rules, as approved by the Faculty, govern all intercollegiate athletic contests.

#### Scholarship Grades

Grades are given in the State University according to the following system of marking:

A—Work of the best grade; B—work better than average; C—average work; +—pass without defining grade; D—work below average, but of barely passing grade; E—condition; F—failure.

If all the work in a course has not been done and there is sufficient reason for this, the grade I is given. This incomplete work must be completed not later than one calendar year after the incomplete grade was assigned.

In continuous courses, if a grade of F is given, the student's connection with the course is severed. All other grades must be followed

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by the letter "n," indicating that the course is a continuous one and that the completion of the quarter's work carries no credit toward graduation until the remaining quarters of the course are completed. The grade of any quarter of a continuous course shall be final, except in thesis courses and courses offered by the Law School. In these cases the letter "n," not accompanied by a grade, is assigned at the end of each quarter to indicate that the student is entitled to continue in the course; upon completing the course a grade is given which applies to the whole course.

A student may withdraw from a course in which he has registered:

(1) during the first and second weeks of a quarter, with the consent of his adviser and the instructors concerned; (2) during the period from the third through the ninth week, with the consent of adviser and instructor and the permission of the chairman of the Board of Advisers. In these cases the student is given a grade W, which carries no credit; if a student withdraws for unsatisfactory scholarship a grade of F may be assigned. After the ninth week, the student who withdraws receives a grade, usually I. All withdrawals must be formal and

must be recorded by the student with the Registrar.

#### **Grade Points**

Each student receives the following number of grade points for each quarter credit for which he has been registered and for which he has received a grade: 3 grade points for each credit of grade A; 2 grade points for each credit of grade B; 1 grade point for each credit of grade C; 1 grade point for each credit of grade "plus;" O grade points for each credit of grade D or E; 1 grade point is deducted from his total for each credit of grade F. (See grade point requirements for graduation, page 19.)

#### **Financial Obligations**

Students who owe bills to the State University for fees, fines, board and room in the residence halls, and other charges are not permitted to receive official reports of grades, register for the succeeding quarter, secure transcript of record, or obtain diplomas until the obligation is paid or satisfactorily adjusted. Similar action is taken where students owe bills to student organizations whose books are kept in the Business Office of the State University, including charges for board and room in fraternity and sorority houses.

#### Fees

All fees must be paid at time of registration, except as otherwise stated. The facilities of the State University do not permit the ac-

ceptance of non-bankable papers.

The entrance fee, student activity fee and health service fee are not charged students registering for less than six credits. (Applied music courses and shorthand are not included in determining the maximum of less than six credits.) Listeners pay the same fees as students who register for less than six credits except those to whom the special attendance fee applies.

Graduate students pay the same fees as undergraduate students except that the student activity fee, the student union building fee, and

the student health fee are optional.

Students who withdraw or are dropped during a quarter receive no refunds.

High school honor scholarships exempt holders from payment of the entrance fee, the registration fee, and the incidental fee. State University scholarships exempt holders from payment of the registration fee and the incidental fee. For further information regarding these scholarships see page 32.
The following are the fees authorized for the college year 1934-35 in all schools and departments except where otherwise specified:  Entrance (or Matriculation) Fee
Payable by all students on first registration, except those registered for less than six credits.
Registration Fee (per quarter)
Special Attendance Fee (each course, per quarter)
Incidental Fee (per quarter) \$10  Payable quarterly by all students registered for six or more credits, to cover laboratory supplies in all courses, library book rentals, locker fees, gymnasium towel service, etc. This fee does not include loss, breakage or fines. Students registered for less than six credits are charged \$5.
Tuition Fee for Students in the School of Law (per quarter)\$5
Late Registration Fee
Non-Resident Fee (except in School of Forestry) (per quarter)\$25 All students not residents of the State of Montana unless matriculated before September 1, 1923, in the University of Montana, are required, in addition to all other fees, to pay a special non-resident fee of \$25 per quarter. Part-time students are required to pay a non-resident fee of only \$2 per quarter credit, with a minimum of \$10 per quarter. No person will be considered eligible to register as a resident of the State of Montana unless he has resided in the state for the twelve months next preceding the date of his proposed registration. provided that no person under legal age shall be prevented because of his minority from gaining such residence; and no unmarried person will be considered to have gained residence in the state while a student in any institution of learning unless, or until his parents, if living, move into the state and acquire bona fide residence there. Residents of Alaska, the Canal Zone, Hawaii, Porto Rico and the insular possessions of the United States, are exempted from the payment of non-resident fees.
The burden of registering under proper residence is placed upon the student. If there is any possible question of his right to legal residence, the matter should be brought to the attention of the Registrar and passed upon, previous to registration or the payment of fees. Any student who registers improperly under this rule not only is required to pay the non-resident fee, but is assessed a pentalty of \$10.  Non-Resident Fee in the School of Forestry (per quarter) \$41.66
Student Activity Fee (per quarter) \$5.50

Entitles to subscription to college paper, the college annual, free admission to all intercollegiate athletic and debate con-
tests, and class dues.
Student Union Building Fee (per quarter)
Income from this fee is to be administered under the super-
vision of the President and the Local Executive Board of the
State University for the purpose of providing a building for the
use of the student organizations and activities.
Health Service Fee (per quarter) \$2.50
This fee covers services indicated on page 31.
Change of Enrollment Fee\$1
Payable by each student for each change of enrollment card
filed after the first week of the quarter; \$2 after the second
week. Special Examination Fee\$2
Special Examination ree
Payable by students for each special examination.  Diploma Fee
Payable by candidates for degrees and certificates at the time
the application is filed.
Application for Degrees and Certificates (Delayed)
Applications for degrees and certificates must be filed not later than the eighth day of the quarter immediately preceding the quarter in which the student expects to complete his requirements. Students who do not file such applications at this time may file the application at a later date only upon the payment of a fee of \$5.
Removal of Incompletes or Conditions (not due to illness or fault
of institution) \$2
Student Hand Books (first book free)
Transcript of Record (first transcript free) \$1
For fees charged in typing and shorthand see description of those
courses, page 73.
For fees charged in the School of Music see School of Music,
page 90.  For fees charged in correspondence study see Correspondence
Courses, page 70.  For fees charged during the summer session see Summer Session
Bulletin.
For textbook fee in the School of Education see page 76; Introduction to Biological Science, page 40; in Introduction to Physical Science, page 56; in Introduction to Social Science, page 63.

# Expenses and Living Accommodations The Residence Halls

The State University adopted the freshman dormitory plan in 1923. All freshmen whose homes are not in Missoula are required to live in North or South Halls unless permission to live elsewhere is granted for special reason.

The freshman year is the most trying of the student's college course. College standards are different from high school standards. There is more freedom and yet there is more individual responsibility. To introduce the student to these new conditions, to guide him towards pleasant mastery of them, and to give him the fullest opportunity to develop his own individuality in his own way, is the purpose of the freshman dormitory plan.

Upperclass women are advised to live in Corbin Hall, which is reserved for women students beyond the freshman year.

The social, moral, and educational welfare of the residents of the halls is under the general supervision of the Deans of Men and Women. Social directors, who give personal attention to the needs of each student, reside in each hall. The students who live in the halls are organized into clubs and assist in the management of social and general interests. In the construction and arrangements of the residence halls, and in their management, the most highly recommended and successful means of attaining a happy, healthful, inspiring, industrious atmosphere have been considered.

The health of the residents of the halls is looked after daily by the University Nurse.

The business management of the halls is in charge of a business director of residence halls.

North Hall, Corbin Hall and South Hall, dormitories for freshman women, upperclass women and freshman men, respectively, are all three-story fireproof brick buildings. The rooms are well lighted and steam heated. Each bedroom has a lavatory; the double rooms have two clothes closets. All bathrooms have showers. Each room is furnished with a study table, chairs, single beds, mattresses, pillows, bed linen, towels, curtains and a dresser in Corbin and North Halls, or two chiffoniers in South Hall. In addition, each bed in Corbin and North Halls is supplied with two woolen blankets, and in South Hall, with three army blankets. In all dormitories, day covers for beds, drapes and a rug are to be furnished by the student. Each hall has a students' laundry and trunk room.

#### Rates

The following rates apply to the three residence halls, Corbin and North for women, and South Hall for men:

Double rooms, \$22.50 per quarter for each occupant.

Single rooms, \$37.50 per quarter.

Board by the month, \$15.

Club Fee. A fee not to exceed \$1 per quarter may be assessed the residents of each hall. This fund is expended under the direction of the club officers for social activities.

The University reserves the right to raise or lower the rates with reasonable notice. All occupants of the halls are required to board in the halls in which they reside. Application for admission to the halls must be accompanied by a deposit of \$10; the application must be made upon a form furnished by the State University.

#### Living Accommodations for Upperclass Students

The Dean of Men has general supervision over the housing of men students and the Dean of Women, of women students.

Upperclass students have no difficulty in securing satisfactory rooms in private homes or in rooming houses near the campus at rates varying from \$7.50 to \$10 a month; for single rooms, from \$10 to \$15. Board may be obtained at boarding houses at rates varying from \$18 to \$22.50.

Student rooms must be approved by the University. A list of approved rooms in private residences may be obtained on application

to the Dean of Women or the Dean of Men. Arrangements for reservation of rooms in private residences must be made directly with the landlady.

Expenses

Minimum and average expenses of students for the college year are estimated as follows:

Books and Equipment	\$20.00	to	\$40.00
Fees		to	79.25
Room rent for one (two in a room)			
Board	135.00	to	225.00
Laundry	15.00	to	30.00
Total			

This includes only the necessary expenses. Other expenses should be provided for, including clothing, \$100 to \$200, and incidentals about \$10 per month. The expenditures for clothing and incidentals are similar to expenditures for those purposes at home. If a single room is desired, a minimum of \$35 additional should be provided.

The minimum expense of \$29.25 for fees is applicable only to holders of high school honor and State University Scholarships. Students not residents of the State of Montana require \$75 additional for payment of the non-resident fee, making a total of \$154.25 for fees for non-resident students for each college year. In addition, there is an Extra-Non-Resident fee of \$50 per year for Forestry students.

Parents are advised to place all students on a fixed allowance rather than to give them an unlimited sum on which to draw.

For information about earning expenses see 30 and 31; student loans, page 29; scholarships and prizes, pages 32 to 34; railroad fare refund, page 29.

#### Railway Fare Refund

In accordance with the provisions of Chapter 41 of the Session Laws of 1925, enacted by the Nineteenth Legislative Assembly, and under regulations established by the State Board of Education, railroad fare in excess of fifteen dollars actually paid by any student for a round trip by the most direct route available between his Montana home and the State University once each year, will be refunded. The amount of the refund will be based upon the railroad or stage fare over the shortest route and at the lowest rate. Students must present receipts for the fare thus paid.

In order to be entitled to the refund students must satisfactorily carry a normal amount of work, and must be in attendance either throughout the college year or through the summer quarter.

Claims for refunds must be presented within thirty days after the close of the term in which the student was last in attendance.

#### General University Student Loan Funds

The Montana Bankers' Association Student Loan Fund and the Edward C. Elliott Loan Fund are available for students in the junior and senior classes of any of the institutions of the University of Montana, who are unable to continue their studies without financial aid, and are satisfactorily recommended as to character and scholarship by the dean or director of the department in which the applicant's major work is done. The loan to any one student is limited to two

hundred dollars during his course, and not more than one hundred dollars in any year. Loans must be repaid within one year after the borrower's graduation. Loans bear two per cent interest to maturity and six per cent thereafter.

The Grand Commandery of Knights Templar of Montana has established a loan fund which is available under similar conditions. Loans from this fund bear five per cent interest, and are payable in specified installments, one, two, three, and four years after the borrower's graduation.

University women may borrow under similar terms from the loan fund founded in 1922 by the Missoula branch of the American Association of University Women and from the loan fund of the Associated Women Students.

Application blanks and a statement of detailed regulations governing these loans may be obtained from the Business Manager.

#### Employment and Aid for Students

Although many students earn all or a part of their expenses while in attendance at the State University, due to the economic conditions of the last few years it has become increasingly difficult to obtain employment. Those students who will find it necessary to obtain work in order to attend college should realize, also, that it is necessary to sacrifice some pleasures and to apply themselves diligently to the task before them. The necessary effort and sacrifice can be made only when there is an earnest desire on the part of the student for higher education. Self-supporting students enjoy the highest respect and regard both of their fellow students and of the faculty.

The Student Employment Secretary of the University keeps in close touch with all sources of employment, and is able to give considerable assistance to worthy students in finding work. Assistance and cooperation in this work is given by the Missoula Chamber of Commerce, the Missoula Women's Club and the business men and residents of Missoula in general. With a little assistance at the beginning, a student often finds it possible, after becoming somewhat acquainted, to find sufficient employment on his own initiative. Free tuition and low registration fees at the State University are also a considerable advantage to self-supporting students who are residents of Montana.

Business houses in Missoula employ students as clerks, janitors, stenographers, bookkeepers, waiters, dishwashers, porters, bell boys, automobile mechanics, musicians, clothes pressers, solicitors, and collectors. There are many calls for students to do "odd jobs" in private homes, such as garden work, window washing, furnace tending, handling coal and wood, picking apples, and general cleanup work. There are some jobs at the University, such as janitor work, waiting on tables in dining halls, stenography, and, for upper class students, employment as laboratory and library assistants. The employment policy is to assist first those most in need of employment. Other factors, however, are taken into consideration, such as the student's scholarship, ability and dependability.

Students planning to earn all or a part of their expenses are not advised to enter the University with less than \$250 or \$300. This sum is usually sufficient to take care of all necessary expenses for the first two quarters, giving the student time to get well started in his studies, and to find employment. Entering the University with less than this amount is a serious handicap to a new student, and usually results in

poor scholarship, and ultimate withdrawal from the University because of a lack of funds. If, on the other hand, a student has earned and saved this amount before entering the University, that fact is a good indication that he will succeed in college.

It is impossible for the University to give students any definite assurance of employment in advance of their arrival and personal application. Upon arriving at the University students should apply to the Student Employment Secretary, who will be glad to advise them regarding employment and give them every aid possible.

#### Health Service

A health service is maintained for the benefit of all students and is under the immediate direction of the University Nurse, who has general supervision of student health. Advice and care are given by the University Nurse who investigates all cases of students reported to be ill. When medical attention is necessary, the University Nurse calls any regularly practicing physician in Missoula whom the patient may desire. Parents and guardians are promptly notified of serious or prolonged illness.

All freshmen receive a thorough physical and medical examination by a regularly practicing physician at the time of their entrance to

the State University.

Students are urged to be vaccinated for small-pox and typhoid

fever before coming to the State University.

The State University will furnish typhoid and small-pox vaccine and diphtheria anti-toxin to any student free of charge, but will not reimburse students suffering from such infections when they have not been vaccinated. A student not of age should bring the written consent of his parents or guardian to allow the proper health authorities to vaccinate in case of emergency. Cold serums will be furnished on request.

Reimbursement. The service is supported by a student fee of \$2.50 per quarter. Students who have paid the health service fee are reimbursed only for those bills incurred with the express authorization of the University Nurse, and only to the extent that the fund derived from this fee is sufficient. Reimbursement is limited to bills incurred for sickness not caused by any illness chronic or acute prior to entering the State University, and for accidents happening to students while on the State University campus, or while engaged in activities under the direct supervision of the State University. Reimbursement for bills for serums and anti-toxins will not be made except in cases where illness had been treated by serums and anti-toxins, nor will reimbursement in general be given for the services of dentists or oculists, nor for the treatment of chronic diseases or deformities, nor for consultation of physicians, for X-rays (except in case of accident), extra charges by hospitals, or special nurses. Students who knowingly and unnecessarily expose themselves to contagious and infectious diseases, or fail to take precautions such as vaccination for small-pox and typhoid fever and anti-toxin for diphtheria, will not be reimbursed for expenditures for such diseases. Physicians' charges are pro-rated, the total paid in any one quarter not to exceed \$100. Hospital charges are paid in full, not to exceed \$100 in any one quarter. This fee does not cover doctor bills for surgical operations such as removal of appendix, goitre, tonsils or hernia.

Fee. All students (optional with graduates) are required to pay the Health Service Fee of \$2.50 per quarter with the following exceptions: (1) students taking less than six quarter credits, or over 30 years of age, or married students, may not pay this fee without special permission of the University Nurse; (2) members or adherents of religious organizations opposed to medical service, and those carrying health insurance, may pay the fee if they desire to do so. Students exempted from payment of the fee are not entitled to reimbursement for bills incurred because of illness; students exempted from payment of the fee one quarter cannot pay the fee another quarter and receive the benefit of the health service reimbursements (with the exception of limited registrants changing status); neither can they be reinstated in the Health Service except upon special permission of the University Nurse.

## **Scholarships and Prizes**

The deans of men and women in conference with the president are authorized to administer all matters connected with prizes and scholarships, subject to the condition of gift and any actions by the faculty. Where the award of a prize is conditional upon performance in, or in relation to the work of a department of the University, the award is made by the department concerned. Those that are established at present are stated as follows:

High School Honor Scholarships. The principal-of each fully accredited high school in the state may name from each year's graduating class from one to four members, depending on the size of the class (but not more than two for any one unit of the University of Montana), to be recipients of high school honor scholarships. These scholarships exempt the holders from the payment of the matriculation fee, the registration fee, and the incidental fee, described on page 26, during their freshman year. Blanks for the nomination of scholars, with detailed statement of conditions, are furnished to principals by the Executive Secretary of the University of Montana at Helena.

State University Scholarships. The State University is authorized to award to five per cent of the students in regular attendance above the freshman year, scholarships exempting the holders from payment of the registration and incidental fees during the three quarters of the following college year. These scholarships are to be awarded on or about July 1 of each year to students who, during the preceding year, attended all three quarters and made a scholastic index of 1.75 on a minimum of 40 credits. The awards are made on the basis of ability, character, and promise.

State Federation of Women's Clubs Scholarships. The Montana Federation of Women's Clubs assumes the payment of expenses for board, room rent and necessary books by a gift for the first year and funds provided on the loan basis for the remaining three years.

American Association of University Women. The Butte Branch of the American Association of University Women maintains five loan scholarships at the State University, as follows: Claribel Leggat Couse Scholarship, Eleanor Humphrey Smith Scholarship, Rosemary MacGinnis Creden Scholarship, Natalie Lahr Dwight Scholarship, and the Jane Hutchens Moore Scholarship.

One scholarship each year is offered to a Butte high school girl graduate. Candidates for the scholarships must have high grades in the high school and must receive the vote of two-thirds of the club's

active membership. These scholarships are on the loan plan, \$300 being allowed each year to each recipient.

The Bonner Scholarship. This scholarship, amounting to approximately \$300 a year payable from the income of an endowment, was established by Mrs. E. L. Bonner. It is awarded to a student ranking among the highest in scholarship at the end of his freshman year, to be held by him for three years unless forfeited.

The Rhodes Scholarship. Men who have completed their sophomore year at the State University of Montana, and are between 19 and 25 years of age, are eligible to compete for the Cecil Rhodes Scholarship, tenable for three years at Oxford University, England, with a stipend of four hundred pounds each year. Information may be obtained from Dean J. E. Miller, State University, Missoula, Montana, who is the State University representative for the Rhodes Scholarship.

The Samuel W. Fairchild Scholarship. Second year pharmacy students are eligible to compete for a scholarship which amounts to \$500 in cash. The examinations are held annually at the State University the second Monday in June. Students desiring to compete for this scholarship should apply to the Dean of the School of Pharmacy not

later than May 1.

The Ryman Fellowship in Economics. This fellowship was founded in 1927 by the late J. H. T. Ryman, Esq., of Missoula, by a bequest of ten thousand dollars, the income of which is to be awarded every fourth even year to a student of that year's graduating class who has shown distinctive ability and promise in Economics and Sociology. The purpose of the fellowship is to enable such a student to pursue study in some graduate school of recognized standing leading to the degree of Doctor of Philosophy.

American Legion Military Award. The Hell Gate Post No. 27 of the American Legion awards a medal at the end of each regular quarter to a student of good scholarship and conduct who excels in military science and tactics.

The Annie Lewis Joyce Memorial Prize. This prize, the annual proceeds from a \$200 endowment, is awarded upon recommendation of the English Department.

The Bennett Essay Prize. This prize, the annual proceeds from a \$500 endowment, is awarded upon recommendation of the Department of History and Political Science for the best essay by any regular undergraduate student of the State University, on some topic pertaining to good government. No prize is awarded, however, in case the judges decide that no essay submitted is good enough to receive recognition.

The 1904 Class Prize. This is a prize payable from the interest on an endowment of \$400.

The Duniway Scholarship Books. A fund of \$400, established by former President C. A. Duniway, provides standard books, within various fields of knowledge, to be awarded annually to students distinguishing themselves by scholarship in the several departments of the State University.

The Aber Memorial Oratorical Prizes. A fund of \$1000 was set aside by the late Professor William M. Aber for the establishment of the Aber Memorial Oratorical prizes. Prizes are given to the winners of first, second and third places, payable from the interest on this fund.

The Edwin B. Craighead Memorial Prize in Art. This prize is given annually to the freshman student in the Department of Fine Arts who shows the greatest ability in art during the year.

The Frontier Poetry Prizes. Books are awarded for the first and second places upon recommendation of the Department of English.

The Pi Mu Epsilon Prize. This prize is given bi-annually in the Department of Mathematics and the Department of Physics. It is of the same nature, and is awarded under the same conditions as the Duniway prize; it is given by the local chapter of Pi Mu Epsilon, honorary mathematics fraternity.

**Pharmacy Prizes.** The Kappa Psi Senior Scholarship prize is given by the Kappa Psi National Pharmacy fraternity annually to one of its members, provided that a member of Kappa Psi makes the highest general average among all of the pharmacy students in all classes.

The Lehn and Fink gold medal is awarded annually to a member of the graduating class making the highest general average in the pharmacy courses, but not to a member receiving the Kappa Psi prize.

Life membership and dues in the National Association of Drug Clerks is awarded annually to each of the three students ranking highest in the three major divisions of Pharmacy.

The Montana Trophy. This trophy is awarded annually to the student possessing the highest all-around excellence in athletics and scholarship. The trophy is a silver cup given by Professor W. E. Schreiber, chairman of the Department of Physical Education.

# Activities

#### Athletics

All athletic activities in the State University are under the control and supervision of the Faculty Athletic Committee. Athletic eligibility, schedules of competition and relationship with other institutions are subject to the approval of the Faculty Athletic Committee. The details of management of Intercollegiate athletics are handled by the athletic manager and the coaches, subject to the approval of the Associated Students' Athletic Board, which consists of two members of the Faculty, three members of the Central Board of the Associated Students, and two alumni members.

The University has two gymnasiums, one for women and one for men. The men's gymnasium is one of the finest in the country. The gymnasium floor is 75x140 feet in size with separate rooms for boxing, wrestling and theory classes. The first floor is given up to administrative offices, locker rooms, varsity teams' rooms, and training rooms. A wing of the building contains the shower rooms and swimming pool. The entire building is equipped with the very latest and best apparatus of all kinds.

The women's gymnasium is equipped with dressing rooms, shower rooms, rest rooms, offices, class rooms, and contains a gymnasium floor 45x90 feet in size. It is fully equipped with the best gymnastic apparatus. In the men's gymnasium is a large locker and shower room set apart for the use of women, and the natatorium is reserved for their use half of the time.

To the north of the men's gymnasium is the Dornblaser athletic field, which was presented to the University by the Alumni Association. A standard quarter mile cinder track encloses the football field and pits for pole vaulting and jumping. The track has a 220-yard straightaway, 35 feet wide. North of the football field is the baseball diamond. The bleachers, extending nearly the full length of the field, have a

ACTIVITIES

seating capacity of 7,000. Ten concrete tennis courts have been constructed north of the women's gymnasium. To the east of the tennis courts is a women's athletic field for hockey, association football, and baseball.

#### **Annual Interscholastic Games**

For thirty-one years the State University has held an annual interscholastic invitation meet for track and field contests on Dornblaser Field. Golf and tennis tournaments have recently been added to the regular program of events. Invitations to participate are extended to all fully accredited high schools in the state. In determining and administering rules of eligibility for the contests the State University has the aid of the Montana High School Athletic Association.

Interscholastic week is by no means devoted entirely to athletics. The declamatory contests for both girls and boys, the essay contest, the Little Theatre tournament, the interscholastic debate, the meetings of the Interscholastic Editorial association—these events attract students from all parts of the state.

### Intercollegiate Debate

The State University engages in debate with the leading universities in the Northwest and occasionally with eastern universities. In addition to the regular debates, teams from the State University make a tour of the state each year. Whenever foreign teams, traveling in the United States visit the West, debates with them are scheduled if possible. The activity of debate at the State University affords the finest opportunity for students in public address to combine academic, class, and practical experience.

#### **Publications**

The Associated Students of the State University publish a semiweekly newspaper, The Montana Kaimin. The paper has become a permanent factor in campus life.

The Sentinel is a year book published by the Associated Students of the State University. It contains a valuable record of the activities of each year.

The Frontier and Midland, a literary magazine, is published quarterly at the State University.

#### Societies

The entire student body is organized into one society known as the Associated Students of the State University of Montana. This organization, through appropriate committees and officers, has charge of matters of general student concern, such as athletics, oratory, debate, and entertainments.

The Associated Women Students is an organization made up of all women students in the University for the purpose of regulating matters pertaining to the student life of its members.

The University Inter-Church Club and various church clubs and associations carry on work for the religious and social life of the University.

There are five musical organizations—the University Glee Club, composed of men; the Women's Glee Club; the Choral Society, composed of men and women; the University Symphony Orchestra; and the

University Band. These organizations provide music for University events during the year, and furnish an opportunity for all students who have musical talent to cultivate it as well as to participate in the social pleasures pertaining to such organizations.

The "M" Club is an organization of all University men who have won a letter in any branch of athletics. Its purpose is the betterment

of University spirit, with athletics especially in view.

The Montana Masquers is the University dramatic organization, open to students who have distinguished themselves in dramatics in any capacity; acting, stage managing, costuming, designing, etc. A series of plays is given throughout the year in Missoula, and at least one tour is made of the state.

The Penetralia Chapter of Mortar Board is an honor organization of upperclass women devoted to advancing the interests of the University in every feasible way.

The Silent Sentinel is a similar organization of upperclass men. Bear Paw is an organization of sophomore men which assists in entertainment of visiting teams.

Tanan-of-Spur is a society of sophomore women for the purpose of taking care of women guests at the University during the year and of assisting the Bear Paw organization in any way in University affairs.

Quadrons is an organization of all senior women in the University. The Women's Athletic Association is an organization devoted to the development of interest in the various sports for women.

# Organization of Instruction

College of Arts and Sciences (page 38).

### Division of Biological Sciences

Biology (page 40). Botany (page 42). Physical Education (page 44). Psychology and Philosophy (page 45).

#### Division of the Humanities

English (page 47).
Fine Arts (page 50).
Foreign Languages: French,
German, Spanish, Latin and
Greek (page 51).
Library Economy (page 55).

GRADUATE DIVISION (page 68).

Public Service Division (page 69).

SCHOOL OF BUSINESS ADMINISTRATION (page 71).

School of Education (page 74).

School of Forestry (page 78).

SCHOOL OF JOURNALISM (page 82).

School of Law (page 85).

School of Music (page 87).

SCHOOL OF PHARMACY (page 91).

MILITARY SCIENCE AND TACTICS (page 94).

SUMMER SESSION (page 96).

Affiliated School of Religion (page 93).

Note—In the following outline of courses, the length of a course and the quarter or quarters in which it is given are indicated immediately after its title. Courses numbered from 10 to 99 are offered to undergraduates only; those numbered from 100 to 199 are offered to both undergraduates and graduates (the amount of graduate credit allowed is subject to the regulations listed under "Graduate Division"); those numbered from 200 to 299 are offered to graduates only. In the courses designated "continuous" the student may receive credit only upon the completion of the entire course. In courses numbered a, b, c, credits may be granted upon completion of a quarter's work. In continuous courses, or in courses numbered a, b, c, the first quarter of a course is prerequisite to the second quarter and the second quarter is prerequisite to the third quarter, unless otherwise indicated. This outline is as nearly complete as it is possible to make it and it affords the student information which is necessary in arranging his course. When the student has decided upon his major course, he is expected to follow closely the work which is outlined as the required course in that line of study or research.

The University reserves the right to withdraw any course for which

The University reserves the right to withdraw any course for which fewer than five students are enrolled before the opening of the course. Such courses may be given only in special cases and with the written approval of the President.

Division of Physical Sciences Chemistry (page 56).

Mathematics (page 60).

Home Economics (page 59).

Pre-Medical Course (page 62).

History and Political Science

Pre-Business Administration

Pre-Education (page 67).

Geology (page 57).

Physics (page 62).

(page 64).

(page 65).

(page 67).

Division of Social Sciences Economics and Sociology

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## COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences offers the student a liberal education and special training in some chosen field of work.

### Requirements for Admission

The regular University requirements for admission apply to the College of Arts and Sciences, see pages 14 to 16.

### Requirements for Graduation

Candidates for the Bachelor of Arts degree must meet the following requirements:

(1) The general University requirements for graduation, see

pages 17 to 21.

(2) Complete 93 credits in the College of Arts and Sciences including the requirements in the Division of which the major department is a member, and the major requirements of the department from which the degree is to be granted.

## Divisional Requirements for Graduation

**Division of Biological Sciences.** Candidates for the degree of Bachelor of Arts in this Division should complete the following curricula during the freshman and sophomore years:

Physical Science 17	Autumn Quarter Credits 5 5 1 1 1 7 17	Quarter	
Social Science 11abc or Humanities 15abc	$\begin{array}{c} 3-5 \\ 5 \\ 3-5 \\ 1 \end{array}$	5 3-5 5 3-5 1	5 3-5 3-5 3-5 1
	19-20	19-20	19-20

Note: Electives in second year: Botany majors, Botany 22, 21, and 3 additional credits; Biology majors, Biology 21ab and 3 additional credits; Psychology majors, Psychology 12ab and 3 additional credits; Physical Education majors, Physical Education 20abc.

**Division of the Humanities.** Candidates for the degree of Bachelor of Arts in this Division should complete the following curricula during the freshman and sophomore years:

Freshman Year	Autumn Quarter Credits		Spring Quarter Credits
Humanities 15abc or Social Science 11abc	5	5	5
Biological Science 13 or Physical Science 17	5	5	5
*Foreign Language	5	5	5
Physical Education 11abc	1	1	1
Military Science 11abc (Men)	1	1	1
	177	177	17

<sup>\*</sup>Course entered dependent upon high school preparation. See Department of Foreign Languages, page 51, and Department of Mathematics, page 60.

### Sophomore Year

	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits	
Biological Science 13, Physical Science 17, Social Science 11abc, or Humanities 15abc *Foreign Language and Psychology 11	5 5 3 3-4 1	5 5 3 2–4 1	5 5 3 3–4 1	
	18-19	17-19	18-19	

Note: Electives in second year: English majors, English 59abc (two quarters), and 57ab (one quarter), or 30 or 32. Library Economy majors should elect Psychology or Economics.

**Division of Physical Sciences.** Candidates for the degree of Bachelor of Arts of this Division should complete the following curricula during the freshman and sophomore years:

Freshman Year			
Social Science 11abc	5	5	5
Chemistry 13 or Humanities 15abc	5	5	5
*Mathematics or *Foreign Language	5	5	5
Physical Education 11abc	1	1	1
Military Science 11abc (Men)	1	1	1
	- <del> </del>		
	17	17	17
Sophomore Year			
Humanities 15abc or Chemistry 13	5	5	5
Physics 20abc	5	5	5
English 11ab (two quarters)	3	3	3
*Foreign Language and Psychology 11	5	5	5
Physical Education 12abc	1	1	1
Military Science 12abc (Men)	1	1	1
	17-20	17-20	17-20

Note: Students who do not offer entrance credit in Chemistry should elect Humanities 15abc in the freshman year. Students intending to major in Home Economics should elect Foreign Language in the freshman year; others Mathematics. In the sophomore year, students intending to major in Home Economics may replace Physics 20abc with Home Economics 15ab and 14, and may replace Foreign Language with Chemistry 19 and 103. Foreign Language in the freshman year and Home Economics 15ab and 14 in the sophomore year may be interchanged in case of schedule conflicts.

**Division of Social Sciences.** Candidates for the degree of Bachelor of Arts in this Division should complete the following curricula during the freshman and sophomore years:

#### Freshman Year

Sile to an extra problem of the control of the cont	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits
Physical Science 17 or Biological Science 13	5	5	5
Social Science 11abc	5	5	. 5
*Foreign Language	5	5	5
Physical Education 11abe	1	1	1
Military Science 11abc (Men)	1	1	1
		-	
	17 -	17	17

<sup>\*</sup>Course entered dependent upon high school preparation. See Department of Foreign Languages, page 51.

## Sophomore Year

	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits	
Humanities 15abc	5	5	5	
Economics 14 and Psychology 11	4-5	4-5	4-5	
English 11ab and elective	3	3	3	
Elective	4	4	4-5	
Physical Education 12abc	1	1	1 .	
Military Science 12abc (Men)	1	1	1	
	-			
	18-19	18-19	18-19	

Note: Electives in the sophomore year: History majors, History 21abc and 4 additional credits; Economics majors, Economics 62, 61, and Psychology 14.

## DIVISION OF BIOLOGICAL SCIENCES

PROFESSOR MORTON J. ELROD (CHAIRMAN).

The following course is offered as a general survey of the field of Biological Sciences:

13. Introduction to Biological Science. 3 Q. Autumn, winter, spring. Continuous. 15 cr. Students having 8 or more college credits in biology or botany may not receive credit in this course. A general survey of the principles and laws controlling the growth, reproduction and maintenance of living organisms, their distribution over the world, their relations to man as a source of disease and their economic value to man through benefit or injury. Given conjointly by the Departments of Biology, Botany and Geology. A textbook fee of \$1.50 is charged each quarter. Mr. Elrod. Mr. Severy. Mr. Deiss.

# Biology

PROFESSORS, MORTON J. ELROD (CHAIRMAN), R. T. YOUNG. INSTRUCTOR, ALVIN Y. WELLS.

Major Requirements: A minimum of 45 credits, including Biology 11abc, either 21ab or 22ab, 125 and 3 credits of 129. In addition, major students must take two (preferably three) quarters of Botany 11abc, Chemistry 13 or Physical Science 17, and must have a reading knowledge of German. Geology 11ab is advised.

Senior examinations will not be given except to candidates for honors.

The Biological Station. Through an act of Congress when the Flathead Indian Reservation was thrown open to settlement, the State University received a grant of 160 acres of land for use as a Biological Station. This land is in three tracts at Flathead Lake, 89 acres at Yellow Bay, 36 acres on Bull (Idylwild) Island, and 34 acres on Wild Horse Island. At Yellow Bay a brick laboratory building, a log house for a dining room, a boat house and a kitchen were erected. Sleeping quarters were in tents. The adjacent region is largely a virgin forest.

The Station was maintained and used as an out-of-door summer school for students and as a laboratory for investigation for many years. Owing to lack of funds it has not been open to students for the past several years.

For "Premedical Course" see page 62.

### For Undergraduates

11abc. Elementary Zoology. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Summer, 11a. 4 cr. Introduction to the study of animals, dealing with their anatomy, distribution and habitats. Invertebrates are studied during the autumn and winter quarters; vertebrates in the spring.

13. Animal Ecology. 1 Q. Spring. 5 cr. Prerequisite, Biology 11abc. Animals as affected by environment; adaptability of structure to modes of

life. Mr. Elrod.

16. Protozoology. 1 Q. Spring. 5 cr. Prerequisite, Botany 11a or Biology 11a. The life histories of various protozoans, their structure, habits, reproduction, distribution; their relation to animals and man through

diseases. Mr. Young.

17. Entomology. 1 Q. Spring. 5 cr. Prerequisite, Biology 11ab. Insects; their structure, classification, distribution, benefits and injuries; their relation to animals and man through diseases. Mr. Elrod.

relation to animals and man through diseases. Mr. Elrod.

19a. General Bacteriology. 1 Q. Autumn. 5 cr. Prerequisite, Chemistry 13 and either Botany 11ab, Biology 11ab or Pharmacy 13. The activities of bacteria; essential technique in laboratory methods. Principles of sterilization, cultivation of bacteria, factors influencing the growth of bacteria, products of bacterial growth, general ideas of disease production and immunity; bacteriology of soil, milk, water and foods. A course especially serviceable to students preparing for medicine or technical work. Mr. Wells.

19b. Pathogenic Bacteriology. 1 Q. Winter. 5 cr. Prerequisite, Biology 19a. The characteristics, etiology, prophylaxis, and control of diseases caused by microorganisms. Laboratory work deals with various pathogenic types and methods of laboratory diagnosis of diseases. Mr. Wells.

21ab. Histology. 2 Q. Autumn. winter. 4 cr. each quarter. Biol

21ab. Histology. 2 Q. Autumn, winter. 4 cr. each quarter. Biology 11ab is prerequisite for 21a or 21b. A knowledge of chemistry is recommended. Preparation of animal tissues for microscopical examination; use of microscope and microtome: methods of fixation, sectioning and staining; a study of the tissues of the human body. Mr. Elrod.

staining; a study of the tissues of the human body. Mr. Elrod.

22ab. Embryology. 2 Q. Winter, spring. Continuous. 10 cr. Prerequisite, Biology 11abc. The early development of animals, with special reference to the chick and pig. Mr. Young.

23. Comparative Anatomy. 1 Q. Autumn. 5 cr. Prerequisite, Biology 11abc. A comparative study of organ systems in the higher vertebrates as a basis for the interpretation of the mammal. Mr. Young.

24a. Physiology of the Human Body. 1 Q. Autumn. 4 cr. Prerequisite, sophomore standing. A year of chemistry and a year of elementary botany or zoology recommended. A summary of bodily activities, and the physiology of digestion, metabolism, excretion and muscular action. Mr. Wells.

24b. Physiology of the Human Body. 1 Q. Winton. 4 cm. Present

Mr. Wells.

24b. Physiology of the Human Body. 1 Q. Winter. 4 cr. Prerequisite, same as for 24a. The physiology of the nervous system, blood, circulation, respiration, reproduction, and endocrine glands. Mr. Wells.

26. General Hygiene. 1 Q. Spring. Summer. 3 cr. Open only to freshmen and sophomores. An informational course dealing with the subject as related to the individual, the community and the state. Bacterial and protozoan diseases, food. exercise, sleep, ventilation, drainage, disinfectants and quarantine. Elementary chemistry and zoology recommended. This is not a laboratory course and does not apply toward the restricted elective requirement. Mr. Wells.

#### For Undergraduates and Graduates

114. Eugenics. 1 Q. Autumn. Summer. 3 cr. Prerequisite, junior standing and Biology 11ab or Botany 11ab. The fundamental principles involved in the better development of man and animals. This is not a laboratory course and does not apply toward the restricted elective requirement. Mr. Elrod.

118. Entomology, Advanced. 1 to 3 Q. Autumn, winter, spring. Credit variable. Prerequisite, Biology 17. Individual work will predominate, the student taking special groups of insects or special insect problems. Mr. Elrod.

120. Immunology. 1 Q. Spring. 5 cr. Prerequisite, junior standing and Biology 19ab. General principles of immunity and laboratory work in serology, animal experimentation and clinical diagnoses. Mr. Wells.

122. Histology, Advanced. 1 Q. Spring. Credit variable. Prerequisite, junior standing and Biology 21ab. Special work and problems in tissue structure and pathology may be taken up by students individually. Mr. Elrod.

125. Evolution and Heredity. 2 Q. Winter, spring. 6 cr. Continuous. Prerequisite, junior standing and Biology 11abc or Botany 11abc. The facts and theories of evolution and heredity. Given conjointly by the Departments of Biology and Botany. Mr. Young. Mr. Severy.

129. Biological Club. 3 Q. Autumn, winter, spring. 1 cr. each quarter. Prerequisite, senior standing and 20 credits of biology or botany. Reviews of current literature for the purpose of comprehensive survey of the trend of thought and study in biological fields. Reports of special studies.

Biology and Botany Staff.

131. Biological Problems. 1 to 4 Q. Autumn, winter, spring, summer. Credit variable. Opportunity is given graduate students and others of sufficient ability to pursue original investigations individually. Mr. Elrod. Mr. Wells. Mr. Young.

#### For Graduates

201. Research. 1 to 4 Q. Any quarter. Credits variable for students outlined to meet individual needs and requirements. Courses Staff.

# Botany

PROFESSORS, JOSEPH W. SEVERY (CHAIRMAN), CHARLES W. WATERS. ASSISTANT PROFESSOR, C. L. HITCHCOCK.

Major Requirements: 45 or more credits, including Botany 11abc, 21, 22, 141abc. Additional work should be elected from the following courses: 14, 51, S61, 161, 165, 168, 170, 171. The following courses must be completed: two quarters (three recommended) of Biology 11, 10 cr., 125, 6 cr., 129, 3 cr. Chemistry 13 or Physical Science 17 and Geology 11ab are advised. A reading knowledge of French or German (preferably both) is desirable, particularly for students planning to do graduate work.

Senior examinations will not be given except to candidates for honors.

General Information. The region is rich in opportunity for research in ecology, pathology, systematic botany and other branches of the science. Graduate work in these subjects, leading to the degree of Master of Arts, is offered.

## For Undergraduates

11a. General Botany. 1 Q. Autumn. 5 cr. Summer. 4 cr. No prerequisite. A presentation of the general principles of the anatomy and physiology of the flowering plants. Mr. Hitchcock. Mr. Waters.

11b. General Botany. 1 Q. Winter. 5 cr. No prerequisite. A presentation of the broad outlines of the classification of the plant kingdom, and the tracing of the possible stages in the evolution and development of the vegetative and reproductive structures of plants. Mr. Hitchcock. Mr. Waters.

11c. General Botany. 1 Q. Spring. 5 cr. No prerequisite. An introduction to the classification of the higher plants, as exemplified in the spring flora; factors governing plant distribution, variation and heredity, and evolution. Given in 1935-36, and in alternate years. Mr. Hitchcock.

13. Identification of Range Plants. 1 Q. Spring. 3 cr. Prerequisite, Botany 11b. For Forestry students. An intensive survey course in field identification of range plants. Largely field work. Mr. Hitchcock.

14. Economic Botany. 1 Q. Spring. 5 cr. No prerequisite. A treatment of plants from the standpoint of their uses and products; their geographic distribution; a consideration of the more important aspects of the methods of culture and utilization of those plants of chief economic importance. Given in 1934-35, and in alternate years. Mr. Waters.

21. Plant Histology. 1 Q. Winter. 5 cr. Prerequisite, Botany 11ab. A detailed study of the origin of organs and tissues of plants, and a comprehensive survey of the anatomy of the higher plants. Methods of making microscopical slides. Mr. Severy.

22. Plant Physiology. 1 Q. Autumn. 5 cr. Prerequisite, Botany 11ab. The functions of the living plant and an attempt to interpret function in terms of chemical and physical reactions. The laboratory work consists of observations of the various processes of plants under controlled conditions. Mr. Severy.

- 31. Forest Pathology. 1 Q. Spring. 5 cr. Prerequisite, Botany 22. The agencies of disease and decay of trees and structural timbers; problems of government forests. Mr. Waters.
- 51. Plant Ecology. 1 Q. Spring. 5 cr. Prerequisite, Botany 22. The relation of vegetation to the factors of the environment; the influence of environmental factors upon the distribution of plants; the problems of plant succession. A brief survey of plant geography. Mr. Severy.
- S61. An Introduction to Systematic Botany. 1 Q. Summer. 4 cr. Open to all students. The classification of flowering plants and a survey of the origin and relationships of the higher plants. The identification of plants; use of a manual; methods of collecting, preserving and mounting plants. The work deals with the summer flora of western Montana. Mr.
- 75. Botanical Problems. 1 Q. Any quarter. 2 to 5 cr. Prerequisite, ten credits in botany. Qualified students will be permitted to do independent study on some botanical subject. Mr. Severy. Mr. Hitchcock. Mr. Waters.

### For Undergraduates and Graduates

141abc. Comparative Morphology. 3 Q. Autumn, winter, spring. 4 cr. each quarter. Prerequisite, Botany 22. The morphology and life histories of representative types of plants belonging to the larger natural groups, the relationship and the possible evolution of these groups. Given in 1935-36, and in alternate years. Mr. Waters.

161abc. Systematic Botany. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Students may enter any quarter. Prerequisite, Botany 22. Classification of the flowering plants, especially of Montana; methods of collecting, preserving and mounting plants. Mr. Hitchcock.

- 165. Mycology. 1 Q. Autumn. 5 cr. Prerequisite, Botany 141abc for Botany majors; Botany 31 for Forestry majors. The classification and relationships of the fungi, with training in their collection and preservation. Given in 1934-35, and in alternate years. Mr. Waters.
- 168. Microtechnique. 1 Q. Any quarter, but preferably in the spring. 2 to 5 cr. Course may be repeated during a succeeding quarter to a maximum of 5 credits. Prerequisite, Botany 21. The various methods of preparing microscopic slides: instruction in the paraffin method, venetian turpentine method, celloidin method and the glycerine method. Largely independent laboratory work. Mr. Severy. Mr. Waters.
- 170. Plant Pathology. 1 Q. Winter. 4 cr. Primarily designed for majors in Grazing in the Forestry School. Prerequisite, Botany 22. Plant diseases from the standpoint of classification, life history, methods of control, methods of culture. Mr. Waters.
- 171. Botanical Literature. 3 Q. Autumn, winter, spring. 1 to 3 cr. each quarter. Prerequisite, senior standing in botany. Students may enter any quarter. An introduction to the botanical journals and to the methods of bibliographical research. Mr. Severy. Mr. Hitchcock. Mr. Waters.
- 175. Botanical Theses. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, senior standing and 30 credits in botany. Primarily for those seeking a Civil Service appointment requiring a botanical thesis. Mr. Severy. Mr. Hitchcock. Mr Waters.

#### For Graduates

**201.** Research. Any quarter. Credit variable. Work on selected problems in the fields of ecology, pathology, morphology, physiology and systematic botany. Mr. Severy. Mr. Hitchcock. Mr. Waters.

## Geology

Students who specialize in historical geology and paleontology should complete the curricula of the Division of Biological Sciences. For further information regarding major requirements and courses see page 57 in the Division of Physical Sciences, Department of Geology.

# **Physical Education**

Professors, Bernard F. Oakes, William E. Schreiber (Chairman). Assistant Professor, Harry F. Adams (Intra-Mural Director). Instructors, Adolph J. Lewandowski, Ruth Nickey (Acting Director of Women's Division).

Major Requirements: 45 or more credits in Physical Education, in addition to courses 11abc and 12abc. Physical Education 15abc and 20abc must be completed. The following courses should be completed: Biology 11abc, 19ab, 10 cr.; 21ab, 4 or 8 cr.; 24ab, 8 cr.; 26, 3 cr. The requirements of the School of Education for the Certificate of Qualification to Teach should be completed. A course in physics and chemistry is advised.

Senior examinations will not be given except to candidates for honors.

General Information. All students taking part in the work of the Department are required to take the physical and medical examinations provided by the Department. This examination is given to every student entering the freshman or sophomore year.

All students enrolled in the State University for eight or more credits are required to take 1 credit hour each quarter until 6 credits of Physical Education 11abc, 12abc have been completed. Students who are physically unable to take the regular class work are given excuses or exemptions by the Chairman of the Department after consultation with the physician in charge of the case, or are required to enter corrective classes, or to do individual corrective work suited to their needs.

Athletics. All intercollegiate athletics are under the supervision of the Faculty Athletic Committee, varsity teams being maintained in football, basketball, track and the minor sports.

Facilities are provided by the Department for participation in athletic work for every member of the student body, intra-mural competition being maintained in football, hockey, basketball, baseball, track, tennis, cross-country running, indoor baseball, boxing, wrestling, handball, gymnastics and swimming.

## For Undergraduates

S2. Training and Athletic Injuries. 1 Q. Summer. 1 cr. Handling and conditioning the athlete for contests; treatment of some of the common athletic injuries. Mr. Schreiber.

11abc, 12abc. Freshman and Sophomore Physical Training (Men). 6 Q. Autumn, winter, spring, freshman and sophomore years. Summer. 1 cr. each quarter. Practical work in: swimming, floor work, apparatus work, competitive games, track, boxing, wrestling, tennis, golf, fencing and cross-country running. No student will be given the final grade in the last quarter of this course until he has passed the elementary examination in swimming. Mr. Schreiber and Staff.

11abc, 12abc. Freshman and Sophomore Physical Training (Women).
6 Q. Autumn, winter, spring, freshman and sophomore years. Summer.
1 cr. each quarter. Practical work in hockey, tennis, recreative games, mass class drills, apparatus work, elementary and advanced dancing, swimming, fencing, basketball, volley ball, baseball, track, tennis and golf. No student will be given a final grade in the last quarter of this course until she has passed the elementary swimming examination. Miss Nickey and Staff.

15abc. Advanced Gymnastics. 3 Q. Autumn, winter, spring. 1 cr. each quarter for major and minor students. Students may enter any quarter. Prerequisite, 12abc or marked gymnastic ability. Open for credit only to major and minor students. Gymnastic mass floor drills in the German and Swedish systems; apparatus work and military marching tactics; outdoor work in recreative games and athletics; class leading is also required in advanced swimming, diving and life saving. Mr. Schreiber. Miss Nickey.

Human Anatomy. 3 Q. Autumn, winter, spring. 4 cr. each Prerequisite, sophomore standing. Students may enter either 20abc. quarter. Prerequisite, sophomore standing. S 20b or 20c after completing 20a. Mr. Schreiber.

32. First Aid. 1 Q. Spring. 2 cr. Prerequisite, for students majoring in Physical Education, 20ab; for majors in Forestry, junior standing; all others, senior standing. Accidental injuries of the human body; methods of treatment. Red Cross certification may be secured on completion of of treatment. Red Cross the course. Mr. Schreiber.

35a. Systems and Methods. See courses in Education.
35b. Systems and Methods. 1 Q. Winter. 3 cr. Prerequisite, Education 35a. A continuation of Education 35a. Miss Nickey.
45abc. Gymnastic Dancing. 3 Q. Autumn, winter, spring. 1 cr. each quarter. Prerequisite, Physical Education 12abc and junior standing. Students may enter any quarter. Folk, gymnastic, and natural dancing given especially from the standpoint of the teacher. Miss Nickey.

#### For Undergraduates and Graduates

134. Playgrounds. 1 Q. Autumn. 4 cr. Prerequisite, junior standing. History, construction, equipment, problems, management, methods of conducting and practical work in supervision of playgrounds; theory of play. Miss Nickey.

136. Kinesiology. 1 Q. Winter. 5 cr. Open only to major students. Prerequisite, Physical Education 20ab. The anatomical mechanism of the

Prerequisite, Physical Education 20ab. The anatomical mechanism of the most common and representative types of gymnastic movements and positions with the view of developing subjective control. Mr. Adams.

137. School Gymnastics. 1 Q. Spring. 4 cr. Prerequisite, Physical Education 35b. Methods of handling gymnastics in the graded and high schools. Types of work suitable for each grade. Miss Nickey.

139. Laws of Growth and Development. 1 Q. Spring. 1 cr. Prerequisite, Physical Education 149. Open to major students only. The laws of growth and development of the child from birth to adult years; the application of physical education to these laws. Mr. Schreiber.

141. Corrective Gymnastics. 1 Q. Winter. 4 cr. Prerequisite, Physical Education 136 and 137. Open only to major students. The prevention and correction of deformities in the child. Mr. Schreiber.

142. Equipment and Management. 1 Q. Spring. 2 cr. Open only to major students. Best methods of construction of gymnasiums, athletic fields, swimming pools, tennis courts, running tracks and their management in schools and colleges. Mr. Schreiber.

143abc. Principles of Coaching. 3 Q. Autumn, winter, spring. 2 cr.

in schools and colleges. Mr. Schreiber.

143abc. Principles of Coaching. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Education 18, or may be taken concurrently. Summer. 1 to 6 cr. Students may enter any quarter. Methods of handling athletic teams, theory and practice. The work of the men and women is separate. For men: football, basketball, baseball, track and training methods from the standpoint of the coach. For women: basketball, hockey, indoor baseball, playspound ball, volley ball and association football. Mr. Adams. Mr. Lewandowski. Miss Nickey. Mr. Oakes.

146. Massage. 1 Q. Spring. 2 cr. Prerequisite, Physical Education 20ab. Open only to major students. The place of massage in therapeutics and physical education. Methods and use of the various types of massage. Practical application. Mr. Schreiber. Miss Nickey.

148. Physiology of Exercise. 1 Q. Autumn. 2 cr. Prerequisite, Biology 24. Open only to major students. The physiological effects of the different types of exercises on the functions of the human body. Mr. Schreiber.

Schreiber.

149. Physical Diagnosis. 1 Q. Autumn. 3 cr. Prerequisite, Physical Education 20ab. Open only to major students. Examination of the human body for external signs of disease. Anthropometric measurement and tests; how to use and chart them; their value in physical education. Mr. Schreiber.

# Psychology and Philosophy

PROFESSORS, WALTER R. AMES, ERNST A. ATKINSON, FRANKLIN O. SMITH (CHAIRMAN).

Major Requirements: 45 or more credits, including Psychology 11, 12ab, 14 or 51, 104 and 130.

Senior examinations will not be given except to candidates for honors.

### For Undergraduates

11. General Psychology. 1 Q. Autumn. Winter. Spring. 5 cr. Summer. 4 cr. Entering freshmen may not register for this course in the autumn quarter. An outline study of the whole field, and an introduction to the special courses in Psychology. Psychology Staff.

12ab. Experimental Psychology. 2 Q. Winter, spring. 4 cr. each quarter. Prerequisite, Psychology 11. Laboratory methods and apparatus used in the study of some of the laws of mental processes, and their application. Mr. Atkinson.

- 13. Child Psychology. 1 Q. Autumn. 3 cr. Prerequisite, Psychology 11. The development of the child; comparative studies with animal intelligence and behavior. Mr. Ames.
- 14. Social Psychology. 1 Q. Spring. 5 cr. Prerequisite, Psychology 11. A study of the social aspects of mental life; the psychological processes of groups. Given in 1934-35, and in alternate years. Mr. Smith.
- 15. Psychology of Personality. 1 Q. Winter. 5 cr. Summer. 4 cr. Prerequisite, Psychology 11. Mr. Smith.

19. Educational Psychology. See courses in Education.

30. Applied Psychology. 1 Q. Winter. 5 cr. Prerequisite, Psychology 11. General principles of applied psychology; special reference to vocational and avocational psychology; the psychology of law, medicine, industry, music, religion, art, literature. Mr. Atkinson.

32. Psychology of Business. 1 Q. Spring. 5 cr. Prerequisite, Psychology 11. Mr. Atkinson.

33. Vocational Psychology. 1 Q. Winter. 4 cr. Prerequisite, Psychology 11. A study of the psychological principles in determining vocational fitness; theory and technique of objective methods of selection and guidance; special and general aptitude tests, trade tests, and rating scales, with special reference to the student's occupational problems. Mr. Smith.

Logic. 1 Q. Autumn. 5 cr. Prerequisite, sophomore standing. Mr. Atkinson.

51. Ethics. 1 Q. Spring. 5 cr. Prerequisite, sophomore standing. Inquiry into the nature of moral life, the evolution of ethics, the psychology of conduct, the meaning of moral values, with applications to current problems in the fields of law and justice, peace and war, marriage and the family, property and business. Given in 1933-34, and in alternate years. Mr. Smith.

Mr. Smith.

52. Introduction to Philosophy. 1 Q. Autumn. 3 cr. Prerequisite. sophomore standing. Statement of philosophical problems: explanation of terms; purpose and methods of the study of philosophy. History of Greek philosophy. Not given in 1934-35. Mr. Smith.

53. History of Modern Philosophy. 1 Q. Winter. 3 cr. Prerequisite, Psychology 52 or 11. Not given in 1934-35. Mr. Smith.

60. Types of Philosophy. 1 Q. Spring. 5 cr. Prerequisite, sophomore standing. Some outstanding problems and trends in philosophy at the present time. Given in 1933-34, and in alternate years. Mr. Smith.

### For Undergraduates and Graduates

101. Advanced Experimental Psychology. 1 Q. Autumn. 3 cr. Pre-requisite, Psychology 11 and consent of instructor. A study of special prob-lems of quantitative psychology. Mr. Smith.

102abc. Problems in Psychology. 3 Q. Autumn, winter, spring. Summer. 1 to 3 cr. each quarter. Students may enter course any quarter. Prerequisite, Psychology 11 and consent of the chairman of the department. Not more than 5 credits may be applied toward graduation. Psychology

104. Systematic Psychology. 1 Q. Autumn. 5 cr. Prerequisite, Psychology 11. A study of the psychology of William James and other contemporary psychologists. Mr. Smith.

105. Modern Viewpoints in Psychology. 1 Q. Spring. 5 cr. Prerequisite, Psychology 11. Given in 1934-35, and in alternate years. Mr. Smith.

115. Abnormal Psychology. 1 Q. Autumn. 5 cr. Summer. 3 cr. Prerequisite, junior standing and Psychology 11. A study of abnormal phenomena and mental diseases: sleep and dreams; the subconscious; hypnotism; psychoanalysis. Mr. Atkinson.

130. Mental Measurements. 1 Q. Spring. 4 cr. Prerequisite, junior standing and Psychology 11. Designed for those preparing for work in education and social service; methods of measuring intelligence. Mr. Ames.

131. Clinical Psychology. 1 Q. Winter. 4 cr. Prerequisite, junior standing and Psychology 11. A study of clinical methods and principles, with applications to individual behavior problems. Mr. Smith.

#### For Graduates

201. Research. Any quarter. Credit variable. Prerequisite, Psychology 11 and 130 or equivalent. Work on selected problems under direction. Psychology Staff.

Colloquium. In cooperation with members of the faculty of other departments in the State University. No credit. Meets twice each month from October to May. Open to members of the faculty, graduate and senior students.

The object of the colloquium is to afford opportunity for the study and discussion of topics of general interest in a more comprehensive and inclusive manner than is possible in the restricted departmental courses.

## DIVISION OF THE HUMANITIES

PROFESSOR HAROLD G. MERRIAM, CHAIRMAN.

The following course is offered as a general survey of the field of the Humanities.

15abc. Introduction to the Humanities. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Students who have completed 8 or more college credits in literature may not receive credit in this course. Acquaintance with art, music and literature through the centuries from the Greeks to Americans, with the primary aims of understanding and appreciation. Offered conjointly by the Departments of English, Fine Arts, Foreign Languages and the School of Music. Mr. Clark. Mr. Freeman. Mr. Merriam. Mr. Mickel.

# English

PROFESSORS, EDMUND L. FREEMAN, HAROLD G. MERRIAM (CHAIRMAN), LUCIA B. MIRRIELEES. ASSOCIATE PROFESSORS, RUFUS A. COLEMAN, VARDIS FISHER, BRASSIL FITZGERALD. ASSISTANT PROFESSOR, DARRELL PARKER. INSTRUCTOR, BARNARD W. HEWITT. GRADUATE ASSISTANT, JOHN HOUSTON. SPECIAL LECTURER, FRANCES CORBIN.

Major Requirements: 32 credits in addition to English 11ab and Humanities 15abc. The required courses in English are listed in the four outlines given below, which are designed for students of four different types of needs and interests. By the beginning of his junior year the student should have decided definitely which of the four schedules he is to follow. Fine Arts 31abc, Music 35abc and at least two quarters of study in each of the fields of psychology and sociology are strongly recommended. A reading knowledge in the literature of some foreign language, ancient or modern, is required.

Senior examinations must be taken by all students who do major work in English. The examinations will require elementary knowledge of critical literary terms, knowledge of the fields of literature the student has studied in courses and of a special field in which he has read independently. By the end of the second quarter of his junior year the student will indicate to his adviser the field in which he wishes to read and receive guidance from him.

## Required in all Schedules

Freshman Year: Humanities 15abc.

Sophomore Year: 11ab and 30 or 32, or 11a and 30 or 32, or 11b and 30 or 32.

For Students Who Expect to do Graduate Work or to Teach English in a High School.

Junior and Senior Years: A year's sequence of courses 189abc, or 187, 165, 164, or 173, 174, 180; 192 (one quarter); 199 (two quarters). Education 105 and English 69 required of prospective teachers in addition.

- B. For Students Who Desire Literary Information and Appreciation. Junior and Senior Years: 75, 76 (one quarter); 77, 83, 178 (one quarter); 189abc, 187, 165, 164, 173, 174, 180 (two quarters); 86.
- C. For Students Primarily Interested in Creative Writing. Junior and Senior Years: 72abc, 160abc, 163 (six credits); 161abc (two quarters); 187; 86, 75, 76, 77, 178 (two quarters).
- D. For Students Primarily Interested in Speech, Dramatics and Drama.

Junior and Senior Years: 62, 69, 77, 83, 178, 173, 187 (three quarters). Recommended for drama students, 163.

Note: For course in the teaching of English see Education 105.

## For Undergraduates

A. Preparatory Composition. 1 Q. Autumn. Winter. Spring. No credit. Sub-freshman course designed to meet the needs of freshmen who fail to establish an acceptable college standard in the English placement examination at the time of entrance. Mr. Houston.

11ab. English Composition. 2 Q. Autumn, winter. Winter, spring. 3 cr. each quarter. Required of all students in the sophomore year. Freshmen who place high in the placement examination may be exempted from 11a and in the sophomore year proceed at once to 11b or 30 or 32. The gathering and organization of material for the writing of papers, and the development of personal ideas. Study of words and syntax. The English Staff

20. Principles of Speech. 1 Q. Autumn. Winter. Spring. 5 cr. Summer. 4 cr. Open to all students. A beginning course in public speaking. Mr. Parker.

21. Argumentation. 1 Q. Winter. 5 cr. Summer. 4 cr. Open to freshmen, but only with the consent of the instructor. Lectures and class discussions upon the principles of thinking, research, testing of evidence and brief drawing. Mr. Parker.

S29. Lectures. 1 Q. Summer. 1 cr. Open to all students.

- 30. Composition. 1 Q. Autumn. Spring. 4 cr. Open to sophomores who have made a grade of A or B in English 11a, or have been exempted from it, and to any student who has completed 11b successfully. A study of exposition. On an average two essays a week will be written. Mr.
- 32. Narration and Description. 1 Q. Winter. 4 cr. May be taken in lieu of English 11b or 30 by sophomores who have made a grade of A or B in 11a, or have been exempted from 11a, or by any student who has completed 11b. A beginner's course in the writing of fiction. Mr. Fitz-
- 53. Contemporary Magazines. 1 O. Autumn. 4 cr. Prerequisite, sophomore standing. Reading of contemporary periodicals. Mr. Fisher.

  S54. Biography: American Letters and Journals. 1 Q. Summer.
  2 cr. Open to all students. A study of the greater American writers through their letters and journals. Miss Corbin.

  55a. Contemporary Literature. 1 Q. Winter. 4 cr. Prerequisite, sophomore standing. Man in conflict and adjustment: self, family, environment. Mr. Fitzgerald.

55b. Contemporary Literature. 1 Q. Spring. 4 cr. Prerequisite, sophomore standing. Man in conflict and adjustment: race, class, war. Miss Mirrielees.

57a. Shakespeare. 1 Q. Autumn. Spring. 4 cr. Prerequisite, sophomore standing. A chronological study of fourteen of the plays of Shakespeare. Mr. Hewitt. Miss Mirrielees.

57b. Shakespeare. 1 O. Winter. 4 cr. Prerequisite, sophomore standing. An intensive study of two or three plays. Mr. Coleman.

S58. General Literature. 1 Q. Summer. 4 cr. Open to sophomores, or to freshmen who intend to major in English. The aims and values in types of literature. Mr. Merriam.

59abc. American Literature. 3 Q. Autumn, winter spring. 4 cr. each quarter. Summer, 59a, 2½ cr.; 59b, 4 cr. Prerequisite, sophomore standing. American thought and feeling as reflected in our literature from

the earliest to present days. Mr. Coleman.

62. Dramatic Presentation. 1 Q. Autumn. 4 cr. Summer. 2½ cr. Prerequisite, junior standing. The fundamentals of direction, staging, lighting, make-up. Mr. Hewitt.

69. Oral Interpretation of Literature. 1 Q. Winter. 4 cr. Prerequisite, junior standing. Practice in reading aloud, with criticism. Mr. Hewitt. 72abc. Fiction Writing. 3 Q. Autumn, winter, spring. 1 to 2 cr. each quarter. Prerequisite, English 32 or consent of instructor on basis of submitted writings. The writing of sketches, stories or novels. Mr. Fisher Mr. Fishers and Mr. Fis

of submitted writings. The writing of sketches, stories or novels. Mr. Fisher. Mr. Fitzgerald.

75. English Novelists. 1 Q. Winter. 4 cr. Prerequisite, junior standing. A course designed to develop a sense of prose style, some critical standards for fiction, and an intelligent interest in and sympathy with all sorts of people, by the reading and discussion of the novels of Fielding, Austen, Thackeray, Eliot, Trollope. Given in 1934-35, and in alternate years. Mr. Fitzgerald.

76. Masters of Fiction. 1 Q. Spring. 4 cr. Prerequisite, junior standing. Study of novels, either of the present or the past, by the great novelists of the world—Balzac, Flaubert, Hugo, Tolstoi, Turgeney, Howells, James, Meredith. Given in 1934-35, and in alternate years. Mr. Fitzgerald.

77. Modern Drama. 1 Q. Winter. 4 cr. Prerequisite, junior standing. From Ibsen to contemporary dramatists. Given in 1933-34, and in alternate years. Mr. Hewitt.

83. World Drama. 1 Q. Autumn. 4 cr. Prerequisite, junior standing. A study, primarily, of comedy and melodrama. Given in 1933-34, and in alternate years. Mr. Hewitt.

86. Biography. 1 Q. Autumn. 4 cr. Prerequisite, junior standing. Wide reading in biographical materials. Will not be given in 1934-35. Miss Mirrielees.

Mirrielees.

88. General Reading. 1 Q. Spring. 2 cr. Open to junior and senior men only. Reading and discussion of ten books. Mr. Fitzgerald.

### For Undergraduates and Graduates

S157b. Shakespeare. 1 Q. Summer. 3 cr. Prerequisite, a course in Shakespeare or consent of the instructor. An intensive study of two or

Shakespeare or consent of the instructor. An intensive study of two or three plays. Mr. Coleman.

S159a. Early American Drama. 1 Q. Summer. 4 cr. Prerequisite, junior standing and English 59a or its equivalent and consent of the instructor. The history of the drama up to the Civil War; a discussion of foreign adaptations, the use of native sources, the early comedy and melodrama, ending with the study of the earlier plays of Boucicault. Mr. Coleman.

160abc. Imaginative Writing. 3 Q. Autumn, winter, spring. Summer. 1-2 cr. each quarter. Continuous for two quarters. May be entered any quarter. Prerequisite, one course in writing above 11b, or consent of instructor on the basis of a submitted manuscript. Experiments in writing; laboratory work. Students should take English 161abc concurrently. Mr. Merriam.

Merriam.

161a. Poetic Art. 1 O Autumn. 2 cr. Study of rhythm. metre, poetic conception, theory. Will not be given in 1934-35. Mr. Merriam.

161b. Narrative Art. 1 Q. Winter. 2 cr. Study of story conception, narrative movement, nartly through consultation of fictionists' notebooks. Will not be given in 1934-35. Mr. Merriam.

161c. Style. 1 Q. Spring. 2 cr. Consideration of such qualities, in a writer and his writings, as sincerity, adjustment of language to intentions, ear for sound, color in language, vitality. Will not be given in 1934-35.

ear for sound, color in language, vitality. Will not be given in 1934-35.

163. Playwriting. 3 Q. Autumn, winter, spring. Summer. 1-2 cr. each quarter. Continuous for two quarters. Prerequisite, consent of the instructor. Theory and practice of dramatic writing. Mr. Hewitt.

164. Chaucer. 1 Q. Spring. 4 cr. Prerequisite, junior standing and English 165: 187 recommended. Chaucer considered as a story-teller, poet, voice of the fourteenth century. Given in 1933-34, and in alternate years.

Miss Mirrielees.

Miss Mirrielees.

165. M'ddle English Literature. 1 Q. Winter. 4 cr. Prerequisite, junior standing; English 187 recommended. Thought of the Middle Ages. Brief consideration of: the beginnings of prose, drama, metrical romance; Wvclif, Langland, Caxton; social. religious and political verse. Given in 1933-34, and in alternate years. Miss Mirrielees.

173. The Renaissance in English Literature. 1 Q. Autumn. 4 cr. Prerequisite, junior standing and English 57a or b; English 165 and History 13a recommended. Study of the new learning and new feeling as expressed in the poetry of Wyatt, Surrey, Spencer and Sidney. The educational ideal and ethical function of literature as expressed in the prose fiction of the period. Representative drama, exclusive of Shakespeare. Given in 1934-35, and in alternate years. Mr. Coleman.

174. Literature of the Seventeenth Century. 1 Q. Spring. 4 cr. Pre-requisite, junior standing and English 173 or History 13a. Cavalier lyrists; religious poets: Bacon. Milton, Bunyan, Dryden. Given in 1934-35, and in alternate years. Mr. Freeman.

178. Tragedy. 1 Q. Spring. 4 cr. Prerequisite, junior standing, and any course in drama. Study of the nature of tragedy; reading of great tragedies in the world's literature. Given in 1933-34, and in alternate years.

any course in transcriptions and the results in the world's literature. Given in 1933-34, and in alternate years. Mr. Hewitt.

180. Literature of the Eighteenth Century. 1 Q. Spring. 4 cr. Prerequisite, junior standing and two courses in literature. The verse and prose writers; beginnings of the romantic revolt; Johnson and his circle. Given in 1934-35, and in alternate years. Miss Mirrielees.

S183. Romantic Poets. 1 Q. Summer. 4 cr. Prerequisite, junior standing and two quarters of literature or the equivalent. Study of the British poets of the early nineteenth century. Miss Sickels.

187. History of the English Language. 1 Q. Autumn. 4 cr. Prequisite, junior standing. Growth of the English language and the development of modern English grammar and syntax. Given in 1933-34, and in alternate years. Miss Mirrielees.

189abc. Currents in Nineteenth Century Literature. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Summer. 2 cr. Prerequisite, junior standing and two courses in literature. Students may enter any quarter. Intention is to gain acquaintance with social conditions and activity, social theories of literary men, the changing philosophical and religious attitudes, and changes in literary aims, standards and taste. Mr. Freeman. Mr. Merriam.

Studies in Major Writers. 1 Q. Autumn. Winter. Spring. 3 cr.

192. Studies in Major Writers. 1 Q. Autumn. Winter. Spring. 3 cr. Summer. 2 cr. Prerequisite, senior standing and consent of instructor. Subject and instructor change from year to year: 1933-34, Autumn, Melville, Mr. Coleman; Winter, Samuel Johnson, Miss Mirrielees; Spring, Milton, Mr. Freeman.

198abc. Studies in English. 3 Q. Autumn, winter, spring. 2-3 cr. each quarter. Open to seniors who are English major students and who have a good scholarship record, after consultation with Mr. Merriam. Independent work, guided by instructors, and tested upon completion by both written and oral examination. The English Staff.

199. Seminar. 3 Q. Autumn, winter, spring. 1-3 cr. each quarter. Summer. 1-2 cr. Prerequisite, senior standing and consent of instructors. Instruction and practice in methods of literary study. Mr. Merriam. Mr. Prepagner.

Freeman.

#### For Graduates

**299.** Seminar. 3 Q. Autumn, winter, spring. 1-3 cr. each quarter. Summer. 1-2 cr. Open only to graduate students after consultation with the instructor. Mr. Merriam and the English Staff.

# Fine Arts

Professor, \*Clifford H. Riedell.

Major Requirements: 50 or more credits, including the following courses: Fine Arts 12abc, 13abc, 23abc, 28, 31abc and 32ab.

Senior examinations will not be given except to candidates for honors.

Students who plan to teach fine arts should complete course 41, Teachers' Art.

#### For Undergraduates

12abc. Elementary Drawing. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Summer. 1 cr. Open to all students. Students may enter any quarter with consent of instructor. A systematic training in the modes of drawing. Pencil, brush and oil, water-color. From objects, photographs, and from nature. Mr. Riedell.

13abc. Elementary Design. 3 Q. Autumn, winter, spring. Summer. 2 cr. each quarter. Open to all students. Essentials of design. Color, line, area, values composition. A fundamental course for art appreciation. Mr. Piedell

Riedell.

S21. Fundamentals of Art Appreciation. 1 Q. Summer. 1 cr. Open to all students. Lectures dealing with suggestions, arguments, and explanations relating to good judgment and appreciation of the arts.

23abc. Advanced Drawing and Painting. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Summer. 2 cr. Prerequisite. Fine Arts 12abc. Portrait and figure work in various mediums. The course may be repeated for credit. Artistic anatomy is included. Mr. Riedell.

<sup>\*</sup>Deceased June 22, 1934. Definite statement of work offered during the year 1934-35 will be made later.

 $\bf 28.~~Advanced~Design.~1~Q.~~Winter.~2~cr.~~Prerequisite, Fine Arts 13abc.~~The relation of design principles to modern problems.~~Mr.~~Riedell.~~$ 

31abc. History of Art. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Summer, 31a, 2 cr.; 31b, 2 cr. Prerequisite, sophomore standing. (a) Primitive art through Roman art. Oriental art. (b) From Roman art to art of the French impressionists. (c) From French impressionists to the present time. Mr. Riedell.

32ab. Advertising. 2 Q. Winter, spring. 2 cr. each quarter. Prerequisite, sophomore standing. The principles of drawing and design as related to advertising. Problems in advertising. Mr. Riedell.

33. Illustration. 1 Q. Spring. 2 cr. Prerequisite, Fine Arts 13abc and 23a. Drawings and design as related to illustration. Given in 1932-33, and in alternate years. Mr. Riedell.

41. Teachers' Art. See courses in Education.

### For Undergraduates and Graduates

123abc. Advanced Painting. 3 Q. Autumn, winter, spring. each quarter. Prerequisite, consent of instructor. Painting from life. Riedell.

128abc. Advanced Problems in Drawing and Design. 3 Q. Autumn, winter, spring. 2-5 cr. each quarter. Prerequisite, Fine Arts 28, 123abc and senior standing. Mr. Riedell.

## Foreign Languages

PROFESSORS, WESLEY P. CLARK, RUDOLPH O. HOFFMAN, FREDERICK C. Scheuch (Chairman), B. E. Thomas. Assistant Professors, Mrs. Louise G. Arnoldson, Paul A. Bischoff. Instructors, Jere Mickel, MRS. FLORA B. WEISBERG. GRADUATE ASSISTANT, ANNE BATEMAN.

Major Requirements (French, German, Spanish): 40 or more credits in one language, including (1) courses 117 and 119, and (2) 25 credits selected from courses numbered from 120 to 130. If a student, on the basis of a placement examination, places in a course numbered over 100, 25 credits in addition to courses 117 and 119 may be the minimum requirement. Four quarters of another language and two quarters in the history of Europe must be completed.

Senior examinations will not be given except to candidates for honors.

General Information. Not more than 90 credits in Foreign Languages may be counted towards the Bachelor of Arts degree.

Placement examinations are required of all entering students who continue languages in which entrance credit is presented.

Students who have one high school unit in a modern language should enter course 13a; those with two units, 15; those with three units, courses numbered over 100, subject, however, to a placement examination.

For placement examinations and requirements in Foreign Languages, see pages 18 and 19.

#### French

11. Elementary French. 2 Q. Autumn, winter. Winter, spring. Continuous. 10 cr. Summer, 11a. 4 cr. Miss Bateman. Mr. Hoffman.

13ab. Intermediate French. 2 Q. Autumn, winter. Spring, autumn. 5 cr. each quarter. Summer. 13a. 4 cr. Prerequisite, French 11 or equivalent. Miss Bateman. Mr. Hoffman.

14. Scientific French. 1 to 3 Q. Autumn. Winter. 3 to 5 cr. each quarter. Students may enter any quarter. Prerequisite, French 13ab and consent of instructor. A service course for students majoring in a field requiring a reading knowledge of French for advanced work. Mr. Hoffman.

15. Advanced French. 1 Q. Autumn. Winter. Spring. 5 cr. Sum-c. 4 cr. Prerequisite, French 13b or equivalent. Miss Bateman. Mr. 5 cr. Sum-Hoffman.

115. Practical Phonetics. 1 Q. Wi French 15 or equivalent. Mr. Hoffman. Winter. Spring. 1 cr. Prerequisite,

117. French Grammar, Composition, and Oral Work. 1 Q. Autumn. ing. 5 cr. Summer. 4 cr. Prerequisite, French 15 or equivalent. Mr. Spring. Hoffman.

119. General Survey of French Literature (842-1870). 1 Q. Autumn. 3 cr. Prerequisite, French 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Hoffman.

120. Literature of the Renaissance. 1 Q. Autumn. 2 cr. Prerequisite, French 15 or equivalent. Given in 1935-36, and in alternate years.

Mr. Hoffman.

121. The 17th Century French Prose. 1 Q. Winter. 2 cr. Prerequisite, French 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Hoffman.

192. The 17th Century French Drama. 1 Q. Winter. 3 cr. Pre-tisite, French 15 or equivalent. Given in 1935-36, and in alternate years. requisite. Mr. Hoffman.

123. Literary Writings of the 18th Century. 1 O. Spring. 3 cr. Pre-requisite, French 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Hoffman.

124. Political and Social Writings of the 18th Century. 1 Q. Spring. r. Prerequisite, French 15 or equivalent. Given in 1935-36, and in cr.

125. Cultural Background of French Literature. 1 Q. Autumn. 2 cr. Prerequisite, French 15 or equivalent. Given in 1934-35, and in alternate years. Mrs. Arnoldson.

126. French Poetry. 1 Q. Autumn. 3 cr. Prerequisite. French 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Hoffman.

127. The 19th Century French Novel. 1 Q. Winter. 3 cr. Prerequisite, French 15 or equivalent. Given in 1934-35, and in alternate years. site, French 1 Mr. Hoffman.

128. The 19th Century French Drama. 1 Q. Winter. 2 cr. Prerequisite, French 15 or equivalent. Given in 1934-35, and in alternate years. Mrs. Arnoldson.

129. The Contemporary French Novel. 1 Q. Spring. 3 cr. Pre-requisite, French 119, or 127, or consent of instructor. Given in 1934-35, and in alternate years. Mr. Hoffman.

130. The Contemporary French Drama. 1 Q. Spring. 2 cr. Prerequisite, French 119, or 128, or consent of instructor. Given in 1934-35, and in alternate years. Mrs. Arnoldson.

#### German

11. Elementary German. 2 Q. Autumn, winter. Winter, spring. Continuous. 10 cr. Summer, 11a. 4 cr. Mr. Scheuch. Mrs. Weisberg.

13ab. Intermediate German. 2 Q. Autumn, winter. Spring, autumn. 5 cr. each quarter. Summer, 13a. 4 cr. Prerequisite, German 11 or equivalent. Mr. Scheuch. Mrs. Weisberg.

14. Scientific German. 1 to 3 Q. Autumn. Winter. Spring. 3 to 5 cr. each quarter. Prerequisite, German 13b and consent of instructor. A service course for students majoring in a field requiring a reading knowledge of German for advanced work. Mr. Scheuch. edge of German for advanced work.

5 cr. Summer. 4 cr.

15. Advanced German. 1 Q. Winter. Spring. 5 Prerequisite, German 13b or equivalent. Mr. Scheuch.

117. German Grammar, Composition, Conversation. 1 Q. Spring. 5 cr. Prerequisite, German 15 or equivalent. Mr. Scheuch. Mrs. Weisberg. 119. General Survey of German Literature. 1 Q. Autumn. 3 cr. Prerequisite, German 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Scheuch. Mrs. Weisberg. 120. Lessing. 1 Q. Autumn. 2 cr. Prerequisite, German 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Scheuch. Mrs. Weisberg.

Weisberg.

Weisberg.

121. Sturm und Drang (Goethe). 1 Q. Winter.
German 15 or equivalent. Period of Goethe's Youth.
And in alternate years. Mr. Scheuch. Mrs. Weisberg.
122. Sturm und Drang (Schiller). 1 Q. Winter.
German 15 or equivalent. Period of Schiller's Youth.
And in alternate years. Mr. Scheuch. Mrs. Weisberg.
123. Classical Drama (Goethe and Schiller). 1 Q. Spring. 3 cr. Prerequisite, German 15 or equivalent.
Given in 1935-36, and in alternate years. Mr. Scheuch. Mrs. Weisberg.

- German 15 Lyrics of Goethe and Schiller. 1 Q. Spring. 2 cr. Prerequisite, 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Scheuch. Mrs. Weisberg.
- 125. Cultural Background of German Literature. 1 Q. Autumn. 3 cr. Prerequisite, German 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Scheuch. Mrs. Weisberg.

  126. Heine. 1 Q. Autumn. 2 cr. Prerequisite, German 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Scheuch. Mrs. Weisberg.
- 127. The 19th Century Novel. 1 Q. Winter. 3 cr. Prerequisite, German 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Scheuch. Mrs. Weisberg.
- 128. The 19th Century Drama. 1 Q. Winter. 2 cr. Prerequisite, German 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Scheuch. Mrs. Weisberg.
- 129. Contemporary German Novel. 1 Q. Spring. 3 cr. Prerequisite, German 119 or 127. Given in 1934-35, and in alternate years. Mr. Scheuch. Mrs. Weisberg.
- 130. Contemporary German Drama. 1 Q. Spring. 2 cr. Prerequisite, German 119 or 128. Given in 1934-35, and in alternate years. Mr. Scheuch. Mrs. Weisberg.

## Spanish

- 11. Elementary Spanish. 2 Q. Autumn. winter. Winter, spring. Continuous. 10 cr. Summer, 11a. 4 cr. Mr. Bischoff. Mr. Thomas.
- 13ab. Intermediate Spanish. 2 Q. Autumn, winter. Spring, autumn. 5 cr. each quarter. Summer. 13a. 4 cr. Prerequisite, Spanish 11 or equivalent. Mr. Bischoff. Mr. Thomas.
- 15. Advanced Soanish. 1 Q. Autumn. Winter. Spring. 5 cr. Sum. 4 cr. Prerequisite, Spanish 13b or equivalent. Mr. Bischoff. Mr. mer. Thomas.
- 115. Applied Phonetics. 1 Q. Winter. Spring. 1 cr. Prerequisite, Spanish 15 or equivalent. Mr. Thomas.
- 117. Spanish Grammar, Composition, Conversation. 1 Q. Aut Spring. 5 cr. Prerequisite, Spanish 15 or equivalent. Mr. Thomas.
- 119. General Survey of Spanish Literature. 1 Q. Autumn. 3 cr. Prerequisite, Spanish 15 or equivalent. From El Poema del Cid through Romanticism. Given in 1935-36, and in alternate years. Mr. Thomas.

  120. Picaresque Novel. 1 Q. Autumn. 2 cr. Prerequisite. Spanish 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Bischoff.
- 121. Soanish Drama of the Golden Age. 1 Q. Winter. 3 cr. Prerequisite, Spanish 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Thomas.
- 122. Cervantes. 1 O. Winter. 2 cr. Prerequisite, Spanish equivalent. Given in 1935-36, and in alternate years. Mr. Bischoff.
- 123. Spanish Novel of the 19th Century. 1 Q. Spring. 3 cr. Prerequi-, Spanish 15 or equivalent. Given in 1935-36, and in alternate years. site, Spanish Mr. Bischoff.
- 1.24. Romanticism and Costumbrista Movement. 1 Q. 2 cr. Spring. Prerequisite, Spanish 15 or equivalent. Given in 1935-36, and in alternate years. Mr. Thomas.
- 125. Spanish American Literature (1492-1900). 1 Q. Autumn. 3 cr. Prerequisite, Spanish 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Thomas.
- 126. Spanish Drama of the 19th Century. 1 Q. Autumn. 2 cr. Pre-usite. Spanish 15 or equivalent. Given in 1934-35, and in alternate requisite, Spanish 15 years. Mr. Thomas.
- 127. Contemporary Spanish Drama. 1 Q. Winter. 3 cr. Prerequi-
- 128. Contemporary Spanish-American Literature. 1 Q. Winter. 2 cr. Prerequisite, Spanish 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Thomas.
- 129. Contemporary Spanish Novel. 1 Q. Spring. 3 cr. Prerequisite, Spanish 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Thomas.
- 130. Epic and Ballad. 1 Q. Spring. 2 cr. Prerequisite, Spanish 15 or equivalent. Given in 1934-35, and in alternate years. Mr. Thomas.

### Latin and Greek

Major Requirements: The requirement is in attainment rather than credits. Four courses numbered above 100 should assure a good major in Latin. Two courses in Greek may be substituted for two in Latin. Humanities 15abc and History 15 and 16 are recommended.

Senior examinations will be required of all students who major in Latin.

General Information. Placement examinations are required of all students who continue a language in which entrance credit is presented. Students who offer two entrance units should enter Latin 13a: those offering four units, 15a, subject, however, to the placement examination. The Restricted Elective requirement is fulfilled upon completion of course 13a for students who present entrance units in Latin.

#### Latin

11abc. Elementary Latin. 3 Q. Autumn, winter, spring. 5 cr. each quarter. For students who enter with no credit in Latin. Staff.

13abc. Intermediate Latin. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Summer, 13a. 4 cr. Prerequisite, Latin 11c or equivalent.

(a) Selections from Cicero and others studied for literary and historical value. (bc) Vergil's Aeneid I-VI. Introduction to poetry; reading of hexameter; appreciation of permanent values of the Aeneid. Mr. Mickel.

15ab. College Freshman Latin. 2 Q. Autumn, winter. 5 cr. each quarter. Prerequisite, Latin 13c or equivalent. (a) Readings from Cicero's De Senectute and De Amicitia, or from Livy. (b) The Odes of Horace. Reading of the commonest metrical forms; outline of Roman literature. Mr. Clark. Mr. Mickel.

17ab. Second Year College Latin. 2 Q. Spring, autumn. 5 cr. each quarter. Prerequisite, Latin 15b or equivalent. (a) Selections from the letters of Pliny the Younger and the Epigrams of Martial studied as a basis for an appreciation of the political and social life of the first century A. D. (b) Selections from Catullus; one comedy of Terence. Mr. Clark.

115. Advanced Latin. 1 Q. Winter. 3 cr. Prerequisite, Latin 17b or equivalent. The philosophy of the Greeks and Romans based on the Tusculan Disputations of Cicero; selections from Seneca. Mr. Clark.

129. Lucretius. 1 Q. Spring. 3 cr. Prerequisite, Latin 17b. Reading and appreciation of portions of De Rerum Natura. Not given in 1934-35. Mr. Clark.

Mr. Clark.

Mr. Clark.
140. Tacitus, Minor Works and Histories. 1 Q. A requisite. Latin 17b. Not given in 1934-35. Mr. Clark.
141. The Annals of Tacitus, I-VI. 1 Q. Autumn.
Latin 17b. Not given in 1934-35. Mr. Clark.

Autumn. 3 cr. Prerequisite,

143. Life and Works of Vergil. 1 Q. Autumn. 3 cr. Prerequisite, Latin 17b. Selected Eclogues; parts of the Georgics; review of Aeneid I-VI; reading of Aeneid VII-XII. Mr. Clark.

145. Roman Comedy. 1 Q. Spring. 3 cr. Prerequisite, Latin 17b.

Mr. Clark.

Latin of the Late Empire. 1 Q. Spring. 3 cr. Prerequisite, o. Selections from late pagan and early Christian writings. Not 147. Latin 17b. given in 1934-35. Mr. Clark.

149. Writing Latin (Advanced). 1 Q. Spring. 3 cr. Prerequisite, Latin 17b or equivalent. Prepared exercises in translating into Latin from text-book or selected passages of English. Given in 1934-35, and in alternate years. Mr. Clark.

200. Research in Latin. 3 Q. Any quarter. Credit variable. Directed individual work. Course may be repeated by variation in content. Mr.

Clark.

#### Greek

11ab. Elementary Greek. 2 Q. Autumn, spring. Winter, spring. 5 cr. each quarter. The reading method used; Attic Greek read from the first. Forms, vocabulary, idioms learned by use only. Mr. Clark.

13ab. Intermediate Greek. 2 Q. Autumn, winter. 3 cr. Prerequisite, Greek 11b or equivalent. (a) Selections fro Herodotus. (b) Introduction to Greek Tragedy. Mr. Clark. Autumn, winter. 3 cr. each quarter. nt. (a) Selections from Plato and

15a. Advanced Greek. 1 Q. Spring. 3 cr. Prerequisite, Greek 13b or equivalent. Selections from Lucian. Mr. Clark.

\$185. The Ancient Greeks and Modern Life. 1 Q. Summer. 2½ cr. Prerequisite, senior standing or consent of instructor. A consideration, through translations, books of interpretation and lectures, of some of the most interesting and suggestive aspects of ancient Greek thinking. No knowledge of Greek required. This course does not apply toward the restricted elective requirement in Foreign Languages. Mr. Clark.

Further work in Greek will be offered as there may be a demand for it; the work will be suited to the interest of the students.

# **Library Economy**

PROFESSOR, PHILIP O. KEENEY (CHAIRMAN). ASSISTANT PROFESSORS, M. WINNIFRED FEIGHNER, M. CATHERINE WHITE. INSTRUCTORS, WINONA ADAMS, WILLETTA BRIEN, LUCILE SPEER.

Major Requirements: 42 or more credits, including Library Economy 14ab, 16, 18, 20abc, 22ab, 24, 26, 28ab. Twenty credits are required in both French and German.

Senior examinations will not be given except to candidates for honors.

Students who major in this department are required, either in their freshman or sophomore year, to do field work in some county or city library of the state which contains 10,000 volumes. Not less than fifteen hours a week for a period of not less than ten weeks must be spent at this work. No credit will be given for such work.

Ability to use a typewriter is necessary.

## For Undergraduates

14ab. Classification. 2 Q. Autumn, winter. 3 cr. each quarter. Prerequisite, junior standing. History of classification; comparison of the common systems; a detailed study of the Dewey decimal system. Choice of subject headings for a dictionary catalogue. Offered in 1934-35, and in alternate years. Miss Adams.

16. Cataloguing. 1 Q. Winter. 3 cr. Prerequisite, junior standing. Principles of dictionary cataloguing with special reference to choice of forms in author headings. Practice in cataloguing. Offered in 1934-35, and in alternate years. Miss Speer.

18. Cataloguing and Classification. 1 Q. Spring. 3 cr. Prerequisite, junior standing. Cataloguing and classification of material which illustrates the problems of this work with special reference to different types of libraries. Offered in 1934-35, and in alternate years. Miss Adams.

20abc. Reference. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Prerequisite, junior standing. Introduction to common and specialized reference works in English and the common works in foreign languages. Problems pertaining to the practical work in the reference department based upon a working knowledge of reference works. Offered in 1935-36, and in alternate years. Miss White. alternate years. Miss White. 22ab. Book Selection. 2

alternate years. Miss White.

22ab. Book Selection. 2 Q. Autumn, spring. 3 cr. each quarter. Prerequisite, junior standing. Principles and practice in book selection. Reading and reviewing of selected books; practice in the use of aids, in the making of selected lists, in the writing of book notes. Offered in 1935-36, and in alternate years. Miss Feighner.

24. History of Libraries. 1 Q. Autumn. 1 cr. Prerequisite, junior standing. Extent and growth of libraries. Mr. Keeney.

26. Library Practice. 3 Q. Autumn, winter, spring. 1 to 3 cr. each quarter. Summer. 1 or 2 cr. Prerequisite, sophomore standing and consent of instructor. Students may enter any quarter. Not more than four credits may be earned in one year. Majors in Library Economy must offer four credits in this course. Specially planned practice work under the supervision of the librarians of the city, county and university libraries. Miss Feighner.

28ab. Library Administration. 2 Q. Autumn, spring. 3 cr. each quarter. Prerequisite, junior standing. An outline of all the phases of librarianship showing the relationship of the various departments within a library. Attention given to all problems of administration. Offered in 1934-35, and in alternate years. Mr. Keeney. Miss Speer.

31. Book Buying and Ordering. 1 Q. Spring. 2 cr. Prerequisite, junior standing. Routine of ordering; lectures on the importation of books; book dealers; allocation of book funds; trade discounts. Offered in 1934-35, and in alternate years. Miss Brien.

33. Story Telling. 1 Q. Winter. 2 cr. Prerequisite, junior standing. Not given in 1934-35, and in alternate years.

35. Trade Bibliography. 1 Q. Spring. 2 cr. Prerequisite, junior standing. Development of bibliographical aids in the study of the book trade in the United States, England and Europe. Offered in 1935-36, and in alternate years. Mr. Keeney.

39. Public Documents. 1 Q. Winter. 2 cr. Prerequisite, junior standing. Acquisition, care and reference use of federal publications. Practical problems dealing with document catalogues, indexes and check lists. Offered in 1935-36, and in alternate years. Miss Speer.

41. History of the Book. 1 Q. Winter. 2 cr. Prerequisite, junior standing. The evolution of the book; emphasis on the important development of printing in the occidental world after 1450. Offered in 1935-36, and in alternate years. Mr. Keeney.

## DIVISION OF PHYSICAL SCIENCES

PROFESSOR RICHARD H. JESSE, CHAIRMAN.

The following course is offered as a general survey of the field of Physical Sciences.

17. Introduction to Physical Science. 3 Q. Autumn, winter, spring. Continuous. 15 cr. Students who have 8 or more college credits in chemistry, geology, or physics may not receive credit in this course. Consideration is given to astronomical phenomena and concepts; chemical changes and their uses; geological features and processes; the various theories of matter and energy as well as the laws and principles that describe their behavior and application. A text-book fee of \$1.50 is charged each quarter. Given conjointly by the Departments of Chemistry, Geology, Mathematics and Physics. Mr. Clapp. Mr. Jesse. Mr. Little. Mr. Merrill. Mr. Shal-parberger. lenberger.

# Chemistry

PROFESSORS, WILLIAM G. BATEMAN, JOSEPH W. HOWARD, RICHARD H. JESSE (CHAIRMAN).

Major Requirements: 50 credits, including Chemistry 13, 15 cr.; 15b, 5 cr.; 17 and at least 2 cr. of 111, 7 to 10 cr.; 101, 10 cr.; 106, 10 cr.; 113, 3 cr. At the time of his graduation, a major student in Chemistry should have acquired a reading knowledge of German or French, and a working knowledge of English Composition, College Physics, Algebra, Trigonometry, Analytic Geometry, Calculus and Elementary Mineralogy.

Senior examinations will not be given except to candidates for honors.

## For Undergraduates

13. Inorganic Chemistry and Qualitative Analysis. 3 Q. Autumn, winter, spring. Continuous. 15 cr. Prerequisite, one year of chemistry in high school or sophomore standing. The fundamental laws of chemistry; properties and relations of the non-metallic and metallic elements; theory and methods of inorganic qualitative analysis. Mr. Bateman. Mr. Howard. 15a. Qualitative Analysis. 1 Q. Autumn. 5 cr. Prerequisite, Chem-

and methods of inorganic qualitative analysis. Mr. Bateman. Mr. Howard.

15a. Qualitative Analysis. 1 Q. Autumn. 5 cr. Prerequisite, Chemistry \*11. The theory of, and the methods for the detection and separation of the principal inorganic basic and acidic ions. Students cannot receive credit in both Chemistry 13c and 15a. Mr. Bateman.

15b. Qualitative Analysis. 1 Q. Winter. 5 cr. Prerequisite, Chemistry 13 or 15a. A continuation of course 15a. Mr. Bateman.

17. Quantitative Analysis. 1 Q. Spring. 5 cr. Prerequisite, Chemistry 13 or 15a. Introduction to quantitative gravimetric and volumetric methods. Mr. Jesse.

19. Organic Chemistry. 1 Q. Winter. 5 cr. Prerequisite, Chemistry \*11 or 13. Briefer survey of the field of organic chemistry. Intended for students of Pharmacy and Home Economics. Mr. Howard.

students of Pharmacy and Home Economics. Mr. Howard.

<sup>\*</sup>Course discontinued.

## For Undergraduates and Graduates

101. The Carbon Compounds. 2 Q. Autumn, winter. Continuous. 10 cr. Prerequisite, Chemistry \*11 or 13. Students who have taken Chemistry 19 will not receive full credit for this course. A detailed. systematic study of organic chemistry. Intended for chemistry majors and premedical students. Mr. Howard.

102. Organic Qualitative Analysis. 1 Q. Spring. 2 cr. Prerequisite, Chemistry 101. Systematic methods of identification of pure organic compounds and mixtures: general class reactions of organic chemistry. Mr.

pounds and mixtures; general class reactions of organic chemistry.

Howard.

Howard.

103. Physiological Chemistry. 1 Q. Spring. 5 or 6 cr. Prerequisite, Chemistry 19 or 101. Chemistry of the human body; blood, bile, urine, feces, milk, etc. Mr. Bateman.

106. Physical Chemistry. 2 Q. Autumn, winter. Continuous. 10 cr. Prerequisite, Chemistry 17, 101, and enrollment in college physics. A knowledge of calculus is desirable. The prerequisite in organic chemistry may be waived at the discretion of the instructor for students majoring in other departments who present two quarters of calculus and additional courses in physics. The more important methods, results, and problems of theoretical chemistry. Mr. Jesse.

109. Inorganic Industrial Chemistry of industrial and engineering materials and the discussion of technical chemical processes. Given in 1934-35, and in alternate years. Mr. Howard.

110. Organic Industrial Chemistry. 1 Q. Spring. 5 cr. Prerequisite, Chemistry 13 or 15a and 101. Given in 1933-34, and in alternate years. Mr. Howard.

Mr. Howard.

111. Technical Analysis. 1 Q. Autumn. Winter. Spring. 2 to 4 cr. Course may be taken two quarters for a total of not more than 4 credits. Prerequisite, Chemistry 17. Analysis of materials of commercial importance. The work is varied according to the needs of the individual. Mr. Jesse. Mr. Howard.

113abc. Journal Club. 3 Q. Autumn, winter, spring. 1 cr. each quarter. Prerequisite. Chemistry 17, 101, and a reading knowledge of German or French. Students may enter any quarter. Presentation and discussion of current journal literature by upper classmen and the departmental staff. This course may be repeated for credit. The Chemistry Staff.

#### For Graduates

200. Advanced Courses and Research. The Department is prepared to arrange for properly qualified students advanced and research courses in: inorganic, analytical, organic, physical, industrial chemistry, or in bio-chemistry.

# Geology

PROFESSORS, CHARLES H. CLAPP. JESSE P. ROWE (CHAIRMAN). AS-SOCIATE PROFESSOR, CHARLES F. DEISS.

Major Requirements: 50 or more credits, including Geology 11ab, 22, 23, 24, 26, 35 and 121. Major students should have the equivalent of 25 credits in Modern Languages, and must have a reading knowledge of German or French. Forestry 41abc, Mathematics 12. Chemistry 13, and Physics 22 should be completed. Students emphasizing Economic Geology and Petrology should take in addition: Chemistry 15 and 17, Mathematics 13 and 21, Physics 20 or Mathematics 22 and 23: those emphasizing Stratigraphy and Paleontology should take: Biology 11abc (Zoology) and 125 (Evolution), Botany 11b, and Sociology 62.

Senior examinations will not be given except to candidates for

honors.

#### For Undergraduates

11ab. General Geology. 2 Q. Autumn, winter. 5 cr. each quarter. Summer. 3 cr. The first quarter is given to a study of the origin and development of the surface features of the earth, and its broad structural features. The second quarter is directed to the origin and evolution of the earth and its organisms. Mr. Rowe. Mr. Deiss.

<sup>\*</sup>Course discontinued.

- 16. Geography and Natural Resources of Montana. 1 Q. Autumn. Winter. Spring. Summer. 3 cr. This course does not apply toward the restricted elective requirement in science unless credit is offered in Geology 11ab. Mr. Rowe.
- 17. Gem Stones. 1 Q. Winter. Summer. 2 cr. Open to all students. The properties, occurrence, history and determination of precious, semi-precious, and ornamental stones; methods of determining imitation and synthetic stones from real ones. Mr. Rowe.
- 22. Historical Geology. 2 Q. Autumn, winter. Continuous. 6 cr. Prerequisite, Geology 11a. The first quarter takes the study to the close of the Paleozoic era, and the second quarter continues it to the present time. Mr. Deiss.
- 23. Stratigraphy of North America. 1 Q. Spring. 3 cr. Prerequisite, Geology 22 or 111. The stratigraphic record of North America in terms of paleogeography. Mr. Deiss.
- 24. Mineralogy. 2 Q. Autumn, winter. Continuous for geology majors. 10 cr. Chemistry 13 is prerequisite or may be taken simultaneously. The elements of crystallography and the classification and determination by means of physical properties, blowpipe analysis and other simple chemical tests, of about 175 common minerals of geologic and economic importance.
- 26. Petrology. 1 Q. Spring. 4 cr. Prerequisite, Geology 24. A careful study of the common rocks by means of their physical characters and mineral composition, their identification in the field, classification, origin and structural features. Mr. Rowe.
- 35. Field Geology. 2 Q. Autumn 1 cr., spring 2 cr. Prerequisite, Geology 11b. A course designed primarily to illustrate geologic features and principles by a study of actual cases in the field. Mr. Deiss.

## For Undergraduates and Graduates

- 101. Economic Geology. 1 Q. Autumn. 5 cr. Prerequisite, Geology 11b and 24. A study of the non-metallic mineral deposits of North America. Mr. Rowe.
- 102. Petroleum Geology. 1 Q. Winter. 3 cr. Prerequisite, Geology 11b and 26. Primarily the application of geologic principles to the discovery of petroleum, with a careful study of the features of the chief oil and gas fields of the United States. Mr. Rowe.

  103. Mineral Deposits. 2 Q. Winter, spring. Continuous. 10 cr. Prerequisite. Geology 26 and 101. A course in the more theoretical aspects of the geology of metallic mineral deposits. Mr. Rowe.

- 105. Mining, Mineral, and Geological Law. 1 Q. Spring. 3 cr. Prerequisite, junior standing and permission of instructor. Given in 1934-25, and in alternate years. Mr. Rowe.

  111. Invertebrate Paleontology. 2 Q. Autumn, winter. Continuous. 10 cr. Prerequisite, Geology 11b; Biology 11abe is recommended. An introduction to the understanding of fossil organisms with equal emphasis placed on anatomy, evolution and faunas. Given in 1935-36, and in alternate years. Mr. Deiss years. Mr. Deiss.
- 121. Structural Geology. 1 Q. Spring. 4 cr. Prerequisite, Geology 11a, 22, 26, high school physics and Mathematics 12. A detailed study of the structural features of the earth's crust, presented largely by means of lectures and problems. Not given in 1934-35. Mr. Deiss.
- 131. Petrography. 2 Q. Autumn, winter. Continuous. 8 cr. Prerequisite, Geology 26. Optical mineralogy and the identification of rock
  minerals followed by the microscopic study of the principal rock types, and
  a discussion of their origin and classification. Mr. Rowe.

  135. Geological Surveying. 1 Q. Spring. 3 to 5 cr. Prerequisite,
  Geology 22, 26, and 35. Methods used in making a detailed study of field
  problems and preparing a formal report upon the investigation. Mr. Clapp.
  Mr. Rowe. Mr. Deiss.

#### For Graduates

201. Research. Any quarter. Credits variable. The department is prepared to arrange for properly qualified students in advance and research courses in paleontology, stratigraphy, structural geology, mineralogy, petrography and economic geology. Mr. Rowe. Mr. Deiss.

## Home Economics

PROFESSORS, HELEN GLEASON (CHAIRMAN), ANNE PLATT. ASSOCIATE PROFESSOR, MRS. MONICA BURKE SWEARINGEN (Director of Residence Halls).

Major Requirements: 55 or more credits in Home Economics; these credits should include the courses listed in one of the three groups outlined below.

- 1. Home-making: 14, 15ab, 16, 21, 117, 119, 120, 122, 123 and 124.
- Institutional Management: 14, 15ab, 16, 21, 117, 119, 122, 123, 124, 133, 135 and 139. Course 138 may be substituted for one of the advanced courses.
- Teaching: 14, 15ab, 16, 21, 117, 119, 122, 123, 124, 139 and Course 138 may be substituted for one of the advanced courses. In addition, a major student qualifying to teach must take Chemistry 13, 19 and 103. Biology 19a and Sociology 61 are recommended.

Senior examinations will not be given except to candidates for honors.

### For Undergraduates

14. Clothing. 1 Q. Autumn. Spring. 3 cr. A course for students who wish to acquire ability in clothing selection and construction. Miss

15. Foods. 2 Q. Autumn, winter. Continuous. 10 cr. Foods from a scientific and economic aspect with emphasis placed on selection and place in diet. Miss Platt.

16. Clothing Design. 1 Q. Autumn. 4 cr. Prerequisite recommended, Fine Arts 13abc. Composition and color through the use of masterpieces and the application of art principles to clothing. Miss Gleason.

21. Foods. 1 Q. Winter. 3 cr. Prerequisite, Home Economics 15 or its equivalent. Chemistry 13 is recommended. Meal planning, serving, marketing. Miss Platt.

33. Methods of Teaching Home Economics. See courses in Education.

#### For Undergraduates and Graduates

117. Textiles. 1 Q. Spring. 4 or 5 cr. Prerequisite, Home Economics 16 and registration in 14. Fibers, their manufacture and use; physical and chemical tests to aid in the selection of clothing and household furnishings. Miss Gleason.

Miss Gleason.

119. House Planning and Furnishing. 1 Q. Winter. 5 cr. Summer.
4 cr. Prerequisite, junior standing. The aesthetic, economic and hygienic
problems in house planning and furnishing. Miss Gleason.

120. Clothing. 1 Q. Winter. 5 cr. Prerequisite, Home Economics
14 and 16; 117 recommended. The clothing problem of the family studied
from the economic and social point of view. Miss Gleason.

122. Nutrition. 1 Q. Autumn. 5 cr. Prerequisite. Home Economics
15 and Chemistry 103. A study in dietetics given in the light of chemistry
and physiology of digestion. Miss Platt.

123. Nutrition in Disease. 1 Q. Spring. 4 cr. Prerequisite, Home
Economics 122. The symptoms of disease, prophylactics and feeding in
disease. Miss Platt.

Economics 122. The disease. Miss Platt.

disease. Miss Platt.

124. Home Administration. 1 Q. Autumn. 5 cr. Summer. 2½ cr. Home Economics 122 is prerequisite, or must be taken simultaneously; 119 is recommended. Problems in the profession of home-making, emphasizing child care and welfare. Miss Gleason.

133. Institutional Cookery. 1 Q. Autumn. 5 cr. Home Economics 122 is prerequisite, or must be taken simultaneously. The application of scientific, economic and sociological principles to the feedings of large numbers of people. Mrs. Swearingen.

135. Institutional Management. 1 Q. Winter. 5 cr. Proposition

135. Institutional Management. 1 Q. Winter. 5 cr. Prerequisite, Home Economics 133. Organization, management and equipment of special types of institutions, such as dormitories, hospitals, tea rooms, cafeterias and hotel dining rooms. Mrs. Swearingen.

138. Foods. 1 Q. Spring. 4 cr. Prerequisite, Home Economics 21 and Chemistry 19. Special problems are assigned for individual investigation. Miss Platt.

139. Readings in Nutrition. 1 Q. Autumn. Winter. Spring. 2 to 4 cr. Course may be repeated during the succeeding quarters to a maximum of 4 cr. Prerequisite, Home Economics 122. Miss Platt.

141. Advanced Clothing Design. 1 Q. Spring. 4 cr. Prerequisite, Home Economics 120. The application of all the art principles in the carrying out of original designs in materials. Miss Gleason.

150. Clothing. 1 Q. Any quarter. 4 cr. Prerequisite, Home Economics 120 and 141. Special problems in costume design which deal with the historical development of dress are designed for individual investigation. Originality in design is emphasized. Given subject to demand. Miss Gleason.

191abc. Problems in Nutrition. 1 to 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Home Economics 122. Students may enter any quarter. Experimental work in nutrition with rat colony. Miss

## **Mathematics**

Professors, N. J. Lennes (Chairman), Archibald S. Merrill. ASSOCIATE PROFESSOR, EUGENE F. A. CAREY.

Major Requirements: 45 or more credits. However, for students presenting three and a half entrance units in Mathematics, a 40 credit minimum, and for students with four entrance units, a 35 credit minimum may be permitted at the discretion of the Department. No student may offer in fulfillment of these minimum requirements more than four of the following courses or their high school equivalents: Mathematics 12, 13, 14, 16, 19, 21 or 25. Courses 10, 11 and A11 may not be counted toward a major in Mathematics. Students majoring in Mathematics must complete Physics 20abc or the equivalent.

Senior examinations will not be given except to candidates for honors.

General Information. Major students are expected to take part in extra-curricular activities of the Department, such as the Mathematics Club and the Mathematics Fraternity.

The Mathematics Library contains complete sets of all the American mathematical journals, and several of the most important foreign journals, such as Crelle, Annalen, Liouville, Fortschritte. Important new books are constantly added.

Courses 17, 31, and those numbered over 100 (except 101 and 107ab) are offered subject to demand.

## For Undergraduates

10. Intermediate Algebra. 1 Q. Autumn. 5 cr. Summer. 4 cr. Pre-requisite, 1 entrance unit of Algebra. For students entering with only one year of Algebra this is a prerequisite for all other courses in Mathematics. Students entering with  $1\frac{1}{2}$  units of Algebra cannot take course 10 for credit. Mr. Carey. Mr. Merrill.

11. Solid Geometry. 1 Q. Winter. 5 cr. Prerequisite, Mathematics 10, and one entrance unit in Plane Geometry. Students who present entrance credit in Solid Geometry cannot take this course for credit. Given

in 1933-34, and in alternate years. Mr. Lennes. Mr. Carey. Mr. Merrill.

12. Survey of College Mathematics. 1 Q. Autumn. Winter. 5 cr.
Summer. 4 cr. Prerequisite, 1 entrance unit of Algebra and 1 entrance unit of Plane Geometry and Mathematics 10 or equivalent. A prerequisite for all courses in Mathematics except courses 10, 11, 19 and 25.

Lennes. Mr. Carey. Mr. Merrill.

13. Plane Trigonometry. 1 Q. Winter. Spring. 5 cr. Summer. 4 cr. Prerequisite, Mathematics 10 or equivalent, and Mathematics 12. Students who present entrance credit in Trigonometry cannot take this course for credit. Mr. Lennes. Mr. Carey. Mr. Merrill.

14. Spherical Trigonometry. 1 Q. Winter. 5 cr. Prerequisite, Mathematics 13 or equivalent, and Mathematics 12. Given in 1934-35, and in alternate years. Mr. Lennes. Mr. Carey. Mr. Merrill.

16. College Algebra. 1 Q. Autumn. 5 cr. Summer. 4 cr. Prerequisite, Mathematics 12. Students who present 2 entrance units of high school Algebra cannot take this course for credit. The advanced part of the entrance Algebra should be taken not earlier than the third year of the high school course. Mr. Lennes. Mr. Carey. Mr. Merrill.

17. Strength of Materials. 1 Q. Winter. 5 cr. Prerequisite, Mathematics 13. Mr. Carey.

19. Mathematics of Investments. Elementary Course. 1 Q. Winter.

matics 13. Mr. Carey.

19. Mathematics of Investments, Elementary Course. 1 Q. Winter. 5 cr. Prerequisite, 1 entrance unit of Algebra and Mathematics 10 or 1½ entrance units of Algebra. Mathematics 19 may not be taken for credit by those who have had 25 or more credits in Mathematics. Mr. Lennes. Mr. Carey. Mr. Merrill.

20. Mathematics of Investments, Advanced Course. 1 Q. Autumn. 5 cr. Prerequisite. Mathematics 19 or 25 credits in the department of Mathematics. Mr. Merrill.

21. Plane Analytic Geometry. 1 Q. Spring. 5 cr. Prerequisite, Mathematics 13 or equivalent, and Mathematics 12. Mr. Lennes. Mr. Carey. Mr. Merrill.

22. Differential Calculus. 1 Q. Autumn.

22. Differential Calculus. 1 Q. Autumn. 5 cr. Prerequisite, Mathematics 21, and. with certain exceptions, Mathematics 16. Mr. Lennes. Mr. matics 21. and. with certain cases.

Carey. Mr. Merrill.

23. Integral Calculus. 1 Q. Winter. 5 cr. Prerequisite, Mathematics
22. Mr. Lennes. Mr. Carey. Mr. Merrill.

25. Statistics. 1 Q. Spring. 5 cr. Prerequisite, Mathematics 10, or

equivalent. Mr. Merrill.

26. Statistics. 1 Q. Winter. 5 cr. Prerequisite, Mathematics 12 and 25, or 25 credits in Mathematics. Mr. Merrill.

31. Teaching of Secondary Mathematics. See courses in Education.

35abc. Forestry Mathematics. 3 Q. Autumn, winter, spring. 4 cr. each quarter. Prerequisite, 1 entrance unit of Algebra and one of Plane Geometry. Students who have completed Mathematics 10 or the equivalent may not receive credit in 35a; those who have completed Mathematics 13 or the equivalent may not receive credit in 35b; those who have completed Mathematics 25 may not receive credit in 35c. Mr. Lennes. Mr. Carey. Mr. Merrill.

Mr. Merrill.

#### For Undergraduates and Graduates

101. Ordinary Differential Equations. 1 Q. Spring. 5 cr. Prerequisite, Mathematics 23. Mr. Lennes. Mr. Carey. 103. Synthetic Projective Geometry. 1 Q. Winter. 5 cr. Prerequisite, Mathematics 21. Mr. Merrill.

site, Mathematics 21. Mr. Merrill.

104. Theory of Equations. 1 Q. Winter. 5 cr. Prerequisite, Mathematics 22. Mr. Lennes. Mr. Carey. Mr. Merrill.

107ab. Selected Chapters in Calculus. 2 Q. Autumn, winter. 5 cr. each quarter. Prerequisite, Mathematics 23. Mr. Lennes. Mr. Carey.

125. Solid Analytic Geometry. 1 Q. Spring. 5 cr. Prerequisite, Mathematics 22. Mr. Lennes. Mr. Carey.

125ab. Analytic Mechanics. 2 Q. Autumn, winter. 5 cr. each quarter. Prerequisite, Mathematics 23. Mr. Carey.

150. Seminar. 1 Q. Any quarter. Credit variable. Registration on consultation with instructor. This course provides guidance in special work for advanced students. Mr. Lennes. Mr. Carey. Mr. Merrill.

#### For Graduates

240abc. Functions of a Real Variable. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Mr. Lennes.

241. Functions of a Complex Variable. 1 Q. 5 cr. Mr. Lennes. Mr.

ey. Mr. Merrill.
243. Vector Analysis. 1 Q. 5 cr. Mr. Carey.
245. Theory of Sets of Points. 1 Q. 5 cr. Mr. Lennes.
246. Advanced Projective Geometry. 1 Q. Spring. 5 cr. Prerequisites, elementary projective geometry and a certain mathematical maturity. Mr. Lennes.

#### Astronomy

All. Descriptive Astronomy. 1 Q. Spring. 5 cr. This course does not apply toward the restricted elective requirement in science. Mr. Merrill. Alol. Celestial Mechanics. 1 Q. Autumn. 5 cr. Prerequisite, Mathematics 101 and 126a. Mr. Merrill.

# **Physics**

PROFESSOR, GARVIN D. SHALLENBERGER (CHAIRMAN). ASSOCIATE PROFESSOR, EDWARD M. LITTLE.

Major Requirements: 40 or more credits in Physics. In preparation for the advanced courses, a student should take Physics 20abc in the sophomore year. Essential courses offered in other departments: Mathematics 13, 16, 21, 22, 23 and Chemistry 13. Students planning to teach should elect Psychology 11, and courses 18, 19, 22, 26, and 7 additional credits in the School of Education.

Senior examinations will not be given except to candidates for honors.

### For Undergraduates

20abc. General Physics. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Prerequisite, sophomore standing and Mathematics 12 or 13; high school physics is desirable. This course satisfies medical school and technical requirements in general physics. (a) Mechanics and heat; (b) sound, electricity and magnetism; (c) light and modern physics. Mr. Shallenberger.

22. General Physics (Briefer Course). 1 Q. Winter. 5 cr. Prerequisite, sophomore standing and Mathematics 12 or 13. Students who have taken Physics \*11a or 20a may not receive credit in this course. A course for Forestry and Geology students. Mr. Little.

31abc. Junior Laboratory. 3 Q. Autumn, winter, spring. 2 or 3 cr. each quarter. Students may enter any quarter. Prerequisite, Physics 20abc. Experimental or theoretical work in advanced general physics. Work adapted to the needs of the student. Mr. Shallenberger. Mr. Little.

## For Undergraduates and Graduates

114. Electricity. 1 Q. Autumn. 3 cr. Prerequisite, Physics 20b, and Mathematics 23. Not a laboratory course. Mr. Little.

115. Electrical Measurements. 1 Q. Autumn. 2 cr. Prerequisite, Physics 20b, and Mathematics 23. Mr. Little.

122. Light. 1 Q. Winter. 3 cr. Prerequisite, Physics 20abc, and Mathematics 23. Not a laboratory course. Mr. Little.

123. Optical Measurements. 1 Q. Winter. 2 cr. Prerequisite, Physics 20abc and Mathematics 23. Given in 1933-34, and in alternate years. Ordinarily accompanies Physics 122. Mr. Little.

141. Sound. 1 Q. Any quarter. 3 cr. Prerequisite, Physics 20abc and Mathematics 23. Not a laboratory course. Mr. Little.

152. Modern Physics. 1 Q. Spring. 5 cr. Prerequisite, Physics 20abc and Mathematics 23. The recent discoveries and theories in physics. Not a laboratory course. Mr. Little.

154. Advanced Modern Physics. 1 Q. Spring. 5 cr. Prerequisite, Physics 114, 122 and 152. A continuation of Physics 152. Quantum theory and relativity. Mr. Shallenberger.

170abc. Theoretical Physics. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Prerequisite. Physics 20abc and Mathematics 23. Not a laboratory course. Mr. Little.

180. Physics Seminar. 1 Q. Spring. 1 cr. A library and discussion course required of Physics majors. Mr. Shallenberger.

## **Pre-Medical Course**

The State University offers courses which prepare students for entrance to any medical school in the United States. The entrance requirements to such schools as adopted by the Council on Medical Education of the American Medical Association are as follows:

High School. Students must have completed a four-year course of at least fifteen units in a standard accredited high school or other school of standard secondary grade, or have passed examinations for unconditional entrance to college. The subjects taken in high school should include, if possible, at least two years' work in Latin.

<sup>\*</sup>Course discontinued.

College. The minimum requirement is two years of collegiate work extending through thirty-two weeks each and comprising ninety quarter credits. Many of the best medical schools, however, require three years of preparatory work and a few require graduation from college.

## Pre-Medical Curriculum

The following courses will satisfy the requirements of all medical schools requiring only two years of preparatory work:

Chemistry: Fifteen credits in general chemistry which may include qualitative analysis; ten credits in organic chemistry.

**Biology:** Fifteen credits in zoology or in zoology and botany, but not in botany alone.

Physics: Fifteen credits in general physics.

English: Nine credits in composition.

French or German: A reading knowledge of one modern language. This includes at least one year's college work in addition to high school credits.

**Electives:** To make ninety credit hours, electives should be selected from non-science courses in general.

These requirements will be fulfilled in the University by completing Chemistry 13 and 101, Biology 11abc, Physics 20abc, English 11ab and either 30 or 32, French 13b or German 13b.

In a few cases the above courses somewhat more than satisfy the minimum requirements; but many medical schools require other courses in addition. Students should plan their pre-medical work to fit the demands of the particular school they wish to attend.

While the minimum requirements as outlined comprise college credits for only two years, premedical majors should note that the general requirements of the State University which apply to all students take another year to complete. But all medical schools of high standing urge students to undertake a more thorough preparation than the minimum course outlined above. If in addition pre-medic majors wish to graduate they may complete a fourth year at the State University of Montana and receive the Bachelor of Arts degree with a major in Pre-Medical Sciences. The additional courses required for this degree include: Biology 19ab, 23, 120; Chemistry 17, 103; Psychology 11; Foreign Language 14 (Scientific French or German).

Aptitude Test. In addition to the work outlined above, each candidate for entrance to any medical school in the United States must pass an aptitude test. This will be given at the University of Montana during the winter quarter of the regular school year.

## DIVISION OF SOCIAL SCIENCES

PROFESSOR PAUL C. PHILLIPS, CHAIRMAN.

The following course is offered as an introduction to the field of Social Sciences.

11abc. Introduction to Social Sciences. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Students who have completed one or more college courses in history, economics, or sociology may not receive credit in this course. Students may enter any quarter. The background and development of political, social and economic Europe from the 16th century to the present day. Given conjointly by the Departments of Economics and History. A text-book fee of \$1.50 is charged each quarter. Mr. Miller. Mr. Turney-High. Mr. Bennett. Mr. Kast. Mr. Tascher.

# Economics and Sociology

PROFESSOR, HARRY TURNEY-HIGH (CHAIRMAN). ASSOCIATE PRO-FESSOR, MATTHEUS KAST. ASSISTANT PROFESSORS, HAMPTON K. SNELL, HAROLD TASCHER.

Major Requirements: 50 or more credits in Economics and Sociology, including Economics 14 and Sociology 61. The following courses may be applied in partial fulfillment of this credit requirement: Business Administration 133, 151ab, 152, 154, 156. Psychology 11 must be completed; Psychology 14 and Mathematics 25 are recommended. Majors interested in Economics must complete Economics 75 and 151; majors interested in Sociology must complete Sociology 62, 132 and

Senior examinations will not be given except to candidates for honors.

The Ryman Economics Library Foundation. The Ryman Library Foundation in Economics and Sociology was founded in 1927 by the late J. H. T. Ryman, Esq., of Missoula. The gift included the testator's personal library in these fields, as well as a gift of \$5000 for its amplification. A sum of \$7500 was also bequeathed, the income of which is devoted to the systematic extension of the Economics and Sociology library.

In calculating credits for prerequisites, Social Science 11abc does not count.

## For Undergraduates

13. Survey of Economics. 1 Q. Spring. 5 cr. Prerequisite, junior standing. A course designed for majors in fields other than Economics or Business Administration where a study of economic principles from the standpoint of citizenshin is desired. May be substituted for 14a as a prerequisite for 14b, in which case 14a cannot be taken for credit. Mr. Kast. 14. Principles of Economics. 2 Q. Autumn, winter. Winter. sp. ng. Continuous. 8 cr. Summer, 14b, 4 cr. Prerequisite, sophomore standing. Economics 13 can be substituted for 14a as prerequisite to 14b, but credit will not be accepted in both 14a and 13. Mr. Turney-High. Mr. Kast. Mr. Snell. Mr. Tascher.

61. Introduction to Sociology. 1 Q. Winter. Summer. 4 cr. Prerequisite, sophomore standing. A general introduction to the study of
social relations. Mr. Turney-High. Mr. Tascher.
62. Elementary Anthropology. 1 Q. Autumn. 5 cr. Prerequisite,
sophomore standing. An introduction to anthropology discussing the origins
and development of cultures. Mr. Turney-High.

75. Problem Economics. 1 Q. Spring. Summer. 4 cr. Prerequisite, Economics 14. The case methods applied to economic doctrine. An analysis of actual material in the light of economics. Mr. Kast.

## For Undergraduates and Graduates

101. Money and Banking. 1 Q. Autumn. Summer. 4 cr. Prerequisite, Economics 14. Theories of money, and the movement and international distribution of gold; principles of monetary regulation; commercial banking institutions. Federal Reserve system, agricultural banks and other financial institutions. Mr. Spell other financial institutions. Mr. Snell.

105. Economic History of the United States. 1 Q. Spring. Summer. 4 cr Prerequisite. Economics 14. Evolution of the present status of manufacture, transportation, commerce and finance. Mr. Tascher.

facture, transportation, commerce and management of the principles of railway, ocean and waterway, motor truck and bus, and consent of instructor. The expenditures, revenues, credit, and taxation policies of the body politic. Mr. Snell.

127. Transportation. 1 Q. Autumn. 4 cr. Prerequisite, Economics 14. The principles of railway, ocean and waterway, motor truck and bus, and air transportation; problems of operation and public regulations. Mr. 14. The principles of ransway, ocean and matter, and public regulations, and air transportation; problems of operation and public regulations.

129. Public Utilities. 1 Q. Winter. 4 cr. Prerequisite, Economics 14. Problems of electric, communication, gas, water and city transportation industries; franchises, rate structures, problems and methods of public control. Mr. Snell.

131. Labor Problems. 1 Q. Autumn. 3 cr. Prerequisite, Economics 14. Survey of the main forces and factors which give rise to modern labor conditions; child labor; unemployment; wages; hours of work; distribution of income: the philosophy and methods of organized labor; labor legislation; social insurance. Mr. Kast.

132. Development of Social Theory. 1 Q. Spring. 4 cr. Prerequisite, ten credits in Economics or History. Social theories from earliest times until the present, and the forces which produced them. Mr. Turney-High.

133. Agricultural Economics. 1 Q. Autumn. 3 cr. Prerequisite, Economics 14. A systematic discussion of the economic problems which confront the citizens of an agricultural community, and of the means applied or advocated as solutions. Mr. Kast.

151. Development of Economic Theory. 1 Q. Winter. 4 cr. Prerequisite, 20 credits in Economics, or 14 and consent of instructor. A history and analysis of economic theories, emphasizing the Classical, Historical and Austrian schools. Mr. Kast

160. Principles of Social Case Work. 1 Q. Autumn. 4 cr. Prerequisite, Economics 61 and Psychology 11. The principles behind current methods of giving organized poor relief, with emphasis on the analysis of actual case histories dealing with the settlement of family problems. Mr.

Tascher.

161. Laboratory in Social Case Work. 1 Q. Any quarter. 1 or 2 cr. Prerequisite, Economics 160 and consent of instructor. Course may be repeated for credit: not more than 10 credits may be applied toward graduation. A field course in social case work. Mr. Tascher.

165. Development of Public Welfare Policies. 1 Q. Spring. 3 cr. Prerequisite, Economics 61. The policies of organized society throughout the world in dealing with pauperism and dependency, and the social and economic forces which brought them about. Mr. Tascher.

166. Social Pathology. 1 Q. Winter. 3 cr. Prerequisite, Economics 61. An inspection of the socially dangerous elements in modern life; problems of crime and penal methods. Mr. Turney-High.

167. Problems of Population. 1 Q. Spring. 3 cr. Prerequisite, Economics 61. Quantity and quality of populations, birth and death rates, immigration, race problems. Mr. Turney-High.

171. Property and Distribution. 1 Q. Spring. 3 cr. Prerequisite, Economics 151, or 20 credits in Economics and consent of instructor. Application of economic principles to a study of the property system; distribution of incomes and property to the various members and classes of society. Not given in 1934-35. Mr. Kast.

of society. Not given in 1934-35. Mr. Kast.

173. Cooperative Movements. 1 Q. Autumn. 3 cr. Prerequisite, Economics 14. Contemporary organizations of labor, capital and the state for the cooperative production and distribution of goods. Not given in

1934-35. Mr. Kast.

174. Ethnology of the American Indian. 1 Q. Spring. 4 cr. Prerequisite, Economics 62. An intermediate course in anthropology. Special emphasis is laid upon Montana tribes. Mr. Turney-High.
180. Archaeological Survey. 1 Q. Any quarter. 1 to 5 cr. Prerequisite. Economics 174. A field course in Montana archaeology. Mr.

Turney-High.

Turney-High.

182ab. Trends in American Social Life. 2 Q. Winter, spring. 4 cr. each quarter. Prerequisite, for majors, Economics 61, 62; for others, senior standing and consent of instructor. An analysis of sociological doctrine in the light of modern social change. Mr. Turney-High.

190. Independent Work. Any quarter. Credit variable. Prerequisite, junior standing or consent of instructor. The department makes provision for tutorial instruction of a limited number of qualified students. A reasonable amount of such independent, advanced study is expected of departmental major students, and is required of those who wish to graduate with honors. Mr. Turney-High. Mr. Kast. Mr. Snell. Mr. Tascher.

# **History and Political Science**

PROFESSORS, J. EARLL MILLER, PAUL C. PHILLIPS (CHAIRMAN). AS-SISTANT PROFESSORS, EDWARD E. BENNETT, DARRELL PARKER. GRADUATE ASSISTANT, MICHAEL MANSFIELD.

Major Requirements: 45 credits in History and Political Science; 15 of these credits must be taken from courses numbered over 100, and at least 6 of these must come from courses 102, 104, 105, 112 and 113. Freshmen who expect to take major or minor work in History should

register for Social Science 11abc. Major students must elect either History or Political Science as a special field of study. Constitutional Law offered in the Law School, and Economics 111, 129, and 132 may be applied toward a major in Political Science.

Senior examinations are required of all students who major in History or Political Science.

## For Undergraduates

13abc. English History. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Prerequisite, sophomore standing. Students may enter any quarter. The political, economic and social history of England and the British Empire. Mr. Bennett.

15. History of Greece. 1 Q. Autumn. 4 cr. Prerequisite, junior standing. The cultural, social and political development of ancient Greece from prehistoric times to the Roman conquest.

16. History of Rome. 1 Q. Winter. 4 cr. Prerequisite, junior standing. The institutional, social and cultural development of Rome to 395 A. D., with emphasis upon the period from the founding of the Republic to the death of Marcus Aurelius.

to the death of Marcus Aurelius.

17. American Government and Politics. 1 Q. Autumn. 4 cr. Prerequisite, 8 cr. in history. The organization and functions of federal government and the problems of the present time. Mr. Phillips.

18. State and Local Government. 1 Q. Autumn. 4 cr. Prerequisite, History 17. A study of state, county, and municipal governments and their relation to the federal government. The vanishing functions of the states. The NRA and federal control of local relief. Mr. Phillips.

20. Comparative Governments. 1 Q. Spring. 4 cr. Prerequisite, Social Science 11bc, or History 13c, or 17, and sophomore standing. A study of representative types of government, constitutional beginnings, organization, methods of legislation and administration. Soviets, Facists, and other programs of reform. Mr. Phillips.

grams of reform. Mr. Phillips.

grams of reform. Mr. Phillips.

21abc. United States History. 3 Q. Autumn, winter, spring. 4 cr. each quarter. Summer, 21c. 4 cr. Prerequisite, sophomore standing. Students may enter any quarter. (a) 1492-1789. Colonial beginnings and types of governments, with attention to social and economic conditions. Causes of the Revolution; the Confederation and formation of the national government. (b) 1789-1865. The development of nationality and democracy; the western movement; the slavery and nullification controversy; Civil War and reconstruction. (c) 1865-1933. The new West; agricultural and industrial development; influence of business and organized labor; movements for reform; the World War, the Golden Age and depression. Mr. Bennett. Mr. Phillips.

22. Montana History and Government. 1 Q. Summer. 4 cr. Open to all students. Exploration, fur trade, missions, gold mining, social and economic conditions, transportation, development of silver and copper mining, agriculture, territorial and state government and political questions. Mr. Phillips.

Mr. Phillips.

23ab. Hispanic-American History. 2 Q. Autumn, winter. 3 cr. each quarter. Prerequisite, sophomore standing. History 23a is recommended as preparatory to 23b. (a) A survey of Spanish and Portuguese explorations; institutional developments in Latin-America to the close of the 18th century. (b) The political and economic development of Hispanic-American nations in the 19th and 20th centuries. Mr. Parker.

29. French Revolution and Napoleonic Era. 1 Q. Autumn. 4 cr. Prerequisite, Social Science 11a or History 35, and junior standing. Economic, social, political and religious developments, and the international reaction to the Revolution. Mr. Bennett.

30ab. Europe in the 19th Century. 2 Q. Autumn, winter. 3 cr. each quarter. Prerequisite, Social Science 11bc or History 29, and junior standing. The internal, economic, social, political and religious development of France, Germany, Austria and Italy. (a) To 1870. (b) After 1870. Mr. Bennett.

33. Medieval Europe. 1 Q. Autumn. 3 cr. Prerequisite, 10 credits in European history and junior standing. The political, social, economic and institutional development of Europe from the barbarian invasions to 1300. Mr. Phillips.

34. Renaissance and Reformation. 1 Q. Winter. 3 cr. Prerequisite, History 33. The political and social history of Europe from 1300 to 1600; emphasis on the history of ideas. Mr. Bennett.

35. Background of the French Revolution. 1 Q. Spring. 3 cr. Prerequisite, Social Science 11ab or History 34, and sophomore standing. The history of Europe from about 1600 to the outbreak of the French Revolution. Mr. Bennett.

40. The Teaching of History. See courses in Education.

## For Undergraduates and Graduates

102ab. History of the Northwest. 2 Q. Autumn, winter. 3 cr. each quarter. Prerequisite, History 21abc. Students may enter either quarter. The most significant factors in the history of the northwestern states and their relation to the nation. Mr. Phillips.

103. Contemporary European History. 1 Q. Winter. 3 cr. Summer. 4 cr. Prerequisite, History 30. Europe on the eve of the World War; the World War and the resultant political and economic problems of Europe. Not given in 1934-35. Mr. Miller.

104abc. Seminar in American History. 3 Q. Autumn, winter, spring. Summer. Credit variable. Prerequisite, 25 credits in history and senior standing. Individual work adapted to the needs of the student. Mr. Phillips.

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105abc. Seminar in European History. 3 Q. Autumn, winter, spring. Summer. Credit variable. Prerequisite, 25 credits in history and senior standing. Individual work adapted to the needs of the student. Mr. Phillips.

standing.

106ab. International Public Law. 2 Q. Winter, spring. 3 cr. each quarter. Prerequisite, junior standing.

107ab. Diplomatic History of Europe. 2 Q. Winter, spring. 3 cr. each quarter. Summer. 4 cr. Prerequisite, junior standing. Students may enter either quarter. International relations and world politics from the congress of Vienna to the World War. Mr. Miller.

108. Present World Problems. 1 Q. Spring. 3 cr. Summer. 4 cr. Prerequisite, History 103. The present European situation, reparations, disarmament, the decline of democracy, the world court, the League of Nations. Not given in 1934-35. Mr. Miller.

109. American Political Problems. 1 Q. Autumn. Summer. 3 cr. Prerequisite, History 21abc. Present day political problems, such as governmental reorganization, depression cures, relation of government and business, and foreign problems. Mr. Parker.

110. History of the British Empire Since 1783. 1 Q. Winter. 3 cr. Prerequisite, junior standing and History 13bc. Organization of the Old Empire at the close of the American Revolution; new colonial policy and British Expansion in the 19th century; evolution of the self-governing dominions, and their relations with the mother country; the dependent empire and the British Commonwealth of Nations; recent developments and the outlook for the future. Mr. Bennett.

112abc. Seminar in Political Science. 3 Q. Autumn, winter, spring. Credit variable. Prerequisite, 18 credits in political science and senior standing. Mr. Phillips.

112abc. Seminar in Political Science and Science Credit variable. Prerequisite, 18 credits in political science and Science standing. Mr. Phillips.

113. Representative Americans. 1 Q. Spring. 4 cr. Prerequisite, History 21abc. Studies in American biography. Mr. Phillips.

114. History of Russia. 1 Q. Autumn. 4 cr. Prerequisite, junior standing and 6 credits in European history. The earlier period of Russian history and the modern regime of the Czars, with special emphasis on the Soviet regime. Mr. Parker.

S127ab. British Institutional History. 2 Q. Summer. 3 to 4 cr. Pre-

S127ab. British Institutional History. 2 Q. Summer. 3 to 4 cr. Prerequisite, History 13 and senior standing. Studies in the foundation and development of British democracy. Mr. Miller.

# **Pre-Business Administration**

Students who plan to enter the School of Business Administration should see the suggested curriculum, the requirements for graduation and the courses in the School of Business Administration, pages 71 to 74.

## Pre-Education

Students who plan to enter the School of Education should complete the required curriculum of the Division of Social Sciences. For further information regarding the School of Education, see pages 74 to 77.

# Pre-Legal

Students who plan to enter the School of Law should complete the required curriculum in the Division of Social Sciences. For further information regarding the School of Law, see pages 85 to 87.

## GRADUATE DIVISION

#### Admission

Candidates for admission to the Graduate Division must hold a Bachelor's degree from the University of Montana or from another institution of approved standing. In order to become a candidate for a Master's degree, the student must offer evidence of completion of satisfactory undergraduate work in the field he has selected for graduate study. To receive graduate credit the student must register in the Graduate Division and his program must receive the approval of the Chairman of the Graduate Committee.

### Courses

Graduate work is offered in the following departments or schools: Biology, Botany, Business Administration, Chemistry, Economics and Sociology, Education, English, Foreign Languages, Forestry, Geology, History and Political Science, Home Economics, Journalism, Mathematics, Pharmacy, Physical Education, Physics, Psychology and Philosophy.

Undergraduate courses of advanced character are accepted for graduate work. Such courses, however, must be of at least junior character and should have a prerequisite of not less than eight credits in the same field. Normally, courses numbered from 100 to 199 will meet this requirement. In such courses, however, the student must do extra work equal to fifty per cent of the regular assignments in order to receive full graduate credit. Such extra work must be of distinctly advanced character. In case students do not do the extra work required for graduate credit they may, with the approval of the Graduate Committee, count two-thirds of the course credit as graduate credit.

#### Requirements for a Master's Degree

Candidates for a Master's degree must present thirty credits of graduate work and a thesis. Candidates must be registered for a full graduate course for three quarters. The residence requirements may be met by carrying a normal graduate course for three summer sessions of nine weeks each and preparing the thesis in absentia. In the case of students transferring graduate credits from other institutions, the residence requirements are three quarters or summer sessions and not less than twenty-two credits at the State University of Montana. Students of superior ability may earn the degree within a year if they give all their time to graduate study. Twenty credits must be in the major subject, and with the approval of the Graduate Committee, ten credits may be offered in a minor field. Candidates for the Master's degree will be expected to earn a "B" average (an index of 2.00) on credits offered for the Master's degree.

Before receiving the Master's degree the candidate must present evidence of intensive study and investigation in some field of interest. In connection with this study he must prepare a thesis. The subject of this thesis must receive the approval of the major professor and the chairman of the Graduate Committee. Finally he must pass an examination over the whole field of his special study, and this examination may be taken only after the thesis is accepted. Final acceptance of the thesis is subject to the approval of a special examining committee which also conducts the examination over the special field of study. The examination may be oral or written or both. Before the degree is conferred, two copies of the thesis must be deposited in the library. The thesis must be prepared in the form prescribed by the Graduate Committee.

## PUBLIC SERVICE DIVISION

The University is actuated by the idea that, so far as its resources permit, it should perform any public service for which it is more naturally adapted than other existing agencies. For this reason it undertakes various extension activities, such as correspondence study, extension lecturing, etc.

# Correspondence Study

During the past year the University has offered the following correspondence courses:

#### Biology

Economic Zoology, Entomology, Eugenics, Physiology, General Hygiene, Evolution and Heredity.

#### **Business Administration**

Commercial Geography, Elementary Accounting, Intermediate Accounting, Advanced Accounting, Auditing, Income Tax Procedure, Credits and Collections, Corporation Finance, Foreign Trade, Marketing.

#### Economics and Sociology

Principles of Economics, Money and Banking, Public Finance, Social Problems, Transportation.

#### Education

School Management, History of Education, Principles of Education, Educational Psychology, The High School, School Supervision, History of American Education, Educational Administration, School Hygiene.

#### English

Freshman Composition, Sophomore Composition, Advanced Composition, American Literature, Social Thought of Literary Men, English Novelists, Masters of Fiction, Contemporary Literature.

#### Foreign Languages

Elementary French, Intermediate French, Advanced French, General Survey of French Literature, Advanced French Grammar and Composition, History of French Literature in the Eighteenth Century, History of French Literature in the Nineteenth Century, Elementary German, Intermediate German, Advanced German, Advanced German Grammar and Composition, Elementary Spanish, Intermediate Spanish, Advanced Spanish, Advanced Spanish Composition, General Survey of Spanish Literature, Spanish Drama, Spanish Literature of the Eighteenth Century, Spanish Literature of the Nineteenth Century, Contemporary Spanish Literature, Commercial Spanish, Spanish-American Literature, Spanish Novel.

Elementary Latin, Intermediate Latin, Writing Latin (Elementary), College Freshman Latin, The Odes and Epodes of Horace, Second Year College Latin, the Annals of Tacitus, Life and Works of Vergil. More advanced work upon request.

#### Geology

General Geology, Geography and Natural Resources of Montana.

## History and Political Science

Political and Economic Progress, English History, American Government and Politics, State and Local Government, United States History, Contemporary United States History, Montana History and Government, Europe in the Nineteenth Century, French Revolution and Napoleonic Era, Medieval Europe.

#### Home Economics

Elementary Dietetics, House Planning and Furnishing, Textiles.

#### **Mathematics**

Elementary Algebra, Plane Geometry, Intermediate Algebra, Solid Geometry, Survey of College Mathematics, College Algebra, Plane Trigonometry, Mathematics of Investments, Analytic Geometry, Differential Calculus, Integral Calculus, Advanced Work.

# Music

History of Music.

# Psychology

General Psychology, Social Psychology, Abnormal Psychology, Mental Measurements, Ethics, Child Psychology, Psychology of Business, Logic, Applied Psychology, Psychology of Handicapped Children.

#### Correspondence Study Fees

The fees for correspondence courses are payable in advance.

For each quarter credit......\$2.50

To cover cost of postage on returned assign-

ments, per course ......\$1.00

For transferring from one course to another.....\$2.00

A charge of \$2.00 will be made for extension of time for the completion of a correspondence study course, except in the case of students required to suspend the correspondence study work while in attendance at some institution.

In case books are borrowed from the University Library a deposit of \$4.00 should be sent to the Correspondence Study Department. When the student no longer desires books, \$3.00 of the deposit is returned, less postage and fines for delay in returning books. The other \$1.00 is retained as a rental charge.

# **Public Lectures**

The services of members of the University staff may be secured for public addresses and lectures by application to the Public Service Division.

Owing to financial limitations the State University has no separate staff for public service work, but is compelled to call upon the members of the regular staff for extra-mural services. For this reason it is usually necessary to plan some time in advance for any work which calls staff members away from the institution for any considerable length of time.

# **Board of Recommendations**

The University endeavors to assist school authorities in need of trained teachers, principals and superintendents; and, in like manner, to assist teachers, principals and superintendents in finding positions which they, by training, ability and experience, are fitted to fill successfully. This work is carried on by the Board of Recommendations of which Professor W. E. Maddock is chairman. Confidential information is collected showing the preparation, character, ability and success of persons interested in school positions, and this information is furnished school authorities upon application. A registration fee of \$5.00 is charged teachers for this service to cover the cost of gathering material, making up sets of papers, and sending them out to employing school officials. No additional charge will be made for renewal of registration in subsequent years.

# SCHOOL OF BUSINESS ADMINISTRATION

PROFESSORS, ROBERT C. LINE (DEAN), EMMETT R. SANFORD, JAMES B. SPEER, J. HOWARD TOELLE. ASSISTANT PROFESSORS, ALLEN K. SMITH, HAMPTON K. SNELL. INSTRUCTOR, MRS. BRENDA F. WILSON.

The School of Business Administration gives training in its elementary courses for expert clerical work, and in its advanced courses for administrative positions in industrial and commercial organizations, and in public service.

# Requirements for Admission

A well rounded course in business requires a solid foundation in non-technical subjects. In addition to the University requirements for admission (pages 14 to 17), a student must have completed two years of approved college work.

For regulations regarding admission of special students see page 16.

# Requirements for Graduation

Candidates for the degree of Bachelor of Arts in Business Administration must meet the following requirements:

- (1) The general University requirements for graduation (see pages 17 to 21), except in foreign languages.
- (2) A minimum of 53 credits in Business Administration. The following courses, described under the Department of Economics, are accepted as Business Administration subjects: Economics 101, 105, 127, 129.
- (3) The following courses must be completed: Economics 14, Psychology 11, Business Administration 12ab, 41, 133 and 151ab.
- (4) The following courses should be completed: Mathematics 19 and 25.

In addition to the above requirements, each student should be able to typewrite at a minimum rate of 40 words a minute and should be able to take dictation at a reasonable rate of speed.

Senior examinations will not be given except to candidates for honors.

# Cooperating Schools

The School of Business Administration cooperates with the School of Law so that it is possible to obtain in six years both the degrees of Bachelor of Arts in Business Administration and Bachelor of Laws. This is a very desirable combination for those expecting to enter the legal profession.

Students who wish to major in Advertising should elect the following courses: Freshman year, Journalism 11abc; sophomore year, Journalism 21abc, Economics 14, Psychology 11 and 32; junior year, Business Administration 41, Journalism 43 and the advertising section of Journalism 31; senior year, Business Administration 151ab, Fine Arts 32ab, Journalism 45 and 47.

The School of Business Administration cooperates with the School of Education in order that those who expect to teach commercial subjects in secondary schools may obtain a University Certificate of Qualification to Teach. Students desiring this certificate should take Psychology 11 in the sophomore year; Education 18 and 19 in the junior year; and Education 22, 26, 32 and 66 in the senior year. They

should take the typewriting and shorthand courses offered (Business Administration 21 and 22) or be able to meet the standards of such courses.

# C. P. A. Examinations

The laws of the State of Montana provide for the certification of public accountants. The University grants the C. P. A. certificate to legally qualified persons who have successfully passed a written examination in "Theory of Accounts," "Practical Accounting," "Auditing," and "Commercial Law." Graduates of the School of Business Administration who have taken the courses suggested in the accounting group will have had the necessary educational training for these examinations. One year's residence in Montana is prerequisite for the granting of a certificate by examination or otherwise.

# Suggested Curricula for Majors in Business Administration

Freshman Year			
Physical Circumstance (1997)	Autumn Quarter Credits	Quarter Credits	Spring Quarter Credits
Physical Science 17 or Biological Science 13 Humanities 15abc Mathematics 10, 19, 25 Physical Education 11abc	5 5 1	5 5 1	5 5 1
Military Science 11abc (Men)	1	1	1
Sophomore Year	17	17	17
Business Administration 11 and 12ab Economics 14	5 4	5	5
Psychology 11 and 32	5	4	5
English 11ab		3 4	3
Elective ————————————————————————————————————	1.	i	1
Military Science 12abc (Men)	1	1	1
	19	18	19
ACCOUNTING			
Junior Year			
Business Administration 41ab		3	3
Business Administration 133 and 114 Business Administration 154 or Economics 129	4	3-4	4
Business Administration 113ab and 132	4	4	2
Business Administration 124  Economics 101	4		3
Elective	5	5	4
Senior Year	17	15-16	16
Business Administration 151ab	3	3	
Business Administration 129 Business Administration 145 and 115ab	4	2 4	
Economics 131	3	4	
Elective	6	6	11-
	16	15	15
GENERAL BUSINESS AND COMMER Junior Year	CIAL T	EACHING	
Business Administration 41ab		3	3
Business Administration 133 and 132	4		2
Business Administration 154 or Economics 129 Business Administration 124		3-4	3
*Business Administration 21		0	0
Economics 101 and 105	8	9	4 4
	_		
	16	15-16	16

<sup>\*</sup>Required only of students preparing for Commercial Teaching.

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Senior	Year

	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits
Business Administration 151ab and 152		3	4
Business Administration 191		. 1	1
*Business Administration 22abc		2	2
Business Administration 129 and 122		4	
Economics 131			
Economics 127 Economics 129 or Business Administration 154		3-4	
Elective	3	4	6
Dicetive			
	16	15-16	16

#### For Undergraduates

S1. Industrial Geography. 1 Q. Summer. 4 cr. Open to all students. The distribution, development and utilization of raw materials in industry and trade; the influence of economic resources upon business life. Mr. Sanford.

11. Elementary Accounting. 1 Q. Autumn. 5 cr. Prerequisite, sophomore standing. A student may be exempted from this course upon passing a placement examination admitting him to 12a. Fundamental principles of accounting as applied to the single proprietorship. Mr. Sanford.

12ab. Intermediate Accounting 2 Q. Winter, spring. 5 cr. each quarter. Prerequisite, Business Administration 11 or placement examination, and sophomore standing. (a) Methods of modern accounting practice, with classification of accounts for a partnership. (b) The corporate type of accounting records, controlling accounts, consignments, joint ventures and related topics. Mr. Sanford.

21. Typewriting. 3 Q. Autumn, winter, spring. Summer. No credit. Students may enter any quarter. Five times per week. Beginning: Keyboard drills and copy work. Advanced: Letter forms, tabulating, legal forms, speed work. Fee, \$5.00 per quarter. Mrs. Wilson.

22. Shorthand. 3 Q. Autumn, winter, spring. Continuous. 6 cr. towards the degree of Bachelor of Arts in Business Administration only. However, credit in Shorthand may be included in the 25 credits required for a minor in Business Administration. Beginning: principles and dicta-

for a minor in Business Administration. Beginning: principles and dicta-

for a minor in Business Administration. Beginning: principles and dictation. Advanced: reading, dictation, speed work, and teaching methods. Fee, \$12.50 per quarter. Mrs. Wilson.

32. Teaching of Commercial Subjects in Secondary Schools. See courses in Education.

41ab. Business Law. 2 Q. Winter, spring. Continuous. 6 cr. Prequisite, junior standing. (a) Introduction; Contracts; Sales. (b) Agency; Negotiable Instruments; Partnership; Corporations. Mr. Smith. Mr. Toelle.

50. Retail Stores. 1 Q. Winter. 3 cr. Prerequisite, Economics 14a or Pharmacy 27. Types of retail stores, location, buying, pricing, merchandise display, store selling, types of display advertising and store costs. Mr. Line Line.

Salesmanship. 1 Q. Autumn. 3 cr. Mr. Line. 52.

# For Undergraduates and Graduates

For Undergraduates and Graduates

113ab. Advanced Accounting. 2 Q. Autumn, winter. 4 cr. each quarter. Prerequisite, Business Administration 12ab. (a) Corporation accounting; theory of balance sheets; valuation of assets on the balance sheet; depreciation; profits; reserves: dividends; surplus. (b) Sinking and other funds; income summaries; analysis of balance sheets; liquidations; consolidations; mergers and branch house accounting. Mr. Sanford.

114. Cost Accounting. 1 Q. Spring. 4 cr. Prerequisite, Business Administration 113ab. Elements of cost; principles and general methods of cost findings; direct and indirect costs; payroll and labor costs; compiling costs and cost data; control of cost records. Mr. Sanford.

115ab. Auditing. 2 Q. Winter, spring. 4 cr. each quarter. Prerequisite, Business Administration 113ab. (a) The general scope and purpose of auditing; the audit program; the analytical study of balance sheets and accounting records, with practical problems. (b) The application of the theory of auditing to practical problems, the preparation of final reports, with full analysis in approved form for submission to clients. Mr. Sanford.

124. Insurance. 1 Q. Spring. 3 cr. Summer. 4 cr. Prerequisite, Economics 14. Methods of meeting risk; fundamental principles of life, fire, marine and other insurance. Mr. Line.

129. Principles of Organization and Management. 1 Q. Winter. 2 cr. Prerequisite, junior standing. Principles of organization and management as applied to the office. Mr. Speer.

131. Real Estate. 1 Q. Autumn. 2 cr. Prerequisite, Economics 14. Mr. Line.

Mr. Line.

<sup>\*</sup>Required only of students preparing for Commercial Teaching.

132. Credits and Collections. 1 Q. Spring. 2 cr. Prerequisite, Economics 14. Credit organization; the credit department; the mercantile agencies; sources of credit information; securing and granting credit; collection methods.

agencies; sources of credit information; securing and granting credit; collection methods. Mr. Line.

133. Corporation Finance. 1 Q. Autumn. 4 cr. Prerequisite, Economics 14. The position of corporate organization in modern business; the financial side of organization and promotion; the financial policy with reference to underwriting; capitalization; earnings; surplus; insolvency; receivership and reorganization. Problems and methods of social control. The financial organization of particular corporations. Mr. Snell.

145. Income Tax. 1 Q. Autumn. 4 cr. Prerequisite, Business Administration 113ab and 41. The accounting requirements of the law, the regulations and a digest of the law, with practical problems in the preparation of returns for individuals, partnerships and corporations. Mr. Sanford.

150. Business Ethics. 1 Q. Winter. 3 cr. Prerequisite, senior standing. Mr. Line.

151ab. Marketing. 2 Q. Autumn. winter. 3 cr. each quarter. Sum-

150. Business Ethics. 1 Q. Winter. 3 cr. Prerequisite, senior standing. Mr. Line.

151ab. Marketing. 2 Q. Autumn, winter. 3 cr. each quarter. Summer, 151a. 4 cr. Prerequisite, Economics 14. (a) The prevailing methods of marketing as applied to manufactured products, industrial raw materials, agricultural products and consumers goods; functions of middlemen. (b) Marketing problems by the case method applying the principles of marketing. Mr. Line. Mr. Snell.

152. Foreign Trade. 1 Q. Spring. 4 cr. Prerequisite, Economics 14 and 101, or consent of instructor. Theories, principles and methods of international trade. Economic resources and products of the principal countries, their chief exports and imports. Mr. Snell.

154. Investments. 1 Q. Winter. 3 cr. Prerequisite, Business Administration 133. Investment principles and plans; kinds of securities; tests of investment values; outline of financial analysis of industrial, public utility, railroad, financial, real estate, governmental and foreign securities; the mechanics of investment. Mr. Snell.

156. Business Cycles. 1 Q. Spring. 3 cr. Prerequisite, Economics 101. Business cycles with special reference to their history, causes, duration and effects; business forecasting is considered. Mr. Line.

191. Business Administration Seminar. 3 Q. Autumn, winter, spring. 1 to 3 cr. each quarter. Prerequisite, senior standing. An intensive study of some problems in Business Administration. Mr. Line.

# SCHOOL OF EDUCATION

PROFESSORS, WALTER R. AMES, FREEMAN DAUGHTERS (DEAN), WIL-LIAM E. MADDOCK, MRS. HARRIET RANKIN SEDMAN.

The School of Education has the following objectives: (1) To train superintendents, principals and supervisors for the public schools of Montana; (2) to train teachers for the junior and senior high schools, and teachers of special subjects such as music, art, physical education and home economics; (3) to provide assistance to the schools of the state in the form of testing programs, extension work and expert counsel; (4) to encourage investigation and research in the schools of the state; and (5) to unify and coordinate the agencies of the University which contribute to the preparation of those who expect to enter school work.

Requirements for Admission

In addition to the regular University requirements for admission (pages 14 to 17), a student must complete two years of college work. Pre-Education students should follow the required curriculum in the Division of Social Sciences. (See page 39.) A minimum of four credits in general psychology is prerequisite to all courses in Education, except 14 and 66, and should be taken in the sophomore year.

Requirements for Graduation

Candidates for the degree of Bachelor of Arts in Education must meet the following requirements:

The general University requirements for graduation (see

pages 17 to 21), except in foreign languages. A minimum of 40 credits in Education, including Education 18, 19, 22, 26, 130, 134, 150ab, 152, 154, 156 and 158 or 162 or equivalents.

(3) Three minors must be completed in subjects usually taught in high schools.

Senior examinations will not be given except to candidates for

honors.

Candidates for the degree of Master of Arts must comply with the regulations governing graduate work set forth on page 68. In addition to these regular requirements, the candidate must take a general written examination on the field of Education early in the period of his candidacy. This is designed to separate his general examination on the field from his special examination on his thesis which comes shortly before the granting of the degree. For further information candidates should write or consult the Dean of the School of Education.

# The University Certificate of Qualification to Teach

The State University issues to its graduates a certificate of qualification to teach which is a license to teach in grades 6 to 12, inclusive, of the public schools of the state. Its jurisdiction may be extended downward to include the lower grades by meeting the conditions prescribed in the state law.

This certificate meets the North Central Association requirement of 22½ quarter credits of preparation in Education. Many states require from 25 to 36 quarter credits in Education as a prerequisite to high school certification. To hold an administrative position in Montana the candidate must have approximately a major in Education.

A candidate for the University Certificate of Qualification to

Teach is required:

 To offer either a Bachelor's or Master's degree from the State University.

(2) To submit either major or minor preparation in three fields usually taught in Montana high schools. A candidate may not be held by a department or school for more than 25 credits for a minor. His work must be of such quality as to secure from the minor departments a recommendation as to his ability in the subject. He must also be recommended as to character and scholarship by his major department.

(3) To offer 23 credits in Education in addition to 4 credits in General Psychology and including Education 18, 19, 22, 26 and one elective course in Education not included in the methods courses listed below. These courses, except the elective, are indicated by a star (\*) affixed to the number in the course description. Not more than three credits in the following methods courses may be included in the 23 required credits: Education 31, 32, 33, 35a, 40, 41, 105 and 124.

(4) To demonstrate his ability to teach successfully.

(5) To be a citizen of the United States at the time of receiving the certificate.

In addition to the above requirements the candidate for the certificate must be in good health, free from such defects as would prevent successful teaching; his character must be above doubt; he must show reasonable intelligence in any standards or tests that the University may prescribe; his scholarship must be satisfactory; and he must possess such favorable attitudes, interests and ideals as to justify certification. The University reserves the right to withhold the certificate for failure to meet adequately any of these standards.

Candidates for the certificate should confer with the Dean of the School of Education not later than the beginning of the sophomore year.

#### General Information

Students preparing for the work of superintendent, principal or supervisor in public schools, for educational research, or for teaching professional subjects, should do major work in Education. Those desiring to become teachers of particular subjects, either in the junior or senior high school, may specialize in the subjects to be taught.

The special methods courses are taught by specialists in the respective fields and are designed for candidates planning to teach special subjects. The courses are numbered 31, 32, 33, 35a, 40, 41, 105, 124, respectively.

A text-book fee of \$1 is charged for each course taken in the School of Education, except in seminar courses, in which case the fee is \$1.50 per course. The object of this fee is to make it unnecessary for students to purchase texts for particular courses.

# For Undergraduates

S12. School Law. 1 Q. Summer.  $1\frac{1}{2}$  cr. Prerequisite, sophomore standing or teaching experience. A study of the Montana School Law.

14. History of Education. 1 Q. Summer. 4 cr. Prerequisite, sophomore standing or teaching experience.

\*18. Principles of Education. 1 Q. Autumn. Spring. 3 cr. Summer. 4 cr. Prerequisite; Education 19, unless 18 and 19 are taken simultaneously in the junior or senior year. Mr. Ames.

\*19. Educational Psychology. 1 Q. Autumn. Spring. Summer. 4 cr. Prerequisite, sophomore standing and Psychology 11. Mr. Ames.

S21. Montana Courses of Study. 1 Q. Summer. 4 cr. Prerequisite, sophomore standing or teaching experience. Montana courses of study.

sophomore standing or teaching experience. Montana courses of study, elementary and secondary.

\*22. The High School. 1 Q. Autumn. Winter. Summer. 4 cr. Pre-requisite, senior standing and 7 credits in Education. The history, organiza-tion, management and problems of the high school. Mr. Daughters.

tion, management and problems of the high school. Mr. Daughters.

\*26. Observation and Teaching. 1 Q. Autumn. Winter. Spring.
5 cr. Education 22 is prerequisite or must be taken simultaneously. Not more than 40 students will be registered in the spring quarter. Reservations for a place in this course in the spring quarter must be made prior to the winter quarter in any year. If there are more than can be accommodated in any one quarter, those without reservations will not be permitted to take the work. Observation of classroom teaching; conferences; preparation of lesson plans; and teaching under supervision of critic teachers and staff of the School of Education in cooperation with the Missoula county high school and the Missoula city schools. Mr. Daughters. Mr. Maddock.

31. Teaching of Secondary Mathematics. 1 Q. Spring. 3 cr. Prerequisite, consent of instructor. Given in 1933-34, and in alternate years. Mr. Lennes.

32. The Teaching of Commercial Subjects in Secondary Schools. 1 Q. Summer. 2½ cr. Prerequisite, Business Administration 22b. The purpose, methods and trends in teaching commercial work in high schools. Mr. Sanford. Mrs. Wilson.

33. Methods of Teaching Home Economics. 1 Q. Summer. 2 cr. Prerequisite, consent of instructor. The aims, organization and presentation of the subject; measurement of attainment for the various types of schools. Miss Gleason

35a. Systems and Methods. 1 Q. Autumn. 3 cr. Open only to major or minor students in Physical Education. Prerequisite, Physical Education 12abc. Various systems of physical education; their place in American schools; practical application in methods of handling gymnastic class work. Miss Nickey.

40. Teaching of History. 1 Q. Spring. 3 cr. Prerequisite, 25 credits in history. The problems of history teaching; emphasis upon historical method; objectives in history teaching; the history curriculum; assignments and class room procedure; general and special methods. Mr. Bennett. 41. Teachers' Art. 1 Q. Spring. 3 cr. Prerequisite, Fine Arts 13abc, 23 and senior standing or consent of instructor. Not given in 1934-35.

**S42.** Character Education. 1 Q. Summer. 4 cr. dents. Physical, intellectual and social adjustments. the home and the school. 4 cr. Open to an sea ents. The functions of

66. History of American Education. 1 Q. Winter. Summer. 4 cr. Prerequisite, junior standing. Mr. Maddock.

#### For Undergraduates and Graduates

3 cr. Prerequisite, 105. The Teaching of English. 1 Q. Winter. 3 cr. Prerequisite, or standing and consent of instructor. The problems underlying the

105. The Teaching of English. 1 Q. Winter. 3 cr. Prerequisite, senior standing and consent of instructor. The problems underlying the teaching of composition and literature. Miss Mirrielees.

124. Junior High School Music. 1 Q. Spring. 3 cr. Prerequisite, Music 123ab. Given in 1935-36, and in alternate years. Mr. Teel.

130. Fundamentals of School Health. 1 Q. Spring. Summer. 4 cr. Prerequisite, senior standing. The physical and mental health of school children, the hygiene of the school program and instruction, and the problems of the teacher and staff. Mr. Daughters.

133. Personnel Methods in High School. 1 Q. Winter. 4 cr. Prerequisite, senior standing and 7 credits in Education. For students preparing to be deans of girls in high schools. Mrs. Sedman.

134. School Supervision. 1 Q. Autumn. Summer. 4 cr. Prerequisite, Education 19. Instruction—its quality, technique, rating and improvement; discipline, supervised study and other problems bearing upon the instructional side of school work. Mr. Maddock.

S140. Educational and Vocational Guidance. 1 Q. Summer. 4 cr. Prerequisite, junior standing or extensive teaching experience. The individual and his aptitudes; direction in education; vocational guidance, its technique, means and problems.

150ab. Educational Administration. 2 Q. Winter, spring. 3 cr. each

150ab. Educational Administration. 2 Q. Winter, spring. 3 cr. each quarter. Summer. 4 cr. Prerequisite, 7 credits in Education. Students may enter either quarter. (a) City school organization and administration. (b) Federal, state, county and rural school organization and administration. Mr. Maddock.

tion. Mr. Maddock.

152. Educational Measurements. 1 Q. Winter. Summer. 4 cr. Prerequisite, Education 19. Statistical methods. Development and use of
scales, and measurement of educational products. Mr. Ames.

154. Seminar in Education. 1 Q. Autumn. Spring. Summer. Credit
variable. Prerequisite, senior standing and 18 credits in Education, or extensive teaching experience and consent of instructor. Original investigations. Mr. Daughters.

156. School Figures. 1 Q. Winter. Spring. Summer.

156. School Finance. 1 Q. Winter. Spring. Summer. 4 cr. Prerequisite, senior standing or 12 credits in Education and experience as a principal or superintendent. History and sources of school revenue. Funds, relative costs, inequalities, legal limitations and proper expenditures. Comparative study of finances. Mr. Maddock.

158. Educational Sociology. 1 Q. Spring. Summer. 4 cr. Prerequisite, junior standing and 6 credits in Education. The social aspects of education, the relation of the school to society, institutional adjustment and change, and the social objectives of the curriculum. Mr. Daughters.

and change, and the social objectives of the curriculum. Mr. Daughters.

162. Problems in Elementary Education. 1 Q. Autumn. Summer.

4 cr. Prerequisite, junior standing and Psychology 11. The elementary school, its history, organization, management, curriculum, types of teaching; its special problems; the kindergarten and other features with which supervisors should be acquainted. Mr. Maddock.

170. Seminar in Secondary Education. 1 Q. Spring. Summer. 3 to 5 cr. Prerequisite, 20 credits in Education, including Education 22 or equivalent. Special investigations, reports, critical discussions, surveys, readings and term paper or report. Mr. Daughters.

#### For Graduates

266. Seminar in History of American Education. 1 Q. Winter. Summer. 1 to 5 cr. Prerequisite, 12 credits in Education, including Education 66 or equivalent. Special fields in American educational history; special problems and research. Mr. Maddock.

275abc. History of Education. 3 Q. Autumn, winter, spring. 4 cr. each quarter. Prerequisite, Education 14 or 66, or equivalent. The history of education with emphasis upon sources. Educational classics will be studied intensively and reviewed. Not given in 1934-35. Mr. Daughters.

280. Seminar in Administrative Problems. 1 Q. Spring. Summer. Credit variable. Prerequisite, Education 150ab or equivalent. Intensive study of administrative problems; original research. Mr. Maddock.

# SCHOOL OF FORESTRY

Professors, Fay G. Clark, Irwin W. Cook (Acting Dean), J. H. Ramskill, Thomas C. Spaulding (Dean), on leave, 1933-34. Associate Professor, E. W. Nelson. Assistant Professor, T. G. Swearingen.

The School of Forestry provides instruction along two distinct lines: (1) An undergraduate course of four years allowing specialization in General Forestry, Forest Engineering or Grazing Management; (2) A graduate course with opportunities for research in Silviculture, Management, Forest Engineering, Grazing Management or allied subjects.

Undergraduate Course. The undergraduate curricula have been arranged to provide the broadest possible training in the profession of Forestry, with particular reference to the various lines of scientific and administrative work in federal and state forest services, and the problems of management in the lumber industry. Special emphasis is laid on forestry in the West. In order that the student may grasp both the practice and theory of forestry, technical instruction should be supplemented by at least two summers' field practice or its equivalent.

Graduate Course. The School of Forestry offers an exceptional opportunity for graduate and research work, to a limited number of students, leading to the degree of Master of Science in Forestry, in the forest stands of the Northern Rocky Mountains, concerning the problems in Silviculture, Forest Management, Wood Technology, Forest Products, Lumbering and Logging, and Grazing Management.

#### Requirements for Admission

The regular University requirements for admission apply to the School of Forestry (see pages 14 to 16). Since it is desired to limit the undergraduate registration to not more than 100 students, applications with transcripts of high school or previous college work must be filed in advance.

#### Requirements for Graduation

Candidates for the degree of Bachelor of Science in Forestry must meet the following requirements:

- (1) The general University requirements for graduation (see pages 17 to 21).
- (2) A minimum of 186 credits of work, not including credits obtained in Military Science, Physical Education and approved summer field work.
- (3) A Forestry curriculum which is satisfactory to the staff of the School.
- (4) Two summers of regularly approved field work. Should a student fail to offer this field work, he may be allowed to substitute credits earned in residence in the ratio of 3 credits for each summer's work.

Senior examinations will not be given except to candidates for honors.

Candidates for either the degree of Master of Science in Forestry or Master of Science with a combined major in Botany and Forestry must comply with the regulations governing graduate work set forth on page 68.

# Summer Work

One of the important features of the Montana School of Forestry is the opportunity which students have for summer work. Each student is expected to spend at least two summer seasons, of not less than three months each, in gaining field experience in some type of forestry work. The United States Forest Service, the United States Indian Service, State Forestry Services and lumber companies have all assisted, in the past, in making temporary positions available to the students for summer work. Heretofore, all students have had such opportunities to earn while gaining field experience. Positions for summer work cannot, however, be guaranteed, and the securing of such positions, as well as promotions through succeeding vacations and positions after graduation are entirely dependent on the student's own effort and ability, and the availability of positions.

#### Field Work

As much of the technical instruction as possible is carried on in the field. The school forest with its 2,000 acres of fir, larch and yellow pine, varying in size from reproduction to over-maturity, national and private timber holdings, logging operations and sawmills offer excellent laboratories in the practice of the various phases of Forestry and Grazing Management.

Field trips of from one to several weeks duration are required of juniors and seniors. These students should be prepared to bear the personal expenses of such trips. These do not normally exceed \$75 per year.

#### General Information

The School of Forestry possesses a marked advantage in location and equipment. Every forest type of the inland Northwest is found within a few miles of the campus. Two transcontinental and three branch railroads, as well as interurban bus lines, place the school within easy reach of extensive logging, lumbering and lumber manufacturing operations. Two large mills, with a normal annual cut of 120,000,000 feet B.M., are located within thirty minutes walk or ride from the campus. Both have made their plants available for the use of the School for laboratory and research purposes.

The School of Forestry maintains its own nursery with a potential capacity of 1,000,000 trees a year. In addition, a valuable school forest of some 2,000 acres of timber is immediately adjacent to the campus.

The headquarters of the Northern Region of the United States Forest Service, the Northern Rocky Mountain Forest and Range Experiment Station and the LoLo National Forest are located in Missoula. The boundaries of the LoLo and Bitter Root National Forests and the Blackfoot Forest Protective Association surround the school. These include more than 4,000,000 acres of government and privately owned timber lands under forest management. Within 100 miles of the campus are sixteen national forests, two other government timber reserves, several state forests, a national park and several private forest protective associations.

The Forestry Club has established a loan fund for the benefit of upperclass students of forestry. The fund now contains approximately \$2500, available to juniors and seniors who have been active members of the club for at least one year. Loans bear eight per cent interest.

# Suggested Curricula for Majors in Forestry

Suggested Curricula for Majors	in Fores	stry	
Freshman Year			
Potony 11sh and 10	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits
Mathematics 35abc Physical Science 17 Forestry 11abc Forestry 42 Physical Education 11abc Military Science 11abc (Men)	5 4 5 2	5 4 5 1	3 4 5 1
Physical Education 11abe Military Science 11abc (Men)	1 1	1 1	2 1 1
Sophomore Year	18	17	17
Botany 22 and 31 English 11ab and Botany 51 Forestry 33ab Forestry 41abc Forestry 44ab Elective Physical Education 12abc Military Science 12abc (Men)	5 3 4 3 	3 4 3 2 2 3	5 5 3 2 
Military Science 12abc (Men)	$\frac{1}{17}$	$\frac{1}{17}$	$\frac{1}{17}$
GENERAL FORESTRY AND FOREST		EERING	
Junior Year			
Forestry 23abc Forestry 24 Forestry 25ab	5 3 5	5 3 5	5
Forestry 31 and 32 Economics 13 and Forestry 34	3	5	3
Senior Year	16	18	17
Forestry 12 and 37			
rorestry 13ah	3	5	
Forestry 26abc	5	3 5	2 4
Forestry 38	4	4	4
Forestry 26abc Forestry 36abc Forestry 38 Forestry 101	2		
			2-5
	17	17	8-11
GENERAL FORESTRY AND GRAZING Junior Year	MANAC	EMENT	
Forestry 23abc Forestry 24	5 3	5	5
Forestry 31 and 32 Botany 161abc	3	3	5 5 4
Botany 161abc	5		5
Economics 13		5	
	16	18	19
Senior Year			
Forestry 12 and Botany 170 Forestry 13ab Forestry 26abc Forestry 39abc Forestry 101	3 3 5 4 2	4 3 5 4 2	2 4 2–5
		1	Carried to

In addition to the above courses, students after the freshman year may elect not to exceed 12 credits each year in any school or department of the State University, subject to the approval of the faculty of the School of Forestry and of the department in which the work is taken.

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# For Undergraduates

A. Slide Rule. 1 Q. Winter. 0 cr. Application of slide rule to problems in mathematics from arithmetic through trigonometry, in preparation for Forestry 24 placement examination. Examinations given at end of winter quarter and beginning of autumn quarter. Mr. Clark.

11abc. Survey of Forestry. 3 Q. Autumn, 2 cr; winter, 1 cr.; spring, 1 cr. Required of all freshmen. The field of forestry; forestry as a profession; functions and characteristics of forests, their benefits, use, distribution, and importance; forest protection. Forestry Staff.

12. Economics of Forestry. 1 Q. Autumn. 3 cr. Prerequisite, Economics 13 or equivalent. Individual and conference work on all aspects of forestry economics. Mr. Clark.

13ab. Forest Policy. 2 Q. Autumn, winter. 3 cr. each quarter. Prerequisite, junior standing and Forestry 13a for 13b. Forest policies of the United States and other nations; public relations. Mr. Nelson. Mr. Stone.

23abc. Silviculture. 3 Q. Autumn, winter, spring. 5 cr. each quarter.

United States and other nations; public relations. Mr. Nelson. Mr. Stone.

23abc. Silviculture. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Prerequisite, junior standing and Botany 51. Behavior and habits of growth of forest trees; influence of environment on growth and yields, reproduction, adaptability to management; systems of silvicultural treatment; conservation and protection; natural and artificial reproduction. Mr. Cook.

24. Forest Mensuration. 3 Q. Autumn, 3 cr.; winter, 3 cr.; spring, 5 cr. Continuous. 11 cr. Prerequisite, Mathematics 35bc or equivalent; Forestry 23 (may be taken concurrently); proficiency in the use of the log log slide rule (a placement examination on its use must be passed before a student may register in the course). All phases of securing data for a forest working plan. Trips of from one to three days duration may have to be made during any quarter. Mr. Clark.

25ab. Dendrology. 2 Q. Autumn, winter. 5 cr. each quarter. Prerequisite, Botany 22. Study of the micro-structural and systematic relationships of the principal forest trees of the United States and Canada. Mr. Ramskill.

Ramskill.

26. Forest Management. 3 Q. Autumn, 5 cr.; winter, 5 cr.; spring, 2 cr. Continuous. 12 cr. Prerequisite, Forestry 12 (may be taken concurrently) and 24. A continuation of Forestry 24. Preparation of a complete forest working plan from the data secured from the valuation survey made during the spring quarter of Forestry 24. A field trip of a week or ten days duration may be required during any quarter. Mr. Clark.

31. Wood Technology. 1 Q. Autumn. 3 cr. Prerequisite, Botany 22. The physical, chemical and mechanical properties of wood. Mr. Ramskill.

The physical, chemical and mechanical properties of wood. Mr. Ramskill.

32. Forest Products. 1 Q. Spring. 4 cr. Prerequisite, Forestry 31. Character, extent and value of the products from the forests of the world, particularly those of the United States. Mr. Ramskill.

33ab. Logging. 2 Q. Autumn, winter. 4 cr. each quarter. Prerequisite, sophomore standing. Methods and equipment used in logging in the forest regions of the United States, with special reference to the Rocky Mountain and Inland Empire terrain; comparative European methods. Field trips when practical. Mr. Cook.

34. Lumbering. 1 Q. Spring. 3 cr. Prerequisite, Forestry 24, 33ab and 31. The lumbering industry of the United States, with special reference to the western states; sawmills and equipment in use; mill scale studies and practice in grading in nearby mills. Mr. Ramskill.

36abc. Logging Engineering. 3 Q. Autumn, winter, spring. 4 cr. each quarter. Prerequisite, Forestry 24, 33ab and senior standing. Application of engineering principles to logging operations; timber appraisals. Visits to nearby logging operations. Mr. Cook.

37. Timber Mechanics. 1 Q. Winter. 5 cr. Prerequisite, junior standing. Factors governing the strength and utility of wood; application of principles of graphic statics to the determination of stresses in wooden

of principles of graphic statics to the determination of stresses in wooden structures. Mr. Ramskill.

38. Survey of Range Management. 1 Q. Autumn. 2 cr. Prerequisite, consent of instructor. Range management condensed into one quarter

site, consent of instructor. Range management condensed into one quarter for students who do not take Forestry 39abc. Mr. Nelson.

39abc. Grazing Management. 3 Q. Autumn, winter, spring. 4 cr. each quarter. Prerequisite, Botany 51 and junior standing. Types, breeds and methods of handling livestock on the range; feeds and feeding; breeding; diseases and treatment; methods of investigating range conditions necessary for the preparation of working plans. Mr. Nelson.

41abc. Surveying. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Prerequisite, Mathematics 35b and sopohomore standing. Use, care and adjustment of instruments; tape, compass and traverse board surveys; land surveys, computation closure and area by latitude and departure and double meridian distance; transit and stadia surveys; differential, profile and reciprocal leveling; primary and secondary triangulation for control in mapping large areas; plane table and traverse board methods of making topographic and type maps; United States land survey methods. Mr. Swearingen. Swearingen.

42. Elementary Mapping. 1 Q. Winter. Spring. 2 cr. Elementary lettering. Mr. Ramskill. Mr. Swearingen. 44ab. Advanced Mapping. 2 Q. Winter. spring. 2 cr. each quarter. Prerequisite, Forestry 42 and 41b (may be taken concurrently). Advanced lettering; advanced map compilation; tracings. Mr. Ramskill. Mr. Swear-

52. Forest Mapping. 1 Q. Autumn. Winter. 2 cr. Prerequisite, Forestry 44ab. Base maps; small scale maps of large areas; map projection; topographic representations; relief maps; aerial photography and mapping. Given subject to demand. Mr. Cook.

# For Undergraduates and Graduates

101. Forestry Problems and Research. 3 Q. Any quarter. 2 to 5 cr. each quarter. Forestry Staff.

#### For Graduates

213. Forest Policy. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in forest policy. Mr. Spaulding. 223. Silvicultural Investigations. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in silviculture. Mr. Cook. 224. Forest Mensuration. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in mensuration. Mr. Clark. 226. Forest Management. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in forest management. Mr. Clark. 231. Wood Technology. 1 to 3 Q. Any quarter. 3 to 5 cr. each quarter. Prerequisite, undergraduate work in wood technology. Mr. Ramskill Ramskill.

232. Forest Products. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in wood technology and forest products. Mr. Ramskill. 234. Lumbering. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in lumbering. Mr. Ramskill. 239. Grazing Management. 1 Q. Any quarter. 3 to 5 cr. Prerequisite, undergraduate work in grazing management. Mr. Spaulding.

# SCHOOL OF JOURNALISM

PROFESSORS, ARTHUR L. STONE (DEAN), ROBERT L. HOUSMAN. IN-STRUCTORS, ANDREW COGSWELL, CHARLES W. HARDY, IRENE VADNAIS.

The School of Journalism gives practical training in the work of newspaper making. Professional training is combined with academic work in the College of Arts and Sciences so that graduates of the School may obtain a broad and comprehensive preparation.

#### Requirements for Admission

The regular University requirements for admission apply to the School of Journalism (see pages 14 to 16).

#### Requirements for Graduation

Candidates for the degree of Bachelor of Arts in Journalism must meet the following requirements:

The general University requirements for graduation (see (1)

pages 17 to 20), except in foreign languages. A minimum of 50 credits in Journalism not including course (2)11abc.

(3)The curriculum for majors, page 83.

Senior examinations will not be given except to candidates for honors.

Candidates for the degree of Master of Arts must comply with the regulations governing graduate work set forth on page 68.

# General Information

The School's course is four years; the first year's work carries no credit toward the journalism major, but is planned to provide a foundation for the courses of the following three years. These years are arranged to present the features of newspaper work under conditions which parallel those existing in a newspaper office.

The Montana Kaimin, giving news of Montana, its campus, and items of national collegiate interest, is issued throughout the University year. On this newspaper the students supplement class instruction by work in the gathering, handling and presentation of news, as well as in advertising, business management and editorial interpretation and comment.

The School receives the leading newspapers, professional publications and public relations materials from organizations the country over, in addition to copies of daily "flimsy" donated by the Associated Press, the United Press and the International News Service. These materials are used as a basis of instruction throughout the entire course.

The relationship between the School of Journalism and the Montana State Press Association is close and pleasant. The School furnishes to the newspapers of the state a news service from the University. The State Press Association has appointed an advisory board for the School of Journalism.

Students who do major work in Journalism are required, at the beginning of their second year, to provide themselves each with a "desk library" consisting of a copy of The Bible, Webster's Collegiate Dictionary and a World Almanac (or its equivalent).

# Curriculum for Majors in Journalism

The normal curriculum for the School of Journalism, which will be strictly enforced, is as follows:

Freshman Year			
	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits
Journalism 11abc Social Science 11abc	5 5	5 5 5	5 5
Physical Science 17 Physical Education 11abc	5	5	5 1
Military Science 11abc (Men)	î	î	i
	17	17	17
Sophomore Year		ad a film and	
Journalism 21abc	5 5	5	5 5 5 3
Biological Science 13 English 11ab and Geology 16	5	5	5
Physical Education 12abc	1	3	1
Military Science 12abc (Men)	1	1	ī
	20	20	20
Junior Year			
Journalism 43 and 25ab Journalism 31abc	3	3	3 3 2
Journalism 39abc	2	2	
*Electives	. 8–9	8-9	9-10
	16-17	16-17	17-18
Senior Year			
Journalism 33abc		3 2 2	3 2 2 3
Journalism 45ab and 47	. 2	2	2
Journalism 41abc*Electives	3	6-8	6-8
1916001469			
	16-18	16-18	16-18

<sup>\*</sup>In the junior year electives should be selected in English literature, Economics or Sociology, Psychology, Foreign Languages; in the senior year in Foreign Language, Literature, History, and in the School of Journalism courses 148 or 150.

# For Undergraduates

11abc. Elements of Journalism. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Summer. 4 cr. Open only to freshmen and sophomores. Credits in this course do not count toward a major. Reporting. What is News? Methods of gathering and writing news. Study of news sources and services. Practice with assignments. Current events. Mr. Stone.

12abc. Survey of Journalism. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Prerequisite, junior standing. Not open to students who have had Journalism 11abc. A course for non-majors in Journalism. Newspaper practice and usage; publicity and public relations; news writing; news evaluating; history of the newspaper; current events, combined with practice in reporting. Mr. Housman.

21abc. Advanced Reporting and Editing. 3 Q. Autumn, winter, spring. 5 cr. each quarter. Prerequisite, Journalism 11abc. Juniors and seniors admitted only on consent of instructor. History and principles of Journalism; study of news associations and the transmission and evaluation of news; newspaper usage; the handling of news in representative newspapers; news writing; forms of composition; correspondence, state, district or sectional; rewriting; the feature; reviewing; editing; copy reading; head writing; makeup. Mr. Housman.

25ab. Editorial Writing. 2 Q. Winter, spring. 3 cr. each quarter. Prerequisite, Journalism 21abc. Preparation and presentation of editorial interpretation and comment. Editorial history; functions of the editorial page. Emphasis upon newspaper ethics and principles. In the second quarter the class is organized to function as a newspaper editorial writing staff. Mr. Housman. 21abc. Advanced Reporting and

staff. Mr. Housman.

staff. Mr. Housman.

31. Kaimin Laboratory. 3 Q. Any quarter. 3 cr. each quarter. Prerequisite, two quarters of Journalism 11. Students may enter any quarter. Not more than 9 credits may be applied toward graduation. Practical work supplementing class instruction by actual gathering, handling and presentation of news; practice in advertising, business, managerial and editorial writing phases. Mr. Cogswell.

33. Newspaper Administration. 3 Q. Any quarter. 3 cr. each quarter. Prerequisite, junior standing, Journalism 31 and consent of instructor. Students may enter any quarter. Not more than 9 credits may be applied toward graduation. A laboratory course presenting concretely problems of editorial and business administration. The Kaimin furnishes case material. Mr. Stone.

of editorial and business administration. The Kahimi luthishes case material. Mr. Stone.

35abc. Problems in Journalism. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, senior standing. Students may enter any ouarter. Discussions of newspaper problems; ethics and principles. A thesis is required. Journalism Staff.

\$36. Current Events. 1 Q. Summer. 4 cr. Current history of the world; its background; its relationships; its probable influence; discussions of methods of presenting this subject in school work. Mr. Housman.

39. Laboratory in Journalism. 3 Q. Any quarter. 2 cr. each quarter. Prerequisite, Journalism 21abc or junior standing. Students may enter any quarter. Not more than six credits may be applied toward graduation. Practical study of newspaper office methods and practice. Mr. Cogswell.

41. Laboratory in Journalism. 3 Q. Any quarter. 3 cr. each quarter. Prerequisite, Journalism 39 or senior standing. Students may enter any quarter. Not more than 9 credits may be applied toward graduation. Mr. Cogswell.

43. Public Relations. 1 Q. Autumn. 3 cr. Prerequisite, Journalism 21abc or junior standing. The power of public opinion and influences which affect it; relation between the newspaper and public opinion: methods of creating and crystalizing public opinion. A project is required. Mr. Cogs-

45. Advertising. 2 Q. Autumn, winter. Continuous. 4 cr. Prerequisite, Journalism 43. The theory of advertising: the designing, selling and distribution problems of the advertiser. Mr. Stone.

47. The Newspaper. 1 Q. Spring. 2 cr. Prerequisite, senior standing. Newspaper history, organization, responsibility; coordination of departments. Mr. Stone.

#### For Undergraduates and Graduates

148. Senior Practice Laboratory. 3 Q. Continuous. 9 cr. Limited to seniors and graduates in Journalism. Mechanical problems of newspaper production. Practical work in the printing laboratory. Mr. Hardy.

150. Individual Problems. 3 Q. Any quarter. 2 to 5 cr. each quarter. Summer. 4 cr. Students may enter any quarter. Not more than 15 credits may be applied toward graduation. Limited to seniors and graduates in Journalism. Individual work on subjects which may be purely technical, or may may be social, historical or economic problems related to newspaper production. Thesis is required. Mr. Stone. Mr. Housman.

# SCHOOL OF LAW

Professors, Charles W. Leaphart (Dean), David R. Mason, Walter L. Pope (on leave, 1933-34), J. Howard Toelle, Albert N. Whitlock (on leave, 1933-34). Assistant Professor, Allen K. Smith.

The School of Law is located in a modernly equipped law school building with adequate class, office, library and court room facilities. The school has a good working library of 23,000 volumes. To a very great extent the library is the result of the generous gifts and legacies of Mrs. W. W. Dixon, and gifts of Judge John J. McHatton and the Anaconda Copper Mining Company. The school is a member of the Association of American Law Schools and is one of the schools approved by the American Bar Association.

# Requirements for Admission

Applicants for admission must have completed 90 credits of work acceptable for the Bachelor's degree in the State University of Montana, in addition to the credit earned in required Physical Education. Students who have not been exempted and who have not completed the Physical Education may substitute six quarter credits of work in other fields. Applicants must offer for admission as many grade points as credits earned.

Although students may be admitted who have successfully completed two years of college work (i. e., normally 96 credits), three years of pre-legal preparation are recommended.

Pre-legal students should complete the curriculum of the Division of Social Sciences, see page 39.

Special students are not admitted to the School of Law.

For University admission requirements, see pages 14 to 16.

# Requirements for Graduation

Candidates for the Bachelor of Laws degree are required to complete:

- (1) The requirements for admission listed above.
- (2) A total of 126 credits in Law with an average of at least one grade point for each credit.
- (3) The following courses: Contracts, Property I and II, Torts, Criminal Law and Procedure, Forms of Action, Agency, Pleading, and Practice Court.
- (4) Nine quarters of work in a Law School of recognized standing, the last three of which must be completed in residence. Two summer sessions of approximately 6 weeks each will be counted as one quarter.

Candidates for the Bachelor of Arts degree with Law as a major must meet the regular University and College of Arts and Sciences requirements for graduation (pages 17 to 21 and page 38).

No student will be recommended for a degree in Law who is markedly deficient in English, nor who, in the opinion of the majority of the members of the faculty of the School of Law, is unfitted for admission to the practice of law by reason of a lack of honesty and integrity.

Senior examinations will not be given except to candidates for honors.

# **General Information**

No student will be allowed credit in any one quarter for over 15 hours of work in the School of Law; except that in addition, within the discretion of the Dean, a student may be allowed to take an examination to remove a condition and be given credit upon satisfactory passage of the same.

The case system of instruction is employed. Special attention is given to practice court work, in which the students are required not only to argue legal questions, but to try cases, prepare appeals, and go through all the steps incident to the trial of a law suit. A thorough

course is given in the use of law books.

Where courses extend over more than one quarter, credit is provisional upon the completion of and final satisfactory examination over the whole course. In continuous courses examinations also will be given at the end of the first quarter. Conditions may be removed only in the regular examinations at the end of a repetition of the course.

The honor system has been in successful operation since the foun-

dation of the School.

The curriculum of the School of Law is designed to afford preparation for the practice of law in any of the United States, but special attention will be given in all courses to the codes and decisions of Montana.

Graduates of the School of Law may, in the discretion of the Supreme Court of Montana, be admitted to practice in the Courts of Montana without further examination.

Curriculum			
	Autumn Quarter Credits	Winter Quarter Credits	
First Year			
Agency Contracts Criminal Law and Procedure Forms of Action	3	2 3 3	2 3 3
Property	3	3	
Property II Torts	3	3	3
Second and Third Year	rs		
Appellate Practice	1	1	1
**Bills and Notes		and the same	4
Conflict of Laws	2	2	4 2
Constitutional Law	3	3	
Creditor's Rights and Damages	2	2	2
Equity	2	2	. 2
Evidence	2	2	2 2
**Irrigation Law		2	
Legal Ethics	1	1	
*Mining Law		2	
Municipal Corporations	2	2	2
Partnerships	3	4	4
Pleading	2	2	2
Practice Court	í	í	1
Private Corporations	2	2	2
*Public Utilities	4	4	Ä
Sales	2	2	2
Suretyship and Mortgages	2	2	. 2
Trusts	2	2	9
Use of Law Books	sour " Here	1	1
Wills and Administration.	3		No. of Colors
To - 33'1' 1 13 3			

In addition to the above curriculum, second and third year students taking History 106ab (International Law) may apply credit received in it toward a law degree.

<sup>\*\*</sup>Not given in 1934-35, but will be given in 1935-36.
\*Given in 1934-35, but not in 1935-36.

#### Courses

Agency. Mechem's Cases on Agency (second edition). Mr. Toelle, Contracts. Williston's Cases on Contracts (third edition). Mr. Leaphart.

Criminal Law and Procedure. Sayre's Cases on Criminal Law. Mr. Mason.

Forms of Action. Sunderland's Cases on Common Law Pleading (second edition). Mr. Toelle.

Property I. Warren's Cases on Property. Mr. Smith. Property II. Aigler's Cases on Titles. Mr. Smith. Property I.

Torts. Bohlen's Cases on the Law of Torts (third edition). Mr. Toelle.

Appellate Practice. Selected Cases. Mr. Mason.

Bills and Notes. Smith and Moore, Cases on Bills and Notes (third ion). Mr. Mason. edition). Conflict of Laws. Beale's Shorter Selection of Cases on Conflict of Laws. Mr. Smith.

Constitutional Law. Hall's Cases on Constitutional Law. Mr. Maso Creditor's Rights. Hanna's Cases on Creditor's Rights. Mr. Toelle. †Damages. Crane's Cases on Damages. Mr. Leaphart. Mr. Mason. Equity. Cook's Cases on Equity (second edition). Mr. Leaphart.

Evidence. Thayer's Cases on Evidence (revised edition). Mr. Smith. Irrigation Law. Selected Cases. Mr. Toelle.
Legal Ethics. Costigan's Cases on Legal Ethics (revised 1933 edition).

Toelle.

Mining Law. Costigan's Cases on Mining Law. Mr. Toelle.

Municipal Corporations. Tooke's Cases on Municipal Corporations (1931 edition). Mr. Mason.

Partnerships. Mechem's Cases on Partnerships (fourth edition). Mr. Mason.

Pleading. Sunderland's Cases on Code Pleading. The Montana Code of Civil Procedure. Mr. Toelle.

Practice Court. Montana Code of Civil Procedure.

Montana Code of Civil Procedure, selected cases, and

Practice Court. Montana Code of Civil Procedure, selected cases, and practical exercises. Mr. Mason.
Private Corporations. Warren's Cases on Corporations (second edition), and Berle's Cases on Corporation Finance. Mr. Smith.

and Berie's Cases on Corporation Finance. Mr. Smith.
†Public Utilities. Burdick's Cases on Public Service, Common Carriers,
and Innkeepers. Mr. Mason.
Sales. Williston and McCurdy. Cases on Sales. Mr. Mason.
Suretyship and Mortgages. Langmaid's Cases on Suretyship. Park's
Cases on Mortgages. Mr. Leaphart.
Trusts. Scott's Cases on Trusts (second edition). Mr. Leapheart.
Use of Law Books. No text book used. Mr. Mason.
Wills and Administration. Costigan's Cases on Wills. Montana Code. Mr. Toelle.

# SCHOOL OF MUSIC

PROFESSORS, DELOSS SMITH (DEAN), MRS. FLORENCE SMITH, A. HERMAN WEISBERG. ASSOCIATE PROFESSORS, JOHN B. CROWDER, MRS. BERNICE BERRY RAMSKILL. ASSISTANT PROFESSOR, STANLEY M. TEEL.

The School of Music prepares its graduates for the teaching and supervising of music in the public schools.

# Requirements for Admission

The regular University requirements for admission apply to the School of Music (see pages 14 to 16).

Pupils are accepted for private lessons in applied music without the usual academic entrance requirements.

#### Requirements for Graduation

Candidates for the degree of Bachelor of Arts in Music must meet the following requirements:

The general University requirements for graduation (see pages 17 to 21).

<sup>†</sup>Given summer, 1933.

(2) A music curriculum which is satisfactory to the staff of the School of Music.

Senior examinations will not be given except to candidates for honors.

#### General Information

Students who do not major in Music will be allowed to count towards graduation only three credits in ensemble work and twelve credits in applied music. Applied music courses are indicated by a star (\*), and ensemble music courses by a dagger (†) affixed to the number in the course description.

Credit may be granted for work in applied music only to students who are eligible to register for regular University courses.

Music majors are expected to participate in the Glee Clubs, Chorus, Orchestra or Band.

Students required to take voice should do so during the first two years.

Student recitals are given at intervals during the year. The object is to afford opportunity for the students to apply in public the proficiency that has been developed in the studio. Students must obtain consent of the instructors before performing in public.

# Suggested Curricula for Majors in Music

#### Freshman Year

	Autumn Quarter Credits	Winter Quarter Credits	Spring Quarter Credits
Music 26abe	2	2	2
Music 27abc	2	2	2
Music 29abc	1	1	1
Foreign Language		5	5
Mathematics or Science	5	5	5
Physical Education 11abc	1	1	1
Military Science 11abc (Men)	1	1	1
	18	18	18
Sophomore Year			
Music 36abc	2	2	2
Music 35abc	3	3	3
Applied Music 11, 13, 15 or 17	1	1	1
Music 25abc		1 3	$\frac{1}{3}$
English 11ab Psychology 11		9	5
Foreign Language	5	5	J
Elective	3		
Physical Education 12abc	1	1	1
Military Science 12abc (Men)	1	1	1
			-
	17	17	17
PUBLIC SCHOOL MUS	SIC		
Junior Year			
Music 125abc	2	2	2
Music 123ab and 124 or 155abc	. 2-3	2-3	2-3
Applied Music 11, 13, 15 or 17	1	1	1
Education 19 and 18	4		3
Educational Elective			4
History or Economics and Sociology	4 2	6	3
Litective			9

15-16 15-16 15-16

utumn uarter redits 1 2 2–3	Winter Quarter Credits	Spring Quarter Credits
2		•
1 4 5	2-3 1 5 6	$ \begin{array}{c} 2 \\ 2-3 \\ 1 \\ 5 \\ 6 \end{array} $
19-16	16-17	16-17
2 2 4 4	2 2 4 	2 2  3 4
5	6	7
17	17	18
$\frac{1}{3}$ $\frac{4}{7}$ $\frac{7}{15}$	1 3 5 5 	1 3 5 5 
	2 2 2 4 4 4  5 17	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### For Undergraduates

- Spring. 1 or 2 cr. Summer
- \*11. Voice. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summ ½ or 1 cr. Individual instruction. Mr. Smith.

  \*12. Voice in Class. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summer. 1 cr. One hour class lessons. Four in each class. Mr. Smith.

  \*13. Piano. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summer ½ or 1 cr. Individual instruction. Mr. Crowder. Mrs. Ramskill.
- \*13. Plano. 1 Q. Autumn. Winter. Spring. 1 of 2 cr. Summer.

  \*14. Piano in Class. 1 Q. Autumn. Winter. Spring. 1 or 2 cr.
  One hour class lessons. Four in each class.

  \*15. Violin. 1 Q. Autumn. Winter. Spring. 1 or 2 cr.

  \*16. Violin in Class. 1 Q. Autumn. Winter. Spring. 1 or 2 cr.
  One hour class lessons. Four in each class. Mr. Weisberg.

  \*17. Organ. 1 Q. Autumn. Winter. Spring. 1 or 2 cr.

  \*19. Organ. 1 Q. Autumn. Winter. Spring. 1 or 2 cr.

  \*20. Cr. Summer.

  \*20. Cr. Summer.

  \*3. Spring. 1 or 2 cr. Summer.

  \*3. Spring. 1 or 2 cr. Summer.

  \*4. Organ. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summer.

  \*4. Organ. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summer.

  \*4. Organ. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summer.
- \*18. Organ in Class. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. One hour class lessons. Four in each class. Mrs. Smith.

  \*19. Wind Instruments. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Individual instruction. Mr. Teel.

- Individual instruction. Mr. Teel.

  \*20. Wind Instruments in Class. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. One hour class lessons. Four in each class. Mr. Teel.

  23. Class Piano Methods. 1 Q. Autumn. Winter. Spring. 1 or 2 cr. Summer. 2½ cr. Prerequisite, consent of instructor. A normal class for piano teachers and public school music instructors dealing with methods and materials for teaching piano classes in public schools and private studios. Practical demonstrations with children's classes. Required of all music majors. Mrs. Ramskill.
- \*24. Piano Ensemble. 1 Q. Autumn. Winter. Spring. 1-2 cr. Pre-requisite, consent of instructor. Four players in a group. Designed to give practice in sight reading and to acquaint the student with symphonic and ensemble literature. Mr. Crowder.
- ensemble literature. Mr. Crowder.

  25abc. String Instruments Methods. 3 Q. Autumn, winter, spring.
  1 cr. each quarter. Instruments to be selected by students with advice and consent of instructor. Mr. Weisberg.

  26abc. Elementary Harmony. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Construction and use of triads in major and minor keys; inversion of triads; cadences; dominant seventh chords and their inversions. Mr. Weisberg.

  ½ or 1 cr. Individual instruction. Mr. Weisberg.

  27abc. Sight Singing and Ear Training. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Summer. 2½ cr. Prerequisite, consent of instructor. Beginning sight singing, including one, two, three and four-part work;

<sup>\*</sup>Applied Music.

melody writing, melodic and harmonic dictation, notation and terminology.

Mr. Teel. 29abc.

Mr. Teel.

29abc. Wind Instruments Methods. 3 Q. Autumn, winter, spring. 1 cr. each quarter. One or more wind instruments to be selected by the student with advice and consent of instructor. Mr. Teel.

S33. Music Education. 1 Q. Summer. 2½ cr. Prerequisite, consent of instructor. The materials, principles, methods of teaching music in the primary, intermediate and upper grades. Mr. Teel.

35abc. Music Appreciation and History. 3 Q. Autumn, winter, spring. 3 cr. each quarter. Summer. 2½ cr. Prerequisite, sophomore standing. Students may enter any quarter. The elements of musical understanding; musical progress from ancient times to modern. Music of important periods of composition illustrated by means of phonograph selections and departmental programs. A reading knowledge of music is necessary only for 35c. Mr. Teel.

36abc. Advanced Harmony 2 Q. Advanced Harmony 2 Q.

36abc. Advanced Harmony. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Music 26c. Modulation, secondary seventh chords, counterpoint, diminished seventh chord, augmented chords and suspensions.

Mr. Weisberg.

Mr. Weisberg.
†37abc. Orchestra. 3 Q. Autumn, winter, spring. ½ cr. each quarter.
Prerequisite, consent of director. Mr. Weisberg.
\$38. Recital-Lectures. 1 Q. Summer. 1 cr. Open to all students.
A course presenting piano compositions of various periods and schools, with historical and analytical comment by the performer. Mr. Crowder.
†39abc. University Band. 3 Q. Autumn, winter, spring. ½ cr. each quarter. Prerequisite, completion of or exemption from the required Military Science. May be repeated for credit. Mr. Teel.
†41. Women's Glee Club. 3 Q. Autumn, winter, spring. 1½ cr. Continuous. Mr. Smith.
†43. Men's Glee Club. 3 Q. Autumn, winter, spring. 1½ cr. Continuous. Mr. Smith.
†45abc. Choral Society. 3 Q. Autumn, winter, spring. ½ cr. each quarter. Oratorios, cantatas and part songs studied and performed in recitals and concerts. Mr. Smith. recitals and concerts. Mr. Smith.

# For Undergraduates and Graduates

123ab. Elementary School Music. 2 Q. Autumn, winter. 3 cr. each quarter. Prerequisite, Music 27c or consent of instructor. Music of the first six grades of school. Child voice, rhythmic development, rote singing. Given in 1935-36, and in alternate years. Mr. Teel.

124. Junior High School Music. See courses in Education.

125abc. Counterpoint. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Music 36c. Two, three and four-part counterpoint. Mr. Weisherg.

Weisberg.

Mr. Weisberg.

129abc. Orchestration. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Music 125c. Mr. Weisberg.

155abc. High School Music and Supervision. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Music 124 or consent of instructor. Music of the senior high school; bands, orchestras, glee clubs, chorus. Problems of community music, rural music, festivals, operettas; conducting. Given in 1934-35, and in alternate years. Mr. Teel.

159abc. Forms and Composition. 3 Q. Autumn, winter, spring. 2 cr. each quarter. Prerequisite, Music 125c. Invention and fugue. May be elected in the senior year. Mr. Weisberg.

Applied Music Fees per quarter (12 weeks)

Voice 11, Piano 13, Violin 15. Two lessons a week	\$48.00
One lesson a week	24.00
Organ 17, Wind Instruments 19. Two lessons a week	
One lesson a week	18.00
Voice 12, Piano 14 and 24, Violin 16. Two lessons a week	\$24.00
One lesson a week	12.00
Organ 18, Wind Instruments 20. Two lessons a week	\$18.00
One lesson a week	9.00
**Music 23	\$10.00
**Music 25abc and 29abc (two lessons a week)	\$ 6.00
Music 26abc, 36abc, 125abc. Two class lessons a week	\$ 3.00
Fees will be adjusted individually for students registered	
than a full quarter.	Mai H

<sup>\*</sup>Applied Music †Ensemble Music.

<sup>\*\*</sup>Fee assessed only to students not majoring in music.

No absence from lessons will be excused. Lessons lost through fault of the instructor will be made up. Lessons falling on legal holidays will not be made up.

Rentals, per quarter (12 weeks)
Piano and practice room. One hour daily\$ 3.00
Additional hour daily
Organ and practice room. One hour daily\$12.00
Additional hour daily
Practice room for violin students. One hour daily\$ 1.00
Additional hour daily50
Students registering in Music 25abc and 29abc must rent instru-
ments unless they provide their own.
Rentals must be paid for entire quarter. No refunds of rentals
will be made.

# SCHOOL OF PHARMACY

PROFESSOR, CHARLES E. F. MOLLETT (DEAN). ASSISTANT PROFES-

sors, Leon Richards, John F. Suchy.

The School affords opportunities to students to obtain a thorough technical education in Pharmacy. By properly selecting courses in Chemistry and Bacteriology, graduates of this School are prepared for positions as laboratory technicians.

# Requirements for Admission

The regular University requirements for admission apply to the School of Pharmacy (see pages 14 to 16).

# Requirements for Graduation

Candidates for the degree of Bachelor of Science in Pharmacy must meet the following requirements:

1) The general University requirements for graduation (see

pages 17 to 21).

(2) A minimum of 78 credits in Pharmacy which must include courses 12, 13, 14, 20, 22, 25, 27, 31, 33, 42, and 4 credits of 135; Chemistry 13, 19 or 101; Biology 24a and 19a.

Senior examinations will not be given except to candidates for

honors.

Note: According to the recommendations adopted by the National Association of Boards of Pharmacy, the American Association of Colleges of Pharmacy and other national pharmaceutical bodies, all of the recognized schools of pharmacy are now upon a four-year minimum course basis. All students who have registered in the now discontinued three-year course will be given until the end of the academic year 1934-35 to complete the required work. Thereafter no three year degree will be granted.

Candidates for the degree of Master of Science in Pharmacy must comply with the regulations governing graduate work set forth on

page 68.

#### General Information

This School is a member of the American Association of Colleges of Pharmacy.

As an important addition to the equipment in pharmacy, a small plot is devoted to the raising of medicinal plants to provide material

for laboratory use of students in the courses of pharmacognosy, manufacturing pharmacy and drug analysis. The enterprise has received assistance from the Bureau of Plant Industry of the United States and from a number of schools of pharmacy of other states which have well-established gardens.

Pharmacy majors automatically become members of the Pharmacy

# Suggested Curriculum for Majors in Pharmacy

Freshman Year		illor vol.b	
	Autumn Quarter Credits	Winter Quarter Credits	Quarter
Social Science 11abc	5	5	5
Pharmacy 14	4	4	4
Pharmacy 12	2	2	2
Pharmacy 13 Physical Education 11abc	4	4	4
Military Science 11abc (Men)	1 1	1 .	1
annually belefice flabe (Mell)	1	1	1
	17	17	17
Sophomore Year	0 30 10	1	1.
Pharmacy 20	4	4	4
Pharmacy 27	2	2	2
English 11ab		3 5	3
Chemistry 13	5	5	5
Biology 24a	4	Manager 1	·
Military Science 19che (Men)	1	1	1
Military Science 12abc (Men)	1	1	1
	17	16	16
Junior Year		10	. 10
Pharmacy 22	4	4	4
Pharmacy 33	2	2	2
Psychology 11	5		
Literature or Philosophy	,. "		4
Chemistry 19	5	5	
Foreign Language	9	9	9
	16	16	15
Senior Year	19 70. 301	Building to	
Pharmacy 25	4	4	4
Pharmacy 31	2	2	2
Pharmacy 42			2 2
Pharmacy 135		2	2
Biology 19ab and 120	5	5	5
Foreign Language Elective	9	3	2
TAIGCUAG	- Table 1		
	16	16	17

# For Undergraduates

12. Metrology. 3 Q. Autumn, winter, spring. Continuous. 6 cr. Official weights and measures; important pharmaceutical calculations and processes. Mr. Mollett.

13. Pharmaceutical Botany and Pharmacognosy. 3 Q. Autumn, winter, spring. Continuous. 12 cr. Pharmaceutical botany and crude vegetable and animal drugs: their sources; identification; constituents; preparations; official names and synonyms; doses and uses. Mr. Suchy.

14. Pharmaceutical Chemistry. 3 Q. Autumn, winter, spring. Continuous. 12 cr. The pharmaceutical chemistry of the official inorganic and organic substances and preparations is studied with regard to nomenclature, source and preparation, physical properties and pharmaceutical uses and source and preparation, physical properties and pharmaceutical uses and doses. Mr. Richards.

15. Field Pharmacognosy. 1 Q. Autumn. Spring. 3 cr. Prerequiste, a course in botany or Pharmacy 13a. The official indigenous drug plants; those grown in the medicinal garden are studied as to propagation, methods of selection, and preservation of the parts used in pharmacy. Mr. Suchy.

20. Galenical Pharmacy. 3 Q. Autumn. winter, spring. Continuous. 12 cr. Prerequisite, Pharmacy 12, 13, 14, and Chemistry 13. Pharmaceutical preparations in the United States Pharmacopoeia and National Formulary are studied in connection with laboratory training in the manufacture of most of these. Mr. Richards.

22. Drug Analysis. 3 Q. Autumn, winter, spring. Continuous. 12 cr. Prerequisite, Pharmacy 12, 13, 14, 20, and Chemistry 13. Chemical analysis of inorganic and organic drugs; preparations according to the methods of the U.S. P. and N. F. Mr. Suchy.

23. Materia Medica. 3 Q. Autumn. winter, spring. Continuous. 6 cr. Prerequisite, sophomore standing. Character, use, action and methods of administration of the commonly used medicines. A course for students preparing for medicine, dentistry or nursing. Mr. Mollett.

25. Dispensing. 3 Q. Autumn, winter, spring. Continuous. 12 cr. Prerequisite, Pharmacy 20 and 22. A technical study of all phases of the prescription: practical exercises in sight reading; extemporaneous compounding. Mr. Richards.

Mr. Richards.

27. Commercial Pharmacy. 3 Q. Autumn, winter, spring. Continuous. 6 cr. Prerequisite, Pharmacy 12, 13 and 14. Commercial problems of the modern pharmacy. Assigned readings in current drug journals. Mr. Mollett.

31. Pharmacology. 3 Q. Autumn, winter, spring. Continuous. 6 cr. Prerequisite, Pharmacy 20 and 22. Mr. Mollett.

32. Abstracts. 3 Q. Autumn, winter, spring. Continuous. 6 cr. Prerequisite, Pharmacy 27. The preparation of abstracts. Reading and discussion of articles in current pharmaceutical literature. Mr. Mollett.

28. Special Peoplems. 3 Q. Autumn, winter, spring. 2 to 6 cr. Pre-

38. Special Problems. 3 Q. Autumn, winter, spring. 2 to 6 cr. Prerequisite, junior standing in pharmacy. Special problems within the scope of the facilities of the School which meet the needs and qualifications of the student. A maximum of 6 credits may be offered towards graduation. Mr. Mollett. Mr. Suchy.

40. Evolution of Pharmacy. 1 Q. Any quarter. 2 cr. Prerequisite, junior standing. The origin, evolution and present status of the profession; outstanding pharmacists of the past and present and their scientific contributions. Mr. Mollett.

42. Pharmaceutical Ethics. 1 Q. Any quarter. 2 cr. Prerequisite, senior standing. The ethics of pharmacy from ancient to modern times, as embodied in the various codes from Hippocrates to that of the American Pharmaceutical Association. The major responsibilities of pharmacists: their duties in relation to the public; to the physician; to each other and to the profession of pharmacy. Mr. Mollett.

# For Undergraduates and Graduates

135. Advanced Analysis. 3 Q. Any quarter. 2 to 4 cr. each quarter. Prerequisite, Pharmacy 25 and 31. The study and detection of the common organic and inorganic poisons, with emphasis on those of alkaloidal or glucosidal nature. Physical, microscopic and chemical methods form the basis of separations and identifications. A maximum of 12 credits may be offered towards graduation. Mr. Suchy.

#### For Graduates

201. Research. 3 Q. Any quarter. Credit variable. Work on selected problems for properly qualified students. Pharmacy Staff.

# THE MONTANA SCHOOL OF RELIGION

PROFESSOR AND DIRECTOR, O. R. WARFORD.

The Montana School of Religion was organized in 1924 by a committee representing the University and several religious denominations for the purpose of making courses in religion available to the students of the State University. The School of Religion is not a part of the University, but is under a director who is responsible to a Board of Trustees representing the cooperating denominations and the University.

The University allows a maximum of fifteen credits toward graduation for courses taken in the School of Religion. Additional information concerning these courses may be obtained from the Director of the School of Religion at the State University.

#### For Undergraduates

21R. The Religions of Mankind. 1 Q. Autumn. 3 cr. Open to all students. A survey of the historic, psychological, and literary setting of religions, indicating their values, weaknesses, and strengths. Designed to

increase appreciation for this part of the cultures of other peoples. Given in 1934-35, and in alternate years. Mr. Warford.

22R. Literature of the Old Testament. 1 Q. Winter. 3 cr. Prerequisite, Religion 21R or sophomore standing. Chief poetic and historic writings of the Old Testament from a literary viewpoint. Designed to increase the understanding of the common life of the Semitic peoples, and an appreciation for their contribution to civilization. Given in 1934-35, and in alternate years. Mr. Warford.

23R. New Testament Literature and Life. 1 Q. Spring. 3 cr. Prerequisite, Religion 21R or sophomore standing. The life of Jesus and its effect upon the times following. The founding of the apostolic church; the historic antecedents and consequences of the Christian tradition. Given in 1934-35, and in alternate years. Mr. Warford.

24R. Philosophy of Religion. 1 Q. Autumn. 3 cr. Open to all students. An attempt to place religion in its modern setting; its relationship to the sciences and the social processes, and its possible effects and values. Given in 1935-36, and in alternate years. Mr. Warford.

25R. Christian Ethics. 1 Q. Winter. 3 cr. Prerequisite, Religion 24R or sophomore standing. The historic sources of ethical idealism in the West and its development leading up to current ethical thinking and action. Given in 1935-36, and in alternate years. Mr. Warford.

26R. The Prophetic Heritage. 1 Q. Spring. 3 cr. Prerequisite, Religion 24R or sophomore standing. The social teachings of the Prophets of Israel, including Jesus, and the implications of their teachings for modern times. Given in 1935-36, and in alternate years. Mr. Warford.

# MILITARY SCIENCE AND TACTICS

Professor, George L. Smith (Major, Infantry). Associate Pro-FESSORS, FRED B. ROGERS (Captain, Infantry), A. E. ROTHERMICH (Captain, Infantry). Assistants, Maywood Kirkwood (Sergeant, D.E.M.L.), Clarence W. Peterson (Sergeant, D.E.M.L.).

The University maintains an infantry unit of the Reserve Officers' Training Corps, senior division, organized under authority of the National Defense Act.

"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 national emergency."-Extract, War Department publication A. G. 353 R. O. T. C., 1932. Every effort is made to develop the initiative and other qualities of leadership necessary for success in any walk of life.

Students enrolled in the R. O. T. C. courses have no obligation for military service in a national emergency other than that of any ablebodied citizen. Students satisfactorily completing the advanced course are commissioned as second lieutenants, Infantry Reserve, with attendant obligations.

All resident men students of freshman and sophomore standing who are citizens of the United States and who are physically fit are required to take the basic R. O. T. C. course except those who may claim exemption under any of the following reasons:

SECTION I. Credits for complete exemptions.

- GENERAL REQUIREMENTS:
  - Students who have reached the age of 27 years at the beginning of the quarter.
  - Filipino students who have not been legally admitted as citizens of the United States.
- (b) MILITARY REQUIREMENTS: (Upon presentment of the necessary credentials.)
  - Completion of two years of military instruction in a Senior R. O. T. C. Unit.

- 2. Attendance of two Citizen's Military Training Camps.
- 3. Completion of one enlistment in the National Guard.
- 4. Attendance at two National Guard Training Camps which consisted of at least two weeks training at each camp.
- 5. Students who have served in any branch of the Army or Navy.

SECTION II. Credit for exemption of one year.

- (a) Attendance at one Citizen's Military Training Camp.
- (b) Attendance at one National Guard Training Camp, which consisted of at least two weeks training.

SECTION III. Exemption for training in a Junior Division, or in any college or school conducting military training.

Students who have received previous military training in a Junior Unit or in some other school or college conducting military training under an officer of the Army, will receive such credit as the professor of Military Science and Tactics and the head of the institution may jointly determine.

All male students, unless exempted under Section I of the above regulations, must register in the Department during the first quarter of their attendance at the State University and each succeeding quarter until the requirement is completed.

Students who have completed the Basic Course are eligible to take the Advanced Course which covers two additional years. Before being admitted to the Advanced Course they must execute a written contract to complete the course and pursue a period of camp training.

The Government furnishes each member in the basic R. O. T. C. course with a uniform. No deposit is required, but lost articles must be paid for by the student.

# For Undergraduates

\*11abc. Military Science and Tactics. 3 Q. Autumn, winter, spring. 1 cr. each quarter. Students may enter either the autumn or winter quarters. National Defense Act and Reserve Officers' Training Corps; obligations of citizenship; military history and policy; current national situation; military discipline; courtesies and customs; military sanitation and first aid; military organization; general organization of Infantry with special reference to rifle, machine gun, howitzer, supply and headquarters companies; map reading; leadership and rifle marksmanship. Military staff.

\*12abc. Military Science and Tactics. 3 Q. Autumn, winter, spring. 1 cr. each quarter. Prerequisite, Military Science 11abc. Students may enter any quarter. Military history; leadership; automatic rifle; characteristics of infantry weapons; combat training; musketry; scouting and patrolling; functions of platoon scouts; combat principles. Military staff.

†13abc. Military Science and Tactics. 3 Q. Autumn, winter, spring. 2½ cr. each quarter. Prerequisite, Military Science 12abc. Aerial photograph reading, leadership; weapons; machine guns; howitzer company weapons; pistol; rifle marksmanship; combat training; field fortifications. Military staff.

†14abc. Military Science and Tactics. 3 Q. Autumn, winter, spring. 2½cr. each quarter. Prerequisite, Military Science 13abc. Military history and policy; military law; company administration and supply; Officers' Reserve Corps regulations; leadership; tanks; mechanization; combat training. Military staff.

<sup>\*</sup>Basic Course. †Advanced Course.

# SUMMER SESSION

The Summer Session of the State University of Montana for 1934 will be a nine-weeks' session, beginning June 11 and ending August 10. The School of Music and the Departments of Biology, Fine Arts, and Geology will continue for the first six weeks only. Students may attend the first six, the last six, or the entire nine weeks. For further information see Summer Session Bulletin.

#### Courses

The departments of the College of Arts and Sciences which will offer courses during the Summer Session are: Biology, Botany, Economics and Sociology, English, Fine Arts, Foreign Languages, Geology, History and Political Science, Mathematics, Physical Education, and Psychology. The Schools of Business Administration, Education, Journalism, and Music will also offer courses.

#### Admission

Requirements for admission to the Summer Session are the same as the requirements for entrance during the regular college year. (Pages 14 to 16).

# Registration Fee

Registration fee for the Summer Session is \$22.50. Students who register for less than five undergraduate credits or the equivalent pay \$11.25. Students registered only as listeners pay \$11.25.

Scholarships, including high school honor scholarships, do not

exempt holders from payment of the Summer Session fee.

For further information regarding Summer Session fees see Summer Session Bulletin.

#### Credit Toward Degrees

University credit toward degrees is given to those who satisfy the regular entrance requirements. The normal schedule which may be carried during the nine weeks of the session is 12 credits, plus 1 credit in Physical Education S11 and 1 credit in Applied Music; the maximum registration for six weeks is 71/2 credits plus 1 credit in either Physical Education S11 or in Applied Music. Permission to carry more than this number is granted only for special reasons.

Residence requirements for the bachelor's degree may be fulfilled by four summer sessions of nine weeks each, during which time the student must complete at least forty-five quarter credits. Of the last forty-five credits required for graduation, thirty-five credits must be

earned in residence in the State University.

#### Credit Toward Teachers' Certificates

Courses required for first grade, state and life Montana teachers' certificates will be given.

#### Graduate Work

During the Summer Session, properly qualified students may do work toward the master's degree. Residence requirements for the master's degree may be fulfilled by three summer sessions of nine weeks each provided the student meets regulations governing graduate study and the granting of the master's degree (see page 68).

# Certificate of Attendance

Students in the Summer Session who are not registered as candidates for degrees, will, upon request to the Registrar, receive a certificate of attendance for courses satisfactorily completed.

#### Recreation

An attractive feature of the Summer Session is the recreational program, which includes organized week-end excursions and camping trips, picnics, campfire parties, golf, tennis, baseball and swimming. The pleasant summer climate and picturesque mountain country of western Montana provide an ideal background for a combination of study and recreation.

# SUMMARY OF REGISTRATION—1933-34

-	Total	1010	88	37	106	115	71	41	09	1528	48	11	24	1611	559	2170	142	2028	1095	3123	195	2928
als		481 1	6	4	1	53	1	35	15	618 1	35	6	10								94	100
Totals	Women		_	-										672	331	1003	69	934		1609		1413 1515
	Men	529	69	23	106	62	70	9	45	910	13	62	14	939	228	1167	- 73	1094	420	1514	101	1413
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ials	Total	က	1	1	1	1	1	Н	1	4	-	1	-	ar)	1		-	1		1	1	1
Specials	Women	63	1	1	-	-	-	1	1	က				2 Ye								
	Men	1	1	1	1	1	1	1	1	1				lemic								
													-	(Academic Year)								
Freshmen	Total	397	1	1	41	48		12	20	518												
resh	Women	218 179	- !	1	1	21	1	10	57	303 215 518												
14	Men	218	1	1	41	27	-	2	15	303									-			
es																						
Sophomores	Total	151 117 268	1	1	. 31	33		13	4 16	211 150 361												
doos	Women	1 117	1	1	31	15 18		2 11	12	1 150												
02	Men	15	,		ന	1	,		1	21												
	m-t-1	136	43	11	17	21	20	11	15	14												
ors	Total	69 13	4	8	-	6 2	2	9	4	30 274												
Juniors	Women	67	39	က	17	15	20	64	11	174 100	-											
	Men									1												
EO.	Total	154	41	12	16	12	37	4	2	283												
Seniors	Women	82 1	12	က	1	00	1	4	62	111 2								4				
Se	Men	72	29	6	16	4	37	1	2	172 111								22-3				
																		01 0	,			
tes	Total	52	4	14	1	Н	14	1	63	88								dent				
Graduates	Women	32		63	1	1	-	1	1	39		als						Į,	ats			
Gr	Men	. 20		11		. 1	. 13	1	64	49		speci						dont	tude			34
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	CHO	50	trati									Typi			-193		icate	90	Stud		cate	ear
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	COLLEGE, SCHOOL, OR COURSE	Arts and Sciences.	Business Administration	Education	Forestry	Journalism		0	Pharmacy		Music Specials	Shorthand and	Unclassified	To	Summer Quarter-1933	F	Le	Total Ensolment of Besident Students 1933-34	Correspondence Study Students.	T	Le	Total for Year 1933-34.
		Arts	Busi	Educ	Fore	Jour	Law	Music	Phai		Mus	Shor	Uncl		Sum			TO+OF	Corr			Net

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# SUMMARY OF REGISTRATION BY COUNTIES, STATES AND COUNTRIES 1933-34

Counties in Montana	Men	Women	Total
Beaverhead	15	5	20
Big Horn	6	2	8
Blaine	5	3	8
Broadwater	8	. 4	12
Carbon		17	39
Cascade		45	100
Chouteau	6	8	14
Custer		7	32
Daniels	4	2	6
Dawson	7	5	12
Deer Lodge	16	14	30
Fallon	1	3	4
Fergus	24	15	39
Flathead	34	22	56
Gallatin	18	15	33
Garfield	1	1	2
Glacier	4	1	5
Golden Valley	3	5	8
Granite	2	3	5
Hill		16	26
Jefferson	6	6	12
Judith Basin	13	13	26
Lake	18	15	33
Lewis and Clark	27	27	54
Liberty	2		2
Lincoln	8	8	16
McCone	3	3	6
Madison	11	6	17
Meagher	3	1	4
Mineral	10	5	15
Missoula	287	324	611
Musselshell	9	11	20
Park	16	15	31
Petroleum	3	4	7
Phillips	- 12	1	9
Pondera		8	13
Powder River			2
Powell		8	26
Prairie		3	7
Ravalli		29	57
Richland		9	13
Roosevelt		13	27
Rosebud		4	10
Sanders		9	20
Sheridan	100	9	24
Silver Bow		55	135
Stillwater	-	2	10
Sweet Grass		5	14
Teton	3	11	14

Toole	. 11	10	21
Treasure	. 3	3	6
Valley	. 11	13	24
Wheatland	. 9	8	17
Wibaux	. 4		4
Yellowstone	. 42	28	70
Totals	.977	859	1836
States	Men	Women	Total
Alabama	. 1	1.000	1
California	. 20	4	24
Colorado	. 2		2
Connecticut	. 1		1
District of Columbia	. 1		1
Georgia	. 1		1
Idaho	. 6	17	23
Illinois	. 4	2	6
Indiana	. 1		1
Iowa	. 5	2	7
Kansas	. 1	1	2
Massachusetts	. 4	1	5
Michigan	. 1	1	2
Minnesota		3	9
Mississippi	. 1		1
Missouri		6	6
Nebraska	_	1	3
New Jersey	. 3		3
New York	. 1	1	2
North Dakota	. 17	13	30
Ohio	. 5	2	7
Oklahoma		1	1
Oregon	. 2	3	5
Pennsylvania	. 2	2	4
South Dakota	. 1	3	4
Washington	. 10	8	18
Wisconsin	. 3	1	4
Wyoming	. 4	2	6
Totals	.105	74	179
Countries	Men	Women	Total
Alaska	. 1		1
Canada		1	2
Germany			1
Hawaii			2
Philippine Islands			7
		-	-
Total	. 12	1	13
Totals1	.094	934	2028

# DEGREES GRANTED 1933-34\*

	Men	Women	Total
Master of Arts:			
Biology	1		1
Chemistry	1		1
Education	4	1	5
English	1	2	3
Geology	1		1
History	2	1	3
Master of Science in Forestry	1		1
Master of Science in Pharmacy	2		2
Total Master's Degrees	13	4	17
Bachelor of Arts:			
Biology	11	3	14
Botany	5	1	6
Chemistry		1	11
Economics and Sociology		5	9
English		17	22
Fine Arts	3	3	6
French	-	6	6
Geology		1	3
German		1	1
History		7	10
Home Economics		12	12
		5	
Latin			5 3
Law			the second second second second
Library Economy		1	1
Mathematics		5	7
Physical Education	4	4	8
Pre-Medical Science	1		1
Psychology	1	1	2
Spanish	1	6	7
Total Bachelor's Degrees, Arts and			101
Sciences	55	79	134
Bachelor of Arts in Business Administration	19	12	31
Bachelor of Arts in Education	8	7	15
Bachelor of Science in Forestry	7		7
Bachelor of Arts in Journalism	5	5	10
Bachelor of Laws	19		19
Bachelor of Arts in Music.		4	4.
Bachelor of Science in Pharmacy	4	2	6 97
Pharmaceutical Chemist	6	2	8 13
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*July, 1933-34.			

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