UNIVERSITY OF NEVADA BULLETIN

CATALOGUE

RECORD FOR 1944–1945

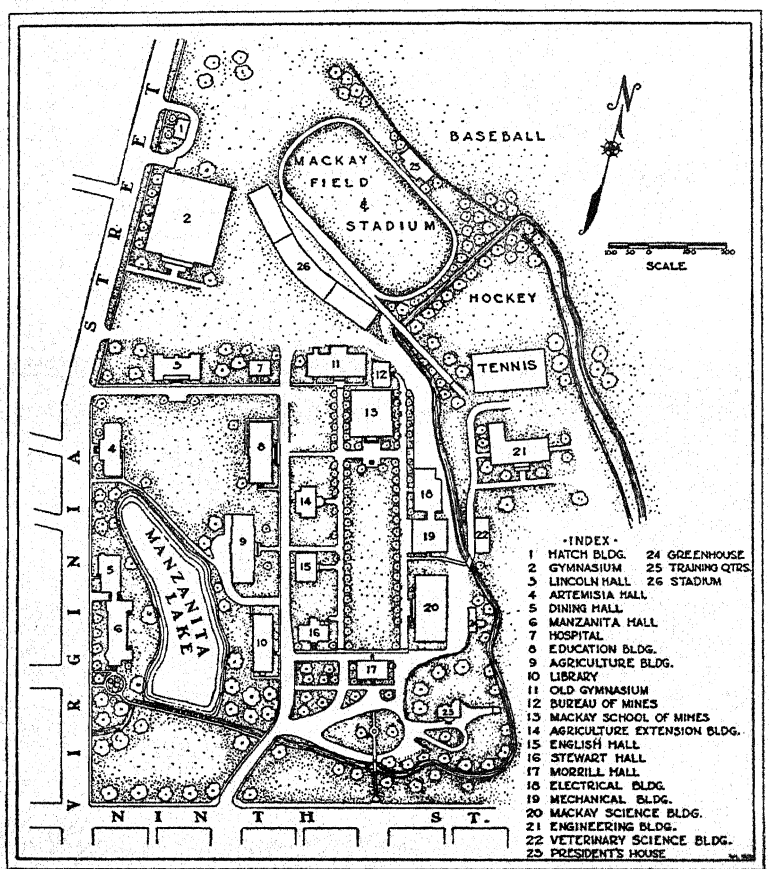
WITH

ANNOUNCEMENTS FOR 1945–1946

VOLUME XXXIX APRIL 15, 1945 NUMBER 2

UNIVERSITY OF NEVADA

Campus Plan



UNIVERSITY OF NEVADA BULLETIN

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Published Quarterly
By the
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Reno, Nevada

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CARSON CITY, NEVADA
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1945

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OFFICE OF THE
BOARD OF REGENTS, UNIVERSITY OF NEVADA
RENO, NEVADA, APRIL 15, 1945

To His Excellency, E. P. CARVILLE, *Governor of the State of Nevada.*

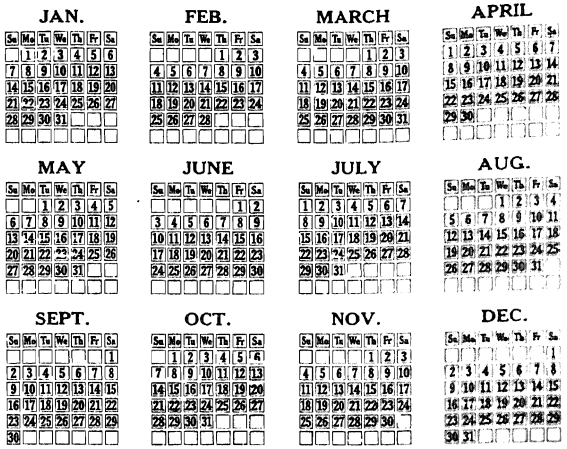
SIR: The Regents of the University of Nevada have the honor to submit herewith the Annual Catalogue of the University, giving the record for the year 1944–1945, containing the courses of study, general information, the membership of the Faculty, and the enrollment of the students, as required by the Act of the Legislature, approved March 6, 1901.

By the Board of Regents:

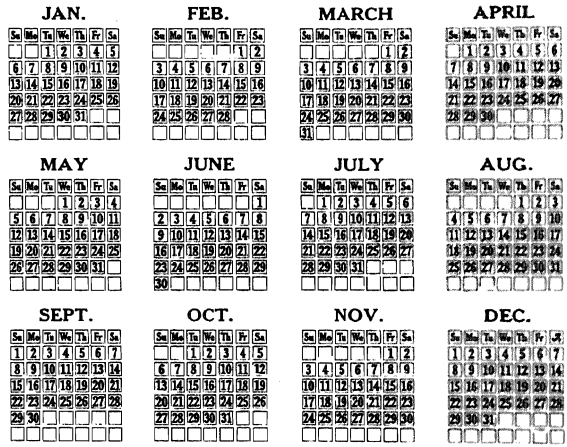
SILAS E. ROSS,
Chairman.

ALICE TERRY, *Secretary.*

1945 - CALENDAR - 1945



1946 - CALENDAR - 1946



UNIVERSITY CALENDAR

1945-1946

FIRST SEMESTER

September 15	Saturday	Domitories open.
September 16	Sunday, 3 p. m.	President's reception and outdoor entertainment for new students.
*September 17-18	Monday-Tuesday	Orientation for new students.
September 17	Monday, 7 p. m.	Freshman mixer.
September 19	Wednesday	Registration.
September 20	Thursday	Instruction begins.
September 29	Saturday, 12 noon	Last day for late registration.
(†)	Saturday	Homecoming.
October 30	Tuesday	Grade reports due.
October 31	Wednesday	Admission Day.
November 22-25	Thursday-Sunday	Thanksgiving recess.
December 15	Saturday	Grade reports due.
December 21	Friday, 4 p. m.	Christmas vacation begins.
December 22	Saturday	Dormitories close.
January 2	Wednesday	Dormitories open.
January 3	Thursday, 8 a. m.	Instruction begins.
January 26-31	Saturday-Thursday	Semester examinations.
January 31	Thursday, 4:15 p. m.	First semester closes.
February 2	Saturday, 12 noon	Final grades on file with Registrar.

SECOND SEMESTER

February 2	Saturday, 9 a. m.	Mental tests for new students.
February 4	Monday	Registration.
February 5	Tuesday	Instruction begins.
February 16	Saturday, 12 noon	Last day for late registration.
March 13	Wednesday	Grade reports due.
(†)	Saturday	Mackay Day.
April 13	Saturday	Grade reports due.
April 13-23	Saturday noon—Tuesday, 8 a. m.	Easter recess.
May 30	Thursday	Memorial Day.
June 3	Monday	Senior grades on file with Registrar.
June 3-7	Monday-Friday	Semester examinations.
June 7	Friday	Meeting of Honorary Board of Visitors.
June 8	Saturday, 12 noon	Second semester closes.
June 8	Saturday evening	Phi Kappa Phi banquet and address.
June 9	Sunday	Baccalaureate address.
June 10	Monday	Commencement.
June 12	Wednesday, 9 a. m.	Final grades on file with the Registrar.

*All new students are expected to be present at the Education Auditorium at 8 a. m., Monday, September 17, at which time required mental tests will be given.
†To be arranged.

OFFICERS OF THE UNIVERSITY

THE BOARD OF REGENTS

HON. CHRIS H. SHEERIN (1951) ..... Elko
HON. MARY HENNINGSEN (1949) ..... Gardnerville
HON. SILAS E. ROSS (1949) ..... Reno
HON. LEO A. MCNAMEE (1947) ..... Las Vegas
HON. PAUL J. SIRKEGIAN (1947) ..... Kimberly

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MISS CAROLYN M. BECKWITH, Secretary Emeritus ..... San Francisco
MISS ALICE TERRY, Secretary ..... Reno

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Property Committee—SILAS E. ROSS.
Instruction Committee—CHRIS H. SHEERIN.
Library Committee—PAUL J. SIRKEGIAN.
Student-Welfare Committee—LEO A. MCNAMEE, MARY HENNINGSEN.

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MRS. CORINNE DEVLIN ..... Whitney, Clark County
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R. W. HADDOW ..... Carlin, Elko County
MRS. PETER BREEN ..... Goldfield, Esmeralda County
MRS. PETER MERIALDO ..... Eureka, Eureka County
C. F. FRANSWAY ..... Winnemucca, Humboldt County
MRS. MARIE STRESHLEY ..... Austin, Lander County
DARYL L. MAYHEW ..... Caliente, Lincoln County
MRS. NORMAN BROWN ..... Smith, Lyon County
MRS. LOWRAN BOLDRA ..... Hawthorne, Mineral County
MRS. FRANK E. BELL ..... Tonopah, Nye County
ARNOLD A. MILLARD ..... Carson City, Ormsby County
T. C. JOHNSON ..... Lovelock, Pershing County
A. L. MCFARLAND ..... Virginia City, Storey County
DR. H. ILER ..... Sparks, Washoe County
MRS. CHRISTINE RUSSELL ..... Ely, White Pine County

ADMINISTRATIVE OFFICERS

JOHN O. MOSELEY, M.A., LL.D., President.
WALTER E. CLARK, Ph.D., LL.D., President Emeritus.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President; Comptroller and Treasurer.
MRS. JEANETTE C. RHODES, B.A., Registrar.
MISS LOUISE M. SISSA, Emeritus Registrar.

REUBEN C. THOMPSON,[1] M.A., LL.D., Dean of Men.
MRS. ALICE B. MARSH, M.S., Acting Dean of Women.
JAMES J. HILL, M.A., B.S., in L.S., Director of Libraries.
MISS THEA C. THOMPSON,[2] Ph.B., Librarian.
JOSEPH D. LAYMAN, B.L., Emeritus Librarian.
WALTER S. PALMER, E.M., Curator of the Mackay Museum.
ANDREW C. RICE, Ph.D., Acting Supervising Engineer, United States Bureau of Mines Experiment Station.
ROBERT S. GRIFFIN, Ph.D., Acting Master of Lincoln Hall, Assistant in Administration.
JOHN D. BIBB, M.D., University Hospital Association Physician.
MISS BEATRICE WARREN, R.N., Head Nurse, University Infirmary.
MISS C. PATRICIA LOWRY, B.S., Dietitian.
MRS. EDITH PEACOCKE, Hostess of Artemisia Hall.
MISS ETHEL DIXON, Hostess of Manzanita Hall.

Colleges and Schools—

FREDRICK WOOD, Ph.D., Dean of the College of Arts and Science.
STANLEY G. PALMER, M.E., Dean of the College of Engineering.
FREDERICK W. WILSON, M.S., Acting Dean of the College of Agriculture.
FRED W. TRANER, Ph.D., Dean of the School of Education.
JAY A. CARPENTER, E.M., Director of the Mackay School of Mines.
HAROLD N. BROWN, Ed.D., Director of Summer Sessions.

Public Service Division—

WALTER S. PALMER, E.M., Director of the State Analytical Laboratory.
EDWARD RECORDS, V.M.D., Director of Veterinary Control Service.
WAYNE B. ADAMS, B. S., Commissioner, Food and Drugs Control and Weights and Measures.
SAMUEL BRADFORD DOTEN, M.A., Director of the Agricultural Experiment Station.
CECIL W. CREEL, Agr.D., Director of Agricultural Extension.
JAY A. CARPENTER, E.M., Director, State Mining Bureau.

General Library Staff—

MISS CLARE LOUISE JOHNSON, B.A., Cataloguer.
MRS. ALENE DERUFF, B.A., Loan Librarian.
MRS. GERTRUDE FREEMAN CARRICK, B.S., Senior Assistant.

Central Clerical Staff—

MISS ALICE TERRY, Secretary to the President.
MRS. EVA RAY LATHROP, Stenographer, President's Office.
MRS. ERNESTINE MCCLEARY, Assistant Registrar.
MRS. ADELAIDE STEINER, Clerk, Comptroller's Office.
MISS ESTHER ROMANO, Clerk, Comptroller's Office.
MISS PHYLLIS SCHUMACHER, Clerk, Comptroller's Office.
MRS. VIRGINIA ARTHUR, Secretary, Catalogue Committee.

Associated Students—

JOE T. MCDONNELL,[3] Graduate Manager.
LEONARD E. CHADWICK, B.S., Acting Graduate Manager.

[1]Absent on leave, Spring, 1945. [2]Resigned, January 1, 1945. [3]Absent on leave.

THE UNIVERSITY FACULTY[1]

President

JOHN OHLEYER MOSELEY, M.A., LL.D., President.

A.B., Austin College, 1912; A.M., University of Oklahoma, 1916; B.A., Oxford (England), 1922; M.A., *ibid.*, 1928; LL.D., Austin College, 1936; Associate Professor of Education, Henry Kendall College, 1916–1917; Assistant Professor of Latin and Classical Archeology, University of Oklahoma, 1919–1924; Associate Professor of Latin and Classical Archeology, *ibid.*, 1924–1935; Professor of Latin and Classical Archeology, *ibid.*, 1935; President, Central State Teachers' College (Oklahoma), 1935–1939; Dean of Students, University of Tennessee, 1939–1944; President, University of Nevada, 1944–.

WALTER ERNEST CLARK, Ph.D., LL.D., President Emeritus.

B.A., Ohio Wesleyan University, 1896; M.A., *ibid.*, 1898; Ph.D., Columbia University, 1903; LL.D., Ohio Wesleyan University, 1918; LL.D., University of Nevada, 1938; Chevalier, Légion d'Honneur, 1937; Instructor in Mathematics, Ohio Wesleyan University, 1896–1899; Instructor in Philosophy, College of the City of New York, 1902–1906; Assistant Professor of Philosophy, *ibid.*, 1906–1907; Associate Professor and Acting Head of the Department of Political Science, *ibid.*, 1907–1910; Professor and Head of the Department of Political Science, *ibid.*, 1910–1917; Extension Lecturer in Economics, Columbia University, 1916–1917; President, University of Nevada, 1917–1938; President Emeritus, *ibid.*, 1938–.

Vice President

CHARLES H. GORMAN, Honorary M. S., LL.D., Vice President, Comptroller and Treasurer.

Honorary M.S., University of Nevada, 1939; LL.D., University of Nevada, 1944; Assistant Registrar and Auditor, *ibid.*, 1911–1912; Comptroller and Treasurer, *ibid.*, 1912–; Vice President, *ibid.*, 1941–; Acting President, *ibid.*, 1943–1944.

Faculty Emeriti

HORACE PRENTISS BOARDMAN, C.E., Emeritus Professor of Civil Engineering.

B.S., University of Wisconsin, 1894; C.E., *ibid.*, 1911; Professor of Civil Engineering, University of Nevada, 1907–1939; Director of the Engineering Experiment Station, *ibid.*, 1921–1939; Emeritus Professor of Civil Engineering, *ibid.*, 1939–.

CHARLES LEROY BROWN, M.A., Emeritus Associate Professor of Biology.

B.A., University of Nevada, 1912; M.A., *ibid.*, 1913; Instructor in Biology, *ibid.*, 1918–1929; Assistant Professor of Biology, *ibid.*, 1929–1936; Associate Professor of Biology, *ibid.*, 1936–1938; Emeritus Associate Professor of Biology, *ibid.*, 1938–.

JAMES EDWARD CHURCH, JR., Ph.D., LL.D., Emeritus Professor of the Classics.

A.B., University of Michigan, 1892; Ph.D., University of Munich, 1901; LL.D., Nevada, 1937; Instructor in Latin and German, University of

[1]The President, Vice President, Deans, Librarian, Registrar, and all other persons with the rank of instructor or above, who give instruction in any of the regular college departments of the University, constitute the University Faculty.

The record of teaching experience does not include work in high schools or academies, nor University instruction as fellows or assistants. Summer School and extension instruction is also excluded.

Nevada, 1892–1894; Assistant Professor of Latin Language and Literature, *ibid.*, 1894–1895; Associate Professor of Latin Language and Literature, *ibid.*, 1895–1896; Professor of Latin Language and Literature, *ibid.*, 1896–1918; Professor of the Classics, *ibid.*, 1918–1939; Emeritus Professor of the Classics, *ibid.*, 1939–.

PETER FRANDSEN, A.M., LL.D., Emeritus Professor of Biology.

A.B., University of Nevada, 1895; A.B., Harvard University, 1898; A.M., *ibid.*, 1899; LL.D., University of Nevada, 1924; Assistant Professor of Zoology and Bacteriology, University of Nevada, 1900–1902; Associate Professor of Zoology and Bacteriology, *ibid.*, 1902–1903; Professor of Zoology and Bacteriology, *ibid.*, 1903–1906; Professor of Biology, *ibid.*, 1906–1942; Emeritus Professor of Biology, *ibid.*, 1942–.

JOHN WILLIAM HALL, M.A., Emeritus Professor of Education.

Superintendent Training Department, Colorado Teachers College, 1898–1900; B.S., Teachers College, Columbia University, 1901; M.A., Columbia University, 1902; Teacher of Psychology and History of Education, New York Training School for Teachers, 1901–1905; Professor of Elementary Education, University of Cincinnati, 1905–1920; Dean of the School of Education and Professor of Education, University of Nevada, 1920–1937; Emeritus Professor of Education, *ibid.*, 1937–.

ALBERT ELLSWORTH HILL, A.B., Emeritus Professor of English.

A.B., University of Chicago, 1899; Associate in English, *ibid.*, 1907–1909; Instructor in English, *ibid.*, 1909–1913; Assistant Professor of English, University of Nevada, 1913–1914; Associate Professor of English, *ibid.*, 1914–1916; Professor of English, *ibid.*, 1917–1944; Acting Head of the Department of English, *ibid.*, 1928–1942; Head of the Department of English, *ibid.*, 1942–1944. Emeritus Professor of English, *ibid.*, 1944.

KATHERINE LEWERS, Emeritus Associate Professor of Art.

Instructor in Freehand Drawing, University of Nevada, 1905–1907; Assistant Professor of Freehand Drawing, *ibid.*, 1907–1914; Associate Professor of Freehand Drawing, *ibid.*, 1914–1939; Emeritus Associate Professor of Art, 1939–.

SARAH LOUISE LEWIS, M.A., Emeritus Professor of Home Economics.

B.S., Columbia University, 1919; A.M., Teachers College, Columbia University, 1923; Instructor, Oregon Agricultural College, 1912–1915; Assistant Professor, *ibid.*, 1915–1917; Professor of Household Science and Head of Department, *ibid.*, 1919–1920; Professor of Home Economics, University of Nevada, 1920–1942; Emeritus Professor of Home Economics, *ibid.*, 1942–.

MARGARET ELIZABETH MACK,[1] A.M., Emeritus Associate Professor of Biology.

B.S., University of Nevada, 1910; A.M., Columbia University, 1913; Instructor in Biology, University of Nevada, 1913–1917; Assistant Professor of Biology, *ibid.*, 1917–1922; Associate Professor of Biology, *ibid.*, 1922–1942; Dean of Women, *ibid.*, 1918–1942; Emeritus Associate Professor of Biology, *ibid.*, 1942–1945.

KATHERINE RIEGELHUTH, A.M., Emeritus Professor of English.

B.A., University of Nevada, 1897; A.M., Columbia University, 1913; Instructor in German, University of Nevada, 1905–1916; Assistant Professor of German, *ibid.*, 1916–1917; Associate Professor of German, *ibid.*, 1917–1922; Associate Professor of English, *ibid.*, 1922–1941; Professor of English, *ibid.*, 1941–1943; Emeritus Professor of English., *ibid.*, 1943–.

ROBERT STEWART, Ph.D., Emeritus Professor of Agronomy.

B.S., Utah Agricultural College, 1902; Ph.D., in Agronomy, University of Illinois, 1909; Assistant Professor of Chemistry, Utah Agricultural

[1]Deceased, February, 1945.

College, 1905–1908; Professor of Chemistry and Station Chemist, *ibid.*, 1908–1915; Professor of Soil Fertility, University of Illinois, 1915–1920; Dean of the College of Agriculture and Professor of Agronomy, University of Nevada, 1920–1943; Emeritus Professor of Agronomy, *ibid.*, 1943–.

JEANNE ELIZABETH WIER, B.A., LL.D., Emeritus Professor of History and Political Science.

B.Di., Iowa State Teachers' College, 1893; B.A., Leland Stanford Junior University, 1901; LL.D., University of Nevada, 1924; Acting Assistant Professor of History, University of Nevada, 1899–1901; Associate Professor of History, *ibid.*, 1901–1906; Professor of History and Political Science, *ibid.*, 1906–1917; Professor of History, *ibid.*, 1917–1921; Professor of History and Political Science, *ibid.*, 1921–1940; Emeritus Professor of History and Political Science, *ibid.*, 1940–.

Professors, Associate Professors, Assistant Professors, and Instructors

PHILIP GERALD AUCHAMPAUGH, Ph.D., Associate Professor of History and Political Science.

B.A., New York State College for Teachers, 1920; M.A., Syracuse University, 1921; Ph.D., Clark University, 1924; Teacher in History and Social Studies, Buffalo State Teachers College, 1921–1925; Instructor in History, Syracuse University, 1925–1926; Teacher of History and Social Studies, Duluth State Teachers College, 1926–1937; Professor of History, Blue Ridge College, Md., 1939–1941; Assistant Professor of History and Political Science, University of Nevada, 1941–1944; Associate Professor of History and Political Science, *ibid.*, 1944–.

SAMUEL BURBRIDGE BATDORF,[1] Ph.D., Associate Professor of Physics.

A.B., University of California, 1934; M.A., *ibid.*, 1936; Ph.D., *ibid.*, 1938; Instructor in Physics, University of Utah, spring of 1938; Assistant Professor of Physics, University of Nevada, 1938–1942; Associate Professor of Physics, *ibid.*, 1942–.

E. MAURICE BEESLEY, Ph.D., Associate Professor and Acting Head of the Department of Mathematics.

A.B., Lafayette College, 1936; Sc.M., Brown University, 1938; Ph.D., *ibid.*, 1943; Instructor in Mathematics, University of Nevada, 1940–1942; Assistant Professor of Mathematics, *ibid.*, 1942–1944; Associate Professor and Acting Head of the Department of Mathematics, *ibid.*, 1944–.

WILLIAM DWIGHT BILLINGS, Ph.D., Associate Professor of Biology.

A.B., Butler University, 1933; M.A., Duke University, 1935; Ph.D., *ibid.*, 1936; Instructor in Botany, University of Tennessee, 1936–1937; Instructor in Biology, University of Nevada, 1938–1940; Assistant Professor of Biology, *ibid.*, 1940–1943. Associate Professor of Biology, *ibid.*, 1943–.

FREDERICK L. BIXBY, C.E., Professor and Head of the School of Civil Engineering.

B.S., University of California, 1905; C.E., University of Nevada, 1918; Professor of Civil and Irrigation Engineering, New Mexico College of Agriculture and Mechanic Arts, 1910–1913; Associate Professor of Agronomy, University of Nevada, 1919–1920; Associate Professor of Civil Engineering, *ibid.*, 1922–1926; Professor of Civil Engineering, *ibid.*, 1926–; Acting Head of the School of Civil Engineering, *ibid.*, 1939–1941; Head of the School of Civil Engineering, *ibid.*, 1941–.

[1]Absent on leave.

GILBERT BRUCE BLAIR, A.M., Associate Professor of Physics and Astronomy.

A.B., Tabor College, 1902; A.M., Washburn College, 1904; Professor of Physics, Morningside College, 1907–1909; Instructor and Assistant Professor of Physics, Oregon Agricultural College, 1912–1919; Assistant Professor of Physics, University of Nevada, 1919–1924; Associate Professor of Physics, *ibid.*, 1924–1935; Associate Professor of Physics and Astronomy, *ibid.*, 1935–.

HAROLD N. BROWN, Ed.D., Professor of Education and Director of Summer Sessions.

B.S., Kansas State Teachers College, 1923; A.M., Stanford University, 1927; Ed.D., University of California, 1935; Critic, Junior High School, Arizona State Teachers College, 1927–1930; Assistant Professor of Education, University of Nevada, 1930–1935; Associate Professor of Education, *ibid.*, 1935–1940; Director of the Summer Session, *ibid.*, 1940–1942; Professor of Education, *ibid.*, 1940–; Director of Summer Sessions, *ibid.*, 1942–.

J. RAYMOND BUTTERWORTH,[1] M.A., Instructor in English.

B.A., Syracuse University, 1933; M.A., University of Southern California, 1938; Instructor in English, University of Nevada, 1940–.

JAY ARNOLD CARPENTER, E.M., Director of Mackay School of Mines, Professor and Head of the Department of Mining Engineering.

B.S., University of Nevada, 1907; E.M., Mackay School of Mines, *ibid.*, 1911; Instructor in Metallurgy, University of Nevada, Mackay School of Mines, 1908–1909; Assistant Professor of Metallurgy, *ibid.*, 1909–1910; Professor of Mining, South Dakota School of Mines, 1921–1922; Professor of Mining, University of Nevada, Mackay School of Mines, 1926–1937; Professor and Head of the Department of Mining Engineering, *ibid.*, 1937–; Acting Director, Mackay School of Mines, 1937–1938; Director, Mackay School of Mines and State Bureau of Mines, 1939–.

LEONARD EDWIN CHADWICK, B.S., Assistant Professor of Economics, Business, and Sociology.

B.S., University of California, 1935; Instructor in Economics, Business, and Sociology, University of Nevada, 1939–1942; Assistant Professor of Economics, Business, and Sociology, *ibid.*, 1942–.

JOANNA CHAPMAN, M.S., Assistant Professor of Education.

B.S., University of Illinois, 1926; M.S., University of Colorado, 1937; Student Teacher Supervisor in Home Economics, Oregon State College, 1940–1941; Itinerant Teacher-Trainer in Home Economics Education, Colorado State College, 1941–1943; Associate in Homemaking Education, University of Nevada, 1943–1944; Assistant Professor of Education, *ibid.*, 1944–.

BENJAMIN FRANKLIN CHAPPELLE, Ph.D., Professor and Head of the Department of Foreign Languages.

A.B., Dickinson College, 1908; A.M., *ibid.*, 1911; Diplomé de L'Alliance Francaise, University of Poitiers, 1914; Ph.D., University of Pennsylvania, 1917; Officier d'Académie, 1934; Acting Head of the German Department, Dickinson College, 1910–1911; Instructor in French, Gettysburg College, 1911–1912; Head of the Department of Romanic Languages, *ibid.*, 1912–1916; Assistant Professor Romanic Languages and Literatures, University of Nevada, 1917–1918; Assistant Professor of

[1]Absent on leave.

Romanics, University of Pennsylvania, 1918–1921; Professor and Head of the Department of Romanic Languages, University of Nevada, 1921–1922; Professor and Head of the Department of Foreign Languages, *ibid.*, 1922–.

JAMES W. COLEMAN,[1] M.A., Associate Professor of Physical Education for Men.

B.S., University of Arkansas; M.A., University of Iowa, 1936; Director of Physical Education and Athletics, Georgetown College, 1922–1925; Acting Director of Athletics and Head Coach of all Sports, University of Akron, 1925–1926; Coach and Director of Health and Physical Education, State Teachers College, Minot, North Dakota, 1926–1936; Assistant Professor of Physical Education for Men, University of Nevada, 1936–1941; Associate Professor of Physical Education for Men, *ibid.*, 1941–.

BERTRAND FRANKLIN COUCH,[1] Instructor in Mine Accounting.

Instructor in Mine Accounting, University of Nevada, 1924–.

MERYL WILLIAM DEMING, Ph.D., Associate Professor of Chemistry.

B.A., University of Oregon, 1923; M.A., *ibid.*, 1925; Ph.D., University of Washington, 1928; Instructor in Chemistry, Oregon State College, 1928–1929; Instructor in Chemistry, University of Nevada, 1929–1930; Assistant Professor of Chemistry, *ibid.*, 1930–1933; Associate Professor of Chemistry, *ibid.*, 1933–.

ETHEL M. DIXON, B.P.E., Instructor in Physical Education for Women.

B.P.E., University of Oregon, 1942; Instructor in Physical Education for Women, University of Nevada, 1943–.

CHARLES T. DUNCAN,[1] B.A., Instructor in Journalism.

B.A., University of Minnesota, 1936; Instructor in Journalism, University of Nevada, 1940–; Acting Master of Lincoln Hall, 1941–1942.

E. LEWIS FIELD, Lt. Colonel, United States Army; Professor of Military Science and Tactics.

Northwestern University Law School, 1907; University of Southern California College of Law, 1911; Professor of Military Science and Tactics, Polytechnic Junior College, California, 1922–1925; Associate Professor of Military Science and Tactics, University of California, 1944; Professor of Military Science and Tactics, University of Nevada, 1944–.

VINCENT P. GIANELLA, Ph.D., Professor and Head of the Department of Geology.

B.S. in E.E., Oregon Agricultural College, 1910; B.S., Oregon School of Mines, 1911; M.S., Mackay School of Mines, University of Nevada, 1920; Ph.D., Columbia, 1937; Instructor in Metallurgy, University of Nevada, Mackay School of Mines, 1923–1924; Instructor in Geology, *ibid.*, 1924–1928; Assistant Professor of Geology, *ibid.*, 1928–1929; Associate Professor of Geology, *ibid.*, 1929–1935; Acting Head of the Department of Geology, *ibid.*, 1932–1935; Professor and Head of the Department of Geology, *ibid.*, 1935–.

JOHN R. GOTTARDI,[1] M.A., Associate Professor of Foreign Languages.

B.A., University of Nevada, 1921; M.A., *ibid.*, 1926; Instructor in Modern Languages, University of Nevada, 1922–1924; Assistant Professor of Modern Languages, University of Nevada, 1926–1930; Associate Professor of Foreign Languages, *ibid.*, 1930–.

[1]Absent on leave.

ELDON C. GRAFTON,[1] M.S., Associate Professor of Structural Engineering.

B.S., Washington State, 1926; C.E., *ibid.*, 1931; M.S., Illinois, 1933; Assistant Professor of Structural Engineering, Armour Institute, 1929–1934; Assistant Professor of Structural Engineering, University of Nevada, 1939–1944; Associate Professor of Structural Engineering, *ibid.*, 1944–.

ROBERT STUART GRIFFIN, Ph.D., Professor of English and Assistant in Administration.

B.S., Oregon State College, 1928; M.A., University of Southern California, 1935; Ph.D., University of Southern California, 1941; Instructor in Public Speaking, Oregon State College, 1927; Instructor in English, University of Nevada, 1928–1936; Assistant Professor of English, *ibid.*, 1936–1941; Associate Professor of English, *ibid.*, 1941–1944; Acting Master of Lincoln Hall, 1942–; Professor of English, *ibid.*, 1944–; Assistant in Administration, 1944–.

EVERETT WHITE HARRIS,[1] Ph.D., Associate Professor of Mechanical Engineering.

B.S. in E.E., Nevada, 1926; S.M. in E.E., Massachusetts Institute of Technology, 1932; Ph.D., University of California, 1941; Instructor in Mathematics, Nevada, 1938–1939; Assistant Professor of Mathematics, *ibid.*, 1939–1942; Assistant Professor of Mechanical Engineering, *ibid.*, 1942–1944; Associate Professor of Mechanical Engineering, *ibid.*, 1944–.

PAUL ATKINS HARWOOD,[1] M.A., Associate Professor of English and Master of Lincoln Hall.

B.A., University of Nevada, 1924; M.A., *ibid.*, 1929; Instructor in English, University of Nevada, 1927–1929; Assistant Professor of English, *ibid.*, 1929–1930; Associate Professor of English, *ibid.*, 1930–; Acting Master of Lincoln Hall, 1932–1936; Master of Lincoln Hall, 1936–.

CHARLES ROGER HICKS, Ph.D., Professor and Head of the Department of History and Political Science.

A.B., Clark University, 1915; A.M., Stanford University, 1922; Ph.D., Clark University, 1931; Professor of History and Political Science, Ottawa University, Kansas, 1922–1924; Instructor in History and Political Science, University of Nevada, 1924–1925; Assistant Professor of History and Political Science, *ibid.*, 1925–1928; Associate Professor of History and Political Science, *ibid.*, 1928–1931; Professor of History and Political Science, *ibid.*, 1931–; Acting Head of the Department of History and Political Science, *ibid.*, 1940–1941; Head of the Department of History and Political Science, *ibid.*, 1941–.

ALFRED LESLIE HIGGINBOTHAM, A.M., Professor and Head of the Department of Journalism.

A.B., Oberlin College, 1920; A.M., *ibid.*, 1920; Instructor in English, University of Nevada, January, 1923–1924; Assistant Professor of English, *ibid.*, 1924–1926; Associate Professor of English, *ibid.*, 1926–1930; Professor of English, *ibid.*, 1930–1936; Professor of Journalism, *ibid.*, 1936–; Head of the Department of Journalism, *ibid.*, 1942–.

JAMES JULIAN HILL, M.A., B.S. in L.S., Director of Libraries and Professor of Library Science.

B.A., University of Oklahoma, 1915; M.A., *ibid.*, 1915; B.S. in L.S., University of Illinois, 1929; Assistant Librarian, University of Oklahoma, 1929–1944; Assistant Professor of Library Science, *ibid.*, 1936–1939; Associate Professor of Library Science, *ibid.*, 1939–1944; Director

[1]Absent on leave.

of Libraries and Professor of Library Science, University of Nevada, 1944–.

CHARLES WORTH HODGSON,[1] Ph.D., Associate Professor and Acting Head of the Department of Agronomy; Extension Specialist in Range Management.

B.S., University of Idaho, 1934; M.S., University of Arizona, 1936; Ph.D., Michigan State College, 1942; Instructor in Agronomy, University of Nevada, 1940–1942; Assistant Professor of Agronomy, *ibid.*, 1942–1944; Associate Professor and Acting Head of the Department of Agronomy, *ibid.*, 1944–.

WILLIAM OLMSTEAD HOLMES,[2] B.A., Assistant Professor of English.

B.A., Nevada, 1936; Instructor in English, University of Nevada, 1940–1943; Assistant Professor of English, *ibid.*, 1943–1945.

MURIEL J. HUGHES, Ph.D., Assistant Professor of English.

B.A., Morningside College, 1925; M.A., Columbia University, 1926; Ph.D., *ibid.*, 1942; Instructor in English and Assistant Dean of Women, Morningside College, 1926–1928; Instructor in English, Northern State Teachers College, Marquette, Michigan, 1930 (Fall Term); Instructor in English, Brooklyn College, 1938–1939; Instructor in English, Hunter College, 1940–1942; Instructor in English, University of Vermont, 1942–1944; Assistant Professor of English, University Nevada, 1944–1945.

ROBERT A. HUME, Ph.D., Associate Professor of English.

A.B., Stanford University, 1929; LL.B., *ibid.*, 1932; M.A., *ibid.*, 1935; Ph.D., Cornell University, 1940; Teaching Assistant in English, Stanford University, 1933–1934; Instructor in English, University of Idaho, Southern Branch, 1935–1937; Instructor in English, Cornell University, 1938–1939; Instructor in English, Purdue University, 1937–1938, 1940–1942; Assistant Professor of English, *ibid.*, 1942–1944. Associate Professor of English, University of Nevada, 1944–.

FRANK P. HUNGATE, B.A., Acting Instructor in Biology.

B.A., University of Texas, 1940; Teaching Assistant in Biology, Stanford University, 1940–1945; Acting Instructor in Biology, University of Nevada, 1945–.

AUSTIN E. HUTCHESON, Ph.D., Associate Professor of History and Political Science.

B.A., Reed College, 1925; M.A., University of California, 1929; Ph.D., University of Pennsylvania, 1937; Assistant Professor of History and Government, St. Lawrence University, 1931–1932; Instructor in Government, Goucher College, 1936–1937; Instructor in History, Pennsylvania State College, 1937–1938; Assistant Professor of History and Political Science, University of Nevada, 1940–1943; Associate Professor of History and Political Science, *ibid.*, 1943–.

ERNEST L. INWOOD, Ph.D., Professor and Head of the Department of Economics, Business, and Sociology.

B.A., Nevada, 1927; Ph.D., California, 1935; Instructor in Economics, Nevada, 1930–1931; Instructor in Economics, The College of the City of New York, 1934–1938; Associate Professor of Economics, Business and Sociology, University of Nevada, 1938–1941; Head of the Department, *ibid.*, 1939–; Professor of Economics, Business and Sociology, *ibid.*, 1941–.

RALPH A. IRWIN, Ph.D., Professor of Psychology.

B.S., Kansas State Agricultural College, 1928; M.S., *ibid.*, 1929; Ph.D.,

[1]Absent on leave. [2]Deceased, February, 1945.

Ohio State University, 1938; Instructor in Psychology, University of Nevada, 1929–1931; Assistant Professor of Psychology, *ibid.*, 1931–1937; Associate Professor of Psychology, *ibid.*, 1937–1944; Professor of Psychology, *ibid.*, 1944–.

HELEN JOSLIN, Instructor in Art.

Instructor in Art, University of Nevada, 1939–.

LAWTON B. KLINE,[1] M.A., Assistant Professor of Foreign Languages.

B.A., University of Nevada, 1926; M.A., *ibid.*, 1928; Instructor in Modern Languages, University of Nevada, 1931–1937; Assistant Professor of Foreign Languages, *ibid.*, 1937–.

CHARLTON G. LAIRD,[1] Ph.D., Associate Professor of English.

B.A., University of Iowa, 1925; M.A., *ibid.*, 1927; Ph.D., Stanford University, 1940; Instructor and News Editor, University of Iowa, 1925; Head, Department of Journalism, Drake University, 1926–1928; Instructor, Assistant Professor, Associate Professor, University of Idaho, 1932–1943 (Leave 1938–1939, 1942–1943); Acting Assistant Professor, Purdue University, 1942–1943; Associate Professor of English, University of Nevada, 1943–.

PHILIP A. LEHENBAUER, Ph.D., Professor and Head of the Department of Biology.

A.B., Westminster College, 1907; A.M., Milikin University, 1909; Ph.D., University of Illinois, 1914; Instructor in Botany and Horticulture, University of Nevada, 1914–1916; Assistant Professor of Botany and Horticulture, *ibid.*, 1916–1917; Plant Physiologist, University of Illinois, 1917–1922; Associate Professor of Biology, University of Nevada, 1922–1925; Professor of Biology, *ibid.*, 1925–; Head of Department of Biology, *ibid.*, 1944–.

SIGMUND W. LEIFSON, Ph.D., Professor and Head of the Department of Physics.

B.S., North Dakota State Agricultural College, 1922; Ph.D., University of California, 1925; Instructor in Physics, University of Nevada, 1925–1926; Assistant Professor of Physics, *ibid.*, 1926–1929; Associate Professor of Physics, *ibid.*, 1929–1935; Professor of Physics, *ibid.*, 1935–; Acting Head of the Department, *ibid.*, 1939–1941; Head of the Department, *ibid.*, 1941–.

EDWARD WALTON LOWRANCE,[1] Ph.D., Associate Professor of Biology.

A.B., M.A., University of Utah, 1930, 1932; Ph.D., Stanford, 1937; Instructor in Biology, University of Nevada, 1938–1940; Assistant Professor of Biology, 1940–1943; Associate Professor of Biology, *ibid.*, 1943–.

ALICE B. MARSH, M.S., Assistant Professor of Home Economics; Acting Dean of Women.

B.S., Oregon State College, 1914; Professional degree, *ibid.*, 1933; M.S., Kansas State College, 1934; M.A., Ohio University, 1936; Instructor in Home Economics, University of Nevada, 1936–1937; Assistant Professor of Home Economics, *ibid.*, 1937–, Acting Dean of Women, *ibid.*, 1943–.

JOHN EDWARD MARTIE, M.P.E., Professor and Head of the Department of Physical Education for Men.

B.S., Central Missouri State Teachers College, 1923; M.P.E., Y. M. C. A. College, Springfield, Massachusetts, 1930; Instructor in Physical Education for Men, University of Nevada, 1923–1924; Assistant Professor of Physical Education for Men, *ibid.*, 1924–1926; Acting Head of Department, *ibid.*, 1924–1926; Associate Professor of Physical Education for Men, *ibid.*, 1926–1929; Head of Department and Professor of Physical Education for Men, *ibid.*, 1929–.

[1]Absent on leave.

ANATOLE G. MAZOUR, Ph.D., Associate Professor of History and Political Science.

A.B., University of Nebraska, 1929; M.A., Yale University, 1931; Ph.D., University of California, 1934; Acting Assistant Professor, Miami University, 1936–1937; Assistant Professor of History and Political Science, University of Nevada, 1938–1941; Associate Professor of History and Political Science, *ibid.*, 1941–.

MICHAEL J. MCCORMICK, Staff Sgt. D.E.M.L.; Instructor in Military Science and Tactics.

Instructor in Military Science and Tactics, University of Nevada, 1938–.

CHRISTIAN W. F. MELZ, Ph.D., Assistant Professor of Foreign Languages.

B.A., University of California, 1931; M.A., *ibid.*, 1933; Ph.D., *ibid.*, 1935; Instructor, Colegio Alemán, Santiago, Chile, 1926–1930; Instructor in German, University of California, 1936–1941; Instructor in Foreign Languages, University of Nevada, 1941–1943; Assistant Professor of Foreign Languages, *ibid.*, 1943–.

KATHARINE NORRID MERGEN, B.A., Instructor in Journalism.

B.A., University of Nevada, 1936. Instructor in Journalism, *ibid.*, 1944–.

WILLIAM C. MILLER,[1] M.A., Assistant Professor of English.

B.S., in Speech, University of Southern California, 1931; M.A., *ibid.*, 1932; Instructor in English, University of Nevada, 1934–1937; Visiting Instructor in Speech and Director of Dramatics, University of Southern California, 1939–1940; Assistant Professor of English, University of Nevada, 1937–.

FRANCIS CLARK MURGOTTEN,[1] Ph.D., Professor of Foreign Languages.

A.B., Stanford University, 1901; A.M., *ibid.*, 1908; Ph.D., Columbia University, 1924; Professor of Hebrew, Church Divinity School of the Pacific, 1908–1918; Assistant Professor of Modern Languages, University of Nevada, 1922–1924; Associate Professor of Modern Languages, *ibid.*, 1924–1926; Professor of Foreign Languages, *ibid.*, 1926–.

ROBERT M. OLIVER,[1] M.S., Assistant Professor of Mechanical Engineering.

M.S., University of California, 1940; Assistant Professor of Mechanical Engineering, University of Nevada, 1942–.

STANLEY G. PALMER, M.E., Dean of the College of Engineering; Professor and Head of the School of Electrical Engineering.

B.S., University of Nevada, 1909; M.E., Cornell University, 1910; Instructor in Electrical Engineering, University of Nevada, 1915–1916; Assistant Professor of Electrical Engineering, *ibid.*, 1917–1918; Professor of Electrical Engineering, *ibid.*, 1918–; Acting Dean of the College of Engineering and Acting Head of the School of Mechanical Engineering, *ibid.*, 1941–1942; Dean of the College of Engineering and Head of the School of Electrical Engineering, 1942–.

WALTER S. PALMER, E.M., Professor and Head of the Department of Metallurgy; Director of the State Analytical Laboratory.

B.S., University of Nevada, 1905; E.M., Columbia School of Mines, 1907; Instructor in Mining and Metallurgy, University of Nevada, 1910–1913; Assistant Professor of Mining and Metallurgy, *ibid.*, 1913–1916; Professor and Head of the Department of Metallurgy, *ibid.*, 1917–; Director, State Analytical Laboratory, 1925–.

[1]Absent on leave.

ALDEN J. PLUMLEY, M.A., Assistant Professor of Economics, Business, and Sociology.

B.A., Nevada, 1929; A.M., Brown, 1932; Instructor in Economics, Business and Sociology, University of Nevada, 1931–1935; Assistant Professor of Economics, Business and Sociology, *ibid.*, 1935–.

JESSIE P. POPE, M.A., Associate Professor of Home Economics.

B.S., University of Nebraska, 1913; M.A., Columbia University, 1926; Instructor in Home Economics, University of Nevada, 1918–1927; Assistant Professor of Home Economics, *ibid.*, 1927–1929; Associate Professor of Home Economics, *ibid.*, 1929–.

THEODORE H. POST, M.A., Professor and Head of the Department of Music; Director of Music.

New England Conservatory of Music, Certificate, 1918; A.B., Washburn College, 1922; M.A. in Music, Harvard University, 1926; Assistant Professor of Voice Culture and Singing, Smith College, 1919–1921; Professor of Voice Culture and Singing, Washburn College, 1921–1924; Assistant Professor of Theory, Teacher of Singing, Grinnell College, 1926–1927; Professor and Director of Music, University of Nevada, 1927–.

JOHN PARK PUFFINBARGER,[1] Ed.M., Assistant Professor of Education.

B.S. in Education, Kansas State Teachers College, 1926; Ed.M., University of Oklahoma, 1933; Associate Professor of Education and Principal of Training School, State Teachers College, Durant, Oklahoma, 1933–1935; Assistant Professor of Education, University of Nevada, 1937–.

FRANK RICHARDSON, Ph.D., Assistant Professor of Biology.

B.A., Pomona College, 1934; Ph.D., University of California, 1939; Instructor in Biology, University of Nevada, 1941–1943; Assistant Professor of Biology, *ibid.*, 1943–.

MARIO B. RODRIGUEZ, M.A., Acting Assistant Professor of Foreign Languages.

B.A., University of Oklahoma, 1928; M.A., Columbia University, 1939; Assistant Professor of English, University of Puerto Rico, 1928–1936; Instructor in Romance Languages, Cornell University, 1941–1943; Acting Assistant Professor of Foreign Languages, University of Nevada, 1945–.

EDITH M. RUEBSAM, M.A., Associate Professor of Education.

B.A., Columbia, 1921; M.A., California, 1934; Demonstration Teacher of Kindergarten and Teacher Training, San Jose (California) State Teachers College, 1915–1924; Assistant Professor of Education, University of Nevada, 1925–1935; Associate Professor of Education, *ibid.*, 1935–.

RUTH IRENE RUSSELL,[1] M.S., Instructor in Physical Education for Women.

B. S., Colorado, 1937; M.S., Oregon, 1939; Instructor in Physical Education for Women, University of Nevada, 1939–.

JACK TORNEY RYAN, Superintendent of Shops and Supervisor of Shop Instruction.

Instructor in Shop Practice and Superintendent of Shops, University of Nevada, 1931–1944; Superintendent of Shops and Supervisor of Shop Instruction, *ibid.*, 1944–.

[1]Absent on leave.

ELSA SAMETH, M.S., Professor and Head of the Department of Physical Education for Women.

A.B., Cornell University, 1911; B.S., Columbia University, 1911; M.S., University of Wisconsin, 1922; Instructor in Physical Education for Women, University of Nevada, 1913–1915; Assistant Professor of Physical Education for Women, *ibid.*, 1915–1918; Associate Professor, *ibid.*, 1918–1930; Professor of Physical Education for Women, *ibid.*, 1930–.

IRVING JESSE SANDORF,[1] M.S., Professor of Electrical Engineering.

B.S., in E.E., University of Michigan, 1923; M.S., University of Nevada, 1931; Instructor in Electrical Engineering, University of Nevada, 1928–1931; Assistant Professor of Electrical Engineering, *ibid.*, 1931–1935; Associate Professor of Electrical Engineering, *ibid.*, 1935–1944; Professor of Electrical Engineering, *ibid.*, 1944–.

CHESTER M. SCRANTON, M.A., Associate Professor of Physical Education for Men.

B.A., University of Nevada, 1924; M.A., *ibid.*, 1928; Instructor in Physical Education for Men, University of Nevada, 1928–1929; Assistant Professor of Physical Education for Men, *ibid.*, 1929–1936; Acting Head of the Department, *ibid.*, 1929–1930; Associate Professor of Physical Education for Men, 1936–.

GEORGE WALLACE SEARS, Ph.D., Professor and Head of the Department of Chemistry.

B.S., Drury College, 1908; M.S., University of Illinois, 1911; Ph.D., *ibid.*, 1914; Instructor in Chemistry, University of Illinois, 1914–1917; Instructor in Chemistry, University of Nevada, 1917–1918; Associate Professor of Chemistry, *ibid.*, 1918–1924; Professor of Chemistry, *ibid.*, 1924–; Head of the Department of Chemistry, *ibid.*, 1926–.

CLAUDE CARSON SMITH,[1] M.A., Associate Professor of History and Political Science.

A.B., Carson-Newman College, 1921; M.A., University of Oklahoma, 1924; Instructor in Social Science, Kansas City University, 1927–1929; Instructor in History and Political Science, University of Nevada, 1929–1930; Assistant Professor of History and Political Science, *ibid.*, 1930–1935; Associate Professor of History and Political Science, *ibid.*, 1935–.

WILLIAM I. SMYTH, E.M., Associate Professor of Metallurgy and Mining; Analyst in the State Mining Laboratory.

B.S., University of Nevada, 1914; E.M., *ibid.*, 1927; Instructor in Metallurgy and Analyst in the State Mining Laboratory, University of Nevada, 1925–1928; Assistant Professor of Metallurgy, *ibid.*, 1928–1933; Associate Professor of Metallurgy and Mining, *ibid.*, 1933–.

EDWARD G. SUTHERLAND, A.B., Associate Professor of Economics, Business, and Sociology.

A.B., University of Utah, 1923; Instructor in Economics, Business and Sociology, University of Nevada, 1924–1925; Assistant Professor of Economics, Business and Sociology, *ibid.*, 1925–1926; Associate Professor of Economics, Business and Sociology, *ibid.*, 1926–.

MILDRED SWIFT, M.S., Professor and Head of the Department of Home Economics.

B.S., Russell Sage College, 1927; M.S., Cornell University, 1930; Director of Home Economics, Briar Cliff Junior College, 1932; Director of Home Economics, Furman University, 1933–1935; Director of Home Economics, University of Akron, 1936–1942; Professor and Acting Head

[1]Absent on leave.

of the Department of Home Economics, University of Nevada, 1942–1943; Head of the Department of Home Economics, *ibid.*, 1943–.

REUBEN CYRIL THOMPSON,[1] M.A., LL.D., Professor and Head of the Department of Philosophy; Dean of Men.

B.A., McMinnville College, 1899; B.A., Harvard University, 1901; M.A., *ibid.*, 1902; LL.D., Linfield College, 1938; Instructor in Latin and Greek, University of Nevada, 1908–1909; Assistant Professor of Latin and Greek, *ibid.*, 1909–1910; Associate Professor of Latin and Greek, *ibid.*, 1910–1914; Professor of Latin and Greek, *ibid.*, 1914–1915; Professor of Philosophy, *ibid.*, 1915–; Dean of Men, *ibid.*, 1932–.

LOUIS TITUS, M.S., Associate Professor of Agronomy.

B.S., University of Nevada, 1924; M.S., Cornell University, 1931; Instructor, Smith-Hughes Agriculture and Farm Mechanics in State of California, 1925–1930; Assistant in charge of Farm Accounting, Agricultural Experiment Station, University of Nevada, 1933–1939; Associate Professor of Agronomy, *ibid.*, 1939–.

FRED W. TRANER, Ph.D., Dean of the School of Education; Professor of Education and Head of the Department of Secondary Education.

A.B., Beloit College, 1908; M.A., University of California, 1920; Ph.D., *ibid.*, 1930; Instructor in Education, University of Nevada, 1915–1918; Assistant Professor of Education, *ibid.*, 1918–1920; Associate Professor of Education, *ibid.*, 1920–1924; Professor of Education, *ibid.*, 1924–; Head of Department of Secondary Education, *ibid.*, 1931–; Dean of the School of Education, 1937–.

JAMES R. VAN DYKE, M.E., Professor and Acting Head of the School of Mechanical Engineering.

B.S., Pennsylvania State College, 1918; M.E., *ibid.*, 1922; Instructor in Engineering Mathematics, University of Colorado, 1922–1924; Head of Engineering and Industrial Arts Department, New Mexico Normal University, 1924–1928; Assistant Professor of Manual Arts and Mathematics, Nebraska State Teachers College, 1928–1929; Assistant Professor of Mechanical Engineering, University of Minnesota, 1929–1930; Assistant Professor of Mechanical Engineering, North Dakota Agricultural College, 1930–1934; Associate Professor, Head of Engineering, Eastern New Mexico College, 1937–1941; Special Professor in charge of Secondary C. P. T. program, Texas Technological College, 1941; Associate Professor of Mechanical Engineering, University of Nevada, 1941–1944; Acting Head of the School of Mechanical Engineering, *ibid.*, 1942–; Professor of Mechanical Engineering, *ibid.*, 1944–.

WARREN O. WAGNER,[1] M.S., Associate Professor of Civil Engineering.

B.S., Washington State, 1934; M.S., Michigan, 1936; Assistant Professor of Civil Engineering, University of Nevada, 1939–1944; Associate Professor of Civil Engineering, *ibid.*, 1944–.

MILAN J. WEBSTER, Ph.D., Professor of Economics, Business, and Sociology.

B.E., Nebraska Normal College, 1908; B.A., University of Nevada, 1929; M.A., *ibid.*, 1931; Ph.D., University of Colorado, 1934; Instructor in Education, Nebraska Normal College, 1908–1909; Instructor in Economics, Business, and Sociology, University of Nevada, 1929–1931; Assistant Professor of Economics, Business, and Sociology, *ibid.*, 1931–1935; Associate Professor of Economics, Business, and Sociology, *ibid.*, 1935–1944; Professor of Economics, Business, and Sociology, *ibid.*, 1944–.

HARRY EUGENE WHEELER,[1] Ph.D., Associate Professor of Geology.

B.S., University of Oregon, 1930; M.A., Stanford University, 1932;

[1]Absent on leave.

Ph.D., *ibid.*, 1935; Instructor in Geology, University of Nevada, 1935–1936; Assistant Professor of Geology, *ibid.*, 1936–1942; Associate Professor of Geology, *ibid.*, 1942–.

ALBERT G. WIEDERHOLD, Ph.D., Assistant Professor of Philosophy and Psychology.

M.A., Boston University, 1936; B.Th., *ibid.*, 1937; Ph.D., Stanford University, 1940; Instructor in Philosophy and in Psychology, University of Nevada, 1941–1943; Assistant Professor of Philosophy and Psychology, *ibid.*, 1943–.

LORING RIDER WILLIAMS, Ph.D., Associate Professor of Chemistry.

B.S., West Virginia Wesleyan, 1927; M.S.. West Virginia, 1932; Ph.D., Illinois, 1939; Instructor, Alderson-Broaddus College, 1932–1934; Instructor in Chemistry, University of Nevada, 1939–1941; Assistant Professor of Chemistry, *ibid.*, 1941–1944; Associate Professor of Chemistry, *ibid.*, 1944–.

FREDERICK WESTON WILSON, M.S., Acting Dean of the College of Agriculture; Professor and Head of the Department of Animal Husbandry.

B.S., Kansas State Agricultural College, 1905; M.S., University of Illinois, 1913; Assistant Professor of Animal Husbandry, in charge of Farmers' Institute Work, University of Arizona Agricultural Experiment Station, 1905–1906; Associate Professor of Animal Husbandry, *ibid.*, 1908–1912; Professor of Animal Husbandry, *ibid.*, 1912–1913; Professor of Animal Husbandry, University of Arizona, 1913–1914; Professor and Head of the Department of Animal Husbandry, University of Nevada, 1914–; Acting Dean of the College of Agriculture, *ibid.*, 1943–.

ELDON WITTWER,[1] Ph.D., Professor and Head of the Department of Agricultural Economics.

B.S., Nevada, 1922; Ph.D., Cornell, 1930; Instructor in Agricultural Economics, Cornell University, 1926–1930; Associate Professor and Head of the Department of Agricultural Economics, University of Nevada, 1938–1939; Professor of Agricultural Economics, *ibid.*, 1939–.

FREDRICK WOOD, Ph.D., Dean of the College of Arts and Science; Professor and Head of the Department of Mathematics.

A.B., University of Wisconsin, 1915; M.A., *ibid.*, 1916; Ph.D., *ibid.*, 1923; Instructor in Mathematics, University of Wisconsin, 1915–1917, 1919–1923; Head of Department of Mathematics, Lake Forest College, 1924–1925; Georgia Wesleyan College, 1925–1928; Hamline University (Minnesota), 1928–1932; Professor and Head of the Department of Mathematics, University of Nevada, 1932–; Dean of the College of Arts and Science, *ibid.*, 1938–.

JAMES REED YOUNG, Ph.D., Professor and Head of the Department of Psychology.

B.L., Berea University, 1907; A.B., Leland Stanford Junior University, 1909; A.M., *ibid.*, 1910; Ph.D., University of Chicago, 1916; Instructor in History of Education, University of Chicago, 1913–1915; Associate Professor of Education, University of Nevada, 1915–1917; Professor of Education, *ibid.*, 1917–1920; Professor and Head of the Department of Phychology, *ibid.*, 1920–.

Assistants, Fellows, and Lecturers

VIRGINIA CARROLL, M.A., Assistant in Home Economics.

B.S., Columbia University, 1927; M.A., *ibid.*, 1933; Assistant in Home Economics, University of Nevada, 1943–.

[1]Absent on leave.

FRED L. HUMPHREY, B.S., Assistant in Geology.

B.S. in Mining Engineering, University of Nevada, 1943; Assistant in Geology, *ibid.*, 1945–.

MILDRED KLAUS, B.A., Lecturer in Secondary Education.

B.A., University of Nevada, 1926; Lecturer in Secondary Education, *ibid.*, 1941–.

PENELOPE RICE, Ph.D., Assistant in Home Economics.

B.S., Kansas State College, 1924; Ph.D., University of California, 1925; Assistant in Home Economics, University of Nevada, 1943–.

HARRIET BEACH SPENCER, B.A., Assistant in English.

B. A., University of Illinois, 1922; Assistant in English, University of Nevada, 1944–.

MARGARET JENSEN WILLIAMS, M.A., Assistant in Mathematics.

B.S., University of Nevada, 1938; M.A., *ibid.*, 1940; Assistant in Mathematics, *ibid.*, 1941–1943; 1944–.

UNIVERSITY STANDING COMMITTEES

The first-named member of each Committee is its Chairman, to whom all matters of business should be referred.

Administrative Council—
WOOD, BROWN, CARPENTER, HILL, LEHENBAUER, MARSH, S. PALMER, RHODES, SEARS, R. THOMPSON, TRANER, WILSON.

Admission, Entrance Examinations, and Advanced Standing—
S. PALMER, HICKS, WOOD, DEMING.

Assemblies and Lectures—
HUTCHESON, HUME, WIEDERHOLD.

Athletics—
WILSON, RHODES, GRAFTON.

Campus Calendar for Student Activities—
R. THOMPSON, MARSH, POST, GRIFFIN, MILLER, SAMETH, MARTIE.

Campus Employment—
R. THOMPSON, MARSH, GRIFFIN.

Ceremonials—
WOOD, GRIFFIN, HIGGINBOTHAM, POST, S. PALMER, FIELD, BROWN, A. S. U. N. President.

Chief Marshal of Formal Assemblies—
FIELD.

Graduate—
TRANER, LEIFSON, SEARS, MAZOUR, WITTWER.

Health—
LOWRANCE, MARTIE, MARSH, SAMETH, HOWARD, GRIFFIN, FIELD, A. S. U. N. President, A. W. S. President.

Library—
CHAPPELLE, W. PALMER, SWIFT, WEBSTER, WILLIAMS, HICKS, HUME, HILL.

Orientation—
IRWIN, MARSH, BROWN, BIXBY, DEMING, GRIFFIN, A. S. U. N. representatives.

Publications—
WOOD, ADAMS, BILLINGS, CARPENTER, CREEL, DOTEN, GORMAN, HIGGINBOTHAM, HUME, S. PALMER.

Public Relations—
HIGGINBOTHAM, WITTWER, BROWN, MAZOUR, POST.

Research—
BILLINGS, BEESLEY, IRWIN, HICKS, SEARS.

Rhodes Scholarship Nominating Committee—
LEIFSON, R. THOMPSON, WEBSTER.

Schedules—
LEHENBAUER, VAN DYKE, HICKS, WILLIAMS.

Scholarships and Prizes—
BROWN, CARPENTER, SEARS, MARSH.

Student Affairs—
R. THOMPSON, DEMING, POPE, MARSH, LOWRY, AIKEN, GRIFFIN, A. S. U. N. President, Sagebrush Editor.

Vocational Guidance—
IRWIN, BILLINGS, VAN DYKE, MARSH.

War History Committee—
HIGGINBOTHAM, WOOD, GRIFFIN, FIELD, CARPENTER, S. PALMER, SEARS, LEIFSON, CHADWICK, BROWN, A. S. U. U. President.

LOCATION AND CLIMATE

The University of Nevada is situated in the beautiful Truckee River Valley on a low plateau at the northern edge of Reno. Encircled by lofty mountain ranges, the campus commands a magnificent view in all directions. To the west, tower the peaks of the Sierra Nevada, crowned by Mt. Rose, from whose 10,800-foot crest the snow never disappears. In other directions the desert mountains stretch away into the distance, in varying tones of color that are a never-failing source of calm beauty.

The campus itself, consisting of more than eighty-six acres, harmonizes with its comparable setting. The central feature is a turfed quadrangle, at the northern end of which stands the famous statue of John W. Mackay, Comstock pioneer, wrought in bronze by Gutzon Borglum. A few steps westward the quiet waters of Manzanita Lake mirror the red-stone buildings and the green lawns, dotted with an interesting variety of trees, shrubs, and flowers. To stand upon Manzanita's wooden bridge toward the end of day, while twilight deepens and the clear stars unveil, is to experience a moment intense with tradition and beauty. During autumn the placid surface of the lake ruffles to the presence of wild Canadian honkers, pausing for rest on their southward migration.

The elevation of Reno is 4,500 feet. The air is clean and stimulating, and temperatures are almost uniformly comfortable. For more than three hundred days of the year the sun shines from an astonishingly blue sky; the nights are invariably cool. One would have difficulty in selecting a lovelier and more healthful environment.

The city and university are rendered accessible by three railroads: the Southern Pacific, the main line between San Francisco and Ogden, Utah; the Virginia & Truckee Railway, a short line connecting Reno and Carson City; and the Western Pacific, a transcontinental trunk line. Reno is also on the main transcontinental route of the Greyhound and Burlington bus lines. In addition, the Victory Highway passes through Reno from east to west, while other paved highways come from north and south. Finally, the main route of the United Air Lines joins Reno with all important points in the country.

These various transportation facilities serve a substantially built and steadily growing city of more than 25,000. University students at once feel the wholesome hospitality of Reno. Its friendly churches and various actively maintained cultural features, such as the Reno Little Theatre and the Nevada Community Concert Association, keep the bond of common enterprise between university and city gratifyingly strong.

THE HISTORY AND DEVELOPMENT OF THE UNIVERSITY

1862 *The Morrill Land Grant.* By the terms of this grant the State of Nevada received a donation of 90,000 acres of land, in 1866, "for the endowment, support and maintenance of at least one college whose leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts." The fund derived from the sale of this land is known as the "90,000-Acre-Grant Fund," and amounts to $128,010.81.

1864 *Foundation.* The Constitution of the State declares that the "Legislature shall encourage, by all suitable means, the promotion of intellectual, literary, scientific, mining, mechanical, agricultural, and moral improvement," and shall provide for "the establishment of a State University which shall embrace departments for agriculture, mechanic arts and mining." A further provision in the Constitution relates to the Normal School.

1866 By a special Act of Congress there were seventy-two sections in the State set aside for the purpose of endowment of the universities in the State. The fund derived from the sale of this land is known as the "University Irreducible Fund" and now amounts to $60,000.13.

1873 *Location.* The University was first placed at Elko by an Act of the Legislature approved March 7.

1874 University work began at Elko.

1885 By an Act of the Legislature approved March 7, the University of Nevada was moved to Reno.

1886 The University was formally reopened March 31.

1887 The administration of President LeRoy D. Brown began. Student enrollment in 1887–1888 was 50. The faculty consisted of two members, President Brown and Professor Hannah K. Clapp. During the first year two additional members were added, and by the end of the second year the faculty numbered seven.

During the first year five departments were recognized, although not fully organized. They were the Liberal Arts, the Mining, the Normal, the Agricultural, and the Business Schools.

1888 The School of Mines was organized, with Robert D. Jackson, Ph.B., as Director. The Normal School was organized, with Miss Kate N. T. Tupper as the head. The Military Department was organized, with Lieutenant Arthur C. Ducat, Jr., as commandant.

1889 *The Hatch Act.* The Agricultural Experiment Station was organized, President Brown acting as Director. By an Act of Congress passed March 2, 1887, known as the Hatch Act, which was accepted by this State, there were established, in connection with the colleges founded upon the Congressional Act of 1862, agricultural experiment stations, "to aid in the acquiring and diffusion among the people of the United States of useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science." The Hatch Act of 1887 appropriated $15,000 annually for this support.

The State Normal School graduated its first class.

The Administration of President Brown ended December 31.

1890 The Administration of President Stephen A. Jones began on January 6.

The second Morrill Act of Congress made further appropriations for endowments of institutions established under the Act of 1862. (Under this endowment the University is now receiving $25,000 per year.)

1891 The School of Liberal Arts graduated its first class.

1892 The Schools of Mines and Agriculture graduated their first classes.

1894 The Administration of President Jones ended on June 30; that of President Joseph Edward Stubbs began on July 1.

1895 The State Analytical Laboratory was organized under provisions of an Act of the Nevada Legislature of March 16, 1895.

1898 The School of Civil Engineering graduated its first class.

1899 Washoe County presented to the University a sixty-acre farm valued at $12,000, to be used in connection with the Agricultural Experiment Station.

1901 The School of Mechanical Engineering graduated its first class.

1904 The University celebrated the thirtieth anniversary of its establishment.

1906 *The Adams Act.* Congress, under Act dated March 16, known as the Adams Act, provided for additional appropriation for the support of the Agricultural Experiment Station, limiting the money's use to necessary expenses of original research and experimental work in agriculture. This grant amounts to $15,000 per year.

1907 *The Nelson Fund.* An Act of Congress of March 4, carried with it an appropriation for the further support of the universities established under the Morrill Act of 1862. The present appropriation under this fund amounts to $25,000 per year.

Mrs. John W. Mackay and Mr. Clarence H. Mackay began a donation to the University which founded the Mackay School of Mines, the Mackay Athletic Field, and the Mackay Training Quarters, and contributed $25,000 toward the beautifying of

the Campus. They also presented a statue in bronze by Gutzon Borglum of John W. Mackay, one of the pioneers of the Comstock.

1909 State Hygienic Laboratory was organized under provisions of the Act of the Nevada Legislature approved March 25.

1910 The laboratory for Pure Foods and Drugs and Weights and Measures was established under provisions of Act of the Nevada Legislature of 1909, effective from January 1, 1910.

1911 Twenty-fifth anniversary of the establishment of the University at Reno celebrated by the Silver Jubilee and the homecoming of former students and graduates.

1912 Mrs. John W. Mackay and Mr. Clarence H. Mackay presented to the University Board of Regents $150,000 as an endowment for the Mackay School of Mines.

1914 The administration of President Stubbs closed with his death on May 27; that of President Archer B. Hendrick began on September 14.

By an Act of Congress known as the "Smith-Lever Act," there was established a fund for the purpose of agricultural extension. The fund, amounting to $10,000 the first year, increased each year until it amounted in 1923, and thereafter, to $15,699 per year.

1915 State Veterinary Control Service was organized under provisions of an Act of the Nevada Legislature, approved March 11, 1915.

The first graduates in Electrical Engineering.

1917 The University Farm of 213 acres was purchased.

May 1, the administration of President Hendrick ended. September 1, the administration of President Walter Ernest Clark began.

1918 First detachment of 103 soldier students was trained from June 15 to August 13; second detachment of 103 soldier students From August 15 to October 12; Collegiate Section A of 79 soldier students from October 1 to December 21; and Vocational Section B of 212 soldier students from October 15 to December 21.

1920 The School of Education was organized.

The Rare and Precious Metals Federal Mining Experiment Station was assigned to the University July 8, by the Federal Bureau of Mines.

A Federal Radio Station was established on the University campus in September. This station and the Government wireless laboratory were both housed in the smaller of the two barracks buildings until 1924 when the radio station was transferred to the Federal Aviation Field south of Reno, now the Municipal Airport.

The University of Nevada was placed on the approved list of the Association of American Universities in November.

1921 An Engineering Experiment Station was established.

1924 The University celebrated its semicentennial in May with a homecoming of former students and graduates.

The Robert Lardin Fulton Lecture Foundation was established.

1925 Mr. Clarence H. Mackay began his additional gift of $18,000 per year, for five years, to the Mackay School of Mines.

The Purnell Act. An Act of Congress passed in February, under which the income of the University's Agricultural Experiment Station was increased to $50,000 for the year beginning July 1925, and was further increased $10,000 per year until the annual income reached $90,000 in 1929.

1926 Mr. William A. Clark, Jr., began the construction of a library building in memory of his wife, Alice McManus Clark, a native of Virginia City.

Mr. Clarence H. Mackay gave the University $100,000 to enlarge the Mackay School of Mines Building and to perfect its equipment.

1927 The Memorial Library, completely furnished, was presented to the University by Mr. William Andrews Clark, Jr., October 21. This building, including the gift furnishings, cost approximately $250,000.

1928 Mr. Clarence H. Mackay and his mother gave the University seven beautifully bound volumes of the *Virginia City Enterprise*—a nearly complete file of this rare newspaper for the years 1866 to 1872, inclusive.

Mr. Clarence H. Mackay gave $6,500 to aid in collecting historical Comstock Lode material for Mackay School of Mines Museum.

Mr. George Wingfield financed the construction of a retaining wall back of the Engineering Buildings.

Mr. Thomas F. Cole financed important improvements on the Lincoln Hall Men's Dormitory.

The Capper-Ketcham Act. An Act of Congress was passed in May, under which the income of the University's Agricultural Extension Department was increased $20,000 per year beginning with July.

1929 Construction begun on Mackay Science Hall. This $415,000 building, gift of Mr. Clarence H. Mackay, houses the Departments of Chemistry, Physics, and Mathematics.

Under Act of March 29, the Nevada Legislature established a State Bureau of Mines, putting control under the Board of Regents of the University.

Mr. Clarence H. Mackay gave $27,500 to enlarge the Stadium and refurnish the Training Quarters, presented the Walther Library of Desert Geology to the Mackay School of Mines, and arranged to continue indefinitely the $18,000 a year to this School.

1930 Mackay Science Hall was dedicated and presented to the University by Mr. Clarence H. Mackay, October 24.

1931 Under Act of March 25, the Nevada Legislature transferred to the University of Nevada the land and buildings formerly used by the Nevada Historical Society.

1932 Mr. Clarence H. Mackay gave $150 to purchase a file of the Virginia Evening Bulletin covering the entire period of publication from July 6, 1863, to May 16, 1864. So far as is known this is the only complete file of this paper in existence.

1933–1940 Beginning with the summer of 1933 and continuing through 1940, repair and improvement projects were financed by the various Federal Government Relief Administration Funds. Many campus buildings were repainted, roads were improved, retaining walls erected, the spur railway relaid over a better campus site, the Mackay Field improved, an addition made to the greenhouse, several laboratories and President's house rewired, ditch section concreted, sewer mains renewed, and the campus, plant, and grounds generally improved.

1934 Through the Federal Public Arts Project Committee for Nevada the University was presented with twenty-four charcoal drawings of Nevada Indian subjects by Robert Caples. These framed drawings are in the University Library.

1935 The Carnegie Corporation presented to the University a college music set consisting of a Capehart phonograph, 824 classified records, 251 scores, and 129 volumes on music with cabinets for the records and the scores. This set is valued at $2,500.

1935 The Bankhead-Jones Act, passed in June, authorized increased federal funds for resident teaching, agricultural extension, and agricultural experimentation to all Land-Grant Colleges.

The Regents, in June, established the S. Frank Hunt Foundation with gifts of valuable mining stock, cash and automobiles made by Mr. S. Frank Hunt, discoverer of the Rio Tinto mine at Mountain City, Nevada. This foundation, in accord with the desire of the donor will cover the expenses of field trips for geologic study and for mineral prospecting by supervised groups of students of the Mackay School of Mines. In 1937 and 1939 Mr. Hunt made large additional gifts to the Hunt Foundation.

1936 Mr. Clarence H. Mackay purchased from the Evans Estate between twenty-six and twenty-seven acres of land adjoining the campus on the north, increasing the campus acreage nearly fifty percent.

1937 The Schools of Mining and Electrical Engineering were approved by the Engineers' Council for Professional Development.

1938 The University was approved in all departments by the Northwest Association of Secondary and Higher Schools.

The administration of President Clark ended September 30, 1938. The administration of Acting President Leon Wilson Hartman began October 1.

Mr. Clarence H. Mackay died November 12, 1938.

Mrs. Ludovica D. Graham of Reno presented to the University, through the Department of Classics, the Cardinal Rampolla collection of Italian and other marbles and paid for its installation in the exhibit room of the University Library.

The School of Mechanical Engineering was approved by the Engineers' Council for Professional Development.

1938–1941 Gifts to the University totaling approximately $100,000 in Standard Brands stocks were made by Major Max C. Fleischmann. These gifts are in the form of scholarships.

1939 By an Act of the Legislature, the State Hygienic Laboratory was removed from University control.

The administration of President Hartman began September 23, with formal inauguration December 15.

1941 Construction of a new Gymnasium was authorized by the State Legislature at a cost not to exceed $300,000, to be paid for by a State bond issue.

Conversion of the University heating plant from a hot water to a steam system was authorized by the State Legislature at a cost not to exceed $75,000, to be paid for by a State bond issue.

Many campus improvements were completed over a two-year period through the cooperation of the Work Projects Administration, at an approximate cost to the W. P. A. of $100,000. These projects included the new athletic field, a new stone retaining wall, excavation for a basement under the old Gymnasium, and grading of various sections of the campus.

The fiftieth anniversary of the graduation of the University's first four-year class was celebrated at Commencement.

1942 The new Engineering Building was completed. Construction was authorized by the State Legislature in 1939 at a cost not to exceed $175,000, to be paid for by a State bond issue.

Bequests to the University were received as follows: Mrs. Luella Rhodes Garvey, approximately $100,000; Mrs. Jewett W. Adams, approximately $50,000; Mrs. Alice Dimmett, one-fourth interest in the Clay Peters Building in Reno; Mrs. Josephine Beam, an unspecified sum, largely in Philippine Islands mining property, the status of which remains in doubt during the war.

An addition to the University infirmary was completed. Cost of the improvements was approximately $9,000.

A special Summer Session of ten weeks, in addition to the regular six-week session, was undertaken as a major item in the University's war effort.

Joseph D. Layman deeded the house and lot at 1027 Sierra Street, Reno, to the University. From the income received for the rental of this property, $200 per year has been assigned to fulfilling the terms of the Carrie Brooks Layman Scholarships established by Mr. Layman in the Spring of 1929.

1943 In March and April two contingents of the Army Air Forces arrived at the University for pre-flight training.

The residue of the Otto Hartung estate was transferred to the University to establish the Royal D. Hartung Industrial Education Fund in accordance with the provisions of the will of Otto Hartung, deceased.

The administration of President Hartman closed with his death on August 27. The administration of Charles Henry Gorman began September 2 as Acting President.

Army Specialized Training Unit No. 3996 began training in September.

Gifts from the estate of Dr. W. H. Hood, $69.98 as an addition to the General endowment; from Senator J. G. Scrugham, *The War of the Rebellion,* official history of the Civil War; from Paul L. Hartman and his friends, $226.60 to purchase physics books for the Library as a memorial to the late President Leon W. Hartman.

1944 The Engineering Experiment Station, discontinued in 1939, was reestablished in January with Dean S. G. Palmer Acting Director.

The administration of Acting President Charles Henry Gorman ended July 1. The administration of John Ohleyer Moseley began on July 1, with formal inauguration on October 12.

Gifts: Major Max C. Fleischmann gave the University his 258-acre farm, formerly the Ladino Dairy. The property contains modern buildings, farm equipment and machinery, and a herd of dairy cattle and other livestock.

President John O. Moseley gave the University the libraries of his father and grandfather, John Watkins Moseley, Jr., and John Watkins Moseley, Sr.

1945 Mrs. C. W. West, wife of the late Dr. C. W. West, gave the University his medical library consisting of more than 250 volumes, chiefly on surgery.

THE UNIVERSITY ORGANIZATION
COLLEGES, SCHOOLS, AND PUBLIC SERVICE DEPARTMENTS

THE COLLEGE OF ARTS AND SCIENCE

The College of Arts and Science offers four-year courses leading to the degree of Bachelor of Arts. (Students who have majored in mathematics or science may, upon application to the Dean, receive the degree of Bachelor of Science.)

Work in the following subjects is offered in the College of Arts and Science: art, astronomy, biology, botany, business, chemistry, dramatics, economics, education, English, foreign languages, journalism, geology, history, mathematics, military science, music, philosophy, physical education, physics, political science, psychology, speech, sociology, and zoology.

SCHOOL OF EDUCATION

The responsibility for all teacher-training work in the State of Nevada for elementary and secondary schools rests upon the School of Education of the University of Nevada.

This school is a division of the College of Arts and Science, but has its own Dean and direct affiliations with the Colleges of Agriculture and Engineering. It offers to prospective secondary-school teachers a liberal and professional four-year course of study, leading to the bachelor's degree and a teacher's high school diploma, giving title to a teacher's high-school certificate. It also offers four-year courses which qualify one for a first-grade elementary certificate and offers special training courses for future school principals and superintendents.

For the student who cannot remain continuously in the University for four years the School of Education offers a two-year course which entitles the student to be recommended for a first-grade elementary certificate. A one-year course is offered which entitles the student to be recommended for a second-grade certificate.

During the Summer Session and during the regular term graduate courses are provided, leading to the Master of Arts Degree in Education.

THE COLLEGE OF ENGINEERING

The College of Engineering includes the Schools of Mechanical, Civil, and Electrical Engineering and the Mackay School of Mines.

The Mackay School of Mines offers two four-year courses, one in general mining and one in metallurgy. The first prepares the student for general practice in mining, metallurgy, and geology, and leads to the degree of Bachelor of Science in Mining Engineering. The second is a more specialized course in metallurgy, leading to the degree of Bachelor of Science in Metallurgical Engineering. With sufficient substitution of geology subjects in the general mining course, the degree of Bachelor of Science in Geological Engineering may be obtained.

The school is provided with the equipment necessary to teach efficiently the courses in mining, metallurgy and geology, which form

the basis of a mining education. The professional degree of Engineer of Mines is conferred upon graduates who have held responsible mining positions for at least five years and who present satisfactory theses.

The Schools of Mechanical, of Electrical, and of Civil Engineering each offer four-year courses of instruction leading, respectively, to the degrees of Bachelor of Science in Mechanical, in Electrical, and in Civil Engineering. The professional degree of Mechanical, Civil, or Electrical Engineer may be conferred upon a graduate of this or another university under the conditions stated under the heading "Engineering Degrees." (See index.)

The classrooms and laboratories for Mechanical and Civil Engineering are in the new Engineering Building. Those for Electrical Engineering are in the Electrical Building, as is also the Office of the Dean of Engineering. All of these laboratories are provided with modern equipment for teaching the courses as described in the catalogue.

THE COLLEGE OF AGRICULTURE

The College of Agriculture curricula lead to the degree of Bachelor of Science in Agriculture with majors in Agricultural Economics, Preforestry, Vocational Agriculture, Range Management, Agronomy, Botany, General Agriculture, and Animal Husbandry. These are four-year courses, including, in addition to the prescribed agricultural subjects, such subjects in the College of Arts and Science as are necessary to establish in the student's mind a thorough knowledge of agricultural problems.

The School of Home Economics is a part of the College of Agriculture.

AGRICULTURAL EXPERIMENT STATION

The Agricultural Experiment Station receives its Federal support from the Hatch Fund (1887), from the Adams Fund(1906), from the Purnell fund (1925), and from the Bankhead-Jones Act (1935), These funds are restricted by law to the scientific investigation of agricultural problems, including the problems arising from soil conditions, the duty of water, animal diseases, poisonous range plants, economical feeding of livestock, insect pests, plant diseases, and other problems of agricultural economics and practice.

AGRICULTURAL EXTENSION DIVISION

Agricultural Extension, provided for by the Federal Smith-Lever Extension Act, the Capper-Ketcham Act, and the Bankhead-Jones Act is under the immediate charge of a director.

Its specific purpose is "the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise." Further information concerning the work under this division, staff, etc., is given in this catalogue.

PUBLIC SERVICE DEPARTMENTS

The Legislature of the State has placed the following four public service departments under the direction of the President and Board of Regents of the University:

STATE ANALYTICAL LABORATORY

The State Analytical Laboratory, which was organized under an Act of the Legislature approved May 16, 1895, provides a means whereby citizens of Nevada may have ores and minerals, taken from within the boundaries of the State, assayed and analyzed free of charge.

FOOD AND DRUGS CONTROL AND WEIGHTS AND MEASURES

The Act of the Legislature in 1909 which established the Food and Drugs Control and Weights and Measures Department, provides that all rules, regulations, definitions, and decisions proclaimed by the Secretary of Agriculture for the enforcement of the national law shall be adopted by this department in the enforcement of the State law. The Department of Weights and Measures is also charged with the enforcement of the Petroleum Products Inspection Act. The laboratory is located at the corner of Fifth and Sierra Streets, Reno.

STATE VETERINARY CONTROL SERVICE

The State Veterinary Control Service was organized in 1915 to provide facilities for the diagnosis of communicable diseases of domestic animals, for research into the nature, cause, and methods of controlling the same, including the preparation and distribution of special sera and vaccines which cannot be purchased on the open market.

STATE BUREAU OF MINES

The State Bureau of Mines was created by the Thirty-fourth Session of the Legislature (approved March 29, 1929) to provide facilities for cooperation with the mineral industry of the State and to advance the development of the State's mineral deposits.

UNITED STATES MINES EXPERIMENT STATION

In 1920 the Rare and Precious Metals Station of the United States Bureau of Mines was moved to Nevada. From State funds a two-story and basement brick building, including offices, laboratories and library, was built on the University campus to house this Federal Mines Experiment Station. All experimentation for the whole United States in the fields of the rare and the precious metals is done at this Nevada Station. The Federal funds pay all salaries and equipment costs and the State, through the University of Nevada, bears costs of all needed heat, power and light. A working agreement between the United States Bureau of Mines and the University of Nevada provides for use of University laboratories and libraries by staff members of the Mines Station and for use of the station laboratories and library by staff members or advanced students of the University.

THE SUMMER SESSIONS

The Summer Sessions are organized to benefit both graduate and undergraduate students wishing to advance themselves toward degrees or to study in fields of particular interest. Courses are offered upon demand. Classes in the College of Engineering have been included when pupil need seemed to justify these offerings. There is constant demand for work leading to State certification. Hence subjects in the College of Arts and Science are always given.

ADMINISTRATION

GOVERNMENT

The control of the University is vested by law in a Board of Regents consisting of five members elected by the people.

The administration of the University is vested by the Board of Regents in the President of the University, the University Faculty, the Faculties of the several Colleges and the Deans and Directors of the Colleges and Schools and of the Public Service Division.

THE PRESIDENT

The President of the University is the executive head of the University, the Chairman of the University faculty, and ex officio member of all committees. It is his duty to secure through the Academic Deans, Directors of the various schools, and other administrative officers efficient, orderly, and economical administration and healthful development of the University.

THE VICE PRESIDENT

In the absence of the President or in case of his inability to act, the Vice President shall perform his functions.

DEANS

The principal administrative officers are the Academic Deans and the Directors of the various schools, who, under the general supervision of the President, have immediate charge of the educational work of the University. It is the duty of these Deans to secure estimates for the expenses of their departments and to submit their estimates to the President.

DEAN OF WOMEN

The academic and social welfare of all the women students is under the supervision of a Dean of Women, whose office is on the ground floor of the Library. Regulations governing the women students on the campus, in the halls and sorority houses, are formulated by the women students and approved by the Dean. The residence halls are under the direct supervision of social directors but have, in general, self-government.

The personnel record of each women is on file in the office of the Dean of Women. Anyone is welcome to call at any time.

DEAN OF MEN

The academic and the social welfare of the men students is under the special supervision of the Dean of Men. Jurisdiction over all social matters and student organizations in which men students are concerned is given to the Dean of Men.

THE TREASURER AND COMPTROLLER

The Treasurer and Comptroller is authorized to receive all moneys

arising from gifts or bounties in any form to the University or for its benefits; all fees from students or others; proceeds from all sales of farm products or any articles of personal property of whatever nature or kind; fees for services rendered in any manner, and funds from any sources whatsoever other than in cases by law required to be paid to the State Treasurer. He keeps the accounts of the moneys in his custody in such separate funds as are necessary for proper and systematic accounting.

THE UNIVERSITY FACULTY

The President, Vice President, Deans, Librarian, Registrar, and all persons who give instruction, with the rank of instructor or above, in any of the regular college departments of the University, constitute the University Faculty.[1] Subject always to the approval of the President and the Board of Regents, the University Faculty has legislative jurisdiction in all matters of government, discipline and educational policy not delegated by it to the separate faculties, and has the right of review of all actions of the several colleges which relate to the educational welfare of the University as a whole.

The Standing Committees, through which much of the business of the University Faculty is done, are listed elsewhere in this catalogue.

MEETINGS

The University Faculty meets at the call of the President.

COLLEGE FACULTIES

The faculty of each college directs the educational and internal life of the college, makes rules and regulations peculiar to that college; formulates the course of study, the entrance and graduation requirements which, when approved by the University Faculty, the President and the Board of Regents, become the statutes in force in that college. It shall not have the authority to take away from a student any University privilege nor shall it trench upon the executive duties of the Deans. All matters which may require the action of the University Faculty shall be presented to that body by the Dean. The faculty of each college shall organize and carry out its functions as it deems wise. The Dean shall be chairman of the faculty and ex officio a member of all committees. The action of each faculty is subject to the approval of the President and of the Board of Regents. A copy of the minutes must be filed with the President immediately following each meeting.

DEPARTMENTS

The department is the educational unit in the University. The head of each department is directly responsible to the Dean for the efficiency and educational effectiveness of the department. The heads of departments make all department reports to the Dean and submit estimates to him for the expenses of their departments. For general administrative work the head of the department is responsible to the Dean of that college in which his major work appears.

[1]Exceptions to the above rule:
1. Any member of the faculty not teaching during any given college year shall not have the privilege of voting in faculty meetings during that year.
2. New appointees shall not have the right to vote until one year after appointment, except those who may be appointed to the rank of full professor, or as the head or acting head of a department.

EQUIPMENT

BUILDINGS

The following brief descriptions will give some idea of the principal buildings and the purposes for which they are used:

AGRICULTURE BUILDING—A three-story structure of brick, with stone facings and trimmings, situated directly east of Manzanita lake. The first floor includes the administration offices, four classrooms, a large lecture room, a biology laboratory, and the clothing laboratory. The second floor is devoted to Home Economics and Zoology, and includes the dining room and the food and clothing laboratories, as well as the zoological laboratories. The basement includes laboratories for dairying, farm crops, soils research (Experiment Station) and botany. (1918*)

AGRICULTURAL EXTENSION BUILDING—A two-story gray-stone building on the west side of the quadrangle. Fitted with laboratories and classrooms, it was used for chemistry until the fall of 1930. Thoroughly renovated and remodeled on the interior, this building has been occupied from the beginning of 1936 by the Staff of the Agricultural Extension Service of the University. (1902)

ARTEMISIA HALL—A modern brick residence accommodating 76 women in double rooms, located north of the Dining Hall. Artemisia's inviting Study Hall contains many books and current magazines borrowed from the University Library. (1926)

DINING HALL—A one-story brick building on the west side of the campus. It is a scientifically equipped dining hall accommodating two hundred and fifty students. A trained dietitian supervises the preparation of the meals. (1905)

EDUCATION BUILDING—A two-story brick building, with stone facings and columns, situated north of the Agriculture Building. It contains an auditorium seating 350, with stage and dressing room, a Music Room, and classrooms and offices of the School of Education. It also houses the Departments of Economics, Business and Sociology, and Psychology. (1920)

ELECTRICAL BUILDING—A two-story brick building, 50 x 110 feet, situated on the east side of the campus. The first floor contains offices, classrooms, and the electrical laboratories. The second floor contains the electrical engineering library and reading room, classrooms, and a computing room. (1912)

ENGINEERING BUILDING—A fireproof, reinforced concrete, brick and stone building, located on the flat, east of the quadrangle, and facing west. It houses the Departments of Civil and Mechanical Engineering. There is a frontage of 150 feet with an ell extending east 110 feet. The basement contains the following laboratories: (Civil Engineering) fluid mechanics, materials testing, concrete and cement testing;

*Figures given in parentheses at the end of paragraphs describing the buildings state the years in which the respective buildings were completed.

(Mechanical Engineering) calibration and general mechanical. The first and second floors are devoted to offices, classrooms, and drafting rooms. (1941)

GREENHOUSE—A working greenhouse on the east side of the campus. It is used by the Departments of Botany and Horticulture. (1909). An addition was built with Federal Relief Funds in 1934.

GYMNASIUM—The old gymnasium is a brick building, 150 x 60 feet. The assembly hall, 100 x 60 feet, is used for general University purposes. The building is devoted to the Departments of Physical Education for Men and Women. Plans have been made to convert this building into an Armory for the R. O. T. C. Military unit. (1897; extension, 1922.)

HALL OF ENGLISH—A one-story building situated on the west side of the quadrangle, constructed of brick and stone in conformity with the architecture of other buildings. Formerly it housed the Library. During the summer of 1929 its interior was changed to six classrooms and an office, now used for the work of the Departments of English and Journalism. (1913)

HATCH STATION—Enlarged in 1926, occupied by the Agricultural Experiment Station. The Department of Meteorology and the Station Library occupy the first floor. The second floor is occupied by the Departments of Entomology and Range Management and the offices of the Station Director. The herbarium occupies the third floor. (1891; moved to Virginia Street, basement added, 1926)

HEATING PLANT—A central plant supplying most of the buildings on the campus. It consists of four large boilers, pumps, engines, motors, etc., and is operated in connection with the mechanical engineering laboratories. (1908; enlarged, 1926)

INFIRMARY—A one-story building containing nine rooms and a basement, situated between the Gymnasium and Lincoln Hall. There are four wards—two for men and two for women. All the patients' food is prepared in the infirmary kitchen. A registered nurse is in charge at all times, and the physician engaged by the University Health Service has daily office hours. (1902. Enlarged, 1941.)

LIBRARY—CLARK MEMORIAL—A two-story and basement fireproof brick building, the gift of Mr. William A. Clark, Jr., in memory of his wife, Alice McManus Clark. The main stackroom and a receiving room are in the basement. The first floor has workrooms and seminar rooms. The second floor includes the main reading room, a periodical room, a display room, and the main offices of the librarian and staff. (1927)

LINCOLN HALL—A dormitory for men. It is a three-story brick building, with present accommodations for seventy-two men. (1896)

MACKAY SCHOOL OF MINES BUILDING—A gift of Mrs. John W. Mackay and Mr. Clarence H. Mackay, housing the Departments of Mining, Metallurgy, and Geology. It is a dignified and spacious structure in the colonial style, 112 x 118 feet, and has two stories throughout with basement. In the basement are storerooms, the seismograph laboratory, mining laboratory, museum, shower and locker rooms for the students, and the ore dressing laboratory.

On the first floor are the chemical laboratory, electric furnace laboratory, first mezzanine floor of the mill, assay laboratory, museum, library, classrooms, offices of the Director, metallurgy department, and mining department.

On the second floor are the State analytical laboratory, the mezzanine floor of the museum, drafting room, seminar room, instruments room, office of the Department of Geology, the Mackay Research Library, the mineralogy laboratory, maproom, petrography laboratory, petrography grinding and polishing room, classrooms and Mackay research room. (1908; enlarged, 1926)

MACKAY SCIENCE HALL—A reinforced concrete, fireproof, brick and stone building, 170 x 80 feet, housing the Departments of Chemistry, Physics, and Mathematics. A full basement and a subbasement of 1,600 square feet have laboratories and storerooms for chemistry and for physics. The two main floors have laboratories, classrooms, lecture rooms, storerooms, and offices for chemistry, physics, and mathematics. (1930)

MANZANITA HALL—A brick building, the first residence hall for women, located on Manzanita Lake. It accommodates 75 women in single and double rooms, and in suites. Manzanita has a library where students browse among books and current magazines borrowed from the University Library. (1919)

MECHANICAL BUILDING—A two-story brick structure, 80 x 80 feet, on the east side of the quadrangle adjoining the Electrical Building. It contains the machine shop, pattern shop, and welding shop. The carpenter shop of the Department of Buildings occupies a portion of the second floor. (1897)

MINES EXPERIMENTATION BUILDING—A two-story brick building with basement, situated north of the east wing of the School of Mines Building, housing the storage rooms, laboratories, library, and offices of the United States Rare and Precious Metals Experiment Station. (1921)

MORRILL HALL—A three-story brick building with a large basement. On the first floor are the offices of the President, the Comptroller, and the Registrar. The Department of Philosophy, some classrooms in history and foreign language, and the office of the Dean of Men occupy the second floor. The third floor is used for offices of the Departments of Farm Development, Soil Conservation, and Agricultural Economics of the U. S. Department of Agriculture. All three agencies are working in cooperation with the Agricultural Experiment Station. The University Post Office and storerooms and the office of the Superintendent of Maintenance are in the basement. (1886)

NEW GYMNASIUM—A building of brick and reinforced concrete, 170 x 206 feet. The main floor contains a large playing court 104 x 120 feet flanked on either side by balconies for spectators, and when used as an auditorium seats approximately 3,500. The building provides offices and facilities for Physical Education and Athletics. (1943)

PRESIDENT'S HOME—A comfortable three-story structure situated on the southeast corner of the campus. (1900)

STEWART HALL—A three-story brick building with a basement. The

basement is used as an armory and also contains the offices of the Military Department. The Department of History and Political Science occupies the first floor. The second floor is occupied by the Department of Modern Languages. (1890)

STUDENT UNION BUILDING—A story-and-a-half stucco building, housing the offices of the graduate manager, the A. S. U. N. President, and the student publications. This building and land formerly the property of the Nevada Historical Society, was given to the University by the 1931 Legislature.

THE MACKAY FIELD AND TRAINING QUARTERS—A natural amphitheater which had been leased to the University for a number of years by former Regent Evans, was purchased for the University by Mr. Clarence H. Mackay and provision made for its improvement. Later he purchased an additional twenty-six acres to the north of and adjacent to this tract. To care for other branches of athletics, such as basket ball and tennis, the Nevada Legislature of 1909 provided for the purchase of additional land to the south of the old field, so that now about ten acres of land is being used for athletic purposes. The improvements donated by Mr. Mackay include the Training Quarters Building, situated on the east side of the field (1909), which has showers, baths, locker and dressing rooms, a committee room, and a lounging room. On the west bank are the bleachers and colonnade. The natural slope of the bank has been utilized so that the field closely resembles the stadium used at the ancient Olympic games. Originally, in 1909, there were seventeen tiers of concrete, with a colonnade for a covered grandstand in the rear and a seating capacity of about two thousand. In the summer of 1929, through an added gift from Mr. Mackay, this stadium was enlarged to have a seating capacity of more than five thousand.

Situated between these structures is a full-sized football field, surrounded by a quarter-mile track which has an arm extended to make provision for the 220-yard events.

VETERINARY SCIENCE BUILDING—A two-story brick and stone building situated on the east side of the campus directly east of the Mechanical Building. Remodeled on the interior in early 1936, this building now houses the Veterinary Control Service and the bacteriological and chemical laboratories of the University's Agricultural Experiment Station. (1913)

THE EXPERIMENT STATION FARM—A sixty-acre farm, east of the University campus, given by the citizens of Washoe County for agricultural experimentation. (1899)

THE UNIVERSITY FARM—Four miles south of Reno the State purchased, in 1917, a 213-acre farm primarily for use as a stock farm. Owing to the financial emergency, such use of this farm has been suspended since July 1931. Substitutional arrangements for using equipment and livestock of private dairy farms and equipment and flocks of private poultry farms have been in effect since July 1931 in connection with the dairy and the poultry courses.

THE LADINO DAIRY—On September 6, 1944, Major Max Fleischmann

gave his 258-acre Ladino Dairy to the University. Equipped as a commercial dairy, this farm has various buildings, including a residence, bunk house, and laborers' quarters. It also has a herd of dairy cattle, farm equipment, and machinery. This farm can be reconverted easily into a satisfactory laboratory for the benefit of the students in the College of Agriculture.

LIBRARIES

GENERAL LIBRARY

The University Library, housed in the Alice McManus Clark Memorial Building, contains 68,750 bound volumes, excluding over 20,000 Federal publications not catalogued, and several thousand miscellaneous pamphlets. The books have been selected with particular reference to the needs of the several departments of study; but, besides the works needed by special departments, there are many general works and reference volumes of various kinds. The books are catalogued according to the Dewey Decimal Classification System.

The reading room is supplied with daily and weekly newspapers and with many of the best periodicals. These publications include some three hundred leading cultural, scientific, and technical magazines and journals.

During the University year, excepting legal holidays, the Library is open from 7:45 a. m. to 9:30 p. m., Mondays—Thursdays, inclusive; 7:45 a. m. to 5 p. m., Fridays; 8 a. m. to 12 noon, Saturdays; 2 p. m. to 5 p. m., Sundays. Thanksgiving, Christmas, and Easter vacation periods the Library is open daily from 9 a. m. to 4 p. m., except Sundays and legal holidays. It is closed evenings preceding University holidays. During the summer vacation the Library is open daily according to the summer schedule posted on the Library doors.

To the general public (not children) is extended the use of the Library under such restrictions of the time for which a book may be withdrawn as are necessary to prevent interference with the work of the students. Borrowers residing outside of Reno are asked to pay the necessary postage or expressage on the books lent to them.

AGRICULTURAL EXPERIMENT STATION LIBRARY

The Agricultural Experiment Station Library, containing about 5,000 bound volumes and a large number of pamphlets, is housed in Hatch Station. The volumes and pamphlets may be classified broadly as follows: Bulletins and Reports of the various Experiment Stations, publications of the United States Department of Agriculture, and general works on agriculture and the related sciences. Many current agricultural periodicals are on the tables in the reading room. The library is catalogued and classified, and suited for ready reference. It is open daily, and, while intended primarily for the use of the Station Staff, is also accessible to the public.

MINING LIBRARY

Reference books, text books, the recent issues and the bound volumes of technical journals and of the American Institute of Mining and Metallurgical Engineers, along with historical pictures and paintings are located in the attractive library room on the ground floor of the Mackay School of Mines.

The library as a whole consists of some 2,500 bound volumes in addition to which there is maintained a complete set of the publications of the United States Geological Survey and the United States Bureau of Mines, and fairly complete sets of similar publications issued by the States, and also the Nevada Bureau of Mines indexed file of the mining news of Nevada clipped from the newspapers of the State since 1929. The library is open daily during the year.

THE MACKAY RESEARCH LIBRARY

The Johannes Walther Library comprises about 7,000 papers on desert geology, paleontology, ore deposits and other geologic subjects. It is said to be the most complete library on desert geology in existence.

This library is in the Mackay research room on the second floor of the building. The room is well appointed with oak furniture and bookcases. It is lighted by skylights and windows.

The funds to buy the library and to remodel and furnish the research room were supplied by Mr. Clarence H. Mackay.

COMSTOCK MAPS

When the Comstock Merger suspended operations in 1927, the Mackay School of Mines was given all of its maps, both surface and underground. These maps cover all of the mines from the Caledonia on the south to the Con. Virginia on the north. Later a collection of maps covering the northend mines was donated to the collection.

The funds to build the big map case to file these maps in were supplied by Clarence H. Mackay in 1928.

In 1938 a valuable collection of Comstock maps belonging to the late Surveyor Moran were bought with funds collected from Comstock mining companies by Alan Bible (Nevada, 1930), and presented to the school.

The preservation of all of these maps has been of important economic value to the Comstock mining companies and they have been referred to many times by them, by historians, and others.

MINING EXPERIMENT STATION LIBRARY

The library of the U. S. Bureau of Mines Station at the University consists of between 4,000 and 5,000 volumes and pamphlets. The important mining and research periodicals are received, together with the publications of the Bureau of Mines.

SCHOOL MUSIC REFERENCE LIBRARY

Some 200 bound volumes and hand books of music materials for the elementary and high schools, including band and orchestra, class instruction of all grades, concert music, secular and sacred choral music of different periods, vocal arrangements for different ages, operettas, violin and piano teaching material is available in the music rooms and is especially valuable for students and teachers of public school music and for leaders of choral and instrumental groups.

OTHER DEPARTMENTAL LIBRARIES

These libraries are maintained primarily for the use of students taking work in the respective departments. They cover animal husbandry, biology, chemistry, education, home economics, physics, and veterinary science.

COUNTY AND STATE LIBRARIES

Besides the University libraries, members of the University have available the facilities of the Washoe County Public Library of 70,089 volumes and of the State Library at Carson City which has over 234,069 volumes, including over 49,995 volumes on law, constituting, because of the completeness of its early-day statutes of every State in the Union, one of the best law libraries in the United States. Books are mailed all over Nevada, especially to small communities which have no library facilities.

LABORATORIES

ARTS AND SCIENCE LABORATORIES

Biological—The Department of Biology is equipped with the modern instruments and apparatus necessary for university-level teaching and research in the life sciences. These include microscopes, balances, microtomes, ovens, sterilizers, incubators, oscilloscopes, spectroscopes, conductivity apparatus, constant temperature equipment, refrigerators, complete chemical and glassware stockroom, maps, and meteorological equipment. Greenhouse facilities are available. Transportation is provided for field work in taxonomy, entomology, plant ecology, vertebrate zoology, and wildlife management. A biological library, the University Herbarium, and a museum complete the facilities of the department.

Chemical—The Mackay chemical laboratory occupies the north half of Mackay Science Hall. The large lecture room, department library, seminar and classrooms, occupying the central part of the building, give ample room for reference and other work connected with the laboratories. Four laboratories accommodating twenty-four students each and fitted with gas, water, electricity, individual desk hoods, etc., occupy the northeast portion of the basement and first floor for the use of general chemistry and qualitative analysis. In connection with these laboratories are two balance rooms and a hydrogen sulphide room. Above these laboratories, on the second floor, are situated the laboratories for quantitative analysis and organic chemistry. Each will accommodate twenty-four students working at the same time. They are fitted with gas, water, steam, vacuum, compressed air, alternating and direct current electricity, fume hoods, ovens, etc. A balance room and Kjeldahl digestion room are located close by.

In addition to these, smaller laboratories are provided for physical, physiological and advanced inorganic and organic chemistry. These are all equipped with gas, water, steam, compressed air, vacuum, electricity, fume hoods, etc., for advanced work and research in these fields. A dark room, refrigerator room, and large storerooms for supplies are provided. The dispensing room is situated on the first floor and connected with the other two floors by an electrically driven dumb waiter so that students working on any floor may be served conveniently and with little delay.

A furnace room, equipped with both gas and electric furnaces of various types, a grinding room with various grinding machinery and a shop and glass-blowing room are located in the basement.

Geological—The Department of Geology is provided with reference collections illustrating the minerals, rocks, and fossils, and with class

collections for study and determination. Also all folios and some 2,000 topographic maps published by the U. S. Geological Survey are provided for laboratory use. The mineralogical laboratory is arranged, for the present, for the accommodation of single sections of forty students. There is, in addition, a laboratory fitted up for microscopic work, and equipped with petrographical microscopes and the necessary accessories. It has also a set of mineral thin sections cut in definite direction, and a collection of rock sections with many representatives of each of the chief types, together with many sections illustrating special types. A separate grinding room is provided with apparatus for making thin sections of rocks and minerals. Blowpipe and other chemical work is also provided for. A lantern with a growing collection of slides furnishes additional illustrative material for lecture work. A dark room for photography is also provided for the department.

Journalism—Instruction in the Department of Journalism features the use of three writing laboratories. The newsroom in the Hall of English is equipped with typewriters, a copydesk, newspaper files, a reference library, and other facilities similar to those in a daily newspaper newsroom. The printing laboratory, temporarily housed in the new gymnasium, includes type, presses, makeup materials, and other equipment of a complete, one-man job printing plant. The facilities of the Reno newspapers, Reno's national news gathering and distributing bureaus, and the Wilson Advertising Agency serve as laboratories for students in the course in journalism internship.

Music—A college music set was donated to the University by the Carnegie Corporation of New York City in 1935. It includes phonograph records, musical scores, books on music and one of the finest phonographs obtainable, an automatic Capehart.

In this set are 824 records representing all nations, periods, styles, vocal, choral and instrumental combinations. The earliest composition dates from ancient Greece and the latest includes modern compositions of contemporary composers.

The set includes 129 books of the best and latest musical biography, history, theory and criticism, and 251 scores corresponding to the records. All are alphabetically catalogued and classified in several ways for convenient reference.

The records, scores and the phonograph are available to the student body and the community for special reference use at available hours in the music rooms. The books are in the library.

In addition to this gift set the University has a considerable collection of reference books on music, biography, theory, history, encyclopedia, folk song, oratorio scores and song collections, together with some valuable records. Together with the book, score and record items of the Carnegie set these constitute a very comprehensive music library.

The University owns several instruments including a bass viol, bass horn, French and alto horns, kettledrums and other equipment available for students to use in the orchestra and band, and has the use of 30 band instruments furnished by the War Department.

Physics—The physics laboratory is located in the south wing of Mackay Science Hall. The various divisions of the laboratory occupy

the sub-basement, a portion of the basement, and a special room for advanced work on the first floor of the building, as well as a radio laboratory in the attic.

In the sub-basement are located the storage-battery room containing 160 cells, a general storeroom, a constant temperature research room, and three smaller rooms for storing glass tubing and iron, wood and brass stock.

In the basement are located the department's photometry room, the generator room, the shop, the photographic dark room, the laboratory for general physics, the laboratory for electrical measurements, a spacious storeroom connecting and serving the two laboratories, and a steel and concrete vault for the storage of the better grade of electrical instruments belonging to the department.

Both of the laboratories contain distributing panels by means of which storage battery, generator, and alternating current power can be delivered to all the various outlets in the different laboratories and lecture rooms occupied by the department.

The photometry room is provided with a standard three-meter photometer bar equipped with a compound rotator and a Lummer-Brodhun photometer, and with a thirty-inch Ubricht sphere which is used in making measurements of spherical candlepower.

The generator room is provided with a switchboard to which is connected a constant potential charger, used in charging the storage batteries, a 10 kw. motor-generator set, and a special three-phase motor-generator set for experimental work. The switchboard is so connected to the storage batteries located in the sub-basement that one can secure voltages ranging from 2 to 220 volts for all the distributing panels of the department. In addition, current from the direct current generator at 125 volts can be supplied in all the laboratories and lecture rooms of the department. Through a distributing panel three-phase current of constant voltage up to 125 or 150 volts and of any desired frequency between approximately 40 and 90 cycles can be furnished to any table or desk in the electrical measurements laboratory. The switchboard is also provided with switches for automatically starting the 10 kw. motor-generator set and the potential charger.

The department shop contains two motor driven lathes provided with taper attachment, change gears for cutting metric threads, and all the other accessories, hand tools for wood and metal work, including metric taps and dies, a small circular and linear dividing engine, an electrically driven drill press, a motor driven toolgrinder and polisher and work benches. Along one wall of the shop is a table especially adapted for a course in glass blowing given by the department. This table is provided with air, gas, and an oxygen tank outlet for use when working with pyrex glass.

The electrical measurements laboratory has wall desks around two sides of the room. These desks are provided with ample drawer space and with water, gas, direct and alternating current outlets. High sensitivity galvanometers are mounted over these desks at suitable points along the walls of the room. Four separate sets of piers in the center of the room provide tables which are free from vibration and upon which the experimenter can mount his sensitive apparatus. Each of these tables is provided with gas, and with direct current, single

phase and three phase outlets. Among the electrical instruments available for student use in this laboratory are potentiometers, standard cells, standard resistances, standard inductances, standard condensers, standard voltmeters and ammeters, Wheatstone bridges, alternating current bridges and galvanometers, Kelvin bridges, Kohlrausch bridges, inductance bridges, etc. Many of these instruments have been tested at the Bureau of Standards and certificates certifying to their accuracy are on file in the department offices.

The laboratory for general physics is a spacious well-lighted room, having wall desks around three sides of the room. Two large laboratory tables, each equipped with sinks and electrical and gas outlets, extend north and south across the length of the room. These two tables are separated from each other at the middle of the room by a wide aisle which cuts across the room from west to east. Eight smaller desks, symmetrically placed in the room, two on each side of each of the large tables, constitute the remainder of the desk space of this laboratory. At either end each desk is provided with gas and alternating and direct current outlets.

Engineering Laboratories in the College of Engineering—The Civil, Mechanical, and Electrical Engineering laboratories are amply provided with the necessary equipment for teaching the theory and practice of engineering in each of these three fields. Courses of instruction are described in the catalogue under the heading "College of Engineering." (See index.)

MINING SCHOOL LABORATORIES

Assay—The fire assay laboratory in the Mackay Building is equipped with eight gas-fired muffle furnaces and gas-fired melting furnace, six Thompson pulp scales for weighing assay pulps, and suitable hood for parting. Adjoining the laboratory is a storeroom for supplies and a grinding room for the preparation of samples. The grinding room is equipped with a Braun sample jaw crusher, Braun pulverizer, shaking screen, bucking board, and exhaust fan for removing dust.

Connected with the fireroom is the weighing room. Both chemical and button balances for assaying work are placed in this room. The equipment consists of two analytical balances and eleven button balances. Different makes of balances are in use, including the Becker, Ainsworth, Keller, Oertling, Staudinger, Heusser, and Thompson.

Chemical—The chemical laboratory of the School of Mines is fully equipped with the usual desks, hoods, hot plates, and air baths. Electric air baths and drying pans are provided for overnight work. Four four-gallon slime agitators, driven by a small electric motor, are used for slime tests. A direct connected electric driven exhaust fan draws the air from the hood in this laboratory. A complete electrolytic outfit for lead, copper, and other determinations has been installed. The equipment also includes a Richlitz automatic water still, a Monroe hydraulic classifier, and a Spencer binocular microscope.

Geological and Mineralogical—The Department of Geology is provided with reference collections illustrating ores, minerals, rocks, and fossils, with class collections for determination. Complete sets of

United States Geological Survey publications and maps, most of the State Geological Surveys publications, as well as those of many foreign surveys.

The mineralogical laboratory is well equipped for blow-pipe and chemical work, with a large collection of minerals for determination. Binocular microscopes and other accessories are also available.

The S. Frank Hunt Foundation field equipment consists of a tudor sedan, a 1½-ton truck, and complete camping equipment; complete engineering equipment suitable for topographic and geologic mapping, plotting, etc., and necessary prospecting equipment.

Petrographic—The petrographic laboratory includes the following equipment:

One Sauvier & Boylston polishing machine; apparatus for hand polishing; rock saws; seven grinding laps; eight Bausch & Lomb petrographic microscopes; one Iver tint photometer; seven Lietz petrographic microscopes; one Warner & Swasey polishing and grinding machine; one reflecting goniometer; one Abbe refractometer; one microscope for the study of polished sections of opaque ores and minerals; 1,200 slides of rocks and minerals; 1,500 hand specimens of rocks and minerals.

Seismograph—The seismograph laboratory equipment consists of one Weichert inverted two-component seismograph, and a small Ewing duplex pendulum. The records are used chiefly for the study of earthquakes of local origin.

Metallurgical and Ore Dressing—The metallurgical and ore dressing laboratory equipment includes the following:

One 4 x 8 Sturtevant jaw crusher, one pair 10 x 12 crushing rolls; 2 ft. x 5 ft. Stearns-Rogers rod mill; 15-ft. Dorr classifier, one two-compartment bucket elevator and one Vezin automatic sampler. All of these machines are so arranged that ore passes mechanically through any desired series after being fed to the jaw crusher. An exhaust fan prevents dust escaping from the dry crushing machines. The overflow from the Dorr classifier is pumped to two Devereux agitators which in turn are connected to either of two classifiers, a double cone or a Fahrenwald, thence to a Deister Plat-O table or a Deister slime table. Centrifugal pumps circulate the pulps or pump them to waste.

The smaller equipment consists of two Jenney, one Ruth, one Callow and one Booth-Thompson flotation machines, with accessory equipment for preparing samples, a small General Engineering unit consisting of a small two-compartment jig and small Wilfley table.

A large roller agitator is provided for cyanide testing and also a small mechanical agitator for somewhat larger tests.

Special equipment consists of a two-compartment jig, Sperry filter press, suction filter leaves, vacuum pump, 150-lb. tube mill, Krupp ball mill, and platform scales.

Power is supplied by several motors varying in size up to 25 hp. All the machines are so arranged that they can work independently or in conjunction with one another. The following processes may be conducted on a working scale: The dry crushing and automatic sampling of an ore; the concentration of sands and slimes after crushing an ore either in stamp battery or rolls; the wet crushing plate amalgamation, and concentration of a gold ore; the cyanide

treatment of a gold or a silver ore, and the pan amalgamation of a silver ore. A fine grinding plant in enclosed circuit is available to prepare ores for cyanidation, concentration, flotation, or any other tests. A very representative collection of various types of ores for testing purposes is maintained.

Metallographic—The metallographic laboratory is equipped with the following:

One Sauvier & Boylston polishing machine; one Warner & Swasey polishing machine, and a Leitz grinding machine; two large Leitz metallurgical microscopes with photomicrographic cameras; one Heele-Berlin spectroscope; a Bausch & Lomb quartz spectograph; a Leitz ultropaque microscope; one Spencer metallurgical microscope; one electric hot plate; one set prepared specimens of the common and ferro alloys.

Electro-Metallurgical—The electro-metallurgical equipment consists of a Munning direct current generator operated by alternating current motor; one large General Electric automatically controlled heat treating furnace; one small heat treating muffle furnace, a small arc melting furnace, and one General Electric motor generator rated at 220 volts, 20 amperes. Additional equipment is also available in the United States Bureau of Mines Building.

Mining—The mining laboratory consists of the following equipment: One 8½-inch by 9-inch Laidlaw feather valve compressor; one 25 hp. motor, belt-connected to compressor with instruments for the measurement of volumetric efficiency and power consumption; a collection of rock drills and equipment for use upon a concrete building block; mine equipment models, and equipment for mine sampling and mine examination.

The operating mines on the Comstock Lode are close enough to offer abundant opportunity for student study of operating mining equipment, both surface and underground.

AGRICULTURAL LABORATORIES

Dairy (Room 12, Agriculture Building)—This laboratory contains machinery for the manufacture of butter, ice cream and cheese, and equipment for bottling milk and sterilizing utensils. It also has full equipment for making quantitative and qualitative tests of all dairy products. The present equipment can easily accommodate ten students in any one section.

Experiment Station Chemical—This laboratory is equipped for research and analytical work in chemistry. It is used for chemical work in relation to the agriculture of the State and to the research projects of the Agricultural Experiment Station.

Farm Crops—This laboratory includes a large display of samples of seeds and matured plants of the different varieties of cereal and forage crops. The equipment includes a large electric germinator for testing all kinds of farm seeds for germination; testers and cleaners; dockage machines; and other equipment used by the Federal Government for the commercial grading of grain and hay. Students will make germination and purity tests of commercial samples of farm seeds sent to the laboratory from the various farming districts of the State.

Soils Research Laboratory, Experiment Station. This laboratory is equipped for conducting research on soils and soil fertility. Its facilities provide for both macro- and micro-chemical analyses, as well as for the many chemical operations necessary in research work of this kind. A constant-temperature room for small plant cultures is a part of the equipment. Also, there is a small experimental greenhouse to accommodate pot cultures and other tests of soils by plant growth.

Veterinary Science—This laboratory is fitted up for research in pathology and bacteriology. It is used for the work of the Department of Veterinary Science in the Agricultural Experiment Station, and the State Veterinary Control Service.

HOME ECONOMICS LABORATORIES

Food—An up-to-date food demonstration laboratory has seating capacity for fifty. A food laboratory seats sixteen, and a small adjoining laboratory accomodates one.

Clothing—The clothing laboratory is equipped with sewing and drafting tables, sewing machines, and smaller equipment needed for the work of the classes in clothing. Twenty students can be accommodated in this room. Adjoining this laboratory are the garment fitting and locker rooms.

SCIENTIFIC COLLECTIONS

MACKAY MUSEUM

The Mackay Museum, located in the northwest wing of the Mackay School of Mines, contains the mining, metallurgical, geological, and mineralogical displays. The exhibits in this museum are arranged in such a manner as to give a good general idea of the mining industry of the State of Nevada, and to illustrate standard classifications of minerals and rocks. On the wall at the right of the entrance to the museum is a large map of Nevada, showing the location of all the mining districts of the State, while in the center of the museum at the rear there is a topographical relief map of the State on a scale of 4 miles to the inch. The show cases on the left-hand side of the museum present a collection of minerals arranged scientifically according to Dana, followed by a systematic collection of rocks; the cases on the right-hand side of the museum are devoted to displays of Nevada ores of the precious and base metals and of Nevada economic minerals, arranged according to counties, while the cases on the center aisle contain collections of minerals arranged according to their economic uses.

On the mezzanine floor are the following exhibits: East side—Cases containing fossil specimens, and a systematic collection of rock specimens and small mining relics. North side—An excellent working model of a mine headframe, hoist, skip, and stamp mill, along with Comstock mining relics. West side—A display of Comstock Lode ores, relics, pictures, and maps, along with a display of mine models of various types. South side—Prehistoric footprints in sandstone as found in the prison yard at Carson City, along with pictures and plaster casts of the same.

The basement contains a display from the San Francisco Golden Gate Exposition of murals depicting mining and 1849 scenes, twenty replicas of United States gold, silver, and copper coins; sixteen illuminated Rand-McNally maps, wired to show the location and production of the chief metals and minerals of the United States; models of dredges, and an illuminated case displaying copper products from mine to brass. In addition there is a collection of rock drills from the time of the Sutro Tunnel to the present day, models of mines and equipment, and a large collection of ore specimens from various parts of the world.

Many valuable gifts have been made to the Mackay Museum too numerous to list, and its continued growth depends largely upon the generosity of those engaged in the development of the mining industry of Nevada. Contributions of specimens of country rocks, ores, minerals, and metallurgical products, and of photographs, maps, diagrams, and models are greatly desired. The museum is open to the public during the school year, and as far as possible every facility will be placed at the disposal of anyone who wishes to inspect or study the various collections.

BIOLOGICAL COLLECTIONS

The biological collections are in the Agriculture Building. A portion of the collections, including economic insect life histories and mounts of economic birds and mammals, is arranged here for public exhibition.

The biological collections include a set of some 400 skins and mounts of native birds; 100 sets of birds' eggs and about as many nests, donated by Mr. Steinmetz of Carson City; 250 insect life histories and several miscellaneous groups; 75 stuffed mammal skins and mounts; 25 mounted skeletons of various vertebrates; nearly a thousand general museum preparations; about 10,000 prepared microscopic slides; some 200 zoological and physiological models, and about 60 botanical models, some 900 lantern slides, as well as much miscellaneous material.

HERBARIA

The Herbarium of the University of Nevada now contains approximately 20,000 sheets, comprising what is probably the most complete collection of Nevada plants in existence. It is particularly valuable in studying the distribution of native and introduced plants in the State and for checking identifications of plants sent in by Nevada citizens. The collection of grasses is especially complete. Roughly 13,000 of the specimens were collected as a cooperative project with the Bureau of Plant Industry of the U. S. D. A., the Works Progress Administration participating. Located in the Agriculture building, the herbarium is in charge of Dr. W. D. Billings.

The Nevada Agricultural Experiment Station herbarium now contains 15,750 mounted sheets, nearly all of western species, and at least half of them from Nevada. Certain of the forage plants, as grasses, clovers, and lupins, are especially well represented. Although, as yet small, this collection is of considerable importance, as it contains a number of types and typical plants obtained from type localities.

Connected with this herbarium is a large number of negatives depicting various phases of plant life.

PATHOLOGICAL MUSEUM

The Department of Veterinary Science has a collection of several hundred permanently mounted gross pathological specimens covering practically all the common infectious diseases of animals and miscellaneous disease processes of particular interest. The collection also contains some material from human sources, mostly representing disease processes common to both man and the lower animals. This collection is available for teaching purposes and inspection.

CHEMICAL SPECIMENS

A number of substances representing the field of the chemical industries have been collected and placed in cases in Mackay Science Hall. Among these are samples purchased from chemical dealers; about 200 samples made and put up by students in the laboratory; about 80 samples of American-made dyes manufactured by the National Aniline and Chemical Company and donated by Professor Maxwell Adams; plastics, including artificial silk and leather; explosives;

alloys; lubricating oils; and all the common minerals; samples of inorganic salts prepared by J. T. Baker Chemical Company; distillation products obtained from crude petroleum prepared by the Standard Oil Company, and zinc products prepared by the New Jersey Zinc Company.

PUBLIC LECTURES

GENERAL ASSEMBLY

A general assembly of University students and members of the faculty is under the special direction of the Standing Committee on Assemblies and Lecturers. Lectures are given by members of the faculty and by men and women of special eminence in particular fields of study, travel, and business enterprise.

Following are some of the lectures given in 1944–1945:

COMMENCEMENT, 1944

May 20—Phi Kappa Phi Address, "Scholarship and Research," by Dr. E. Maurice Beesley of the University of Nevada.

May 21—Baccalaureate Address, "Frontiers for Fellowship," by The Right Reverend William F. Lewis.

May 2—Commencement Address, "Our Responsibility in Today's Government," by the Honorable Alan Bible, a graduate of the University of Nevada in 1930.

ASSEMBLIES

GIVEN UNDER GENERAL AUSPICES OF THE UNIVERSITY

September 7—Constitution Day, "The Curriculum—Racetrack or Merry-Go-Round," by Dr. John O. Moseley, President of the University of Nevada.

October 3—"Will the Nazis Stay Defeated?" by Mr. Curt Riess, author and pre-Nazi German exile.

October 12—Inaugural Address by Dr. John O. Moseley, President of the University of Nevada.

October 12—"The University and Postwar Demands," by Dr. Alfred Atkinson, President of the University of Arizona.

October 26—"A Geologist Explores the Mountains on the Moon," by Dr. Vincent Gianella, University of Nevada, before the Astronomical Society of Nevada.

November 21—"The United States, Japan, and Russia," by General V. A. Yakhontoff, Czarist general, author, and Kerensky War Secretary.

December 3—"Solar Prominences," lecture illustrated with slides and movie films, by Miss Helen Pettit of Chabot Observatory at Oakland, auspices of Astronomical Society of Nevada.

January 8—Movies. Reissued "March of Time" films and "Army Weekly Combat Bulletin."

February 9—"Mexico" and "Argentina," two Phi Kappa Phi Day addresses by Dean George P. Hammond of the University of New Mexico, under the auspices of Rockefeller Office for Inter-American Affairs.

February 27—Movies. "March of Time" films and "Army Combat Bulletin."

March 10—"Genes and the Chemistry of the Organism," by G. W. Beadle, Professor of Biology at Stanford University.

March 20—Movies. "March of Time" films and "Army Combat Bulletin."

ORGANIZATIONS AND PUBLICATIONS

THE ALUMNI ASSOCIATION

The Alumni Association was organized June 1, 1895, to promote union and good-fellowship among the alumni, and to advance and protect the interests of the University of Nevada. All graduates of the University are recognized as members of the Association, and former students are eligible to membership upon the graduation of the class in which they originally enrolled. Active membership is maintained by payment of the dues of the Association—$2.50 a year. A life membership is granted for $25.00 if the total sum is paid within 12 months of the time payments are started. The Association holds a combined business and social meeting each year during the homecoming celebration.

OFFICERS FOR 1944–1945

President, George Southworth, Jr., '34; Vice President, Jack Walther, '31; Secretary of Executive Committee, Blythe Bulmer, '33; Graduate Manager, Leonard Chadwick; Director of Alumni Office, R. S. Griffin.

ALUMNI EXECUTIVE COMMITTEE

Central—

Blythe Bulmer, '33, Reno.
Leonard Chadwick, Reno.
John E. Chism, '34, Reno.
Mrs. W. S. (Rose Harris) Eddelman, '21, Reno.
Juanita Elcano, '40, Reno.
Lino Del Grande, '34, Reno.
R. S. Griffin, Reno.
Melville Hancock, '30, Reno.
Wayne Hinckley, '27, Reno.
Proctor Hug, '27, Sparks.
Edward Montgomery, '34, Reno.
Nevada Pedroli, '27, Reno.
Hugo Quilici, '21, Reno.
Ed Reed, '22, Reno.
Charles Roeder, '09, Reno.
George Southworth, Jr., '34, Reno.
Mrs. Kenneth (Betty Kornmayer) Tedford, '39, Reno.
Bruce Thompson, '32, Reno.
Jack Walther, '31, Reno.
Tom Wilson, '29, Reno.
Earl Wooster, '21, Reno.

State—

Mrs. Gertrude (Wyckoff) Allen, '27, Minden.
Lem Allen, '28, Fallon.
Samuel Arentz, Jr., '34, Pioche.
Mrs. Holman (Catherine Slavin) Barlow, '34, Tonopah.
Alan Bible, '30, Carson City.
Mrs. James (Leah Barker) Cashman, '17, Las Vegas.
Harry Cazier, '06, Wells.
Mrs. John (Margery Mullen) Cavanaugh, '34, Tonopah.
Walter Cox, '28, Yerington.
Robert Griffith, '23, Las Vegas.
Mrs. George (Helen Adamson) Henningsen, '27, Gardnerville.
Steve James, '42, Caliente.
Kenneth Johnson, '34, Carson City.

Walter Johnson, '31, Fallon.
Harvey Luce, '22, Las Vegas.
Kelley Lyon, '29, Boulder City.
Pete Merialdo, '21, Eureka.
Mrs. Francis (Helen Olmstead) Oakberg, '33, Ely.
Edmond Recanzone, '33, Yerington.
Albert Reed, '20, Lovelock.
Charles Russell, '26, Ely.
James Shaver, '24, Las Vegas.
Wallace Smith, '29, Sparks.
Willard Weaver, '31, Elko.
Mrs. Edwin (Gretchen Cardinal) Whitehead, '31, Sparks.

There are active chapters of the Alumni Association in Los Angeles, New York City, Washington, D. C., and San Francisco.

AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

The Nevada Chapter of the American Association of University Professors meets informally seven or eight times during the University year to discuss questions of interest to the profession of university teaching and research. The objects of the association as defined in its constitution are: "To facilitate a more effective cooperation among teachers and investigators in universities and colleges, and in professional schools of similar grade, for the promotion of the interests of higher education and research, and in general to increase the usefulness and advance the standards and ideals of the profession."

Any member of the faculty who holds a position of teaching or research with the rank of instructor or higher is eligible to become an active member of the association. Dues are $4 a year, including subscription to the Association's Bulletin.

For the profession of university and college teaching and research, the position and functions of the association are analogous to those of the American Bar Association and the American Medical Association in their respective fields.

THE ASSOCIATED STUDENTS

The student body is organized into an association called "The Associated Students of the University of Nevada." Through this association the students handle all matters relating to the student body as a whole. The officers of this association are elected by popular vote. By the payment of the student fee each semester a student receives the A. S. U. N. card which entitles him to a vote in the association and admission to all home varsity games, contests, or events under the University's management, and the subscriptions to the *Sagebrush* and the *Artemisia* and to the payment of his class dues.

THE ASSOCIATED WOMEN STUDENTS

The Associated Women Students is an organization made up of all the women students registered at the institution. Its purpose is to bring all the women together in order to obtain more effective cooperation. The dues are 50 cents per semester, which is deducted from the amount paid into the A. S. U. N. treasury. The organization gives a $25 scholarship each year to the woman student attaining the highest average grade for the year and who receives no other scholarship.

THE ASTRONOMICAL SOCIETY OF NEVADA

The Astronomical Society of Nevada is an organization for all residents of Nevada interested in popular astronomy. The society holds monthly meetings on the campus with discussions by members, occasional addresses by prominent astronomers, and motion pictures on astronomical topics. One of the aims of the society is to build up the astronomical section of the University Library. (Founded in March 1935.)

THE FACULTY CLUB

The Faculty Club is composed of the members of the staff and their wives. The meetings are held monthly in the home economics rooms of the Agriculture Building. At each meeting a lecture of general interest is given, followed by a social hour. The meetings are open to visitors.

THE NEVADA ACADEMY OF NATURAL SCIENCES

Founded in November, 1940, the Nevada Academy of Natural Sciences has as its purpose the stimulation of interest in and study of natural sciences in Nevada. Membership is open to any person interested in the botany, geology, or zoology of the State. It is not limited, however, to Nevadans. Bimonthly meetings are held on the campus, at which speakers present papers, usually concerning some phase of the natural history of the State. The meetings are open to the public. The Academy publishes a monthly newsletter containing items contributed by members.

THE ROCKS AND MINERALS STUDY CLUB

The Rocks and Minerals Study Club was organized in 1934 for any persons who are interested in the study of rocks and minerals. It holds regular meetings once a month in the Mackay School of Mines Building. At the meetings reports are presented by members or instructors. Class work consists of the study of the common rocks and minerals, particularly those of Nevada. Whenever possible, field trips are taken to study interesting geological fields near Reno and to collect rocks, minerals and fossils for class study. The work is supervised by some of the members of the School of Mines staff.

SIGMA XI CLUB

This organization is composed of members of the Society of Sigma XI, national honorary scientific society, whose purpose is the promotion of scientific research. Regular meetings are held throughout the year for the purpose of presentation and discussion of local research projects. Although active membership is limited to local faculty members and others who are members of the national society, the aim of the Club is to stimulate and foster research throughout the University. Each year the Club sponsors a lecture by a nationally known scientist.

STUDENT AFFILIATES OF THE AMERICAN CHEMICAL SOCIETY

In 1941 the Chemistry Club applied for and received its charter as the University of Nevada Chapter of the Student Affiliates of the

American Chemical Society. Active membership is open to all undergraduate students majoring in chemistry. Associate membership is open to a limited number of those who are interested in chemistry, but whose course of study does not make them eligible for active membership. The purpose of the organization is to keep its members in touch with present activities and developments in the chemical field and to foster interest in the science of chemistry. From its membership, elections are made each year to the honor society, Sigma Sigma Kappa. Meetings are held on the second Tuesday of each month.

THE UNIVERSITY HEALTH SERVICE

With the exception of graduate students and of students registered in five, or fewer, hours, all students are charged a Health Service Fee of $6 per semester. The funds obtained from this fee are used to provide an enlarged health service in accordance with the general practice of other colleges and in line with the recommendations of The American Student Health Association. Students paying the fee are entitled to the following privileges and subject to the restrictions imposed by them:

1. A thorough medical and physical examination at the time of entrance with such subsequent examinations and check-ups as may seem desirable in order to ensure the individual's physical fitness for the scholastic and athletic program which the student would like to undertake.

2. Any student found on such examination to be suffering from some chronic or handicapping ailment which makes it unlikely that he can effectively carry on his studies will be advised accordingly and may be required to limit his activities.

3. Any student found to be a carrier of an infectious disease of such a nature as to make him a menace to the general health of the campus may be required to discontinue his work at the University.

4. Standard immunity tests for certain infectious diseases may be given, and when practicable and desirable, susceptible individuals may be immunized.

5. Any student who refuses to comply with any health regulation established by the State or local boards of health or by the University administration may be denied the privilege of registering or continuing work in the University.

6. Free daily consultation periods with the college physicians and nurses will be provided for all students who wish to consult about health matters. The chief object of these consultations is the detection of illness before it becomes serious. Students are urged to take advantage of it. The privilege should, however, not be abused by expecting unreasonable services at unreasonable times.

7. *Injuries or Illnesses Incurred On the Campus.* A student injured or taken ill while on the campus is entitled to the following benefits without additional charges: (a) Necessary emergency attention; (b) All laboratory examinations, X-rays, prescriptions, and medicines which may be required by the University physician in the course of the treatment in the infirmary; (c) use of the infirmary for a period not exceeding two weeks in any semester, including meals, treatment, visits of University physician, and general nursing.

NOTES The term "campus" as used in this and succeeding paragraphs is hereby defined as the geographic limits of the campus proper, and all fraternities and sororities or other living quarters under supervision of University authorities and devoted exclusively to housing University students.

8. *Injuries or Illnesses Incurred Off the Campus.* A student injured or taken ill off the campus is subject to the following regulations: (a) All calls for medical or nursing service, whether provided by members of the regular infirmary staff or by other doctors and nurses, must be paid for by the individuals requesting such service; (b) a student injured or taken ill off the campus must pay all expenses of transportation to the campus, and must pay for all other expenses incurred off the campus by or through such illness or injury; (c) a student injured or taken ill off the campus may use the University Infirmary, provided that the student in question and his attending physician agree to rest convalescent care in the hands of the University physician and nurse, and provided he pay for all meals, laboratory examinations, X-rays, prescriptions, and medicines for the entire period of hospitalization.

9. After a period of two weeks hospitalization in any one semester, regardless of where the injury or illness occurred, the student will be charged an additional $2 per day for such extended period.

10. Requests for consultation periods with the University physician at times other than regular consultation periods at the infirmary must be paid for by the individual requesting it. A student may be hospitalized in the infirmary only upon the recommendation of the University physician acting in his capacity as such.

11. The Student Health Association will not be responsible, financially or otherwise, for the treatment and care of injuries incurred by a student participating in intercollegiate athletics, either in training or in competition, except as may be provided under rule 8 above. Benefits provided under rule 7 above are expressly excluded.

12. When an operation is advised or deemed necessary the student must make his own arrangements and assume the responsibility for the payment of all surgical, nursing, and hospital costs connected therewith.

13. Certain injuries and illnesses may be deemed by the University physician to be of such a nature or degree of severity that they cannot be cared for adequately at the University Infirmary. In such cases the student will be so advised, and the student will make his own arrangements for care elsewhere at his own expense.

14. Neither the University nor the Student Health Association will assume any responsibility for the payment of hospital or other medical expenses incurred on or off the campus, unless such expense is expressly authorized by the University Health Committee. In certain instances of unusually heavy medical expenses, and when student health funds make it possible, the Student Health Committee, solely at its own discretion, may provide some financial relief to a student.

15. The failure to make use of the health services offered will not be accepted as a reason for exemption from the payment of the health service fee or for refunds therefrom in any semester.

HONOR AND HONORARY SOCIETIES

Alpha Epsilon Delta—An honorary premedical fraternity whose purpose is to encourage excellence in premedical work by furnishing a goal toward which the student may strive during the early semesters of the premedical career. Its purpose is to bind together similarly interested students. Membership is open to all students preparing themselves for the study of medicine, dentistry, nursing, or closely allied professions who have completed at least the work of the freshman year with an acceptable scholastic record.

Block "N" Society—An honor society of men who have won the Block "N." Its purpose is to raise the standard of athletics and to promote good fellowship among alumni and resident members.

Blue Key—A national honorary, undergraduate, service fraternity composed of those upper classmen who have been leaders in University activities. This organization sponsors the annual Wolves' Frolic and the semiannual get-together dance at the beginning of each semester.

Chi Delta Phi—A national literary society for women, whose purpose is to form a body of representative women who, by their influence and their literary interests, will uphold the highest ideals of liberal education. (Charter granted April 1931.)

Coffin and Keys—An honor society composed of members of the faculty and men elected annually from the upper classes who are considered leaders in student life and activity.

Delta Delta Epsilon—This is an honorary musical fraternity for University band men and women which promotes and encourages better musicianship and scholarship in the band, assists in discovering new talent on the campus, sponsors loyal spirit and devotion to University events and promotes an increasing interest in University-Community music. Any student musician accepted as a permanent member of the band is eligible for election to the organization after serving one semester of apprenticeship. Honorary membership is extended to a few outstanding musicians associated with the campus who, by contributing their services, have rendered valuable service to the band.

Forensic Key—This is an organization of men and women who have earned the official student body award for intercollegiate debate or oratory. All students are eligible to compete for places on the debate squad. Those who represent the University in intercollegiate debates and oratorical contests receive the award and automatically become eligible for membership in the organization. Local chapter established in 1933.

Gothic "N" Society—An honor organization of women, election to which is based on sportsmanship, sports, participation, health habits, sophomore rank, scholarship average of C or better, participation in at least one nonathletic organization, attendance at W. A. A. meetings and practical unanimity of active members as to acceptability of candidate for election.

Kappa Tau Alpha—National fraternity honoring scholarship in journalism in institutions offering work of recognized professional standing in this field. Students are elected from the highest ten percent of the junior-senior journalism group. The Nevada chapter was established in the spring of 1936.

Masque and Dagger—The Nevada chapter of this national honorary dramatic fraternity was established to recognize students who have shown ability in dramatic work. Election to membership is based upon work done in acting and backstage.

Nu Eta Epsilon—A local honor society established at the University of Nevada in May 1923 for the purpose of encouraging higher standards of scholarship among engineering students. The qualifications for membership are the same as for the National Honor Society of Tau Beta Pi. Elections are held twice a year, and selections of eligibles are based entirely upon scholarship.

Phi Alpha Theta—A national honorary society whose purpose is to encourage excellence in history study, by furnishing a goal and stimulus for students in this field. Eligibility for election is based on completion of twelve hours or more of work in history with satisfactory scholastic average.

Phi Kappa Phi is a national honor society composed of graduate and undergraduate members of all departments in American universities and colleges. Its prime object is to emphasize scholarship in the thought of college students, to hold fast to the original purpose for which institutions of learning were founded, and to stimulate mental achievement by the prize of membership. This society elects to membership a certain number from the graduating class, on the basis of high scholarship. (Local chapter established in 1912.)

Sagens—An honorary women's service and pep organization, the purpose of which is to assist at all student body functions. Membership is limited to five upperclass women in each sorority and in the Independents.

Sagers—A local service organization, members of which are chosen from among outstanding upperclass men. Its many campus activities include that of building the Homecoming bonfire. Membership in the Sagers serves as a stepping stone to membership in Blue Key.

Scabbard and Blade—A national honorary military society founded on the basic idea that military service is an obligation of citizenship. The active membership consists of selected cadet officers of the Reserve Officers' Training Corps at various institutions. Its purposes are: To unite the Department of Military Science and Tactics of American Universities and Colleges into closer relationship; to preserve and develop the essential qualities of efficient officers; to promote good fellowship among cadet officers; and to prepare them to take an active and influential part in the community in which they may reside and to disseminate intelligent information concerning the military requirements of our national defense. The local unit, Company C, 7th Regiment, was organized May 14, 1929.

Sigma Gamma Epsilon—A national organization of geologists, mining engineers, metallurgists, and ceramists. Upperclass students in these subjects are eligible to membership in the local chapter. Biweekly meetings are held for the discussion of problems related to these professions.

Sigma Sigma—An honor organization whose membership is elected from the students majoring in home economics on the basis of scholarship and ability shown in the field of home economics.

Sigma Sigma Kappa—An honor organization whose membership is elected from the Chemistry Club on the basis of scholarship and ability shown in the field of chemistry.

CLUBS AND ASSOCIATIONS

The Aggie Club—Founded by the agricultural students in 1909 is an active organization of men students and faculty members of the college. The club meets the last Wednesday of each month to carry on business and social activities.

Artemisia and Manzanita Association—Residents of these halls are organized into a body under the name of Artemisia and Manzanita Association, with president, vice president, secretary and treasurer elected for one year. The purpose of the association is to carry on campus traditions and to develop leadership and social poise.

The Canterbury Society—The Nevada group of this nationwide organization was formed in September, 1940, for Episcopal students and their friends. The group sponsors cultural and social programs.

Cap and Scroll—A club organized for the purpose of developing the highest ideals on Nevada's campus by combining in organized form the women of the University who are leaders in student life and activity.

The Chemistry Club—The University of Nevada Chapter, Student Affiliates of the American Chemical Society, was organized in 1941. All students registered for the degree Bachelor of Science in Chemistry or who are majoring in chemistry and whose chief academic interest is in the field of chemistry are eligible for active membership. The purpose of the club is to keep its members in touch with present activities and developments in the chemical field, and to foster interest in the science of chemistry. Meetings are held on the second Tuesday of each month.

Civil Engineering Club—Its function is to promote closer relationship between the American Society of Civil Engineers and students. Membership is open to all students in the School of Civil Engineering. Meetings, which are in the form of lecture and discussion, are held monthly.

The Crucible Club—This is an organization of mining, metallurgical, and geological students and faculty. The club meets once a month and is addressed by prominent members of the mining profession. The Crucible Club is a student branch of the Society of the American Institute of Mining and Metallurgical Engineers.

Electrical Engineering Club—The University of Nevada Branch, American Institute of Electrical Engineers, was organized in 1922. All students registered in electrical engineering are eligible to membership. Meetings are held monthly, at which time student technical papers are presented or the branch is addressed by some prominent member of the profession.

Engineering Societies—All engineering students and the engineering faculty are members of the Associated Engineers. This society meets from time to time during the college year for the consideration of social and scientific matters.

In addition to this general society there is a student branch of

each of the four great national societies of Engineering. These groups hold monthly meetings for the discussion of scientific matters relating to their own branch of the profession.

Fine Arts Club—Originated to promote interest in and appreciation of the arts among students. Exhibits of local and out-of-State artists are on display two weeks each month in the Fine Arts room in the library. Meetings are held monthly.

Fraternities—The following fraternities have chapters, the figures in parentheses giving the dates chapters were established at this University: National fraternities—Sigma Nu (1914), Sigma Alpha Epsilon (1917), Phi Sigma Kappa (1917), Alpha Tau Omega (1921), Sima Phi Sigma (1922), Beta Kappa (1925), Lambda Chi Alpha (1929); local fraternity—Sigma Rho Delta (1942).

The Home Economics Club—A social and professional organization, and a member of the national organization. Open to all students in Home Economics. Meetings are held monthly.

Independents—A social organization of unaffiliated men and women students, organized for social purposes, for securing representation in student government, and to further the interests of the University. Meetings are held each Monday evening.

The Mathematics Club—An organization composed of students interested in mathematics. Meetings are held monthly at which talks are made by students or faculty members on subjects of common interest.

Mechanical Engineering Club—An organization of students registered in Mechanical Engineering, upperclass members of which are affiliated with the parent organization, the American Society of Mechanical Engineers. Meetings are bimonthly and are devoted alternately to the conduct of business and to the review of technical subjects.

Musical Organizations—Organizations for the promotion of vocal and instrumental music are heartily encouraged. The groups at present are the Campus Choral Club, the University Singers, the Reno Civic Chorus and Orchestra, the University Band and small ensembles. Membership is open to both men and women in all these groups and may be carried on the regular program for credit hours, or as a volunteer membership and considered as one of the student's outside activities. In addition to the above-named groups, there are the Campus Music Association for the promotion of music interests among the students and the Listening Hour Group, devoted to the study of classics and modern musical literature as represented in the fine library of phonograph records.

The Newman Club—A nonsecret organization open to all students of the University. Its purpose is to impart religious instruction and to promote social contact among the Catholics who are enrolled at the University. There are approximately 250 Newman Clubs already established in colleges and universities of the United States.

The Pilgrim Fellowship—A society open to all students, although organized especially for the religious and social culture of students connected with the Presbyterian and Congregational churches. It

holds fellowship with like societies in State institutions throughout the United States and Canada. Meetings are held each Sunday evening at the Manse.

Sororities—The following sororities have chapters, the figures in parentheses giving the dates chapters were established at this University: National sororities—Delta Delta Delta (1913), Phi Beta Phi (1915), Gamma Phi Beta (1921), Kappa Alpha Theta (1922).

Sundowners of the Sagebrush—Nevada's outstanding good fellowship organization is the Sundowners of the Sagebrush. It is composed entirely of men who are elected to membership, not because they have been outstanding in athletics, publications, or other academic activities, but because they have exhibited the characteristics of good fellowship. Membership is not restricted to undergraduate students, but faculty members as well as post-graduates are active in the organization.

The University of Nevada Press Club—A professional and social organization of students in journalism and members of the staffs of the campus publications. With a membership limited to thirty-five, elections are held twice each year.

Wesley Foundation—A national organization of Methodist college students, formed on the Nevada campus in 1940. Its purpose is to bring together Methodist students, and others who are interested, for social and religious development. Meetings, which are open to all students, are held the first and third Sundays of every month.

The Women's Athletic Association—An organization which sponsors intramural athletics for women. It is a student organization administered by students. A member of the department faculty acting in an advisory capacity meets with the executive board. Meetings are conducted by the students, and no faculty members attend except by special invitation.

W. A. A. is a member of the Athletic Conference of American College Women which is a national organization with a membership of approximately 300 women's athletic associations in colleges and universities throughout the United States.

Y. W. C. A.—The Young Women's Christian Association has a branch organization among the students. The purpose of the association is the maintenance of high standards in all student relations, mutual helpfulness and pleasure, and the promotion of Christian ideals.

UNIVERSITY PUBLICATION

The Bulletin—The official publication of the University, issued quarterly or oftener.

STUDENT PUBLICATIONS

The Artemisia—An annual published by the Associated Students of the University of Nevada.

The Blue Key Directory—A student body directory published each fall by Blue Key, service fraternity.

The U. of N. Sagebrush—A weekly newspaper issued throughout the University year by the students of the University.

PHYSICAL EDUCATION AND ATHLETICS

REQUIRED PHYSICAL EDUCATION

Every student who is a candidate for graduation from the University will be required to complete the prescribed two-year basic course of physical education unless excused therefrom by the Dean of the College concerned.

MEN

The purpose of this department is to assist the men of the University to live to the best advantage, and so to aid them in the formation of hygienic habits that during their stay at the University they may make profitable physical preparation for life. There is urgent necessity that each student should have an intelligent appreciation of the means requisite for the preservation of his health, in order that he may be able to formulate wisely his own policy of health control. Credit counting toward the college degree is given. The individual's grade is largely based on attendance, punctuality, earnestness and application, but practical tests are also given.

PHYSICAL EXAMINATIONS

Each student on entrance to this department is given a physical examination in order that his work may be directed to meet his individual requirements. Members of squads out for varsity teams, reporting regularly, are excused from the practical work during the regular season of that sport, and are entitled to full credit in that portion of their work.

UNIFORM AND FEE

Each student must provide himself with a regulation uniform, which should not be procured until after arrival at the University.

Tentative Cost of Uniform:

White sleeveless gym shirt	$0.75
White running pants, short leg	$1.25 up
White rubber-soled shoes	$2.00 up
Athletic supporter	$0.75 up

A locker-and-laundry fee of $1 is charged each semester.

WOMEN

The purpose of this department is three-fold: First to develop skills which will make possible pleasurable participation in recreational activities; second to overcome remediable physical defects; third, to give the student who is interested in this field a scientific background upon which to base further study in physical education, and enough material drawn from current practices in physical education to qualify her to direct intelligently recreational activities in the elementary and high school.

All women in the University are given opportunity to engage in leisure time activities through the Women's Athletic Association, a

student organization administered by students. The activities sponsored by this organization are: Archery, badminton, baseball, basketball, bowling, dancing, equitation, hiking, hockey, rifle, swimming, tennis. The Women's Athletic Association sponsors interclass and interorganization competition in as many activities as possible, with a member of the department acting in an advisory capacity.

Physical education is required of all freshman and sophomore women unless excused therefrom by the Dean of the College concerned. Upon entering, and at the beginning of each year, medical and physical examinations are given in order to determine individual needs. As far as possible the work of the department is adapted to these needs.

A fee of $2.50 per semester is charged for locker, laundry, and all equipment needed, excepting shoes and socks which are provided by the student. Bowling, golf, riding and swimming carry fees varying from six dollars to ten dollars, depending upon conditions prevalent during the current year.

ATHLETICS

Excellent facilities are provided on the Mackay Athletic Field for all branches of athletics. American football, baseball, track, basket ball, and tennis are the sports of special prominence at present. The main policy of the University is to foster the spirit of honor and manliness, to prevent the development of commercialism or professionalism in athletics, and to see to it that athletic sports do not encroach upon the claims of scholarship.

To represent the University of Nevada in any athletic contest, whether in freshman or varsity sports, a student must be certified by the Faculty Athletic Committee as eligible for participation. No student on probation shall be eligible for participation in any freshman or varsity sport.

FACULTY ATHLETIC COMMITTEE

The duties of the Faculty Athletic Committee are as follows:

To certify the scholastic eligibility of intending participants in all sports, both freshman and varsity. Cases of ineligibility shall be reported both to the coaches and students concerned.

The eligibility rules are printed in the current issue of *Regulations for the Guidance of Undergraduates.*

MILITARY SCIENCE AND TACTICS

1. There is maintained at the University an Infantry Unit of the Reserve Officers' Training Corps. The unit was established by Act of Congress approved June 3, 1916, for the purpose of preparing, by systematic and standard methods of training, students at civil educational institutions for reserve officers in the United States Army. Incidentally, the course of training also prepares students to a certain degree for the positions of noncommissioned officers in the Enlisted Reserve Corps.

2. The Cadet Corps consists of all physically fit male students in their first and second years at the University and such additional male students as may elect and who are selected to continue with the advanced work in their third and fourth years.

3. When registering in military at the University for the first time, students are required to take an examination to determine their *physical* fitness for enrollment in the Reserve Officers' Training Corps. The blank form prescribed for this examination may be obtained from the University Registrar.

4. The United States Government furnishes service uniforms and all equipment necessary to carry on the instruction. In addition, those who elect and are selected to continue the work in their junior and senior years are paid commutation of rations and are required to attend a training camp at the end of the junior year.

NOTE—At the present time, the amount paid to students enrolled in the advanced course approximates $220 for the two years.

5. The arms, equipment, and uniforms issued to students for military training are the property of the United States for which the University is financially responsible. To protect the University against any charge for loss or damage to government property arising from misuse or neglect on the part of the student, a deposit of $10 will be required from each student registered in military, with the exception of military bandsmen.

6. Every male student who is a candidate for graduation in any of the colleges of the University will be required to complete the prescribed two-year (basic) course of military training unless excused therefrom by proper authority.

The following students may be excused from all or a part of the prescribed training:

(a) Those who, upon their initial registration in the University, are over 26 years of age.

(b) Those who have satisfactorily completed parts or all of the equivalent military course prescribed, having acquired the same at an educational institution under the supervision of an officer of the Army regularly detailed as Professor of Military Science and Tactics.

(c) Those who have completed equivalent military training in the regular military and naval services, national guard, or naval militia, and have received honorable discharges therefrom. The credits allowed

for such service shall be determined by the Professor of Military Science and Tactics, and will be based upon the length and character of such service.

(d) Aliens, they being prohibited by law.

(e) Those who are physically unfit for military duty. Physical examinations are required upon original enrollment in the Basic Course (unless a defect is readily apparent), and upon enrollment in the Advanced Course. Subsequent physical examinations may be required of Advanced Course students as necessity therefor arises.

(f) Transfer students who enter this University with junior standing, having completed freshman and sophomore work in an institution which did not then require military training. For definition of "junior standing," see Classification of Students, Index. See, also, Admission by Transfer, Index.

7. Restrictions:

(a) Members of the active personnel of the Army, Navy, or Marine Corps of the United States, commissioned officers of the National Guard or Naval Militia, and reserve officers of the military forces (Army, Navy, and Marine Corps) are ineligible.

(b) No student will be permitted to enroll initially in the basic course after he has attained his 26th birthday, nor will any student be permitted to re-enroll or be continued in the advanced R. O. T. C. course at an age which would make his graduation therefrom impossible before the attainment of his 30th birthday.

(c) Students excused from military training receive no credit toward advanced standing in military except in cases coming under Section 6, (b) and (c), foregoing.

(d) Excused students not receiving advanced credit are required to take additional work aggregating the number of units allowed for that part of the military course from which they are excused.

8. Students who satisfactorily complete the basic and advanced military courses will be tendered commissions by the United States Government as Second Lieutenants of Infantry in the Reserve Corps of the Army.

9. Special Regulations for the Department of Military Science and Tactics are published in pamphlet form, a copy of which will be issued to each student registered in military. **Cadets will be held to observance of these Regulations and of such orders and instructions as may be issued from time to time in connection with their military training.**

10. Upon registration, each cadet will familiarize himself with the Regulations for the Department of Military Science and Tactics.

HONORS AND AWARDS FOR MILITARY EXCELLENCE

Honor Graduates. Under existing Army Regulations, the University may designate certain members of the second year Advanced Course as "Honor Graduates," who may be permitted to compete for commissions in the Regular Army. The number is limited only by the qualifications outlined below. The term "Honor Graduate" applies to graduates of the University (in the current academic year) who are graduates of the Second Year Advanced Military Course in the current academic year or previous academic years, who are citizens of the United States, who have been selected by the President of the University for scholastic excellence and who have been designated as

honor graduates by the Professor of Military Science and Tactics as possessing outstanding qualities of leadership, character, and aptitude for military service. They must be 21 years of age on or before the dates set for their appointments in the Regular Army. Those who are ineligible for appointment in the Regular Army in the year in which they are graduated in honor status because of non-age, will be permitted to compete for appointment with honor graduates in the first year subsequent thereto in which they attain the prescribed age. The designation as an honor graduate does not give the individual any claim or right to an appointment in the Regular Army. (Section 24e, National Defense Act, as amended by section 7, Act of Congress dated April 3, 1939, 53 Stat. 555, Group 3, Honor Graduates.)

For the past three years the University has been canvassed by representatives of the following Federal services, usually early in the second semester, viz:

a. Regular Army, for cadetships at the United States Military Academy and the Air Corps; appointments to commissions from among the honor graduates.

b. Regular Navy, for cadetships at the United States Naval Academy.

c. Coast Guard (Treasury Department), for cadetships to the United States Coast Guard Academy.

d. By Congressmen, for cadetships to the United States Military and Naval Academies.

e. In addition, a Regular Army Board has examined expectant graduates of the Advanced Military courses (prospective Second Lieutenants in the United States Army Reserve), for extended tours of active duty with the Army under the Thomason Act, which permits a small percentage of those accepted, after further competition, to become commissioned officers of that service.

Governor's Medal—Senate Bill No. 86, section 2 (2), adopted at the 1937 session of the Nevada Legislature, makes provisions for the presentation annually of a medal to be known as the "Governor's Medal," to that graduate of the first- or second-year basic course in the military department of the University of Nevada (R. O. T. C.) whose proficiency in military training, observance of the rules of military courtesy, and intelligent attention to duty, have received the approbation of the Professor of Military Science.

In accordance with the requirements of this Act, the name of the student entitled to this award will be transmitted by the Professor of Military Science and Tactics, through the University President, to the Governor of the State, on or about April 15 each year. Presentation will be made on the occasion of the final review of the cadet corps.

Reserve Officers' Association Medal—This medal, donated by the Reserve Officers' Association, Department of Nevada, is awarded annually to that member of the basic course, second year, having the best record for attendance and discipline throughout the two years of the basic course.

Gold Medal for Drill and Discipline—The basic course cadet most proficient in drill is determined in competition held near the end of the school year. Of the five most proficient, the cadet having the best

record for the year in attendance and discipline will be awarded a gold medal, donated by Company C, 7th Regiment, Scabbard and Blade.

Other Medals and Prizes—For particulars as to other awards for which cadets are eligible, see current Regulations for Department of Military Science and Tactics.

FOUNDATIONS, HONORS, MEDALS, AND PRIZES

FOUNDATIONS

THE ROBERT LARDIN FULTON LECTURE FOUNDATION*

(ESTABLISHED 1924)

In memory of Robert Lardin Fulton, constructive citizen of Nevada for over half a century, Mrs. Mary Bragg Fulton established a lecture foundation at the University. The income from this foundation is to be used to bring annually to the University some leader in the field of science, art, literature or public affairs, who will give a series of lectures upon his special subject. The lectures were initiated in April 1925. The committee chosen by the founder to select the lecturer under this foundation consists of the President of the University, the Deans of the Colleges of Arts and Science, of Agriculture, of Engineering, of the School of Education and the Director of the Mackay School of Mines.

Lecturers	*University Year*
DR. ROBERT A. MILLIKAN	1924–1925
DR. EDWARD T. DEVINE	1925–1926
UPTON CLOSE (Josef Washington Hall)	1926–1927
DR. WILL DURANT	1927–1928
COUNT ILYA TOLSTOY	1928–1929
DR. FRANK MORTON MCMURRY	1929–1930
DR. JAMES H. COUSINS	1930–1931
DR. ROBERT A. MILLIKAN	1938–1939
MISS MARY A. DINGMAN	1940–1941
No Lecture	1941–1945

THE S. FRANK HUNT FOUNDATION

(ESTABLISHED 1935)

In memory of Mr. S. Frank Hunt, discoverer and developer of the Rio Tinto mine, the Regents of the University established the Hunt Foundation from successive gifts of cash, mining stocks, automobiles, and equipment that Mr. Hunt gave the University for the Mackay School of Mines.

As Mr. Hunt desired, the foundation provides the opportunity for faculty and students to make trips to operating mines, mills, and mining meetings during the college year, along with week-end trips in connection with school courses. It also provides for the Hunt trip, a free summer course of several weeks to enable a chosen number of students to make a study of mines, prospecting, and geological mapping.

*Suspended for the years 1931–1938 at the desire of the executor of the estate of the donor. Because of readjustment of plan, no lectures were given in 1939–1940 or 1941–1945.

UNIVERSITY SCHOLARSHIP HONORS

HONORABLE MENTION

At commencement an announcement of "Honorable Mention" is made of students in each of the several colleges who have maintained a high scholastic rating during their last year or their entire four-year course. Honorable Mention signifies that the student has ranked in the upper five percent of his college both semesters of his senior year, or of the entire four years.

HONOR ROLL

A Scholarship Honor Roll which includes the upper five percent of the undergraduate student body who have completed at least fifteen semester hours is issued by the Faculty Scholarship Committee at the end of each semester.

MEDALS

FRENCH MEDAL*

(ESTABLISHED 1935)

A medal is awarded annually by the French ministry of Foreign Affairs, through the intermediation of the French Consul General at San Francisco, to that member of the graduating class who has shown high excellence in French courses throughout the junior and senior years and who, in the opinion of the head of the department of foreign lauguages, is most deserving of this honor.

THE HERZ GOLD MEDAL AWARD

(ESTABLISHED 1923)

R. Herz & Brothers, Reno jewelers, award a gold medal annually to that member of the graduating class who has attained the highest average scholarship throughout his college course and has taken all of the required work for his degree (to within 8 units) at the University of Nevada. In the event of a tie, the University is privileged to buy a second medal at cost.

PRIZES

THE ALBERT SENIOR PUBLIC SERVICE PRIZE

(ESTABLISHED 1924)

These prizes were founded by Dr. Henry Albert, formerly Director of the State Hygienic Laboratory, and perpetuated in his memory by Mrs. Albert.

Two prizes of $37.50 each are awarded annually at commencement to two outstanding students on the basis of good scholarship, good character, and worthy service to the University or the community.

The winners of the Albert Senior Public Service Prizes are chosen by the chairmen of the Faculty Committees on Scholarship and Athletics, the Dean of Women, the Master of Lincoln Hall, and the President of the University.

*The awarding of this medal has been temporarily suspended.

PHILO SHERMAN BENNETT PRIZE

(ESTABLISHED 1909)

The Philo Sherman Bennett prize is the interest on a fund of four hundred dollars, given to the University by the Honorable Philo Sherman Bennett of New Haven, Connecticut. The prize is awarded for the best essay on "The Principles of Free Government." The income from this fund is allowed to accumulate until a prize of approximately fifty dollars can be given.

GINSBURG JEWELRY COMPANY AWARD

(ESTABLISHED 1939)

At the beginning of the second semester of each year the Ginsburg Jewelry Company of Reno awards a fine watch of seventeen or more jewels to that man of the sophomore class in regular standing who has been in residence at the University for three semesters. *This student must possess the outstanding scholarship record of his class.* The selection of the winner is made by the University Committee on Prizes and Scholarships.

NEVADA LIVESTOCK PRODUCTION CREDIT ASSOCIATION AWARD

(ESTABLISHED 1940)

The Nevada Livestock Production Credit Association of Reno has established annual awards of $75 and $25 for the best and second-best papers written on the subject of financing of farming and/or stock raising from the angle of production.

Papers are to be not more than 2,000 words in length.

To be able to compete for these awards the student must have been registered in the College of Agriculture, University of Nevada, during the semester preceding the award, and must have completed that semester. Also, the student must be from the territory served by the donor association, which includes all of the State of Nevada and Mono and Alpine Counties and Sierra Valley, California.

Elimination contests are held under rules established by the College of Agriculture, to determine the two best papers prepared by qualified contestants. These papers are presented by the authors at the annual meeting of stockholders of the association which is usually held in January or February of each year. The decision as to the best and second-best paper is reached by the stockholders. Immediately following the decision, the awards are made. The papers presented become the property of the association, with full rights of publication.

Copies of the papers to be presented must be furnished to the association at least ten days before the meeting, and the association has the right to disqualify any paper not meeting the designated conditions, and to substitute the next-best paper.

A WORD TO DONORS

The University of Nevada will be greatly helped in its program of service to Nevada and to the Nation if it is given the aid of substantial

general endowment funds. It can be helped too, at many points, by specific endowment gifts. In the hope that some donors may assure the University aid through their wills, usable forms covering requests either for general or for specific gift endowments are here given:

FORMS OF BEQUESTS

GENERAL

I give and bequeath to the University of Nevada, located in the city of Reno in the Commonwealth of Nevada,.....dollars, to be used at the discretion of the Board of Regents of said University.

SPECIFIC

I give and bequeath to the University of Nevada, located in the city of Reno in the Commonwealth of Nevada,.....dollars in trust for the following uses and purposes; that is to say: (Here specify in detail the purposes.)

It is advisable for any one contemplating a bequest for charitable purposes to ascertain the requirements of the law in the State in which he resides, and to take special pains to comply with such requirements.

The Federal Income Tax Law provides that premiums for life insurance with the University as irrevocable beneficiary are allowable deductions from gross income up to 15% of net income.

SCHOLARSHIPS

(No award in the form of a scholarship will be made unless the recipient is duly enrolled in the University at the time the award is payable.)

1. JEWETT W. ADAMS SCHOLARSHIP FUND

(ESTABLISHED 1942)

In conformance with the will of Mrs. Emma Lee Adams, wife of the late Honorable Jewett W. Adams, former governor of Nevada, the Jewett W. Adams Scholarship Fund of $40,000 was established. The interest on this money is used to assist deserving students.

The Committee on Scholarships and Prizes presents the awards with attention to the following qualifications:

Financial need, promise of future leadership, proven scholastic ability, and good character.

2. ARMANKO OFFICE SUPPLY SCHOLARSHIPS

(ESTABLISHED 1936)

The Armanko Office Supply Company of Reno offers two scholarships of $100 each to students in the Departments of Chemistry and Physics. These scholarships are awarded on Commencement Day by the heads of the Departments of Chemistry and Physics and the Chairman of the Committee on Scholarships and Prizes to students possessing the following requirements:

1. Upright moral character.
2. General scholarship.
3. Outstanding scholastic attainment in the department.
4. Evidence of interest in the field.
5. Completion of a minimum of four hours in the department during the past school year.
6. Financial need is considered only when two students otherwise possess equal qualifications.

One half of this award is paid in the fall and the other half in the spring semester.

3. ASSOCIATED WOMEN STUDENTS' SCHOLARSHIPS

(ESTABLISHED 1918)

The Associated Women Students of the University of Nevada present an annual scholarship of $25 to the woman student who attains the highest average grade for the year and who receives no other scholarship.

4. JOSEPHINE BEAM SCHOLARSHIPS

(ESTABLISHED 1944)

By the will of Josephine Beam, a trust fund was established with the Zion Savings Bank and Trust Company of Salt Lake City, to be known as the Josephine Beam Education Fund. The yearly income of

approximately $3,000 is shared equally by the University of Utah and the University of Nevada.

These scholarships are awarded to incoming freshmen by the President of the University of Nevada, the State Superintendent of Public Instruction, and a representative of the trustee, on the basis of high school scholastic record, principal's recommendation, and college aptitude tests.

Each scholarship is paid in two installments: one each semester. The Committee reserves the right to withhold the second payment should the student's first semester record prove unsatisfactory.

5. THE HORACE P. BOARDMAN SCHOLARSHIP IN CIVIL ENGINEERING

(ESTABLISHED 1941)

Fred A. and Betty R. Roemer provide a $100 annual scholarship known as the Horace P. Boardman Scholarship in Civil Engineering.

The individual selected must possess good character, good scholarship, and be in need of financial assistance. Also, he should have earned either junior or senior standing as a duly enrolled student in the University of Nevada. Both the principal and alternate are chosen by the Civil Engineering faculty.

One half of this scholarship is payable each semester, provided the winner is regularly enrolled as a student at the University.

6. THE FRANK O. BROILI SCHOLARSHIP IN ELECTRICAL ENGINEERING

(ESTABLISHED 1942)

The late Mrs. Francis Leonard Broili Bradley of Reno bequeathed $5,000 to the University of Nevada. The income therefrom is to be used to establish The Frank O. Broili Scholarship in Electrical Engineering at the University of Nevada, or to be used for this department in such manner as the President and the Regents of the University may determine.

7. THE MARYE WILLIAMS BUTLER SCHOLARSHIP

(ESTABLISHED 1921)

In memory of her daughter Marye Williams Butler, a graduate of the University of Nevada Normal School, class of 1899, Mrs. Sophie E. Williams, Nye County, established a scholarship fund of $1,000.

The income from this fund, payable in the fall semester, is to be awarded by the University Committee on Scholarships and Prizes to that student who has completed mathematics through calculus with an average grade of "B" in all work in mathematics, who has earned due credit in this minimum of mathematics not later than the second semester of his junior year, and who receives no other scholarship.

8. THE AZRO E. CHENEY SCHOLARSHIP

(ESTABLISHED 1922)

The Honorable Azro E. Cheney bequeathed $5,000 in trust to the University of Nevada to be controlled and invested by the Board of

Regents. The income from this fund is awarded by the University Committee on Scholarships and Prizes at each annual commencement to that member of the freshman or sophomore class who is a *bona fide* resident of Nevada and who is certified by the head of the Department of English as being the best student in English during that year. Both character and improvement are also considered.

One half of this award is payable in the fall term and the other half in the spring.

9. THE CHARLES ELMER CLOUGH SCHOLARSHIPS IN ENGINEERING

(ESTABLISHED 1926)

Mr. Charles Elmer Clough of Reno established two scholarships in engineering, each of which carries an annual value of one-half of the income received from the Charles Elmer Clough Trust Fund during the calendar year from one University commencement to the next. The scholarships are awarded at the end of each University year, beginning with the award in May 1927.

The winners are chosen by the head professors of the Schools of Civil, Electrical, and Mechanical Engineering from the students enrolled in those schools. The two recipients must be the best all-round students, must be self-supporting in whole or in part, and be of good character and of good scholarship. One of them must have earned senior standing, and the other junior standing, in the University of Nevada.

10. THE DAUGHTERS OF THE AMERICAN REVOLUTION SCHOLARSHIP

(ESTABLISHED 1939)

The Nevada Sagebrush Chapter (Reno) of the Daughters of the American Revolution grant an annual scholarship of $50 to either a man or a woman nominated by the University Committee on Scholarships and Prizes for character, leadership, and scholastic attainment, upon the satisfactory completion of at least one year's work in the University.

One half of this award is paid each semester provided the winner is registered in the University.

11. THE THOS. E. DIXON SCHOLARSHIP

(ESTABLISHED 1945)

This scholarship fund of $3,000, a gift of Mr. Dixon of Caliente to aid deserving students, is administered jointly by the faculty of Lincoln County high school and the Chairman of the Committee of Scholarships and Prizes. The high school faculty chooses the recipient, while the chairman of the University committee determines when payments are to be made.

12. THE RENO LODGE OF ELKS ATHLETIC SCHOLARSHIP

(ESTABLISHED 1937)

The Reno Lodge of Elks established this scholarship of $100 to be

awarded at commencement to a man student who is a leader among the students, and who is a recipient of no other scholarship.

The winner is chosen by a committee of three Elks and the University of Nevada Director of Athletics from a list of five nominated by the Athletic Control Board.

The scholarship is paid in two installments of $50 each, the first payable in the fall and the second in the spring semester.

13. EPSILON SIGMA PHI 4-H CLUB SCHOLARSHIP

(ESTABLISHED 1940)

The Nevada Chapter of Epsilon Sigma Phi, honorary society of agricultural extension workers, established the Epsilon Sigma Phi 4-H Club Scholarship of $50 in the College of Agriculture of the University of Nevada.

The Dean of the College of Agriculture and two members of the staff of the University's Agricultural Extension Service selected by Epsilon Sigma Phi, choose as the recipient of the scholarship that boy or girl who has achieved the most in his Nevada 4-H Club work.

The scholarship becomes available to the winner, within one year after his graduation from high school, upon his registration in the College of Agriculture of the University of Nevada. One half is paid one month after the beginning of both semesters of his freshman year.

14. THE MAJOR MAX C. FLEISCHMANN SCHOLARSHIPS

(ESTABLISHED 1938)

By successive gifts, Major Max C. Fleischmann has provided approximately $175,000 worth of securities as a scholarship fund. The income from approximately $118,000 goes to regular University of Nevada students, and that from approximately $57,000, to incoming freshmen.

The regular students must fulfill the following requirements:

1. Need financial assistance to the amount of the scholarship in order to continue in the University.
2. Give promise of becoming effective citizens upon graduation and be worthy of such assistance.
3. Show qualities of leadership and a spirit of cooperation by active participation in a student activity or activities.

These scholarship are paid in three equal installments during the school year.

The freshmen are selected on the following basis:

1. High school scholarship record of seven semesters.
2. High school principal's recommendation.
3. College aptitude test.

One half of these scholarships are awarded in the fall and the other half in the spring semester, providing the student has made a creditable record during his first term of attendance at the University.

15. THE NOBLE H. GETCHELL SCHOLARSHIPS

(ESTABLISHED 1938)

Senator Noble H. Getchell established eight annual scholarships of $300 each for graduates of the Lander County high schools enrolled in

the University of Nevada. These scholarships were made available for two students during the University year 1938–1939, to four students in 1939–1940, to six students in 1940–1941, and to eight students in 1941–1942 and thereafter. These scholarships are payable annually during each of the four undergraduate years for which the Getchell Scholar is registered at the University.

The announcement of the initial awards is made at the commencement exercises of the Battle Mountain and the Austin high schools; the scholarship going to the worthiest members of each graduating class who have individual ability and need, and who have received no other scholarship. The winners are chosen by a committee consisting of the principals of the two high schools and the District Deputy Superintendent of Public Instruction.

Seventy-five dollars is payable each September and January tenth and $25 each October, November, December, February, March and April tenth of the University year.

16. THE GRAND ARMY OF THE REPUBLIC SCHOLARSHIP

(ESTABLISHED 1934–1935)

The Woman's Relief Corps of the Department of California and Nevada established the Republic Memorial Scholarship Fund, the interest of which is used for scholarships for descendants of soldiers or sailors of the Union in the Civil War.

The income of the Relief Corps' fund, supplemented by gifts from the Nevada Relief Corps at Carson City, Reno, and Virginia City, provides a $50 scholarship.

One half of this scholarship is paid in the fall and the other half in the spring semester.

17. THE CARL RAYMOND GRAY SCHOLARSHIPS IN VOCATIONAL AGRICULTURE

(ESTABLISHED 1926)

The Union Pacific Railroad offers an annual scholarship of $100 to a high school boy from each county served by the railroad who has completed a high school vocational agriculture course and who has the highest average rank in scholarship, supervised practice work, and qualities of leadership. The scholarship is awarded upon enrollment of the winner for a full four-year course in agriculture in the University of Nevada.

The winner is selected by a committee of three appointed by the State Supervisor of Agriculture.

The scholarship is paid as follows: Fifty dollars upon completion of registration in the Agricultural College of the University; $25 upon registration for the second semester, and $25 upon registration for the third semester.

18. THE CARL RAYMOND GRAY SCHOLARSHIPS TO 4-H CLUB MEMBERS

(ESTABLISHED 1926)

The Union Pacific Railroad offers annually a scholarship of $100 in agriculture or home economics to one boy or girl 4-H club member

in each county served by the railroad, for use in the College of Agriculture or the School of Home Economics of the University of Nevada.

The winner of the award is selected by a committee of three persons appointed by the State Director of Agricultural Extension on the basis of quality and quantity of project work and records, and on the basis of character, interest, qualities of leadership, community activities, school activities, and scholastic standing.

Payment of the scholarship award is made upon certification that the student has enrolled at the University for a course in agriculture or home economics. Payment is made in three installments; the first installment of $50 to be paid upon registration and establishment of the student in the classes of the college; the second of $25 upon registration for the second semester; and a third of $25 upon registration for the third semester.

19. ROYAL D. HARTUNG INDUSTRIAL EDUCATION SCHOLARSHIP

(ESTABLISHED 1942)

Under the terms of the will of the late Otto Hartung, the income from his estate was left to the Independent Order of Odd Fellows to be used to establish and maintain an orphans' home to be known as the "Royal D. Hartung Home for Orphans and Foundlings" with the stipulation that if this provision were not carried out, the entire estate should go to the University of Nevada to establish "The Royal D. Hartung Industrial Education Fund." Inasmuch as there were no orphans or foundlings to be provided with a home, the residue of the estate was conveyed in the summer of 1942 to the University of Nevada to establish "The Royal D. Hartung Industrial Education Fund."

The available income from this fund is awarded annually to a qualified student or students (preferably orphans) who are seeking an industrial education in the College of Engineering.

20. THE HERD & SHORT SCHOLARSHIP

(ESTABLISHED 1944)

Mr. Hugh Herd and Mr. Charles Short, clothiers, of Reno, offer a scholarship of $100 to a student in the Department of Economics, Business, and Sociology. This scholarship is awarded on Commencement Day by the head of the Department of Economics, Business, and Sociology, and the chairman of the Committee on Scholarships and Prizes with attention to the following requirements:

1. Upright moral character.
2. General scholarship.
3. Outstanding scholastic ability in the department.
4. Evidence of interest in the field.
5. Completion of a minimum of four hours in the department during the past school year.
6. Financial need, considered only when two students otherwise possess equal qualifications.

One half of this award is paid in the fall and the other half in the spring semester.

21. THE MRS. CARL OTTO HERZ SCHOLARSHIP

(ESTABLISHED 1926)

This scholarship was established by Mrs. Carl Otto Herz of Reno and for several years after her death was continued by Mr. Carl Otto Herz. At the 1930 commencement Mrs. Herz's heirs presented funds to the University to endow perpetually this scholarship in her memory.

The income from this fund is awarded at the end of each University year by the University Committee on Scholarships and Prizes to one of three electrical engineering students nominated by the head professor of electrical engineering. The nominees must be self-supporting in whole or in part, be of good character and of good scholarship and must have earned senior standing in the University of Nevada.

22. THE CARRIE BROOKS LAYMAN SCHOLARSHIP

(ESTABLISHED SPRING 1929)

This annual scholarship, established in memory of Carrie Brooks Layman, provides for ten consecutive payments of $20 each to a worthy, self-supporting sophomore or upperclass man or woman student, who, while in college, avoids bad debts and abstains from intoxicants and tobacco.

The recipient of this scholarship is chosen each spring by the University Committee on Scholarships and Prizes. If a son or grandchild of Mrs. Layman should enter the University of Nevada, then such son or grandchild shall have prior claim to this scholarship.

The initial $20 is payable during the first month of the fall semester and after the recipient has completed registration.

23. THE WILLIAM S. LUNSFORD SCHOLARSHIP IN JOURNALISM

(ESTABLISHED 1935)

Ethel Lunsford Frost and Harry J. Frost established this annual scholarship of $100 to be known as the William S. Lunsford Scholarship in Journalism.

This scholarship is awarded to a man or woman student having all of the following requirements:

1. A worthy moral character.
2. An unusual talent and future promise in the field of journalism.
3. An average grade no less than the average grade of the University.
4. A major in journalism.
5. Junior or senior standing during the University year the scholarship is held.

The University Committee on Scholarships and Prizes awards this scholarship upon the recommendation of the head of the Department of Journalism. Should the recipient fail to keep in good standing in his studies, except through circumstances beyond his control, he automatically forfeits the scholarship, which is then awarded to an alternate chosen by the same committee and satisfying same conditions.

24. THE ROSE SIGLER MATHEWS SCHOLARSHIPS
(ESTABLISHED 1920)

In memory of his wife, Rose Sigler Mathews, Mr. Isaac R. Mathews of Reno established a scholarship fund of $10,200.

Awards are made by the Committee on Scholarships and Prizes on the basis of scholarship, need, and character.

25. THE EMPORIUM OF MUSIC SCHOLARSHIP
(ESTABLISHED 1944)

Mr. and Mrs. Wilfred P. Smith offer a scholarship of $100 to a student in the Department of Music. This scholarship is awarded annually on Commencement Day by the head of the Department of Music and the chairman of the Committee on Scholarships and Prizes with attention to the following requirements:

1. Upright moral character.
2. General scholarship.
3. Outstanding scholastic ability in the department.
4. Evidence of interest in the field as shown by participation in band, chorus, or orchestra.
5. Completion of a minimum of four hours in the department during the past school year.
6. Other things being equal, preference is given to a student intending to minor in music.
7. Financial need is a consideration only when two students otherwise possess equal qualifications.

One half of this award is paid in the fall and the other half in the spring semester.

26. THE GRAND LODGE OF THE INDEPENDENT ORDER OF ODD FELLOWS SCHOLARSHIP
(ESTABLISHED 1939)

This fraternal order authorizes the award of four annual scholarships not to exceed the sum of $150 each. The students who receive these awards are chosen by the I. O. O. F. after recommendations have been submitted to the Board of Trustees and the Scholarship Committee of the Grand Lodge by the Committee on Scholarships and Prizes of the University of Nevada. Two of these scholarships are awarded to young men and two to young women who meet the following requirements and are approved by the Scholarship Committee of the Grand Lodge of Nevada:

1. Must be the son or daughter of an Odd Fellow and a Rebekah in good standing in their respective subordinate lodges in the jurisdiction of the Grand Lodge of Nevada.
2. Must have the approval of the Scholarship Committee of the Grand Lodge of I. O. O. F. of Nevada.
3. Must be of good moral character.
4. Must be a graduate of a Nevada high school.
5. Must have spent the freshman year at the University of Nevada.
6. Must give promise of future achievement.
7. Must have received no other scholarship.

One half of the scholarship money is payable to the respective winners each semester, provided the winners are duly enrolled in the University of Nevada and are in good scholastic standing. Alternates shall be chosen to receive these scholarships in the event the accepted candidates do not return to school or are declared ineligible by the committee.

27. PREMEDICAL–PRENURSING SCHOLARSHIP

(ESTABLISHED 1931)

This annual scholarship of $100, the gift of an anonymous donor, is awarded by the University Committee on Scholarships and Prizes and the head of the Department of Biology, to the worthiest premedical or prenursing student who has completed the freshman or sophomore year at the University of Nevada.

One half of this scholarship is paid in the fall and the other half in the spring semester.

28. THE NEVADA STATE PRESS ASSOCIATION SCHOLARSHIP IN JOURNALISM

(ESTABLISHED 1938)

The Nevada State Press Association established this annual scholarship of $50 to assist and encourage worthy and promising Nevada students preparing for the profession of journalism.

It is awarded under the following conditions, as outlined by the executive committee of the Press Association:

The recipient

1. Must be a graduate of a Nevada high school.
2. Must be registered in the course in Journalism or be majoring in Journalism.
3. Must have revealed talent in this field.
4. Must have shown proficiency and earnestness in the courses in Journalism.
5. Must have attained in all university work the average grade required for graduation.
6. Must have at least one more year of university work to complete, and normally must have been registered as a student at the University for at least two consecutive years prior to the time of the awarding of the scholarship.
7. Must be at least in part self-supporting and in need of financial assistance in order to continue University work.

The recipient of the scholarship is chosen by the head of the Department of Journalism, and receives the award from the Committee on Scholarships and Prizes.

If the recipient of the scholarship fails to keep in good standing, except through circumstances beyond his control, or fails to attend the University the following year, he automatically forfeits the scholarship. The award then goes to an alternate chosen under the same conditions.

29. NEVADA REBEKAH ASSEMBLY SCHOLARSHIPS

(ESTABLISHED 1939–1940)

The Nevada Rebekah Assembly annually gives two scholarships of forty dollars each, one to a son and one to a daughter of a Rebekah, under the following conditions:

1. At the time of application the recipient's father must be an Odd Fellow and his mother a Rebekah of five years' good standing; or his mother must be a Rebekah of five years' good standing; or his mother, if deceased, must have been in good standing, at the time of her death, in a Rebekah lodge under the jurisdiction of the Rebekah Assembly, I. O. O. F., of the State of Nevada.

2. The recipient must have sophomore or junior standing and be registered in the University when the scholarship is awarded.

3. He must have good scholastic standing; be of good character; and, in his relations with fellow students and members of the faculty, be kind, generous, and thoughtful.

4. He must have participated in a reasonable number of extra-curricular activities and be, at least in part, self-supporting and in need of financial assistance in order to continue work at the University.

A committee consisting of the three trustees, the secretary, and the treasurer of the Rebekah Assembly of Nevada chooses the recipients of these scholarships each year. This committee may receive recommendations from the University Committee on Scholarships and Prizes, but need not be bound by these recommendations in its selection.

The scholarships are payable to the respective winners, one half in the fall, and the other half in the spring semester.

30. REGENTS' SCHOLARSHIPS

A. (ESTABLISHED 1911)

Five Regents' Scholarships of $50 each are awarded annually to regular students of the highest scholarship whose names have appeared on the honor roll both semesters of the year in which the award is made, one to a freshman, two to sophomores, and two to juniors. These scholarships are paid during the fall semester.

B. (ESTABLISHED 1922–1923)

By formal action the Regents have exempted the following Federal groups from the payment of the nonresident tuition charge:

1. Officers and enlisted men in active service of the United States Army and Navy and their children.

2. Sons and daughters of officers, warrant officers, and enlisted men in active service in the Coast Guard.

C. (ESTABLISHED 1927)

At the request of the General Federation of Women's Clubs, in any one University year, a total of not more than ten students from Mexico, Central America, and South America will be admissible without the payment of the nonresident tuition; provided, that not more than three such students from any one nation in this area receive this exemption within the same year; and provided, that each student who

receives this privilege is a native-born citizen of the country from which he is admitted. It is understood that such students will be required to pay all other regular University charges.

31. THE RHODES SCHOLARSHIPS*

Special attention is called to the Rhodes Scholarships tenable at the University of Oxford. Since the majority of Rhodes scholars obtain standing at Oxford which enables them to take a degree in two years, appointments are made for two years in the first instance, with a possible third year for those whose record at Oxford and plan of study make such an award advisable.

The stipend of a Rhodes Scholarship is fixed at 400 pounds (approximately $2,000) a year, but a Rhodes scholar should be prepared, if possible, to supplement this amount by at least $250 a year from his own resources.

The annual competition for Rhodes Scholarships has, since 1930, been organized by States and districts, there being eight districts of six States each. Nevada is grouped with California, Utah, Arizona, Colorado, and New Mexico to comprise the southwestern district. Each State Committee of Selection may nominate two candidates to appear before the District Committee which, in turn, may then select not more than four candidates to represent their respective States at Oxford.

Upon recommendation by his college or university, a prospective candidate may apply either in the State in which he resides or in the State in which he has received at least two years of his college education by the time of application.

A candidate to be eligible must: (a) Be a male citizen of the United States, with at least five years' domicile, and unmarried. (b) By the first of October of the year for which he is elected, have passed his nineteenth and not have passed his twenty-fifth birthday. (c) By the time of application have at least junior standing at some recognized degree-granting university or college of the United States.

The qualities which Rhodes specified in his will as forming the basis of selection are: (a) literary and scholastic ability and attainments; (b) qualities of manhood, truth, courage, devotion to duty, sympathy, kindness, unselfishness, and fellowship; (c) exhibition of moral force of character and of instincts to lead and to take an interest in his schoolmates; (d) physical vigor as shown by interest in outdoor sports or in other ways.

Some definite quality of distinction, whether in intellect, character or personality, or in any combination of them, is the most important requirement for a Rhodes Scholarship. Financial need does not constitute a special claim for consideration.

The appointments thus far made to Rhodes Scholarships from the State of Nevada are as follows:

1907—ARTHUR LEONIDAS ST. CLAIR, Deeth.
1908—WILLIAM SCOTT UNSWORTH, Reno.
1910—STANLEY MAYHEW WILTON, Goldfield.
1911—CEDRIC HARDING BEEBE, Reno.
1913—FLOYD SHERMAN BRYANT, Sparks.

*Indefinitely suspended.

1914—WALTER CLARENCE JEPSEN, Verdi.
1917—THOMAS HENRY EDSALL, Reno.
1919—STANLEY M. PARGELLIS, Reno.
1921—CHARLES M. CHATFIELD, Reno.
1922—LESLIE MALTBY BRUCE, Reno.
1923—PAUL A. HARWOOD, Reno.
1925—JOHN OCHELTREE, Reno.
1926—FRED SIEBERT, Reno.
1928—FRED ANDERSON, Carson City.
1929—FRANCIS DUBORG, Reno.
1932—ALDEN SIBLEY, Reno.
1937—RUSSELL W. MCDONALD, Reno.

32. THE ROTARY CLUB OF RENO SCHOLARSHIP

(ESTABLISHED 1939)

Reno Rotary Club No. 248 awards an annual scholarship of $100 early in the second semester to either a man or a woman who has completed at least one semester's work in the University and is again enrolled, who possesses good character and a good scholastic record, is self-supporting in whole or in part, and who, after the grades for the first semester of the academic year are available, has been recommended to the officers of the Rotary Club of Reno by the Chairman of the University Committee on Scholarships and Prizes.

This scholarship is payable to the winner at the office of the Secretary of the Rotary Club of Reno in eight equal monthly installments of $12.50, due on the first business day of the months of February, March, April, May, September, October, November, and December.

33. SEARS ROEBUCK AGRICULTURAL FOUNDATION SCHOLARSHIPS

(ESTABLISHED 1941)

The Sears Roebuck Company, in a nation-wide program for the benefit of the agricultural industry as well as for the individual students, established the Sears Roebuck Agricultural Foundation Scholarships. These scholarships, six in number, are awarded to freshmen students and have an annual value of $125 each.

The winners of this award are selected by the Dean of the College of Agriculture on the basis of worthiness and need of financial assistance. The scholarships are payable at the Comptroller's office, one half in the fall and one half in the spring, provided the winner is then enrolled.

34. RAYMOND SPENCER SCHOLARSHIP

(ESTABLISHED 1937)

In memory of her husband Raymond Spencer, class of 1912, Mrs. Isabelle Schuler Spencer, also 1912, established an annual scholarship of $250 to be given to a student in the School of Electrical Engineering who has good character, good scholarship, and junior or senior standing at the time of the award, and is self-supporting in whole or in part.

The scholarship, paid in ten equal monthly installments, is annually created from the profits of the Spencer Lumber Company, Walnut Creek, California, as the business will allow.

The student is chosen by a committee of three, consisting of the head of the School of Electrical Engineering, the chairman of the Committee on Scholarships and Prizes, and a third person to be named by these two. The winner must be enrolled in electrical engineering in the University of Nevada during the time the payments are being made; otherwise the payments are made to an alternate, chosen under the same conditions.

35. THE ELLA S. STUBBS MEMORIAL SCHOLARSHIP

(ESTABLISHED 1919)

The Women's Faculty Club offers the Ella S. Stubbs Memorial Scholarship of $100 to a student entering the junior or senior class who is working his way, wholly or in part, through the University and who has received no other scholarship.

36. THE MARY ELIZABETH TALBOT MEMORIAL SCHOLARSHIP

(ESTABLISHED 1944)

Ida Mary Hoover, Harry J. Robinson, and Sidney W. Robinson, niece and nephews of Mary Elizabeth Talbot, are the donors of this $300 annual scholarship in mathematics.

The scholarship is awarded by the Head of the Department of Mathematics and the Chairman of the Committee on Scholarships and Prizes with attention to the following requirements:

1. Upright moral character.
2. Outstanding scholastic ability in mathematics for a period of at least one year prior to the award.
3. Students with majors in mathematics to receive preference.
4. Financial need of student to be a factor of first consideration only when two or more students are otherwise equally qualified to receive the award.

One half of this award is paid in the fall and the other half in the spring semester.

37. UNIVERSITY OF SAN FRANCISCO RESIDENT TUITION SCHOLARSHIP IN LAW

(ESTABLISHED 1935)

The University of San Francisco offers to a graduate of the University of Nevada an annual scholarship of one year's free resident tuition in its day law school.

The recipient must be recommended by the President of the University of Nevada, as being, in his judgment, well-qualified scholastically and personally to profit by this scholarship.

38. THE RITA HOPE WINER MEMORIAL SCHOLARSHIP

(ESTABLISHED 1938)

This scholarship, established by gifts from friends of Rita Hope Winer, provides that $50 from the principal and the income shall be

awarded to the most deserving woman who, completing her junior year, is including in her work all the minimum required courses in the School of Education to entitle her to a high school diploma, and who plans to be a public school teacher. The winner is to be chosen by the Dean of Education and the Chairman of the University Committee on Scholarships and Prizes.

39. THE WOMAN'S CHRISTIAN TEMPERANCE UNION SCHOLARSHIPS

(ESTABLISHED 1938–1940)

The Reno Woman's Christian Temperance Union established eight scholarships of $50 each as memorials to the following national and state leaders of the temperance movement: Frances E. Willard, the centenary of whose birth was celebrated in the spring of 1939, Lucy M. Van Devanter, Nettie P. Hershiser, Florence Humphrey Church, and Alice Hitchcock Chism.

These scholarships are available only to students of good moral character, who neither smoke nor use intoxicating liquors, and whose scholarship is good.

The winners are chosen by a committee of the Reno Union in consultation with the Chairman of the University Committee on Scholarships and Prizes.

LOAN FUNDS

The Nevada State Federation Scholarship Fund—The Nevada State Federation of Women's Clubs has established a scholarship fund to be lent to students of the University of Nevada in amounts varying to suit individual needs. The money thus lent is to be returned to the fund at the borrower's convenience without interest. Loans are available first to girls, high school graduates, or girls who have completed one year of normal or university work, the latter to have the preference. Boys are eligible under like conditions, but only when the funds are ample and no applications from girls are on file. Students desiring to take advantage of this offer will apply to Mrs. H. A. Peradis, State Chairman of the Committee on Student Loan Fund, 1419 C Street, Sparks, Nevada.

The David Russell Loan Fund—By will, David Russell of Loyalton, California, bequeathed, in 1908, the annual income of his residual estate to the University of Nevada after an annual $100 payment had been made to another institution. The Board of Regents established the David Russell Fund to receive these annual payments after they became available in 1913. The board has set aside $6,000 of this fund as a revolving fund for loans to deserving students who satisfy the President of the University of their fitness to receive this aid. The money is lent to students on the basis of 4 percent interest until maturity. In practice, loans are not made to freshmen nor can a loan in excess of $150 be made to any one student.

The Olin Ward Bequest—Two scholarships of $300 each, bequeathed by Mr. Olin W. Ward of Reno, Nevada. Under the terms of the will the beneficiaries of such scholarships must be earnest, industrious boys, of good moral character, financially unable to attend or continue their attendance at the University without the aid of such scholarships, and shall be chosen by the President of the University.

Each beneficiary so chosen must, as a condition of his receiving such scholarship and before said sum or any part thereof is paid to him, enter into a written agreement with the Board of Regents that he will, within seven years after receiving such scholarship, pay or cause to be paid to the Board of Regents the sum of $300 for the purpose of providing a scholarship in the University for some boy having like qualifications and chosen as above specified.

The Charles Haseman Memorial Loan Fund—A student-loan fund to be known as the Charles Haseman Memorial Loan Fund, the principal sum of which is $500, was established in 1940 by Emily Ross of Reno, under the following conditions:

The loans are to be made only to students who have finished calculus and who have attained an average scholastic grade of at least "C" or its equivalent.

No loan shall be made except to one who, in the opinion of the head of the Department of Mathematics, needs the loan, and it shall not in any event exceed the sum of $100.

No individual loan for more than $100 shall be made from said fund in any academic year. However, to any needy student a second loan of not to exceed this amount may be made during his fourth academic year.

Each student to whom a loan shall be made shall give a personal note, payable on or before the end of four years from date, with interest payable at the rate of one and one-half percent per annum, and each note shall have a co-signer.

The interest and payments which are returned by borrowers shall become a part of this fund and, so far as may be feasible, the unexpended portion of the fund shall be kept invested as are other endowments of the University of Nevada.

Loans under this fund shall be made only on the recommendation of the head of the Department of Mathematics of the University of Nevada.

OTHER AID FOR STUDENTS

It is the purpose of the officers of the University to aid meritorious students of limited means so far as it lies in their power. Some of the work in and about the University buildings and grounds is done by young men and young women. Students are favored whenever possible with such work as typewriting, copying, housework, dining-hall service, and janitorial service. A committee allots the open positions to students who apply, giving preference to those who have good scholarship records, who need the assistance, who do the work well, and who are upper-class applicants. Applications for campus employment should be made to the Chairman of the Campus Employment Committee, in the office of the Dean of Men. It is to be remembered that the power to favor students with self-help is limited by circumstances and *therefore students cannot expect to earn enough to pay all their expenses while pursuing their studies.*

The *necessary campus* expenses for a University year are covered by about $450, allowing only about $75 for personal incidentals, for each Nevada student. Students from other States should add $150 for tuition. See Expenses of Students, Index.

It is clearly better, both for the individual student and for the common student life on the campus, that students do their necessary money-earning during the long summer vacation. If they can have all their time during their University year free for their studies and for their participation in general student activities, they will more surely develop themselves into fully rounded men and women than if they are compelled to devote many hours each week to work for pay. *Particularly is it desirable that first-year students should, if possible, plan to finance fully their first University year without the necessity of working for pay.*

EVERY STUDENT FROM NEVADA SHOULD HAVE AT LEAST $150 CASH IN HAND, AFTER REACHING THE CAMPUS, TO START ANY UNIVERSITY YEAR PROPERLY. OUTSIDE STUDENTS SHOULD HAVE $250 IN HAND TO START THE YEAR.

NOTICE

By action of the Board of Regents, effective JULY 1, 1945, non-resident tuition was set at $100 per semester.

EXPENSES OF STUDENTS

TUITION

The Board of Regents is empowered to charge tuition to students who come from outside of Nevada. The Board of Regents set this *tuition charge, payable by students from outside Nevada, at $75 per semester,* beginning with August, 1925. *A two-thirds rebate is allowed on this nonresident tuition charge if the student formally withdraws within the first three weeks of any semester and a one-half rebate is allowed if the student withdraws between the end of the third week and the end of the eighth week. No rebate is allowed if the student withdraws after the end of the eighth week.*

Any student due to pay nonresident tuition who registers for seven or less credit hours in any one semester will be charged as nonresident tuition $10 for each credit hour in which he registers in lieu of the flat $75 nonresident charge per semester. In this special case, one-half of this nonresident tuition will be rebated if the student withdraws from the University within the first three weeks of the semester for which the student is registered. No rebate on this special tuition charge will be made if the student withdraws any time after the first three weeks of the semester.

There are three classes of applicants for enrollment entitled to exemption from this nonresident tuition:

I

Any applicant or student whose parents live in Nevada.

II

Those applicants who have themselves been bona fide residents of Nevada at least six months prior to the opening date of the semester in which they matriculate in the University of Nevada.

III

Those individuals whose parents do not live in Nevada but who themselves are married persons, so soon as they shall have lived in Nevada as married persons for six full months.

The Board of Regents of the University has given instructions to the President concerning the first two classes of applicants and has set the University penalty for false testimony in relation to residence as follows:

CASE I

The President of the University is authorized and directed to grant exemption from nonresident tuition to any applicant for matriculation or to any student whose parents live in Nevada. "Parents" in this connection means both father and mother if both are living and are not legally separated. In case one parent is dead or if parents have been legally separated, this residence requirement may be satisfied by residence in Nevada of the one parent with whom the applicant is living. In case both parents are dead, the applicant may be exempt from nonresident tuition on this basis only if the applicant's legal guardian lives in Nevada.

CASE II

The burden of proof is upon any applicant whose parents do not reside in Nevada to show that said applicant has been a bona fide resident of Nevada continuously for at least six full months just preceding the opening date of the semester in which he matriculates. The President of the University is authorized and directed, before granting tuition exemption to any applicant whose parents do not reside in Nevada, to require: (a) Every such applicant to furnish a sworn statement that he has satisfied the above residence requirement, and (b) every such applicant to furnish sworn statements testifying to the applicant's fulfillment of the above residence requirement from each of two established adult Nevada residents.

If in any case after the admission of a student receiving exemption from nonresident tuition in either of the above classifications the University receives clear evidence that materially false statements as to Nevada residence have been made in the sworn statements, then the President of the University is authorized and directed to expel such student from the University of Nevada.

LATE REGISTRATION FEES

A fee of $3 is charged for registration later than the regular enrolling days of each semester. This fee is increased to $5 for those registering later than the end of the week including enrollment days. *No exception is made to the rule.*

Each student shall complete his registration by 4 p. m. of the third day after his registration card is issued, otherwise he shall pay to the Comptroller 75 cents for each day or fraction of a day thereafter until his registration is completed.

MATRICULATION FEE

Each new student must pay a matriculation fee of $5. This fee is paid once only by each student at the time of first enrollment in the University.

REGISTRATION AND INCIDENTAL FEES

A registration fee of $2.50 per semester and an incidental fee of $5 per semester are payable by each student enrolled for more than five credit hours.

UNIFORMS

Young women are required to provide themselves with a regulation gymnasium outfit costing about $5 or $6.

Students in foods will be expected to wear suitable colored wash dresses. Those majoring in dietetics are expected to have three white uniforms.

Military students must make a deposit of $10 to cover uniform and equipment.

RESIDENCE HALLS

Manzanita and Artemisia Halls—Manzanita and Artemisia Halls provide campus residence for women students. Recently both Halls were redecorated and refurnished attractively. Here the students learn group living. They have their own self-governing body and funds. The social directors and their assistants, hostesses of the Halls, are college women who work for the best interests of the students.

Unless women students have applied for residence in excess of the number that can be accommodated, all unmarried women students who are not residents of Reno or Sparks are required to live in one of the women's residence halls during their entire freshman year. The only exceptions to this rule may be made by the Dean of Women: (1) When written request has been filed in advance with the Dean of Women by parents requesting that their daughter be permitted to live with relatives whose home is in Reno or Sparks; (2) when parents have filed in advance a request that a freshman student be permitted to live with a student sister who has reached the age of 25 years. Residence privilege in these halls will not be granted to married women unless they were formerly students of the University. Women students not living in a residence hall are required to select accommodations approved by the Dean of Women.

Application for residence privileges in Artemisia or Manzanita Hall should be made to the Dean of Women who will consider such applications in the order of their receipt. Special application blanks for hall residence will be sent on request made either to the Registrar of the University or to the Dean of Women. All applications, to be honored, must (1) Be on file with the Dean of Women at least one week prior to the opening day of any semester; (2) *Be accompanied by a sum covering the room rent for the semester concerned.* Room rent is as follows for both semesters:

Room with roommate	$36.00
Single room	45.00
Double room used by one person	54.00

Checks* for room rent should be made payable to the Board of Regents. Such sum will be returned in full to the one making the reservation if due notification is sent of desire to cancel reservation, on or before the end of the first enrollment day of the term, to the Dean of Women. If cancellation or withdrawal is made after the end of the first enrollment day, but before the end of the third week of the semester, two-thirds of the room fee will be rebated. If withdrawal is made after the end of the third week and before the end of the eighth week one-half of room fee will be rebated, and no rebate will be made if withdrawal occurs after the end of the eighth week.

No one can be given room in a dormitory until room rent for the semester has been paid.

All residents of women's dormitories are required to:

1. Register in and to carry throughout each semester at least fourteen credit hours of University work unless excused by the Dean of Women.

2. Conform to the regulations of the Halls as adopted by the Artemisia and Manzanita Hall Association in consultation with the Dean of Women and the Social Directors.

3. Be provided with the following articles: Bedding for single bed; one mattress protector, 3x6 feet; towels; bed spreads, and personal toilet articles. If window draperies, white curtains, and rugs

*The University cannot accept any checks unless the full amount of the check is due to the University—that is, the University cannot pay over to the student any cash balance.

are desired, they must be supplied by the students. White tailored glass curtains are furnished by the University. All personal articles and wearing apparel should be plainly marked with the name of the owner.

4. Take care of their own rooms and linen.

Lincoln Hall—Lincoln Hall, the men's dormitory, has present accommodations for 72 men, and is under the direct supervision of the Master of Lincoln Hall, a resident member of the University faculty.

Application for residence in Lincoln Hall should be entered on the special application blank, which will be supplied by the Master of Lincoln Hall upon written request. All applications are considered in the order of their receipt.

To be honored, all applications must: (1) *Be on file with the Master of Lincoln Hall at least two weeks prior to the opening day of the semester;* (2) *be accompanied by a sum covering the room rent for the semester concerned.* Room rent is as follows for each semester:

Room with roommate	$40
Single room	50

NOTE—As only six single rooms are ordinarily available, early application for such accommodation is recommended.

Checks or money orders for room rent should be made payable to the Board of Regents.* Rent will be returned in full to the applicant if due notification is sent to the Master of Lincoln Hall, on or before the end of the first day scheduled for the applicant's enrollment, of desire to cancel the reservation. If cancellation or withdrawal is made after the end of the first day scheduled for the applicant's enrollment, but before the end of the third week of the semester, two-thirds of the room rent will be refunded. If withdrawal is made after the end of the third week, but before the end of the eighth week, one-half of the room rent will be refunded. If withdrawal is made after the end of the eighth week no refund will be allowed.

No one will be admitted to Lincoln Hall until his room rent for the semester has been paid.

All residents of Lincoln Hall are required:

(1) To abide by the regulations of the Hall as adopted by the Lincoln Hall Association, and approved by the Master of Lincoln Hall.

(2) To provide themselves with the following articles: One bedspread; at least two heavy blankets; one comfort; one pillow; one mattress protector, 3 x 6 feet, six towels; personal toilet articles. All clothing and personal property should be plainly marked with the name of the owner. If window hangings or rugs are desired, they also must be supplied by the individual.

The University furnishes lights, heat, sheets and pillowcases (which it launders), beds and mattresses, mattress covers, dressers, tables and chairs. Equipment also is available for those who desire to do their own washing and ironing.

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*The University cannot accept any checks unless the full amount of the check is due to the University—that is, the University cannot pay over to the student any cash balance.

THE UNIVERSITY DINING HALL

For the accommodation of the students the University conducts a Dining Hall under the supervision of a trained dietitian. Students are charged $32.50 per month for board. At each student's first meal at the beginning of a University semester $5 will be collected at the Dining Hall which will be credited toward the payment of the first month's board of the individual. Each student should therefore come prepared to pay this amount.

All women students residing in a University dormitory are required to board at the University Dining Hall. Men students may board at the University Dining Hall.

REGULATIONS GOVERNING THE UNIVERSITY DINING HALL

1. Board is payable in advance. When board is not paid by the fifth of the month, an additional 50 cents per day will be added until board is paid and receipt therefor from the Comptroller's Office is presented at the Dining Hall.

2. Students desiring to board regularly at the University Dining Hall will be required to register with the head waiter.

3. Registration at the Dining Hall will be made only on presentation of the Comptroller's receipt for board paid, or of a special permit issued by the President. In order to furnish board at the rate charged, it is imperative that all board bills be paid, and it is therefore ordered that no credit be extended. *Students who intend to board at the Dining Hall will be expected to come with sufficient money to keep their board paid one month in advance.*

4. Rebate at the rate of $5 per week will be allowed for necessary absences, but no rebate will be made on board for less than one week's continuous absence. Due notice must be given and permission secured in advance, or no rebate will be allowed.

PREFERENCES IN DINING HALL AND DORMITORIES GIVEN TO NEVADA STUDENTS

The Board of Regents adopted the following rule:

Whenever the requests for University of Nevada dormitory or dining hall privileges exceed the number that can be accommodated, preference shall be given as follows:

(1) To Nevada students.

(2) To formerly enrolled students from outside Nevada.

(3) To new students from outside Nevada.

Such preferences for Nevada students in the dormitories are open to all who apply not later than two weeks before the opening of any given semester. Nevadans making application later than such time will be accommodated if places are still open, but cannot be received otherwise.

LABORATORY FEES

LABORATORY FEES—Departments giving laboratory courses must charge fees to cover special expenses incident to such courses. These fees are calculated to cover cost of materials used and the expense incurred for the individual student.

BLANKET DEPOSIT

At registration time a general deposit of $10 is required from each student. Breakage or damage in all laboratory courses, in library, in dormitories and in any other University connection is charged against this deposit. The remainder of this deposit, after all above charges, if any, are deducted, will be returned at the end of the University year only unless a given student is not returning for the second semester. The military deposit is additional to this general deposit. If there are substantial first semester charges reported against any given student, the Comptroller has authority to require that student to renew his deposit to the full $10 at the beginning of the second semester.

ASSOCIATED STUDENTS MEMBERSHIP FEE

At the request of the Associated Students of the University the Board of Regents made the fee for membership in the student association a compulsory fee upon all students except:

1. Visitors.
2. Members of the University staff.
3. Nevada school teachers in active service.
4. Graduates of this or of any other four-year University course.
5. Students who are adult, bona fide Nevadans, registering for five or less semestral University credits.

It is understood that any student registering in any of the above exempt classifications has the *privilege* of paying the student fee and securing the benefits which accrue to the students. This fee of $12.50 per semester includes subscriptions to the U. of N. Sagebrush and, in the second semester, to the Artemisia, pays up each student's class dues and covers admittance to all regular Varsity athletic events and must be paid to the Comptroller at the time of registration.

UNIVERSITY FEES

Students enrolled for five or less semester hours will pay a fee of $2 per credit hour and will also pay the matriculation fee. Students securing the privilege of visiting classes will be charged a fee of $1 per course credit hour.

TABLE OF TUITION CHARGES, FEES AND DEPOSITS PER SEMESTER

	Fees	
Agronomy 61	$9.00	
Agronomy 68	2.00	
Animal Husbandry 3, 56, 61, 62	3.00	
Animal Husbandry 59	1.50	
Art 1, 2, 5, 6, 53, 54	1.00	
Art 3, 4	1.50	
Associated Students Fee	12.50	
Bacteriology 51	5.00	
Botany 1, 55	3.00	
Botany 21, 26, 64, 75, 76	4.00	
Botany 22	1.00	
Botany 53, 54, 68	2.00	
Botany 70	2.00	per lab. credit

TABLE OF TUITION CHARGES, ETC.—*Continued*

	Fees	
Change of registration per course (see page 106)	$1.00	
Chemistry 3, 4, 7, 8, 9, 10, 51, 52, 53, 56, 64, 67, 71, 72, 74, 85, 86, 99, 100	8.00	
Chemistry 9A, 83, 84	4.00	
Chemistry 200 (fee per credit hour)	4.00	
Civil Engineering 53, 54, 63, 65	3.00	
Civil Engineering 58	5.00	
[1]Civil Engineering 58 (Transportation)	15.00	
Civil Engineering 74	2.50	
Dairy Husbandry 1, 53, 54, 61, 62	3.00	
Dairy Husbandry 55	2.00	
Deposit, General	10.00	
Deposit, Military (Basic course students, excepting military bandsmen)	20.00	
Advanced students take course at own expense (to be arranged).		
[2]Diploma (Degree or certificate)	5.00	
Drawing Outfits	20 to 30.00	
Education 3	1.50	
Education 28, 29, 41, 43, 44, 73, 74, 75, 76	1.00	
Electrical Engineering 61, 62, 63, 64, 67, 68, 75	2.50	
Electrical Engineering 76, 77, 85, 86	2.50	per credit
Farm Mechanics 11, 20, 32, 41, 53	3.00	
For 5 or less hours	2.00	per credit
Geology 11, 51, 52, 55, 56	2.00	
Geology 12	3.00	
Health Service	6.00	
Home Economics 55, 94, 99	10.00	
Home Economics 31, 32, 50, 57, 83, 84	5.00	
Home Economics 15, 16, 18, 46, 66, 67, 95, 96	4.00	
Home Economics 42, 53, 88	2.00	
Home Economics 87	3.00	
Library	.50	
Matriculation (new students only)	5.00	
Mechanic Arts 3, 5	5.00	per credit
Mechanic Arts 6, 11, 20, 50	5.00	
Mechanic Arts 7	(To be arranged)	
Mechanical Engineering 20, 64, 65	5.00	
Mechanical Engineering 80	2.50	per credit
Metallurgy 51	15.00	
Metallurgy 56	2.50	
Metallurgy 68, 71	5.00	
Metallurgy 79, 80 (Fee according to work).		
Physical Education (laundry and locker)	1.00	
Physics 1b, 2b, 19, 20, 57, 58, 63, 77, 78	3.00	
Physics 5, 6, 103, 104	1.50	per credit
Physics 75, 76	6.00	
Poultry 2, 8	2.00	
Reexamination Fee	1.50	
Special Examinations for Entrance or Advanced Standing, each	3.00	
Sports (depending upon activity)	1.00 to 12.00	
Teacher Appointment Service	2.50, 1.50	
Transcript Evaluation	2.00	
*Transcript of student record	1.00	

[1]If a student supplies his own transportation in a satisfactory manner this fee will not be required.

[2]If two diplomas are granted in one year, the charge will be $5 for the first and $4 for the second; if three diplomas are granted in any one year, the charge will be $5 for the first, and $4 each for the second and the third.

*When two or more transcripts of record are asked for at the same time, each additional transcript will be 50 cents. *Request for transcript or transcripts,* MUST BE *accompanied by the stipulated fee. No student may be graduated or be furnished with a transcript of record unless and until all accounts with the University have been fully paid.*

TABLE OF TUITION CHARGES, ETC.—*Continued*

	Fees
Tuition to non-Nevadans	$75.00
Visitors (resident)	1.00 per hour
Zoology 2, 11	4.00
Zoology 1, 22, 60, 62, 64	2.00
Zoology 52	3.00
Zoology 57, 58	2.50
Zoology 91, 94, 201 (fee determined by type of work).	
Zoology 9	5.00
Zoology 59	3.00

Students should be prepared to pay any of the above charges due to the University at registration time.

REBATES

A rebate of two-thirds of all *laboratory fees, room rent,* and *non-resident tuition* will be made if a student withdraws before the end of the third week in a semester; a rebate of one-half of these charges will be made if the withdrawal occurs between the end of the third week and the end of the eighth week, but no rebate will be allowed if withdrawal follows the end of the eighth week.

There will be full rebate of all charges *other than those specified in the foregoing paragraph* if a student withdraws before the end of the third week in a semester, but no rebate will be allowed after the third week.

TABULAR ESTIMATE OF NECESSARY ANNUAL EXPENSES OF STUDENTS EXCLUSIVE OF PERSONAL INCIDENTALS, CLOTHING AND TRAVELING.[1]

	Low	*Moderate*	*Liberal*
[2]Tuition	None	None	None
Board, 8½ months	$276.25	$300.00	$325.00
Room	80.00	90.00	125.00
[3]Laundry	25.00	35.00	50.00
[4]Books, stationery, etc.	30.00	35.00	45.00
Fees (laboratory, athletic, health service, etc.)	40.50	45.00	55.00
Fees (registration and incidental)	15.00	15.00	15.00
[5]Totals	$476.75	$520.00	$615.00

[1]The low and moderate estimates apply to residents of dormitories. The liberal estimate, with the exception of books and fees, applies to students living elsewhere.

[2]Students from outside the State of Nevada must add a tuition of $75 each semester.

[3]This item may be greatly reduced by residents of the dormitories who choose to take advantage of the house-laundry facilities.

[4]All engineering students will require complete drawing outfits. These cost from $20 to $30. Students having this equipment should bring it with them.

[5]These amounts do not include the deposit of $10 required of all students at the beginning of each semester, the required military deposit, nor the cost of drawing outfits needed by all engineering students, nor do they include the cost of special uniforms needed in some departments, such as the gymnasium uniforms.

REGULATIONS OF THE UNIVERSITY

ADMISSION OF CANDIDATES FOR DEGREES

The privileges of the University, while open to all qualified persons of good character and serious purposes, are designed primarily for those who satisfy the requirements for admission and become candidates for degrees. In order to insure some breadth of view on the part of students as well as some degree of achievement, curricula have been established in the several colleges, each intended to meet the needs of a considerable body of students. So far as is consistent with the purposes the curricula are intended to fulfill, students are left free to choose their work according to their individual needs and tastes. For most persons it is believed that the pursuit and completion of a regular curriculum is of much higher value than any unrestricted selection of courses. The University wishes, therefore, to impress upon parents and students its firm belief that, under all ordinary circumstances, students should satisfy the requirements for admission and pursue the regular curricula.

METHODS OF ADMISSION

Evidence that a student has had desirable preparatory education, qualifying him for satisfactory study toward a degree, may be shown by:

(1) Examination in prescribed subjects.

(2) Certificate of graduation from an accredited high school or other secondary school.

(3) Transfer from any university or college of recognized standing.

ADMISSION BY EXAMINATION

Examinations for admission are held at the University immediately preceding the opening of the fall semester. Application for examination should be in the hands of the Committee on Admission and Advanced Standing at least one week in advance. These examinations cover all subjects required or accepted for admission, but cannot be taken for the purpose of raising grades obtained in preparatory schools. A fee of $3 per each subject for which such special examinations are given must be paid to the University Comptroller in advance of the examinations.

ADMISSION BY CERTIFICATE FROM AN ACCREDITED PREPARATORY SCHOOL

Students desiring to enter the University should file their credentials with the Registrar as soon as possible after the close of the school in June in order that they may be examined to determine whether they meet the University entrance requirements. Receipt of credentials will be acknowledged and an application blank for admission forwarded to the student. Failure to file credentials may cause registration to be delayed and the student to be greatly inconvenienced.

ADMISSION BY TRANSFER

A fee of $2 will be charged for evaluation of transcripts of record from other institutions; this fee must accompany all requests for such evaluation. In the event that the applicant later enrolls in this University, the $2 will be applied on his registration fees. The advanced standing granted on transcripts of record is valid only if the applicant enrolls within one year following the date on which the record was submitted for evaluation.

Admission is granted by transfer from any university or college of recognized standing on presentation of the proper credentials.

Students who are disqualified at other colleges will not be admitted during the semester immediately following their disqualification.

A student who has been disqualified at another institution because of scholarship deficiency will be admitted only on probation and on recommendation of the Administrative Council.

Students transferring from other colleges must present certificates of honorable dismissal unless one or more full semesters have elapsed since they left their other college.

Students who have been graduated from a full four-year high school and have completed additional work in a normal school, college or university may receive advanced standing as stated below.

Applicants for advanced standing from universities and colleges of recognized standing will receive, upon presentation of their credentials, such credit as the Committee on Admission and Advanced Standing may deem fair. In all doubtful cases the claims will be referred to the heads of the departments. All credit for advanced standing, however, is provisional and subject to revision at the end of the first year following the enrollment of the student.

Graduates from a one-year professional course in an accredited normal school are allowed one year's credit on advanced standing in the College of Arts and Science only.

Graduates of a two-year normal school or junior college will in general be given two years' credit on advanced standing in the College of Arts and Science only. Such students, however, will be expected to fulfill all requirements for graduation, including the special requirements outlined for the freshman and sophomore years with the understanding that education may be used by normal school graduates to satisfy the social science requirement.

Students transferring from a recognized university, college, junior college, or normal school with junior standing may be excused by proper authority from the requirements prescribed by this University for military training and physical education, but must meet all other requirements for graduation prescribed by their college (agriculture, arts and science, or engineering) and must have no entrance deficiencies.

An applicant from a junior college or other institution of collegiate standing must submit evidence that he has fulfilled our entrance requirements for regular freshman standing, or that he has either: (a) at least 60 semester credits with a grade average of C or better, and acceptable for advanced standing in the college or school to which admission is sought; or (b) not less than 15 semester credits with a

grade average of B or better, and acceptable for advanced standing in the college or school to which admission is sought.

ADMISSION OF PERSONS WHO ARE NOT CANDIDATES FOR DEGREES

1. SPECIAL STUDENTS. a. *Requirements.* Persons of serious purpose and good character who are twenty-one years of age or more and who wish to enroll for study at the University but find that their credentials do not satisfy the entrance requirements, may, at the discretion of the Committee on Admission, be admitted as special students. They will be required to submit a program of the work which they wish to undertake at the University and to have the program approved by the dean of the college in which registration is sought. This approval will largely depend on the evidence which the student submits as to his ability to pursue successfully the desired course of study. If the applicant has attended any other colleges or universities previous to making application here, an official transcript of such work must be submitted before the application will be considered.

b. *Registration.* Special students will be expected usually to register in not fewer than ten hours in courses of elementary character which may be counted for admission. They will be permitted to register in advanced courses only upon the approval of their Dean and the head of the department concerned. Special students are subject to all the rules relating to registration and scholarship.

c. *Obtaining Regular Status.* Special students may obtain regular status by removing entrance deficiencies. See Removing Entrance Deficiencies, Index.

A special student who has successfully carried the regular prescribed work of his college during four semesters and who has made an average of 2 grade points in all the hours for which he has been registered, except cases of W, and has no unremoved conditions or failures, will be allowed to matriculate as a regular sophomore student.

If he has made an average of 2.5 grade points for every hour for which he has been registered, except cases of W, and has no unremoved conditions or failures, he will be allowed to matriculate as a regular junior student.

2. VISITORS. With the consent of the Dean and the instructors concerned, regular visitors may be enrolled as such during the regular registration period. They shall be governed by the regular University rules and are due to pay a visitor's fee, or if nonresident, to pay all regular fees and tuition. Under no circumstances will visitors be allowed to do laboratory work, engage in class discussion, take the time of the instructor from regular classwork, or receive credit toward a degree. Nevada residents may visit in not to exceed two University courses.

REQUIREMENTS FOR ADMISSION TO REGULAR STANDING

1. FIFTEEN HIGH SCHOOL UNITS. Applicants for admission to regular standing in the University of Nevada must present satisfactory evidence of high school graduation and of having completed fifteen units of acceptable high school or preparatory work. A "unit" represents a year's study in any subject in a secondary school, constituting approximately one-quarter of a full year's work. Two periods of

laboratory work, or shop work, count as the equivalent of one recitation.

a. *Limited Freshmen.* High school graduates who have 13 or more but less than 15 acceptable high school units may be admitted as limited freshmen. Courses to remove these deficiencies shall take precedence over all other subjects in the University. Requirements pertaining to grades for these students are the same as for regular students.

b. *Restricted Freshmen.* . A restricted freshman is defined as one who presents 15 acceptable units but who is deficient in no more than 2 of the required units.

c. *Special Students.* Students who cannot present 13 acceptable high school units may register as special students if they can meet the other requirements for special students. See Special Students, Index.

2. ACCEPTABLE UNITS. Subjects acceptable for admission include the subjects numbered 1–32 (see Subjects Accredited for Admission, Index), but not to exceed the number of units there specified for each subject.

a. *Ten Academic Units.* Of the fifteen units required for admission at least ten must include subjects numbered from 1–20, inclusive, (see Subjects Accredited for Admission, Index).

3. QUALITY UNITS. Of the acceptable units presented by applicants for admission to first-year standing, six units must carry grades of 80 percent or better, and 4 of the 6 must be in subjects 1–20 inclusive (see Subjects Accredited for Admission, Index).

4. SPECIFIC SUBJECT REQUIREMENTS. Of the fifteen units required for admission to regular standing each college makes its own specific subject requirements, as follows:

The College of Arts and Science

English, 3 units
Mathematics, 2 units

The College of Engineering[1]

English, 3 units
History, 1 unit
Plane geometry, 1 unit
Algebra, 1½ units
Solid geometry or trigonometry, ½ unit
Chemistry or physics, 1 unit

The College of Agriculture

English, 3 units
Social Science, 1 or 2 units
Mathematics, 2 units
Natural Science, 1 or 2 units

[1]It is recommended that the entering student present all the subjects here listed, especially that of 1½ units of algebra, otherwise it is probable that he will be graduated in five years instead of four. Consult meaning of the term "restricted" freshman, and see also mathematics 15 and mathematics A.

It is advised that the electives include 2 units of foreign language, preferably modern language. In certain meritorious cases some entrance credit, not exceeding 1 unit, may be granted for practical experience.

5. REMOVING ENTRANCE DEFICIENCIES—

a. *Time requirement.* All students, except special students, who may be admitted to the University with entrance deficiencies must remove these deficiencies before their second year of residence.

b. *Method.* Entrance deficiencies may be removed by either of the following methods:

(1) College credit may be canceled at the rate of four college credits for each high school unit necessary to fulfill the requirements of the college in which the student is registered.

(2) Examinations may be taken within the first two years of residence at the University in sufficient of the subjects (1–32) listed as accredited for admission to fulfill the requirements of the college in which the student is registered.

c. *Special students.* In addition to the methods described above, entrance credits will be canceled for special students, who can meet the scholarship requirements set forth in the paragraph on obtaining regular status (see Special Students, Index).

Subject	SUBJECTS ACCREDITED FOR ADMISSION	*Units*[2]
1.	English (a)	1
	English (b)	1
	English (c)	1
	English (d)	1
	English (e) Public Speaking	1
	English (f) Journalism	1
2.	French (a)	1
	French (b)	1
	French (c)	1
	French (d)	1
3.	German (a)	1
	German (b)	1
	German (c)	1
	German (d)	1
4.	Spanish (a)	1
	Spanish (b)	1
	Spanish (c)	1
	Spanish (d)	1
5.	Other Languages	
6.	World History (a)	1
	Medieval and Modern History (b)	1
	American History (c)	1
	Civics (d)	½ or 1
7.	Economics	1
8.	Sociology	1
9.	Commercial Law	½ or 1
10.	Commercial Geography	½ or 1
11–12.	Others	

[2]A unit represents a years' study in any subject in a secondary school, constituting approximately a quarter of a full year's work. Two hours of laboratory work are regarded as the equivalent of one hour of prepared work.

Subject	SUBJECTS ACCEPTED FOR ADMISSION—*Continued*	*Units*
13.	Algebra (a)	1
	Plane Geometry (b)	1
	Advanced Algebra (c)	½
	Solid Geometry (d)	½
	Trigonometry (e)	½
14.	General Science	1
15.	Physics	1
16.	Chemistry	1
17.	Physical Geography	½ or 1
18.	Botany	½ or 1
19.	Biology	½ or 1
20.	Physiology or Hygiene	1
21.	Drawing	½ to 2
22.	Music	½ to 2
23.	Agriculture	½ to 4
24.	Home Economics	½ to 4
25.	Manual Training	½ to 3
26.	Shopwork	1 to 3
27.	Bookkeeping	½ to 3
28.	Stenography	½ to 3
29.	Typewriting	1 to 2
30.	Trades and Industries	½ to 4
31.	Vocational Work	1
32.	Commercial Arithmetic or Applied Mathematics	½ or 1
33.	R. O. T. C.	1

Additional units for subjects listed above or additional subjects will be accepted if approved by the Committee on Admission and Advanced Standing.

REGULATIONS FOR REGISTRATION

1. REGISTRATION PROCEDURE. In accordance with such specific regulations governing the procedure of registration as the Registration Committee may prescribe, the student must (a) secure his registration coupons from the Registrar, (b) secure the approval of the department or the professor for each course in which he wishes to enroll, (c) if a male student, adjust his classification for military training with the Professor of Military Science and Tactics, (d) secure the approval of the adviser and the dean of his college, (e) in the case of women, the signature of the Dean of Women, (f) make out his class cards, (g) present the registration card to the Registrar for computation of fees to be paid, and (h) present the card to the Comptroller and pay the fees. The Comptroller will retain the card and file it with the Registrar.

2. THE REGISTRATION PERIOD—

a. *Registration Days.* Preceding the beginning of instruction at the opening of each semester, a registration period is announced. For this time see the University calendar.

b. *Completing Registration.* Each student shall complete his registration by 4 p. m. of the third day after his registration card is issued.

c. *Late Registration.* All registration must be completed by the end

of the second week of the semester except in special cases approved by the President.

3. FEES FOR DELAYS IN REGISTRATION—

a. *Delay in Completing Registration.* Each student who fails to complete his registration by 4 p. m. of the third day after his registration card is issued shall pay 75 cents for each day or fraction of a day thereafter until his registration is completed.

b. *Late Registration.* A fee of $3 shall be charged for registration after enrollment day but within the week including enrollment days. A fee of $5 shall be charged anyone registering after the week including the enrollment day.

4. CHANGES IN REGISTRATION—

a. *Adding a Course.* After the registration coupon has been filed with the Registrar, a student may add a subject in accordance with the rules. No subject may be added after the close of registration in a semester, except in special cases approved by the President.

To add a subject a student must secure the proper card from the Registrar, the signature of the professor of the course he wishes to add, and the approval of his adviser and the dean of his college. He must then file the card with the Registrar.

b. *Withdrawal from a Course.* After the registration card has been filed with the Registrar, a student may withdraw from a course provided the withdrawal meets with the approval of the instructor concerned and of the dean of the college. If he withdraws during the first six weeks of the semester, W will be recorded; if he withdraws after the first six weeks, W will be recorded when the student is passing, F when the student is not passing. The symbol W is not a scholarship grade and shall not be used in any manner in determining a student's scholarship record.

A student who wishes to withdraw from any course shall first secure from the Registrar a withdrawal slip. He shall take this to the instructor in the course in question for his recommendation. He will then report to the dean of his college, who may grant a withdrawal from the class. The withdrawal slip must be filed by the student with the Registrar, who shall notify the instructors concerned. The student is not officially withdrawn from the class until the instructor has received notice from the Registrar. The date of withdrawal shall be the date on which the slip is filed with the Registrar.

c. *Withdrawal from the University.* Any student wishing to withdraw from the University during the first six weeks of the semester may do so, with the withdrawal to be recorded as W. After the sixth week of the semester a student who desires to withdraw from the University will report to each instructor for his grade. If the instructor reports the student as passing, a record of W will be recorded. If the instructor reports the student as not passing, a record of WF will be recorded. The record of WF shall not be used in computing grade points for graduation. In case the student receives records of WF in more than one third of his work, he will be subject to probation or suspension.

5. FEES FOR CHANGES IN REGISTRATION. After the registration

coupon has been filed with the Registrar, a student who adds a subject must pay a fee of $1 for each course added. The fee will be omitted only when the change is caused by faculty action or at the request of the dean of the college concerned.

6. REBATES. A rebate of two-thirds of all *laboratory fees, room rent,* and *nonresident tuition* will be made if a student withdraws before the end of the third week in a semester; a rebate of one-half of these charges will be made if the withdrawal occurs between the end of the third week and the end of the eighth week, but no rebate will be allowed if withdrawal follows the end of the eighth week.

There will be full rebate of all charges *other than those specified in the foregoing paragraph* if a student withdraws before the end of the third week in a semester, but no rebate will be allowed after the third week.

7. PRECEDENCE OF CERTAIN COURSES—

a. *Required Courses.* In registering, all students must give precedence to required courses in regular sequence; an elective course may not be retained to the exclusion of a required course. In no case may a required course be deferred beyond one year.

b. *Entrance Deficiencies.* All but special students are required to remove entrance deficiencies before their second year of residence or they will be placed on probation. A freshman who fails to remove his entrance deficiencies may register on probation as a sophomore provided he includes in his schedule courses which will serve to cancel the deficiencies. The schedule of a student enrolled in courses for a second time in order to remove entrance deficiencies shall not exceed a total of 15 hours.

c. *Failed Courses.* Any required subject in which a student has failed takes precedence over all other subjects in the arrangement of his program. Such a failed subject must be repeated in class as soon as the study is repeated in the University program.

8. REQUIRED COURSES. Each student in registering must observe the specific course requirements in his particular college. He must also observe the following general University requirements and register for them in the specified year:

a. *English 1–2.* All students must register for English 1 and 2 in their freshman year.

b. *Physical Education.* Every student who is a candidate for graduation from the University will be required to complete the prescribed two-year (basic) course of physical education unless excused therefrom by proper authority. This basic course is scheduled for both semesters of the freshman and sophomore years.

c. *Military for Men.* Every male student who is a candidate for graduation will be required to complete the prescribed two-year (basic) course of military training unless excused therefrom by proper authority. This basic course is scheduled for both semesters of the freshman and sophomore years.

d. *Political Science 79–80.* The State law of Nevada provides that no student shall receive a diploma of graduation or a teacher's certificate without previously having passed a satisfactory examination upon

the Constitutions of the United States and of Nevada. Under this provision it is necessary for students to take at an appropriate time Political Science 79 and 80.

e. *Philosophy 5—War Issues.* In accordance with faculty action of March 5, 1942, all beginning freshmen will be required to register for Philosophy 5—War Issues. The course is open to all students.

9. NUMBER OF HOURS TO BE REGISTERED—

Regular Students. Except in special cases each student is expected to register for the number of hours regularly prescribed by his college for the course which he has elected.

In the College of Engineering the regular prescribed course consists of 18 hours each semester; in the College of Agriculture, from 15½ to 17½ hours each semester; in the College of Arts and Science, 15½ hours each semester in the freshman and sophomore years, and 16 hours each semester in the junior and senior years.

10. REGISTERING FOR A REDUCED NUMBER OF HOURS—

a. *Permissive Reduction.* Any student may at any time enroll in as low as three credits less than his course requires, but to take less than this amount the student must have the dean's permission.

b. *Compulsory Reduction.* Under the following conditions the student will not be permitted to register for the regular number of hours prescribed:

(1) In case a student failed to pass in some of his work during the previous semester, the dean may restrict his registration to fewer hours than his course regularly requires.

(2) A student on probation shall not be allowed to register for more than 80 percent of the regular number of hours of his prescribed course.

(3) A student who begins to register after the regular registration days shall not be permitted to enroll in the number of hours to which he would otherwise be regularly entitled; for every week or fraction thereof of delay in registering one hour will be deducted.

(4) The registration of a student enrolled for the second time in courses in order to remove entrance deficiencies shall not be permitted to exceed a total of 15 hours.

11. EXTRA HOURS—

a. In case a student during his previous semester received no condition or failure and received an average of 3 grade points for each hour for which he was registered, excepting cases of W, he may be permitted, at the discretion of the dean, to enroll in a maximum of three hours above that specified for his course.

b. The deans are allowed to grant a student an additional hour beyond the limit specified in the rules.

c. No freshman during the first semester shall be allowed to enroll in more credits than his regular course requires.

12. REGISTRATION IN COURSES NUMBERED 50 AND ABOVE. No course

with the number 50 or more will be open to freshmen or sophomores without the written recommendation of the head of the department and the approval of the dean of the college.

13. REGISTRATION FOR NEW STUDENTS—

a. *Orientation.* Registration in the fall semester for all new students includes a program of orientation during the first week.

b. All new students must be photographed and must take the physical examinations and mental tests scheduled during the first week.

14. CLASSIFICATION OF STUDENTS. Two classes of students seeking college credit are recognized—regular and special:

a. *A Regular Student* is one who has satisfied the requirements for admission to a college and is pursuing a curriculum leading to a diploma or degree. He will be expected to register for the required courses in military science.

(1) *Freshmen.* Limited freshmen are those high school graduates who can present 13 or more but less than 15 acceptable high school units. Restricted freshmen are those presenting 15 acceptable units, but are deficient in not more than 2 required units.

(2) *Sophomores, Juniors, Seniors.* A regular student is classified by his dean as a sophomore, junior, or senior, when he has completed within 3 hours of all the required credits and specific subjects in his course.

b. *A Special Student* is one who, though unable to satisfy the requirements for admission to the college in which he wishes to study, is permitted to register in courses for which he has satisfactory preparation.

15. INTRAMURAL TRANSFERS—

At the beginning of any semester, with the approval of the deans concerned, a student may change his registration from one college to another. In so transferring, the student shall satisfy the admission requirements of the college to which he transfers, effective at the time he is admitted to the University, and he shall satisfy the course of study of the college to which he transfers, effective at the time the transfer is made, the details of the transfer to be handled by the Registrar and the deans concerned.

16. HONORABLE DISMISSAL FROM THE UNIVERSITY. Upon the request of a student in good standing, the Registrar will issue a letter of honorable dismissal. If the student desires to enter another university, a copy of his or her university credentials, including entrance, and stating thereon whether or not this University recommends such transferee, will accompany the letter. A fee of $1 must be paid for each transcript of record furnished to students by the University Registrar.

REGULATIONS FOR SCHOLARSHIP

1. THE GRADING SYSTEM—

a. *Marks Used.* The grading system shall consist of four passing grades, of condition, of incomplete, and of failure. The passing grades

shall be designated in descending order of excellence as A, B, C, and D; a condition shall be marked E, an incomplete I, and a failure F. W indicates withdrawal without failure; WF indicates withdrawal with failure.

b. *Definition of Marks.* A means *excellent;* B, *good;* C, *fair;* D, *passing.* E for *condition* is a temporary mark and is to be used when the quality of the work is doubtful and further opportunity is desired for the student to demonstrate satisfactory achievement. I is used when a student has for acceptable reasons been unable to complete the required work by the close of the semester. Whenever an I is given, the instructor must state upon the final report sheet the reason why the student was unable to complete the work. WF is used only when a student withdraws from the University and is failing in one or more courses.

2. GRADE POINTS. Each credit earned with a grade of A carries four grade points; a grade of B, three grade points; a grade of C, two grade points; a grade of D, one grade point; a grade of F, no grade points.

3. DETERMINATION OF FINAL GRADES. Each instructor will determine the final grade[1] of his students by any method he may consider best adapted to his course.

4. FINAL EXAMINATIONS. Final examinations shall be held at the end of each semester in all undergraduate courses except courses in which an examination is not practicable or appropriate. If a final examination is not given the class shall meet during the examination period and shall continue for at least one hour.

All students are required to take the final examinations in all their courses in which examinations are given, or attend the class meeting held in place thereof. In case of emergency when it may prove an unreasonable hardship to a student to take a final examination at the scheduled time, the student, upon written petition to the Administrative Council, may be granted such dispensation as the Council may determine.

5. SCHOLARSHIP AVERAGE. In determining scholarship average the sum of the grade points received for each hour for which the student is registered, excepting cases of W, shall be divided by the total number of hours for which the student is registered. In determining averages, E and I shall be counted as carrying no grade points.

The symbol W is not a scholarship grade and shall not be used in any manner in determining a student's scholarship record.

6. CHANGING A PASSING GRADE. Except when a clerical error has been made, the passing grade of a student may not be changed after the class records have been filed with the Registrar, unless the subject has been repeated in a regular college class.

A course may be repeated for the purpose of changing the grade received but no additional credit can be gained by repeating a course.

[1]Final grades in any semester are not available to a student who is in arrears in his financial obligations to the University. As soon as the financial obligation is discharged, the grades become available.

7. REMOVING A CONDITION—

a. *Students Eligible.* No disqualified student may be issued a permit to remove a condition. A student not in residence may receive a permit only by vote of the faculty or permission of the President.

b. *Procedure.* A condition may be removed by satisfying the requirements of the department. A student who desires to remove a term condition must present to the instructor by whom the examination is to be given, or under whom the deficient work is to be completed, a statement from the Registrar saying that he is eligible and that the fee of $1.50 has been paid.

c. *Fee for Removing.* Application for the removal of a condition will not be accepted by the Registrar until a fee of $1.50 has been paid.

d. *Time for Removing.* A condition may be removed only during the next semester of residence after the condition is incurred. If a condition is not removed by the end of the first semester of residence thereafter, the Registrar shall record a grade of F.

The individual instructor may set the date on which the condition may be removed.

e. *Grade After Removing Condition.* Upon the removal of a condition, the grade of D shall be given.

8. REMOVING AN INCOMPLETE. Incomplete work must be completed by the close of the student's first semester of residence after the I was incurred; when so completed, the student shall receive whatever grade the instructor deems proper; if not so completed, the I becomes an F.

9. REMOVING A FAILURE—

a. *Procedure.* A failure in a required subject shall be removed by repeating the subject in class. This must be done as soon as the study is repeated in the University program; and any subject in which a student has failed takes precedence over all other subjects in the arrangement of his program.

b. *Failure in Elective Courses.* Failures and conditions in elective courses are not required to be made up.

10. PROBATION—

a. *Conditions Resulting in Probation—*

(1) A student must be passing in at least two-thirds of his work or he may be placed on probation by the Administrative Council, unless he can show that his unsatisfactory record is due to reasons for which he is not personally responsible.

(2) A student may be placed on probation any time his conduct warrants such action.

(3) A student who does not remove his entrance deficiencies before his second year shall be placed on probation.

(4) A student who has been suspended for one semester will be on probation for one entire semester when he returns.

(5) Whenever a student fails for two consecutive semesters to earn a minimum semester average of 2.0 grade points, he may be placed on probation.

b. *Penalties for Probation*—

(1) A student on probation shall not be allowed to register for more than 80 percent of the regular number of hours of his prescribed course.

(2) While on probation a student may not take part in any University exhibition or public contest (*i. e.*, intercollegiate athletic contests, debates, dramatics, etc.) or serve on the staff of any student publication, or become a candidate for any student office. It is the duty of the Faculty Committee on Student Affairs to enforce this rule.

c. *Release from Probation.* Students placed on probation at mid-semester may be released from probation at any time during the remainder of the semester that they raise sufficiently the quality of their work.

11. SUSPENSION, EXPULSION—

a. *Scholarship*—

(1) A student not passing in at least one-half of his work may be suspended from the University, unless this unsatisfactory record is due to reasons for which he is not personally responsible.

(2) A student who is on probation at the end of each of two consecutive semesters may be suspended from the University.

(3) If the class preparation, attendance, or progress of a student toward a degree is deemed unsatisfactory, the student may be suspended from the University at any time.

b. *Deportment*—

A student may be suspended or expelled from the University by action of the appropriate committee any time his conduct warrants such action.

12. DISQUALIFICATION. A student who has twice been suspended shall not be permitted to register in this University.

13. REQUIREMENTS FOR GRADUATION—

a. *Scholarship Requirements*—

(1) Students enrolled prior to August 1940: In order to graduate, every student enrolled in the University prior to August 1940 must earn 252 grade points. Each hour of 2.5 or above earned under the marking system in operation until August 1940 shall be counted as four grade points under the new system of grading.

(2) Students entering in the fall of 1940 and thereafter: In order to graduate, every student entering the University of Nevada in the fall of 1940 and thereafter, shall have an average of 2 grade points for each hour for which he has been registered, except cases of W and WF.

b. *Credit-Hour Requirements*—

In the College of Arts and Science, 126 credits are required for graduation.

In the College of Agriculture, 126 credits are required for graduation.

In the College of Engineering, 144 credits are required for graduation in the Schools of Mechanical and Electrical Engineering; 148 credits in the Schools of Mining and Civil Engineering.

The value of a *credit is defined* as three hours of work per week for one semester.

c. *Subject Requirements.* In addition to specific subject requirements imposed by each college for its several courses, certain subjects are required by the University of all candidates for a degree. These courses as listed under Required Courses (see Index), are English 1 and 2; the two-year basic course in military science for men, and in physical education for both men and women, Political Science 79 and 80, and Philosophy 5.

14. GRADE REPORTS. Twice during the semester instructors will report students whose grades are D, E, and F, with a statement in each case of the reason for the low mark. When because of their low grades students are subject to probation or suspension, they will be required to meet with the Administrative Council.

15. ADVANCED CREDITS. Students who have attained knowledge in a given field by experience or by study, other than in a recognized institution of learning from which transfer credits are available, may take an examination for advanced credit.

To take an examination for advanced credit the student must present to the instructor by whom the examination is to be given a statement from the Registrar certifying that the Advanced Standing Committee has approved the application for the examination and that the necessary fee of $3.00 has been paid.

Application for such advanced credit must bear the recommendation of the head of the department concerned and be accompanied by the written examination on which the recommendation is based. The amount of credit to be granted on the basis of special examination, supplemented by such laboratory work as may be required, will be determined by the Committee on Advanced Standing but will not exceed the regular work of one semester in the college in which the student is registered.

No student will be permitted to take an examination during a semester in which he has already enrolled for the maximum number of hours permitted.

16. SUSPENSION FROM CLASS. A student may be dropped from class at any time for negligence or misconduct upon recommendation by the instructor and with the approval of the dean and of the committee concerned.

DEGREES*

The College of Arts and Science confers upon its graduates the degree of Bachelor of Arts. Any student, however, who pursues a course in which the natural sciences or mathematics have received particular emphasis may, upon petition to the faculty of the College of Arts and Science, be granted the degree of Bachelor of Science.

*No student may be graduated or be furnished with a transcript of record unless and until all accounts with the University have been fully paid.

Upon graduates of the College of Engineering are conferred degrees as follows: Graduates of the Mackay School of Mines receive the degree of Bachelor of Science in Mining Engineering, Metallurgical Engineering or Geological Engineering. Graduates of the Schools of Mechanical Engineering, of Electrical Engineering, or of Civil Engineering receive, respectively, the degree of Bachelor of Science in Mechanical Engineering, Bachelor of Science in Electrical Engineering, and Bachelor of Science in Civil Engineering.

Graduates of the College of Agriculture receive the degree of Bachelor of Science in Agriculture. Graduates of the School of Home Economics receive the degree of Bachelor of Science in Home Economics.

Combination curricula leading to the bachelor's degree in each of two schools or colleges in the University may be arranged. The minimum requirements shall be one extra year in residence and 30 credit hours of extra work. More work may be necessary if the specific requirements of the department in which the degree is sought have not been met.

A charge of $5 is made for all baccalaureate diplomas. If two diplomas are granted in any one year, the charge will be $5 for the first, and $4 for the second. The charge for a teacher's diploma, if received in addition to a baccalaureate diploma, is $1.

DIPLOMAS

For information concerning teachers' diplomas, see The School of Education.

RESIDENCE REQUIREMENT

Students spending less than three years at the University must be in residence the last year to be eligible for graduation; students who have spent three years or more here may be allowed to complete a maximum of eight units *in absentia* after their last registration here. *Premedical, prelegal, and prenursing students are not included in this rule.*

If a student is in residence at the University for one year only, that year's work must be done in the college from which the degree is expected. No college faculty in the University will recommend a student for the bachelor's degree unless he has completed, in residence, credit equivalent to the requirements for one full year's work in the college in which he expects to receive the degree. Attendance at the Summer Session is construed as resident study, three summer sessions at the University of Nevada being considered the equivalent of one semester's residence.

UNDERGRADUATE THESES

Whenever a thesis is required for an undergraduate degree in any department, school, or college of the University, and such thesis is to be filed in the University Library, the format of the thesis must conform to the requirements determined by the Graduate Committee for master's theses, in such matters as general style and mechanics, size and quality of paper, and type of binding.

GRADUATE WORK AT THE UNIVERSITY OF NEVADA

Admission—Qualified graduates of the University of Nevada or of

other accredited institutions may register as graduate students. Registration as a graduate does not mean that a student will become a candidate for an advanced degree.

Registration—Students wishing to register for graduate study should present their credentials to the Committee on Admission and Advanced Standing, and if approved a card of admission will be issued to the applicant. When the student has decided in what department he desires to do his major work, he will confer with the head of that department, who, in consultation with the student, will outline the work to be done. The student will then submit the major and minor courses chosen to the Graduate Committee for approval.

Fees—Graduate students pay the same fees as the undergraduates in the various departments of the University, except that they are exempt from payment of the A. S. U. N. semester fee of $12.50 and the Health Service fee of $6 unless they choose to pay them.

Degrees—The University of Nevada offers the following advanced degrees for work done in residence: Master of Arts and Master of Science.

Requirements for the Master's Degree—A total of 24 credits in course units will be required. Of these, not less than 12 must be offered in the major field and not less than 6 in a minor subject. In addition to the above, a thesis, having a minimum value of 6 credits will be required in the major department.

Application for Admission to Candidacy—The applicant for admission to candidacy shall obtain a blank from the Graduate Committee and present his application to this committee not later than the end of the third week of the semester preceding that in which the degree is to be conferred. The application must contain the following information and it must have the signed approval of the major and minor professors:

1. The name of the school and of the department from which the student received the bachelor's degree; the title and date of the degree.
2. The major and minor subjects in which the advanced degree is sought.
3. The completed work for which the student has received graduate credit.
4. The work the student proposes to offer in order to satisfy the requirements.

Undergraduate Prerequisites—A student must have completed such undergraduate work as the department concerned, with the approval of the Graduate Committee, may require. The prerequisite for a graduate major normally amounts to an undergraduate major or its equivalent, and in no case may this prerequisite be less than the requirements for an undergraduate minor or its equivalent, in the department. If a student is deficient in undergraduate prerequisites he must make up such deficiencies.

Residence Requirement—

(a) For graduates of the University of Nevada: At least 12 semester hours of course work must be done in residence at the University of Nevada.

(b) For graduates of other accredited institutions: At least 16

semester hours of course work must be done in residence at the University of Nevada.

Advancement to Candidacy—After a student has completed at least 12 course units, acceptable for graduate credit at the University of Nevada, the Graduate Committee, on the written recommendation of his major and minor professors, may advance him to candidacy. Before such advancement, however, the applicant must submit to the committee the subject of his thesis and a brief outline of its probable content.

Courses—Courses numbered 50 to 100 may be offered for graduate credit, when they have been recommended by the head of the department concerned and approved by the Graduate Committee, and when they have not been offered previously for undergraduate credit. With respect to such courses, the graduate student must usually do more work than that which is required of an undergraduate registered in the same courses.

All courses numbered above 100 are essentially graduate courses.

Grades—Graduate credit will not be given when the grade falls below B.

Thesis—Each candidate for the master's degree will be required to prepare a thesis that will show scholarly attainment and ability to do independent work. The credit for the thesis shall be determined, upon recommendation of the major professor, by the special committee on final examination.

The title of the thesis shall conform to the following:

The Origin of the English Guilds

A THESIS SUBMITTED TO THE UNIVERSITY OF NEVADA FACULTY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS (OR SCIENCE)

By

JOHN EDWARDS SMITH

RENO, NEVADA

1944

At least two weeks before the date on which the degree is to be awarded, three copies of the thesis must be submitted to the Graduate Committee. It must be in final typewritten form on paper of approved quality and ready for binding when approved by the committee.

The University Library will attend to the binding of the thesis. A small fee will be charged for this service. The charges for binding must be paid before the committee will pass judgment on the thesis. In case the thesis should not be approved, any sums advanced for binding will be returned to the student. If approved, two copies of the thesis will be deposited by the committee in the University Library and one copy will be retained by the major department.

Examinations—

(a) Course examinations. There will be such course examinations as the individual instructors may require.

(b) Final examination. Not later than one week before the date

of conferring the master's degree, the candidate will be given a general examination which may be oral, written, or both. It will cover his major work, his thesis, and his other courses. It will be conducted by a committee of five members of the faculty, one of whom shall be Director of Thesis, appointed by the Graduate Committee. The head of the department in which the major work is taken will be chairman of the committee. The date of the examination will be announced publicly. The examination will be open to members of the University staff and to guests invited by the major professor.

General Regulations—

1. Candidates for the master's degree may not at the same time be candidates for any other degree.
2. Correspondence and extension courses will not be accepted for credit towards the master's degree.
3. Members of the University staff who are employed on full-time salary may not register for more than 6 credits during one semester.
4. No graduate student may register for more than 16 credits (including thesis) during one semester.
5. All the requirements for the master's degree must be satisfied within a period of five calendar years preceding the granting of the degree.
6. The head of the major or minor departments may require a reading knowledge of a foreign language (usually French or German).
7. Undergraduates who lack less than 15 semester credits to complete the requirements for the bachelor's degree may enroll in approved courses for graduate credit, provided such credit is requested by the student and approved by the professor at the time of enrollment.

ENGINEERING DEGREES

The engineering degrees—Engineer of Mines (E.M.), Metallurgical Engineer (Met.E.), Mechanical Engineer (M.E.), Civil Engineer (C.E.), and Electrical Engineer (E.E.)—may be conferred upon graduates who have taken corresponding courses in the College of Engineering of the University of Nevada, or upon graduates of other institutions who have obtained the Master of Science degree in engineering from the University of Nevada; who have been engaged in honorable and successful engineering work in positions of responsibility for a period of at least five years in the case of holders of the B.S. degree, or four years in that of holders of the M.S. degree; and who submit theses showing ability to conduct advanced engineering work. Theses will not be considered when they are merely investigations in literature, compilations of routine laboratory tests, or presentations of the work of others.

The engineering degrees may also be conferred upon graduates of the College of Engineering of the University of Nevada and upon graduates of other engineering colleges of equal standing, who, after graduation, have been engaged for a period of at least one year in honorable and successful engineering work in a position of responsibility, and who subsequently complete successfully one year of graduate work in engineering, including thesis, at the University of

Nevada. Graduates of other institutions must include in their graduate work any subjects in the corresponding undergraduate curricula which are required by the College of Engineering of the University of Nevada, but whose equivalents were lacking in their undergraduate courses.

Formal application for an engineering degree must be filed with the Registrar not later than the beginning of the second semester of the year in which the degree is sought, and approved in turn by the Engineering Faculty and the Graduate Committee. The application must be accompanied by detailed and satisfactory evidence as to the extent and character of the applicant's professional work. The thesis shall have the general form prescribed for the bachelor's thesis, or shall be a reprint of an article appearing in a reputable magazine. In the case of a nonresident applicant, it shall be presented to the Engineering Faculty and to the Graduate Committee at least eight weeks before the date set for conferring the degree. The diploma fee for an engineering degree is $5.

GOVERNMENT OF THE STUDENTS

In the government of the University the largest liberty consistent with good work, good order, and good character is given the students. Their habits of life are expected to be such as to promote daily cultivation of high moral character. They are expected in all their relations to each other and to the University to observe the usages of good society without requiring special regulations for that purpose. They are expected to be punctual and regular in their attendance upon all University exercises. The State provides its bounty for the earnest and industrious student. The indolent or the unworthy will not be retained in the University. Young men and young women who do not intend to give themselves up to the very highest demand of university life are advised to remain at home or to go elsewhere.

OFFICIAL NOTICES

Students should watch the bulletin-board for notices. AN OFFICIAL NOTICE PROPERLY POSTED IS DEEMED SUFFICIENT INFORMATION TO ALL STUDENTS.

THE COLLEGE OF ARTS AND SCIENCE

FACULTY

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
FREDRICK WOOD, Ph.D., Dean of the College of Arts and Science; Professor of Mathematics.
REUBEN CYRIL THOMPSON,[1] A.M., LL.D., Professor of Philosophy.
JAMES REED YOUNG, Ph.D., Professor of Psychology.
BENJAMIN F. CHAPPELLE, Ph.D., Professor of Foreign Languages.
GEORGE WALLACE SEARS, Ph.D., Professor of Chemistry.
FRED W. TRANER, Ph.D., Dean and Professor of Education.
PHILIP A. LEHENBAUER, Ph.D., Professor of Biology.
FRANCIS CLARK MURGOTTEN,[1] Ph.D., Professor of Foreign Languages.
THEODORE H. POST, M.A., Professor of Music.
JOHN EDWARD MARTIE, M.P.E., Professor of Physical Education for Men.
ELSA SAMETH, M.S., Professor of Physical Education for Women.
ALFRED LESLIE HIGGINBOTHAM, A.M., Professor of Journalism.
CHARLES ROGER HICKS, Ph.D., Professor of History and Political Science.
SIGMUND W. LEIFSON, Ph.D., Professor of Physics.
VINCENT P. GIANELLA, Ph.D., Professor of Geology.
HAROLD N. BROWN, Ed.D., Professor of Education.
ERNEST L. INWOOD, Ph.D., Professor of Economics, Business, and Sociology.
MILDRED SWIFT, M.S., Professor of Home Economics.
MILAN J. WEBSTER, Ph.D., Professor of Economics, Business, and Sociology.
ROBERT STUART GRIFFIN, Ph.D., Professor of English.
RALPH A. IRWIN, Ph.D., Professor of Psychology.
E. LEWIS FIELD, Lt. Colonel, U. S. Army, Professor of Military Science and Tactics.
GILBERT BRUCE BLAIR, A.M., Associate Professor of Physics and Astronomy.
EDWARD G. SUTHERLAND, A.B., Associate Professor of Economics, Business, and Sociology.
JESSIE P. POPE, M.A., Associate Professor of Home Economics.
JOHN R. GOTTARDI,[1] M.A., Associate Professor of Foreign Languages.
PAUL A. HARWOOD,[1] M.A., Associate Professor of English.
MERYL WILLIAM DEMING, Ph.D., Associate Professor of Chemistry.
CLAUDE CARSON SMITH,[1] M.A., Associate Professor of History and Political Science.
EDITH M. RUEBSAM, M.A., Associate Professor of Education.
CHESTER M. SCRANTON, M.A., Associate Professor of Physical Education for Men.
JAMES W. COLEMAN,[1] M.A., Associate Professor of Physical Education for Men.
ANATOLE G. MAZOUR, Ph.D., Associate Professor of History and Political Science.
HARRY E. WHEELER,[1] Ph.D., Associate Professor of Geology.
SAMUEL B. BATDORF,[1] Ph.D., Associate Professor of Physics.
AUSTIN E. HUTCHESON, Ph.D., Associate Professor of History and Political Science.
W. D. BILLINGS, Ph.D., Associate Professor of Biology.
EDWARD W. LOWRANCE,[1] Ph.D., Associate Professor of Biology.
CHARLTON G. LAIRD,[1] Ph.D., Associate Professor of English.
PHILLIP G. AUCHAMPAUGH, Ph.D., Associate Professor of History and Political Science.
LORING R. WILLIAMS, Ph.D., Associate Professor of Chemistry.
E. MAURICE BEESLEY, Ph.D., Associate Professor of Mathematics.
ROBERT A. HUME, Ph.D., Associate Professor of English.
ALDEN J. PLUMLEY, M.A., Assistant Professor of Economics, Business, and Sociology.
LAWTON B. KLINE,[1] M.A., Assistant Professor of Foreign Languages.
WILLIAM C. MILLER,[1] M.A., Assistant Professor of English.
JOHN P. PUFFINBARGER,[1] Ed.M., Assistant Professor of Education.

[1]Absent on leave; war service.

ALICE B. MARSH, M.S., Assistant Professor of Home Economics.
LEONARD E. CHADWICK, B.S., Assistant Professor of Economics, Business, and Sociology.
CHRISTIAN W. F. MELZ, Ph.D., Assistant Professor of Foreign Languages.
ALBERT G. WIEDERHOLD, Ph.D., Assistant Professor of Philosophy and Psychology.
WILLIAM O. HOLMES,[2] B.A., Assistant Professor of English.
FRANK RICHARDSON, Ph.D., Assistant Professor of Biology.
JOANNA CHAPMAN, M.S., Assistant Professor of Education.
MURIEL J. HUGHES, Ph.D., Assistant Professor of English.
MARIO B. RODRIGUEZ, M.A., Acting Assistant Professor of Foreign Languages.
MICHAEL J. MCCORMICK, Sergeant, U. S. Army, Instructor in Military Science and Tactics.
HELEN JOSLIN, Instructor in Art.
RUTH IRENE RUSSELL,[1] M.S., Instructor in Physical Education for Women.
J. RAYMOND BUTTERWORTH,[1] M.A., Instructor in English.
CHARLES T. DUNCAN,[1] B.A., Instructor in Journalism.
ETHEL M. DIXON, B.P.E., Instructor in Physical Education for Women.
KATHERINE NORRID MERGEN, B.A., Instructor in Journalism.
FRANK P. HUNGATE, B.A., Acting Instructor in Biology.
HARRIET BEACH SPENCER, B.A., Assistant in English.
MARGARET JENSEN WILLIAMS, M.A., Assistant in Mathematics.
FRED L. HUMPHREY, B.S., Assistant in Geology.
GLORIA RICHARDS, Secretary to the Dean.

AIM

The aim of the College of Arts and Science is twofold:

1. To lay a foundation for the professions, both learned and technical, and
2. To increase knowledge in and sympathy with the broader and cultural aspects of life.

ADMISSION REQUIREMENTS

For admission requirements, entrance subjects and the number of credits belonging to each, see Requirements, Index.

REQUIREMENTS FOR A BACCALAUREATE DEGREE IN ARTS AND SCIENCE

In order to be recommended for the degree of Bachelor of Arts[3] a candidate must, first, have satisfied the requirements for admission; and, second, have gained credits in prescribed and elective courses aggregating 126 semester units, of which at least 40 must be in courses numbered 50 or above. These units are to be distributed as follows:

I. From two to six units in military and physical education as required by the University, and political science 79–80 as required by the State law.

II. A minimum of six units in English 1–2[4] shall be required of all students.

III. A minimum of sixteen units[5] in each of the three groups named below shall be required of freshmen and sophomores:

[1]Absent on leave.
[2]Deceased: February, 1945.
[3]Students who have majored in mathematics or science may on application to the Dean be granted the degree of Bachelor of Science.
[4]Subject to provisions stated under English Language and Literature, see Index.
[5]The fulfillment of these group requirements by substitution of high school units will, however, not reduce the number of regular college units required for graduation below 126.

GROUP 1. French, German, Italian, Latin and Spanish. Four entrance units in not more than two languages will meet this requirement.

A single year in a language will not be counted toward meeting the requirements unless one semester of that language be taken in college.

With three entrance units the requirements are three college credits in the same language or course 1–2 in another language.

With two entrance units: Course 3–4 in the same language or course 1–2 in another language.

With one entrance unit: Courses 2 and 3–4 in the same language.

With no entrance credit: Courses 1–2 and 3–4 in any one foreign language.

GROUP 2. History, political science, economics, sociology, philosophy, psychology, and for normal school graduates, education.

Each unit of high school history or social science, except commercial geography or commercial law, may be used to decrease the requirement in this group by four units, provided such decrease shall not exceed eight units.

GROUP 3. Mathematics, physics, chemistry, botany, zoology, geology and astronomy.

Each unit of high school science except general science and each year of high school mathematics, except first year algebra and plane geometry may be used to decrease the requirement of this group by 4 units.

IV. At least one major and one minor as described under Junior and Senior Requirements, see Index.

The specific group requirements under III, above, have been made not only to insure for each student an acquaintance with the different fields of knowledge but to form what is believed to be a sounder basis for a somewhat greater specialization during the junior and senior years. For this reason, these requirements should be completed during the freshman and sophomore years.

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Military and Physical Educ.	½ to 1½	Military and Physical Educ.	½ to 1½
English 1	3	English 2	3
Philosophy 5	1	Foreign language	12 or 11
Foreign language	11 or 10	Social science	
Social science		Natural science or mathematics	
Natural science or mathematics		Elective	
Elective			
	15½		15½

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Military and Physical Educ.	½ to 1½	Military and Physical Educ.	½ to 1½
Foreign language	15 or 14	Foreign language	15 or 14
Social science		Social science	
Natural science or mathematics		Natural science or mathematics	
Elective		Elective	
	15½		15½

Courses open to freshmen and sophomores which may be used to fulfill the above requirements in the social science and natural science groups are listed below. In general, odd numbers are used for first-semester and even numbers for second-semester courses:

GROUP 2—Social Science—
- Economics 7, 10
- History 1–2
- Philosophy 1, 7, 8
- Political Science 1–2
- Psychology 2

GROUP 3—Natural Science or Mathematics—
- Botany 1
- Chemistry 1–2, 7–8
- Mathematics 5, 8, 11, 13
- Physics 1a–2a, 1b–2b, 7, 9–10
- Zoology 1, 2, 57, 58

Subjects requiring a prerequisite or not open to freshmen:
- Business Adm. 41, 43, 44, 47
- Economics 1, 2
- History 5–6
- Philosophy 21, 22.
- Psychology 5, 6, 10, 14, 40
- Sociology 1, 2, 50
- Botany 21, 22, 26
- Chemistry 9–10
- Geology 1, 2, 10, 11, 12, 14
- Mathematics 14, 15–16, 18, 20 22, 23–24
- Physics 3–4, 5–6
- Zoology 9, 50, 55, 57, 58, 60

Students who, upon their initial registration in the University, are over 26 years of age are excused from physical education and military.

No course with the number of 50 or more will be open to freshmen or sophomores without the written recommendation of the head of the department and the approval of the Dean.

When students transfer to the College of Arts and Science from other colleges, they will be considered deficient in as many hours in arts and science as they are deficient in the college from which they transferred.[1]

No student may transfer from the College of Agriculture or the College of Engineering to the College of Arts and Science unless he be a regular student in the college from which he transfers.

Courses given primarily in other colleges of the University may be taken by arts and science students, but not to exceed twenty units of such work shall be counted for arts and science degrees.

Except as otherwise specified, all students, including transfers. before receiving the bachelor's degree from the College of Arts and Science must have fulfilled the above requirements.

JUNIOR AND SENIOR REQUIREMENTS

The function of the College of Arts and Science is three-fold: to

[1]The hour requirement for graduation from the College of Engineering is greater than that of either arts and science or agriculture. Engineers transferring to either of these two colleges must make 2½ more than the 126 hours required for graduation from arts and science and agriculture, respectively, for each semester they have been enrolled in engineering.

provide for a broad cultural education, to prepare secondary school teachers and to prepare specialists. To accomplish these purposes, candidates for the baccalaureate degree must select courses totaling not less than forty hours' work in courses numbered 50 or above. These courses must be selected from a group of departments so as to include at least a major and a minor.

The combined work of the two or three departments should represent a unity of aim. The particular grouping, however, will depend upon the particular aim of the student. For example, a student making some one language his major may find it desirable to elect a considerable amount of history. A student planning to study medicine should elect a major in biology or chemistry, but may find it desirable to take additional work in physics. Those intending to study law, should elect a major in political science or economics, but may find it desirable to take advanced work in English. Students taking a science major will generally find it profitable to have a good reading knowledge of French and German.

For a major not more than 27 credits may be required within a department of which at least 12 credits must be in courses numbered 50 or above.

For a minor not more than 18 credits may be required within a department of which in arts at least 6 credits and in science at least 4 credits must be in courses numbered 50 or above.

The specific requirements for majors and minors in the different departments will be found in the description of courses of study under their respective heads in the courses of instruction.

It is advisable that students should plan their work for the junior and senior years as early as the sophomore year, in order that the studies then elected may fit in with their later work. At the beginning of the junior year, each student must give the Dean written notice of his selection of major and minor departments; such selection shall bear the approval of the instructors concerned.

Any student after electing his major and minor departments may, with the consent of the department concerned and of the Dean, change his major department or major and minor departments, as the case may be, provided he complies with all the requirements in the case of the new major and minor departments.

The remaining units necessary to make a total of 126 may be freely elected from any department, or, subject to the limit of twenty units named above, from the other colleges of the University.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY

The following course of study is designed for students looking toward the field of chemistry as a profession. It is intended to fit students to enter directly into industrial work or to prepare them for more advanced study. Certain electives are provided in order to fill the needs of students interested in the different branches of chemistry. These electives, therefore, are subject to the approval of the head of the department, and should be chosen in consultation with him:

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Chemistry 7	4	Chemistry 8	4
English 1	3	English 2*	3
Mathematics 15	5	Mathematics 16	5
Military 1	1	Military 2	1
Philosophy 5	1	Social science	3
Elective	2		
	16		16

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Chemistry 9	4	Chemistry 10	4
Mathematics 23	3	Mathematics 24	3
German 1	5	German 2	5
Econ. 1 or Bus. Adm. 41	3	Econ. 2 or Psych. 5	3
Military 3	1	Military 4	1
	16		16

Junior Year

First Semester	*Units*	*Second Semester*	*Units*
Chemistry 51	4	Chemistry 52	4
Chemistry 71	3	Chemistry 72	3
Chemistry 95	½	Chemistry 96	½
German 9	3	German 10	3
Physics 1a	3	Physics 2a	3
Physics 1b	1	Physics 2b	1
Elective	1½	Elective	1½
	16		16

Senior Year

First Semester	*Units*	*Second Semester*	*Units*
Chemistry 75	2	Chemistry 92	2
Chemistry 83	4	Chemistry 84	4
Chemistry 95	½	Chemistry 96	½
Chemistry 99	2	Chemistry 100	2
Political Science 79	1	Political Science 80	1
Elective	6½	Elective	6½
	16		16

In addition to the above course of study, students will be required to fulfill the regular University requirements in physical education.

THE COURSE IN JOURNALISM

In its four-year professional Course in Journalism, the University of Nevada offers approved preparation for the journalistic vocations.

Based on the principle that a well-rounded education coupled with training in journalism is the best foundation for the profession, the Course in Journalism provides study in language, literature, the natural sciences, the social sciences, and the aesthetics, as well as in journalism.

While designed to prepare for general newspaper and magazine work, the Course in Journalism is arranged to enable the student to fit himself, in addition, for special journalistic activities, such as advertising, freelance writing, public relations work, and so forth.

*Subject to provisions stated under English Language and Literature, see Index.

To complete the Course in Journalism, the student must present among the 126 units required for graduation:

1. Twenty-seven credit hours in journalism, including journalism 21–22, news gathering and writing (6 credits); journalism 51–52, news editing (4 credits); journalism 53, the evolution of the newspaper as a social institution (3 credits); journalism 72, the law of the press (1 credit); and jouralism 81–82, newspaper internship (2 credits).

In their sophomore, junior, and senior years students specializing in journalism are advised to include Journalism 31, 32, 61, 62, 91, 92, in their schedules whenever possible in order to build up a background of the news of each year.

2. Twelve credit hours in English literature.

3. Twenty-five credit hours in the social sciences (history, political science, economics, business, sociology, psychology, and philosophy), selected so that they represent at least five of these subjects.

4. Five credit hours in the aesthetics.

5. The freshman and sophomore requirements of the College of Arts and Science.

6. Subjects required of all candidates for graduation from the University of Nevada.

University credits acquired in meeting the freshman and sophomore arts and science requirement in the social sciences may be counted toward this group requirement in the Course in Journalism.

In choosing subjects to meet the group requirements of the Course in Journalism, the student will be guided by the professor of journalism.

In each group, the following courses will be found best to furnish the student with a comprehensive background. *Those starred are especially valuable:*

Journalism—1–2, 54*, 56*, 65*, 67, 68, 79*.

English Literature—23–24, 68–69, 70*–71*, 71A*, 72–73, 74, 75*–76*, 77*, 79, 80, 85, 87–88.

Social Science:

Business—41, 43–44, 47, 68, 85.
Economics—1*, 2*, 7, 10, 17, 51, 61*, 64*.
History—1*–2*, 5*–6*, 56, 58*, 59*–60*, 63*–64*, 69*, 77–78, 81–82*, 83–84, 85, 94*, 97*–98*.
Philosophy—1*, 51, 52, 53*–54*, 61, 82.
Political Science—1*–2*, 55, 56*, 59, 64, 68*, 77, 83*—84*.
Psychology—5*, 10, 11, 51*, 52, 55*, 57*, 65*, 70.
Sociology—1*, 2*, 50, 57, 71*, 79*, 80*, 81, 83*, 84, 90*.

The Aesthetics:

Art—1–2.
English—11–12, 21–22, 53–54, 81–82.
Music—9, 10, 56, 57.
Philosophy—55.

In general, the course for the four years will follow this outline:

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Journalism 1	2–3	Journalism 2	2–3
English 1	3	English 2	3
Group 1 elective (if needed)	3–5	Group 1 elective (if needed)	3–5
Groups 2 and 3 electives	4–7	Groups 2 and 3 electives	4–7
Philosophy 5	1	Military and physical education	½–1½
Military and physical education	½–1½	Electives	----
Electives	----		
	15½		15½

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Journalism 21	3	Journalism 22	3
Journalism 31	1–2	Journalism 32	1–2
Group 1 elective (if desired)	3	Group 1 elective (if needed)	3
Groups 2 and 3 electives (as required)	7–8	Groups 2 and 3 electives (as required)	7–8
Elective or English literature	2–3	Elective or English literature	2–3
Electives	----	Electives	----
	16		16

Junior Year

First Semester	*Units*	*Second Semester*	*Units*
Journalism 53 and/or 65	3–6	Journalism 56 and/or 54	3–6
Journalism 51, 72 and/or 79	2–4	Journalism 52 and/or 67	2–5
English literature	2–3	English literature	2–3
Social sciences	5	Social sciences	5
Political science 79	1	Political science 80	1
Electives	----	Electives	----
	16		16

Senior Year

First Semester	*Units*	*Second Semester*	*Units*
Journalism 81	2	Journalism 82	2
Journalism 65 and/or 53	3–6	Journalism 54 and/or 56	3
Journalism 79, 72 and/or 51	2–4	Journalism 52 and/or 67	2–6
English literature	2–3	English literature	2–3
Social sciences	4	Social sciences	4
Electives	----	Electives	----
	16		16

In addition to the journalism laboratory facilities on the campus, students in journalism at the University of Nevada enjoy the use of the offices and plants of the Reno newspapers, the national press association bureaus, and commercial printing and engraving plants in the city.

Members of the staffs of the Reno Evening Gazette, the Nevada State Journal, the Reno bureaus of the United Press and the Associated Press, the Wilson Advertising Agency, the Nevada Engraving Company, the Reno Printing Company, A. Carlisle and Company of Nevada, and the Silver State Press generously cooperate with the Course in Journalism, not only in making their facilities available but in the instruction itself.

Subjects in journalism, credit hours, semesters offered, requirements for the major and minor, and the faculty in journalism are listed under the Department of Journalism.

PRELEGAL COURSE

Students who intend to study law will find it advantageous to plan their college work in such a way as to permit the inclusion of essential prelegal subjects and to satisfy the University requirements for the B.A. degree.

The requirements of the leading law schools usually embrace: (1) social sciences, history, political science, economics, business and sociology; (2) foundation courses in English, including debate and public speaking; (3) logic; (4) psychology; and (5) Latin, French, or German.

For advice relative to the organization of his work, the student is referred to Professors Inwood, Griffin and Mazour, who are designated advisers of the prelegal students.

The leading law schools prefer that their students shall have completed four years of college work before entrance. Some, however, admit students upon the completion of three years of college work. The University will confer the degree of Bachelor of Arts upon any student of high rank who, after completing three years of approved work in this University, shall enter a law school of approved standing and shall complete worthily one year's work in such law school. (A student of high rank is one who stands above the average of his class.) In order to receive the degree in this way the student must, at the end of his first year in the law school, present a signed testimonial from the Dean of the Law School to the Dean of the College of Arts and Science, such testimonial to include a statement of courses taken, grades achieved, and a recommendation that the degree be granted.

PREMEDICAL COURSES

The requirements for admission to Class A medical colleges vary from a minimum of two years of standard college work to the possession of a bachelor's degree. Students contemplating studying medicine should communicate early in their undergraduate course with the Dean of the particular medical college they may wish to enter in order to learn the exact entrance requirements at the time they expect to enter. Practically all medical colleges prescribe the same minimum of subject matter which includes general zoology, vertebrate anatomy, embryology, general inorganic chemistry, qualitative analysis, organic chemistry, general physics, and a reading knowledge of French or German. Quantitative analyses is also required by some and advised by others. Plane trigonometry and college algebra are required by a few schools and strongly advised to insure an adequate foundation for bio-physical and bio-chemical studies in the medical school.

PREMEDICAL COURSE

To permit the inclusion of all the essential premedical subjects and to satisfy the University requirements for the B.A. degree, the following arrangement of the course of study has proved a desirable one. Considerable variations from it are permissible:

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
English 1	3	English 2	3
Philosophy 5	1	General Chemistry	4
General Chemistry	4	Zoology 2	4
Botany 1	3	Military and Physical Education	½–1½
Military and Physical Education	½–1½	Electives	....
Electives	....		
	15½		15½

As electives the student should choose either the continuance of French or German if he has some entrance credits in these languages or he may elect a social science, preferably psychology in the second semester.

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
German 1	5	German 2	5
Chemistry 9	4	Chemistry 10	4
Zoology 9	5	Mathematics 22	4
Military and Physical Education	1½	Military and Physical Education	1½
Electives	....	Electives	....
	15½		15½

Junior Year

First Semester	*Units*	*Second Semester*	*Units*
German 9	3	German 10	3
General Physics	4	General Physics	4
Organic Chemistry	4	Organic Chemistry	4
Bacteriology 51	4	Zoology 64 (Embryology)	4
Political science 79	1	Political science 80	1
	16		16

Senior Year

Elective or approved credential from professional school.

The University will confer the degree of Bachelor of Arts or Bachelor of Science upon any student of high rank who, after completing three years of approved work in this University, shall enter a medical school rated Class A by the American Medical Association, and shall complete worthily one year's work in such medical school. In order to receive the degree in this way, the student must, at the end of his first year in the medical school, present a signed testimonial from the Dean of the Medical School to the Dean of the College of Arts and Science, such testimonial to include a statement of courses taken, grades achieved, and a recommendation that the degree be granted.

For further advice relative to premedical work, the student is referred to the premedical advisers.

PRE-MEDICAL TECHNOLOGIST COURSE

Medical Technologist or Clinical Laboratory Technician training is available at many hospital laboratories of the country. The following three-year curriculum includes the uniformly required and strongly advised courses for admission to such training schools, as well as certain electives and courses required for graduation. Electives must

satisfy the Arts and Science freshman and sophomore graduation requirements.

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
English 1	3	English 2	3
Chemistry 7	4	Chemistry 8	4
Botany 1	3	Zoology 2	4
Philosophy 5	1	Physical Education 2	1
Physical Education 1	1	Elective	3½
Elective	3½		
	15½		15½

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Chemistry 9	4	Chemistry 26	3
Zoology 11	4	Zoology 22	2
Psychology 5	3	Botany 70	3
Physical Education 3	½	Sociology 2	3
Elective	4	Physical Education 4	½
		Elective	4
	15½		15½

Junior Year

First Semester	*Units*	*Second Semester*	*Units*
Bacteriology 51	4	Zoology 68	2
Physics 1	4	Physics 2	4
Zoology 57	3	Zoology 58	3
Political Science 79	1	Political Science 80	1
Elective (50 or above)	4	Elective (50 or above)	6
	16		16

A student completing the three-year pre-medical technologist course may be granted a Bachelor of Arts or a Bachelor of Science degree from the University of Nevada when he or she has, in addition, completed the twelve to eighteen months' technologist training course and received a certificate or diploma from the laboratory where the training was taken. A testimonial similar to that described under the pre-medical course must be presented from the director of the medical technology school. The only type of laboratory training acceptable will be that obtained either from a medical technology school approved by the Council of Medical Education and Hospitals of the American Medical Association or, during the war, training as an apprentice under a qualified clinical pathologist approved by the American Association of Clinical Pathologists. This latter plan can now be followed at the laboratories of Dr. Lawrence Parsons at St. Mary's Hospital in Reno.

RECOMMENDED THREE-YEAR PRENURSING COURSE

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Botany 1	3	Zoology 2	4
English 1	3	English 2	3
Chemistry 7	4	Chemistry 8	4
History 1	3	History 2	3
Physical Education 1	1	Physical Education 2	1
Elective	1½	Elective	½
	15½		15½

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Zoology 11 (Human Anatomy)	4	Hygiene 2	2
Foreign Language	5	Foreign Language	5
Sociology 1	3	Sociology 2	3
Psychology 5	3	Physical Education 4	½
Physical Education 3	½	Elective	5
	15½		15½

Junior Year

First semester	*Units*	*Second semester*	*Units*
Zoology 57 (Physiology)	3	Zoology 58 (Physiology)	3
Bacteriology 51	4	Home Economics 50	3
English or Foreign Language	3	English or Foreign Language	3
Elective (Courses 50 or above)	5	Elective (Courses 50 or above)	6
Political Science 79	1	Political Science 80	1
	16		16

A student completing the three-year prenursing course may be granted a Bachelor of Arts or a Bachelor of Science degree from the University of Nevada when she has, in addition, completed 32 units of acceptable academic work in a recognized school of nursing.

TEACHERS' DIPLOMAS

For the requirements for a teacher's diploma, see School of Education, Index.

RECOMMENDED COURSE FOR SOCIAL WORKERS

Students who plan to engage in social work will find it advantageous to pursue an undergraduate course designed for this particular purpose. Some branches of the services provided for under the terms of the Social Security Act require that workers shall have had training in a recognized school of social work; others do not. This makes it desirable that the undergraduate work be planned to meet the entrance requirements of schools of social work. The following suggested undergraduate curriculum meets these requirements:

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Chemistry 3	4	Chemistry 4	4
Philosophy 5	1	Hygiene 2	2
English 1	3	English 2	3
Foreign Languages	5	Foreign Languages	5
Military and Physical Educ.	½–1½	Military and Physical Educ.	½–1½
Electives	----	Electives	----
	15½		15½

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Foreign Languages	3	Foreign Languages	3
Economics 1	3	Economics 2	3
Psychology 5	3	Psychology 40	3
Sociology 1	3	Psychology 14	2
Military and Physical Educ.	½–1½	Sociology 2	3
Electives	----	Military and Physical Educ.	½–1½
		Electives	----
	15½		15½

Junior Year

First Semester	*Units*	*Second Semester*	*Units*
Psychology 51	3	Psychology 10	2
Political Science 55	3	Political Science 56	3
Sociology 79	2	Sociology 50	2
Sociology 81 (or 83)	2*	Sociology 84 (or 86)	2*
Zoology 57	3	Zoology 58	3
Electives	3	Electives	2
	16		16

Senior Year

First Semester	*Units*	*Second Semester*	*Units*
Psychology 55	3	Psychology 62	3
Political Science 83	2	Political Science 84	2
Political Science 79	1	Political Science 80	1
Sociology 83 (or 81)	2*	Political Science 76	2
Sociology 71	3	Sociology 86 (or 84)	2*
Electives	5	Sociology 90	3
		Electives	3
	16		16

The following electives are recommended: Econ. 64, History 1–2, English 11–12, Philosophy 7–8–22, Math. 20, Home Ec. 50, Psychology 59–65.

This program provides a Major in Sociology and a Minor in Psychology; this is preferred by many graduate schools of social work and is acceptable to all.

It is assumed here that no part of the foreign language requirement has been met before entering the University. Those students who have met some part or all of this requirement will have a correspondingly larger number of electives.

M. J. Webster has been named as adviser for students wishing to prepare for social work.

COURSE OF STUDY LEADING TO THE DEGREE—BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Economics 7	2	English 2	3
English 1	3	Foreign Language	5
Philosophy 5	1	Mathematics or Science	3–5
Foreign Language	5	Military and Physical Educ.	½–1½
Mathematics or Science	3–4	Electives	
Military and Physical Educ.	½–1½		
	15½		15½

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Economics 1	3	Economics 2	3
Business Administration 41	3	Business Administration 44	3
Business Administration 43	3	Foreign Language	3
Foreign Language	3	Mathematics or Science	5–6
Mathematics or Science	2–3	Military and Physical Educ.	½–1½
Military and Physical Educ.	½–1½		
	15½		15½

*Sociology 81 and 84 offered in odd numbered years. Sociology 83 and 86 offered in even numbered years.

Junior Year

First Semester	*Units*	*Second Semester*	*Units*
Business Administration 55	3	Business Administration 56	3
Economics 61	3	Business Administration 68	3
Mathematics or Science	3	Electives	10
Electives	7		
	16		16

Senior Year

First Semester	*Units*	*Second Semester*	*Units*
Economics 73	3	Business Administration 74	3
Business Administration 65	3	Electives	13
Business Administration 47	3		
Electives	7		
	16		16

Electives must include a minimum of twelve hours selected from the following: Business Administration 66, 67, 70, 85, 86, 92; Economics 51, 53, 58, 62, 64, 92. This selection should accord with the individual needs of the student. A minor must be completed in accordance with the requirements of the College of Arts and Science. For students who expect to enter a business career, a minor in mathematics or foreign language is recommended; for those expecting to teach commercial subjects, a minor in education is recommended; these latter students should elect Business Administration 51 and Business Administration 53 to be eligible for certification.

The program above is based upon the assumption that no part of the Mathematics-Science or Foreign Language requirements has already been met. Those students who have already met a part or all of these requirements will have a correspondingly large number of electives.

All requirements of the College of Arts and Science must be met.

THE SCHOOL OF EDUCATION

FACULTY

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
FRED W. TRANER, Ph.D., Dean of the School of Education; Professor of Education.
THEODORE H. POST, M.A., Professor of Music.
JOHN EDWARD MARTIE, M.P.E., Professor of Physical Education for Men.
ELSA SAMETH, M.S., Professor of Physical Education for Women.
FREDRICK WOOD, Ph.D., Dean of the College of Arts and Science; Professor of Mathematics.
HAROLD N. BROWN, Ed.D., Director of Summer Sessions; Professor of Education.
RALPH A. IRWIN, Ph.D., Professor of Psychology.
EDITH M. RUEBSAM, M.A., Associate Professor of Education.
LOUIS TITUS, M.S., Associate Professor of Agronomy.
JOHN P. PUFFINBARGER,[1] M.Ed., Assistant Professor of Education.
ALBERT WIEDERHOLD, Ph.D., Assistant Professor of Philosophy and Psychology.
JOANNA CHAPMAN, M.S., Assistant Professor of Education.
HELEN JOSLIN, Instructor in Art.
MILDRED KLAUS, B.A., Lecturer in Education.

COOPERATING TEACHERS

In the Reno High School—
BUD L. BEASLEY, B.A.
BLYTHE BULMER, B.A.
MARGARET ERNST, B.A.
KATHLEEN GRIFFIN, B.A.
MARGUERITE R. HUGHES, B.S.
HATTIE MAE KILPATRICK, B.A.
MILDRED KLAUS, B.A.
BETTY NELSON OLSON, B.A.
NEVADA PEDROLI, B.A.
BEULAH SINGLETON, B.A.

In the Sparks High School—
MILDRED RIGGLE, B.S.

In the Northside Junior High School—
JEAN SAUER FRY, B.S.
HELEN HALLEY, B.A.
CHAUNCEY L. KING, B.A.
WINIFRED THOMAS, B.S.
GEORGE W. WOOD, B.A.

In the B. D. Billinghurst Junior High School—
MARY KATHRYN CARROLL, B.A.
ALDENE BRANCH KING, B.S.
MARION MUTH TRABERT, B.S.
J. R. WARREN, B.A.

In the Reno Elementary Schools—
KATHRYN I. CLARK
AILENE DANIELS
PEARL G. DOMINGUEZ
JUANITA ELCANO
DOROTHY JACKSON ELLIOT
HELEN HANLEY

[1]Absent on leave.

KATHRYN MARTIN
ELIZABETH MCCORMACK
ISABELLE MOE
MARGARET PATRICK
EDITH PEDDICORD
OLIVIA TREANOR
ALICE BELLE TWADDLE
GRACE WARNER
EMILIE YPARRAGUIRRE

AIM

The School of Education aims principally to provide for undergraduate students, on the foundation of the broad and liberal education furnished them by the College of Arts and Science, a professional course of studies to equip them for successful teaching in the public schools of the State. To a limited extent it seeks also to offer advanced training for teachers in service who desire either to increase their efficiency in their present positions or to prepare for new and larger positions of responsibility.

For the welfare of the State it aims to provide well-trained teachers for the schools and to stimulate in the teaching personnel and the public a deeper interest in the promotion of good teaching practices and sound educational policies.

TYPES OF TRAINING PROVIDED

1. ELEMENTARY SCHOOL TEACHING. Because the teaching positions in Nevada are predominantly in the elementary schools, the most urgent responsibility of the School of Education is the preparation of teachers for rural and town elementary schools. It meets this responsibility by offering a broad training in the principles of elementary education and in teaching methods that equip the student for either the diverse tasks of the one-room school or the more specialized work of a single-grade room. Supervised teaching which constitutes the heart of all the teacher-training work is possible in the primary, intermediate, or junior high school grades.

2. HIGH SCHOOL TEACHING. For students who desire to qualify for high school teaching, the School of Education provides in the junior and senior years courses in the principles and methods of secondary education and in supervised teaching in the important academic subjects in the high school. Such students must also present a major and a minor in high school subjects.

3. ADVANCED PROFESSIONAL TRAINING. Advanced courses are offered in the evening and during Summer Sessions for the benefit of teachers in service who desire to renew certificates, to qualify for a higher grade of certificate, or to work for a Master of Arts degree.

Applicants for the Master's degree proposing to submit Education as a major or a minor should confer with the Dean of the School of Education before enrolling for graduate credit in any course. Failure to do so may mean enrollment in a course not approved for the Master's degree.

HISTORY AND ORGANIZATION

Training of teachers as a function of the University is almost as old as the University itself. In the first year of the University's life at Reno there were no courses for teachers, but before the year was over

the Legislature passed an Act, approved February 7, 1887, providing for the establishment in the University of "a school for the instruction of teachers," and specifying that those worthily completing the course or a prescribed part of it should be granted teachers' certificates by the State Board of Education. In accordance with this Act the University established a normal course with the opening of the fall term in 1887.

The policy inaugurated by the Act of 1887 of granting certificates on the completion of the courses set up by the University has been consistently followed to the present time. There are now two distinct courses in operation, one for high school teachers and one for elementary teachers.

COURSES FOR HIGH SCHOOL TEACHERS' CERTIFICATES

It is possible to qualify for the high school teachers' certificate by either of two methods:

I. *The University High School Teachers' Diploma*

Students who meet the requirements for this diploma will be granted by the State Board of Education a certificate to teach in the high school any subject approved by the local school board, except the vocational subjects subsidized by the State and National government. For these vocational subjects special certificates are required as indicated below.

To qualify for the University High School Teachers' Diploma, the student must meet the requirements for the B.A. or the B.S. degree and must complete 18 hours of professional work in education. For students who are not candidates for the vocational certificate, these 18 hours consist of the following courses: psychology 5 and 6, and education 24, preferably in the sophomore year; education 60 and 2 units in education 64, 65, or 66, preferably in the junior year; education 71, 75, 76, and 82, all of which must be taken in the senior year. One semester of practice teaching in the elementary school may be substituted for education 75 or for education 76.

Vocational Certificates. Students who have taken the required courses in agriculture or home economics and receive their degrees in those subjects may qualify for both the University High School Teachers' Diploma and for a vocational certificate.

For the home economics certificate the students are required to take the following courses: psychology 5 and 6, education 24, 60, 75, 76, 82, 88, and 89, and, following graduation, to do two weeks of cadet teaching under the direction of the State Department in one of the high schools of the State.

For the agriculture certificate the students are required to take the following courses: psychology 5 and 6, education 24, 60, 75, 76, 82, 86, and 87.

Certificate in Business Education. Students desiring to qualify as teachers of commercial subjects in high school should elect the major in business education offered by the Department of Economics, Business, and Sociology, and should complete the following courses in education: 6, 24, 60, 66F, 66G, 71, 75, and 76.

II. *State Board Requirements*

Under the regulations of the State Board of Education a high school

certificate may be granted to any applicant who holds a B.A. or a B.S. degree from the University, and who has completed 18 semester hours in the field of professional education, including four semester hours of practice teaching. The majority of the hours in professional training must be in the secondary field.

Courses in the secondary field include psychology 6 and all courses listed under "Secondary Education" in the "Courses of Instruction" in this catalogue.

COURSES FOR ELEMENTARY TEACHERS' CERTIFICATE

The most satisfactory course for elementary teaching will require four years and entitle the student to a bachelor's degree. Students entering the University with definite intent to remain four years and to take up teaching upon graduation should recognize that the opportunities in teaching are much more numerous in the elementary than in the secondary field. They should plan, therefore, from the first to follow a curriculum through the four years that will thoroughly equip them for an elementary position. Early consultation with the Dean of the School of Education is urgently recommended to such students.

There are three types of elementary teachers' certificates issued.

I. *Based on Four Years of Study*

A first grade elementary certificate valid for three years is issued to graduates of the University if they have completed 18 hours of professional courses in education. These 18 hours must include four hours of methods of teaching the elementary school subjects, four hours of practice teaching in the elementary school, and a course in school law.

II. *Based on Two Years of Study: The Normal School Diploma*

A first grade elementary certificate valid for five years is issued to students who qualify for the normal school diploma. This diploma is granted by the University of Nevada to students who have earned 62 hours of credit in the College of Arts and Science, of which 30 must be professional courses in education. Usually these professional courses should include education 1, 34, 46, and two semesters of practice teaching: education 28, 29, 43, 44, 73, and 74.

For students entering the University with the expectation of qualifying for the normal school diploma in two years, the following program is suggested:

Freshman Year

First Semester	*Units*	*Second Semester*	*Units*
Education 1	2	Education 34	3
English 1	3	English 2	3
Philosophy 5	1	Physical Education (Women)	1
Physical Education (Women)	1	Physical Education (Men)	½
Physical Education (Men)	½	Military (Men)	1
Military (Men)	1	Education Electives	5–6
Education Electives	5–6	Other Electives	..
Other Electives	..		16
	16		

Sophomore Year

First Semester	*Units*	*Second Semester*	*Units*
Practice Teaching	5	Practice Teaching	5
Education 24	2	Education 46	2
Physical Education	½	Physical Education	½
Military (Men)	1	Military (Men)	1
Political Science 79	1	Political Science 80	1
Education Electives	1–2	Education Electives	1–2
Other Electives	--	Other Electives	--
	16		16

III. *Based on One Year of Study*

A second grade certificate, valid for three years but not renewable, is issued to students who have earned 31 hours of credit at the University of Nevada, of which 15 hours must be professional courses in education. Students planning to qualify for this certificate will take the courses specified in the first year of the course for the Normal School Diploma, as above, but must take also education 24 and political science 79–80.

THE KINDERGARTEN-PRIMARY CERTIFICATE

This certificate will be issued to any applicant who holds a B.A. or a B.S. degree from the University and who has completed the prescribed professional work in education and in related subjects as follows:

Education: 16, 17, 18, 19, 24, 25A, 28, 29, 34, 41, and 53, or approved substitutes, totaling 29 hours.

Music: 1–2 or equivalent to prove ability to sing songs of kindergarten-primary level. The applicant must also pass tests to demonstrate ability to play on the piano music of kindergarten-primary difficulty.

Art: 3 or 4.

Physical education for women: 1, 2, 3, 4, and 9.

Graduates of the University who complete the above courses will also be entitled to the Normal School Diploma, described above.

SUPERVISED TEACHING

All supervised teaching facilities are provided in the public schools of Reno and Sparks through the courtesy of the school authorities in these two cities. By this arrangement students meet typical school problems and secure training for teaching under the most favorable conditions. In every instance the student is assigned to one of the regular teachers in the school system, designated as a cooperating teacher, who assigns to the student the material for teaching, checks his lesson plans, observes his teaching, and gives suggestions for improvement.

Each staff member of the Department of Education is likewise responsible for the supervision of a group of student teachers, making regular visits to observe the student's teaching, and holding conferences with the student and his cooperating teacher concerning the teaching. There is always a close cooperation between the department and the cooperating teacher.

PREREQUISITES FOR SUPERVISED TEACHING

To protect the interests of the public school children, great care is exercised in according the privileges of supervised teaching to students. Only those students who have shown by their previous record a satisfactory ability in scholarship, dependability and earnestness, and a real interest in the problems of education, are accepted for teaching. Any failure on the part of the student teacher to meet any requirement imposed may result in the immediate forfeiture of his teaching privilege. No person can be granted an opportunity for practice teaching until he has spent at least one semester in courses in the School of Education.

THE TEACHER APPOINTMENT SERVICE

For the purpose of bringing school authorities who are looking for competent teachers into touch with promising candidates, the School of Education has maintained a teacher appointment service since 1923.

Only those candidates are accepted for enrollment with the appointment service whose ability and character are well known to the Department of Education. For those enrolled the appointment office secures all data possible, both personal and academic, and recommendations from persons in official positions competent to speak of the character or teaching ability of the candidate. This material is kept on file, and on request is sent to interested school authorities.

The only fees charged for the service rendered will be paid by the candidates at the time of enrollment to cover the necessary costs of postage, printing, and stenographic help. For the first set of five papers prepared a charge of $2.50, and for each succeeding set a charge of $1.50, will be made.

THE COLLEGE OF ENGINEERING

1. THE MACKAY SCHOOL OF MINES.
2. THE SCHOOL OF CIVIL ENGINEERING.
3. THE SCHOOL OF ELECTRICAL ENGINEERING.
4. THE SCHOOL OF MECHANICAL ENGINEERING.

FACULTY

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
STANLEY G. PALMER, M.E., Dean of the College of Engineering; Professor of Electrical Engineering.
REUBEN CYRIL THOMPSON,[1] M.A., LL.D., Professor of Philosophy.
WALTER S. PALMER, E.M., Professor of Metallurgy.
JAMES REED YOUNG, Ph.D., Professor of Psychology.
GEORGE WALLACE SEARS, Ph.D., Professor of Chemistry.
FREDERICK L. BIXBY, C.E., Professor of Civil Engineering.
JOHN EDWARD MARTIE, M.P.E., Professor of Physical Education for Men.
JAY A. CARPENTER, E.M., Director of the Mackay School of Mines; Professor of Mining.
ALFRED LESLIE HIGGINBOTHAM, A.M., Professor of Journalism.
CHARLES ROGER HICKS, Ph.D., Professor of History and Political Science.
FREDRICK WOOD, Ph.D., Dean of the College of Arts and Science; Professor of Mathematics.
VINCENT P. GIANELLA, Ph.D., Professor of Geology.
SIGMUND W. LEIFSON, Ph.D., Professor of Physics.
ERNEST L. INWOOD, Ph.D., Professor of Economics, Business and Sociology.
IRVING J. SANDORF,[1] M.S., Professor of Electrical Engineering.
MILAN J. WEBSTER, Ph.D., Professor of Economics, Business, and Sociology.
JAMES R. VAN DYKE, M.E., Professor of Mechanical Engineering.
ROBERT STUART GRIFFIN, Ph.D., Professor of English.
RALPH A. IRWIN, Ph.D., Professor of Psychology.
E. LEWIS FIELD, Lt. Colonel, U. S. Army, Professor of Military Science and Tactics.
GILBERT BRUCE BLAIR, M.A., Associate Professor of Physics and Astronomy.
PAUL A. HARWOOD,[1] M.A., Associate Professor of English.
MERYL WILLIAM DEMING, Ph.D., Associate Professor of Chemistry.
WILLIAM I. SMYTH, E.M., Associate Professor of Metallurgy and Mining.
CHESTER M. SCRANTON, M.A., Associate Professor of Physical Education for Men.
JAMES W. COLEMAN,[1] M.A., Associate Professor of Physical Education for Men.
HARRY E. WHEELER,[1] Ph.D., Associate Professor of Geology.
SAMUEL B. BATDORF,[1] Ph.D., Associate Professor of Physics.
CHARLTON G. LAIRD,[1] Ph.D., Associate Professor of English.
ELDON C. GRAFTON,[1] M.S., Associate Professor of Structural Engineering.
LORING R. WILLIAMS, Ph.D., Associate Professor of Chemistry.
EVERETT W. HARRIS,[1] Ph.D., Associate Professor of Mechanical Engineering.
WARREN O. WAGNER,[1] M.S., Associate Professor of Civil Engineering.
E. MAURICE BEESLEY, Ph.D., Associate Professor of Mathematics.
ROBERT A. HUME, Ph.D., Associate Professor of English.
ALDEN J. PLUMLEY, M.A., Assistant Professor of Economics, Business, and Sociology.
WILLIAM C. MILLER,[1] M.A., Assistant Professor of English.
ROBERT M. OLIVER,[1] M.S., Assistant Professor of Mechanical Engineering.
WILLIAM O. HOLMES,[2] B.A., Assistant Professor of English.

[1]Absent on leave. [2]Deceased: February, 1945.

BERTRAND F. COUCH,[1] Instructor in Mine Accounting.
JOHN TORNEY RYAN, Supervisor of Shop Instruction.
MICHAEL J. MCCORMICK, Sergeant, U. S. Army, Instructor in Military Science and Tactics.
HELEN JOSLIN, Instructor in Art.
J. RAYMOND BUTTERWORTH,[1] M.S., Instructor in English.
FRED L. HUMPHREY, B.S., Assistant in Geology.
SHIRLEE MURDOCK, Secretary to the Dean.

AIM

The aim of the College of Engineering is to give young men a knowledge of those subjects which form the basis of the mining, mechanical, electrical, and civil engineering professions. The technical courses of study are arranged and directed with the purpose of preparing students not only for immediate usefulness but also for future professional growth. The work is in the form of both lectures and recitations, supplemented by exercises in the drafting room, field, laboratory, and shop.

EQUIPMENT

For the general description of the equipment of the College of Engineering, see Mackay School of Mines, Mechanical Building, Electrical Building, New Engineering Building, Chemistry Building, Laboratories for Geology and Mineralogy, Laboratories of the Mining Department, Mining and Geological Museum, and the Chemical Laboratories, in the earlier part of this catalog.

ADMISSION REQUIREMENTS

An applicant who is deficient in more than two of the required entrance units will not be permitted to enter the Engineering College.

For admission requirements, entrance subjects, and the number of credits belonging to each, see Requirements for Admission, Index.

REQUIREMENTS FOR A BACCALAUREATE DEGREE IN ENGINEERING

The degree of Bachelor of Science in (a) Mining Engineering, (b) Metallurgical Engineering, (c) Geological Engineering, (d) Mechanical Engineering, (e) Electrical Engineering, and (f) Civil Engineering is conferred upon students who have satisfactorily completed the full course in the Schools of (a) Mines, (b) Mechanical Engineering, (c) Electrical Engineering, and (d) Civil Engineering, aggregating 148 semester units in (a), (c) and (f); 144 in (b), (d) and (e).

Combination curricula leading to the bachelor's degree in more than one school in the University may be arranged. The minimum requirements shall be one extra year in residence and 30 credit hours of extra work. More work may be necessary if the specific requirements of the department in which the degree is sought have not been met.

For students taking advanced military work, where sufficient elective credits (10) are not provided, arrangement will be made by substitution or other adjustment.

The State law of Nevada requires that all candidates for a degree must study, during one University year, the Constitutions of the United States and of the State of Nevada.

[1]Absent on leave.

A student entering the College of Engineering who has passed the age of 26 years upon his initial registration in the University, is automatically excused from military training, physical education, and orientation.

COLLEGE OF ENGINEERING

MACKAY SCHOOL OF MINES

GENERAL MINING COURSE

		LAB.	LEC.
Freshman Year—First Semester			
English 1	Composition and Rhetoric	..	3
Chemistry 7	General Inorganic Chemistry	2	2
Mathematics 15	Mathematical Analysis	..	5
General Engineering 5	Elementary Mechanical Drawing	2	..
*General Engineering 2	Freehand Drawing	1	..
Philosophy 5	War Issues	..	1
Military 1	Basic Course	1	..
Physical Education 1	Developmental Exercises	½	..
			17½
Freshman Year—Second Semester			
English 2	Composition and Rhetoric	..	3
Chemistry 8	General Inorganic Chemistry	2	2
Mathematics 16	Mathematical Analysis	..	5
General Engineering 6	Descriptive Geometry	2	..
Geology 10	Engineering Geology	..	3
Military 2	Basic Course	1	..
Physical Education 2	Developmental Exercises	½	..
			18½
Summer Work			
Mining 5	Practical Mine Work	Four Weeks	
Sophomore Year—First Semester		LAB.	LEC.
Mathematics 25	Differential Calculus	..	3
Physics 3	Engineering Physics	..	4
Geology 11	Determinative Mineralogy	2	..
Chemistry 9	Qualitative Chemistry	2	2
Geology 2	Historical Geology	..	3
Military 3	Basic Course	..	1
Physical Education 3	Advanced Exercises	½	..
			17½
Sophomore Year—Second Semester			
Mathematics 26	Integral Calculus	..	3
Physics 4	General Physics for Engineers	..	4
Metallurgy 4	Engineering Metallurgy	..	2
Geology 12	Blowpipe Analysis	2	..
Geology 14	Descriptive Mineralogy	..	2
Military 4	Basic Course	..	1
Physical Education 4	Advanced Exercises	½	..
Chemistry 10	Quantitative Analytical Chemistry	2	2
			18½
Junior Year—First Semester			
Mining 51	Excavation	..	3
Metallurgy 51	Assaying	3	1
Mathematics 55	Analytic Mechanics	..	3
Civil Engineering 51 and 53	Surveying	2	2
Geology 51	Petrology	1	1
Elective		..	3
			19

*Courses marked with an asterisk may be substituted by other courses when approved by the Head of the School and the Dean of the College. Such substituted courses, however, must form part of a systematic course of training.

Junior Year—Second Semester

		LAB.	LEC.
Mining 52	Mine Plant	..	3
Metallurgy 66	Ore Dressing	..	2
Metallurgy 68	Ore Dressing	2	..
Geology 60	Economics Geology Nonmetallic	..	3
Civil Engineering 52 and 54	Surveying	2	2
Geology 52 (or Metallurgy 56)	Petrography (Metallography)	2	1
			17

Summer Course

Civil Engineering 58 — Summer Surveying — Four Credits

Senior Year—First Semester

Geology 61	Economic Geology of Metals	..	3
Mining 61	Mining Methods	..	3
Metallurgy 71	Hydro-Metallurgy	1	2
Metallurgy 61	Pyro-Metallurgy, nonferrous metals	..	3
Political Science 79	Constitutions of U. S. and Nevada	..	1
Project in Mining 79, Metallurgy 79 or Geology 79		2	..
Civil Engineering 91	Fluid Mechanics	..	3
			18

Senior Year—Second Semester

Mining 72	Mine Administration	..	3
Mining 74	Mineral Industry Economics	..	3
Electrical Engineering 75	Electricity in Mining	..	3
Political Science 80	Constitutions of U. S. and Nevada	..	1
Project in Mining 80, Metallurgy 80 or Geology 80		2	..
Civil Engineering 72	Strength of Materials	..	3
Civil Engineering 74	Testing Materials	1	..
Elective		..	2
			18

MACKAY SCHOOL OF MINES

METALLURGY COURSE

Freshman Year—First Semester

		LAB.	LEC.
English 1	Composition and Rhetoric	..	3
Chemistry 7	General Inorganic Chemistry	2	2
Mathematics 15	Mathematical Analysis	..	5
Philosophy 5	War Issues	..	1
General Engineering 5	Elementary Mechanical Drawing	2	..
*General Engineering 2	Freehand Drawing	1	..
Military 1	Basic Course	1	..
Physical Education 1	Developmental Exercises	½	..
			17½

Freshman Year—Second Semester

English 2	Composition and Rhetoric	..	3
Chemistry 8	General Inorganic Chemistry	2	2
Mathematics 16	Mathematical Analysis	..	5
General Engineering 6	Descriptive Geometry	2	..
Geology 10	Engineering Geology	..	3
Military 2	Basic Course	1	..
Physical Education 2	Developmental Exercises	½	..
			18½

Summer Work

Mining 5 — Practical Metallurgical Work — Four Weeks

Sophomore Year—First Semester

Mathematics 25	Differential Calculus	..	3
Physics 3	Engineering Physics	..	4
Physics 5	Physical Measurements	1	..
Geology 11	Determinative Mineralogy	2	..
Chemistry 9	Quantitative Analytical Chemistry	2	2
Military 3	Basic Course	..	1
Physical Education 3	Advanced Exercises	½	..
			15½

*See footnote p. 142.

Sophomore Year—Second Semester		LAB.	LEC.
Mathematics 26	Integral Calculus	..	3
Physics 4	General Physics for Engineers	..	4
Physics 6	Physical Measurements	1	..
Metallurgy 4	Engineering Metallurgy	..	2
Geology 12	Blowpipe Analysis	2	..
Geology 14	Descriptive Mineralogy	..	2
Chemistry 10	Quantitative Analytical Chemistry	2	2
Military 4	Basic Course	..	1
Physical Education 4	Advanced Exercises	½	..
			19½

Junior Year—First Semester			
Metallurgy 51	Fire Assaying	3	1
Mathematics 55	Analytic Mechanics	..	3
Metallurgy 58	Ferrous Metallurgy	..	2
Chemistry 83	Physical Chemistry	1	3
Political Science 79	Constitutions of U. S. and Nevada	..	1
Elective		..	4
			18

Junior Year—Second Semester			
Metallurgy 56	Metallography	2	1
Metallurgy 66	Ore Dressing	..	2
Metallurgy 68	Ore Dressing Laboratory	2	..
Chemistry 84	Physical Chemistry	1	3
Political Science 80	Constitutions of U. S. and Nevada	..	1
Elective		..	6
			18

Senior Year—First Semester			
Metallurgy 61	Pyro-Metallurgy	..	3
Metallurgy 71	Hydro-Metallurgy	1	2
Metallurgy 79	Project	2	..
Elective		..	10
			18

Senior Year—Second Semester			
Electrical Engineering 75	Electricity in Mining	..	3
Metallurgy 62	Metallurgy of Minor and Rare Metals	..	1
Metallurgy 72	Electrometallurgy	..	2
Metallurgy 76	Problems and Seminar	2	..
Metallurgy 80	Project	2	..
Civil Engineering 72	Testing Materials	1	..
Civil Engineering 74	Strength of Materials	..	3
Elective		..	5
			19

NOTE—The electives are not free electives but must be so selected as to form a part of a systematic course of training in metallurgical engineering. Two nontechnical electives may be taken in the senior year.

SCHOOL OF MECHANICAL ENGINEERING

Freshman Year—First Semester		LAB.	LEC.
English 1	Composition and Rhetoric	..	3
Chemistry 7	General Inorganic Chemistry	2	2
Mathematics 15	Mathematical Analysis	..	5
General Engineering 5	Elementary Mechanical Drawing	2	..
Philosophy 5	War Issues	..	1
Mechanical Engineering 19	Elements of Mechanical Engineering	..	1
Military 1	Basic Course	1	..
Physical Education 1	Developmental Exercises	½	..
			17½

Freshman Year—Second Semester		LAB.	LEC.
English 2	Composition and Rhetoric	..	3
Chemistry 8	General Inorganic Chemistry	2	2
Mathematics 16	Mathematical Analysis	..	5
General Engineering 6	Descriptive Geometry	2	..
Military 2	Basic Course	1	..
Physical Education 2	Developmental Exercises	½	..
*Geology 10	Engineering Geology	..	3
			18½

Sophomore Year—First Semester			
Physics 3	General Physics for Engineers	..	4
Physics 5	Physical Measurements	2	..
Mathematics 25	Differential Calculus	..	3
Civil Engineering 51–53	Elementary Surveying	2	2
English 11	Public Speaking	..	2
Mechanic Arts 6	Pattern and Foundry Practice	1	..
Military 3	Basic Course	1	..
Physical Education 3	Advanced Exercises	½	..
Elective		..	1
			18½

Sophomore Year—Second Semester			
Physics 4	General Physics for Engineers	..	4
Physics 6	Physical Measurements	2	..
Mathematics 26	Integral Calculus	..	3
*Metallurgy 4	Engineering Metallurgy	..	2
Mechanic Arts 3	Machine Shop	2	..
Military 4	Basic Course	1	..
Physical Education 4	Advanced Exercises	½	..
Elective		..	4
			18½

Junior Year—First Semester			
Mathematics 55	Analytic Mechanics	..	3
Electrical Engineering 51	Direct Current Machinery	..	3
Electrical Engineering 61	Electrical Engineering Laboratory	1	1
Mechanical Engineering 54	Thermodynamics	..	3
Mechanical Engineering 51	Kinematics	2	1
Mathematics 85	Differential Equations	..	2
Elective		..	2
			18

Junior Year—Second Semester			
Mathematics 56	Analytic Mechanics	..	2
Civil Engineering 72	Strength of Materials	..	3
Civil Engineering 74	Strength of Materials Laboratory	1	..
Electrical Engineering 52	Alternating Current Machinery	..	3
Electrical Engineering 62	Electrical Engineering Laboratory	1	1
Mechanical Engineering 55	Applied Thermodynamics	..	3
Mechanical Engineering 64	Mechanical Laboratory	3	..
			17

Senior Year—First Semester			
Mechanical Engineering 71	Heat-Power Engineering	..	3
Mechanical Engineering 77	Internal Combustion Engines	..	3
Mechanical Engineering 65	Mechanical Power Laboratory	3	..
Mechanical Engineering 57	Machine Design	2	1
Civil Engineering 93	Fluid Mechanics	1	3
Political Science 79	Constitution of U. S. and Nevada	..	1
			17

*See footnote p. 142.

Senior Year—Second Semester

		LAB.	LEC.
Mechanical Engineering 72	Heat-Power Engineering	..	3
Mechanical Engineering 58	Machine Design Problem	1	2
*Business Administration 66	Industrial Management	..	3
Mechanic Arts 50	Engineering Materials and Processes of Manufacturing	2	1
Political Science 80	Constitution of U. S. and Nevada	..	1
Electives		..	6
			19

SCHOOL OF ELECTRICAL ENGINEERING

Freshman Year—First Semester

		LAB.	LEC.
English 1	Composition and Rhetoric	..	3
Chemistry 7	General Inorganic Chemistry	2	2
Mathematics 15	Mathematical Analysis	..	5
General Engineering 5	Elementary Mechanical Drawing	2	..
Philosophy 5	War Issues	..	1
Electrical Engineering 21	Introductory Electrical Engineering	..	1
Military 1	Basic Course	1	..
Physical Education 1	Developmental Exercises	½	..
			17½

Freshman Year—Second Semester

English 2	Composition and Rhetoric	..	3
Chemistry 8	General Inorganic Chemistry	2	2
Mathematics 16	Mathematical Analysis	..	5
General Engineering 6	Descriptive Geometry	2	..
Military 2	Basic Course	1	..
Physical Education 2	Developmental Exercises	½	..
Elective		..	3
			18½

Sophomore Year—First Semester

Physics 3	General Physics for Engineers	..	4
Physics 5	Physical Measurements	2	..
Mathematics 25	Differential Calculus	..	3
Civil Engineering 51–53	Elementary Surveying and Plotting	2	2
English 11	Public Speaking	..	2
Military 3	Basic Course, second year	..	1
Physical Education 3	Advanced Exercises	½	..
Elective		..	2
			18½

Sophomore Year—Second Semester

Physics 4	General Physics for Engineers	..	4
Physics 6	Physical Measurements	2	..
Mathematics 26	Integral Calculus	..	3
Mechanic Arts 3	Machine Shop	1	..
Metallurgy 4	Engineering Metallurgy	..	2
Military 4	Basic Course, second year	..	1
Physical Education 4	Advanced Exercises	½	..
Elective		..	4
			17½

Junior Year—First Semester

Electrical Engineering 51	Direct Current Machinery	..	3
Electrical Engineering 61	Electrical Engineering Laboratory	1	1
Electrical Engineering 57 or Physics 73	Electricity and Magnetism	..	2
Mechanical Engineering 54	Thermodynamics	..	3
Mathematics 85	Differential Equations	..	2
Mathematics 55	Analytic Mechanics	..	3
Elective		..	3
			18

*See footnote p. 142.

Junior Year—Second Semester

		LAB.	LEC.
Electrical Engineering 52	Alternating Current Machinery	..	3
Electrical Engineering 56	Alternating Current Circuits	..	2
Electrical Engineering 62	Electrical Engineering Laboratory	1	1
Mechanical Engineering 64	Mechanical Laboratory	2	1
Mechanical Engineering 55	Applied Thermodynamics		
or	or		
Physics 59	Heat and Thermodynamics		3 or 2
Civil Engineering 72	Strength of Materials	..	3
Mathematics 56	Analytic Mechanics	..	2
Elective			0 to 1
			18

Senior Year—First Semester

Electrical Engineering 53	Alternating Current Machinery	..	3
Electrical Engineering 63	Electrical Engineering Laboratory	2	2
Electrical Engineering 67	Communication Engineering	1	2
Civil Engineering 91 or 93	Fluid Mechanics	..	3
Mechanical Engineering 57	Machine Design	1	2
Political Science 79	Constitutions of U. S. and Nevada	..	1
Elective		..	1
			18

Senior Year—Second Semester

Electrical Engineering 54	Electrical Design	..	3
Electrical Engineering 64	Electrical Engineering Laboratory	2	2
Electrical Engineering 84	Seminar	..	1
Physics 57	Electrical Measurements	2	..
Political Science 80	Constitutions of U. S. and Nevada	..	1
*Business Administration 41	Fundamentals of Business Organization	..	3
Elective		..	4
			18

SCHOOL OF CIVIL ENGINEERING

Freshman Year—First Semester

		LAB.	LEC.
English 1	Composition and Rhetoric	..	3
Chemistry 7	General Inorganic Chemistry	2	2
Mathematics 15	Mathematical Analysis	..	5
General Engineering 5	Elementary Mechanical Drawing	2	..
Philosophy 5	War Issues	..	1
Civil Engineering 19	Technical Report	..	1
Military 1	Basic Course	1	..
Physical Education 1	Developmental Exercises	½	..
			17½

Freshman Year—Second Semester

English 2	Composition and Rhetoric	..	3
Chemistry 8	General Inorganic Chemistry	2	2
Mathematics 16	Mathematical Analysis	..	5
General Engineering 6	Descriptive Geometry	2	..
Geology 10	Engineering Geology	..	3
Military 2	Basic Course	1	..
Physical Education 2	Developmental Exercises	½	..
			18½

Sophomore Year—First Semester

Mathematics 25	Differential Calculus	..	3
Physics 3	General Physics for Engineers	..	4
Physics 5	Physical Measurements	2	..
English 11	Public Speaking	..	2
Civil Engineering 51–53	Elementary Surveying	2	2
Civil Engineering 61	Highway Engineering	..	2
Physical Education 3	Advanced Exercises	½	..
Military 3	Basic Course	1	..
			18½

*See footnote p. 142.

Sophomore Year—Second Semester		LAB.	LEC.
Mathematics 26	Integral Calculus	..	3
Physics 4	General Physics for Engineers	..	4
Physics 6	Physical Measurements	2	..
Civil Engineering 52–54	Advanced Surveying	2	2
Civil Engineering 62	Civil Engineering Drawing	2	..
Metallurgy 4	Engineering Metallurgy	..	2
Military 4	Basic Course	1	..
Physical Education 4	Advanced Exercises	½	..
			18½

Summer Work			
Civil Engineering 58	Summer Surveying	4	..

Junior Year—First Semester			
Mathematics 55	Analytic Mechanics	..	3
Civil Engineering 63–65	Railroad Engineering	2	3
Mechanical Engineering 54	Thermodynamics	..	3
Civil Engineering 93	Elementary Fluid Mechanics	1	3
Political Science 79	Constitutions of U. S. and Nevada	..	1
Civil Engineering 89	Fluid Mechanics Laboratory	2	..
			18

Junior Year—Second Semester			
Mathematics 56	Analytic Mechanics	..	2
Civil Engineering 72	Strength of Materials	..	3
Civil Engineering 74	Strength of Materials Laboratory	1	..
Civil Engineering 94	Irrigation Engineering	..	3
Civil Engineering 76	Structural Analysis	1	2
Civil Engineering 56	Foundations and Sub-Structures	..	2
Political Science 80	Constitutions of U. S. and Nevada	..	1
Electrical Engineering 24	Elementary Electrical Engineering	..	2
			17

Senior Year—First Semester			
Civil Engineering 77	Advanced Structural Analysis, Design	2	1
Civil Engineering 85	Reinforced Concrete	2	2
Civil Engineering 87	Contracts and Specifications	..	3
Civil Engineering 97	Hydrology (A)	..	3
Electives		..	5
			18

Senior Year—Second Semester			
Civil Engineering 66	Engineering Economics	..	2
Civil Engineering 78	Structural Steel and Concrete Design	2	1
Civil Engineering 96	Sanitary Engineering	..	3
Civil Engineering 98	Hydrology (B)	..	3
Civil Engineering 99	Engineering Problems		
or	or		
Civil Engineering 100	Thesis	2	..
Electives		..	5
			18

THE COLLEGE OF AGRICULTURE

1. THE SCHOOL OF AGRICULTURE
2. THE SCHOOL OF HOME ECONOMICS

FACULTY

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
FREDERICK WESTON WILSON, M.S., Acting Dean of the College of Agriculture; Professor of Animal Husbandry.
REUBEN CYRIL THOMPSON,[1] M.A., LL.D., Professor of Philosophy.
STANLEY G. PALMER, M.E., Dean of the College of Engineering; Professor of Electrical Engineering.
JAMES REED YOUNG, Ph.D., Professor of Psychology.
GEORGE WALLACE SEARS, Ph.D., Professor of Chemistry.
PHILIP A. LEHENBAUER, Ph.D., Professor of Biology.
FREDERICK L. BIXBY, C.E., Professor of Civil Engineering.
THEODORE H. POST, M.A., Professor of Music.
ELSA SAMETH, M.S., Professor of Physical Education for Women.
ALFRED LESLIE HIGGINBOTHAM, M.A., Professor of Journalism.
SIGMUND W. LEIFSON, Ph.D., Professor of Physics.
VINCENT P. GIANELLA, Ph.D., Professor of Geology.
ELDON WITTWER,[1] Ph.D., Professor of Agricultural Economics.
MILDRED SWIFT, M.S., Professor of Home Economics.
MILAN J. WEBSTER, Ph.D., Professor of Economics, Business, and Sociology.
ROBERT STUART GRIFFIN, Ph.D., Professor of English.
RALPH A. IRWIN, Ph.D., Professor of Psychology.
E. LEWIS FIELD, Lt. Colonel, U. S. Army, Professor of Military Science and Tactics.
GILBERT BRUCE BLAIR, A.M., Associate Professor of Physics and Astronomy.
JESSIE P. POPE, M.A., Associate Professor of Home Economics.
PAUL A. HARWOOD,[1] M.A., Associate Professor of English.
MERYL WILLIAM DEMING, Ph.D., Associate Professor of Chemistry.
CLAUDE CARSON SMITH,[1] M.A., Associate Professor of History and Political Science.
CHESTER M. SCRANTON, M.A., Associate Professor of Physical Education for Men.
LOUIS TITUS, M.S., Associate Professor of Agronomy.
JAMES W. COLEMAN,[1] M.A., Associate Professor of Physical Education for Men.
ANATOLE G. MAZOUR, Ph.D., Associate Professor of History and Political Science.
W. D. BILLINGS, Ph.D., Associate Professor of Biology.
EDWARD W. LOWRANCE,[1] Ph.D., Associate Professor of Biology.
CHARLTON G. LAIRD,[1] Ph.D., Associate Professor of English.
LORING R. WILLIAMS, Ph.D., Associate Professor of Chemistry.
CHARLES W. HODGSON,[1] Ph.D., Associate Professor of Agronomy.
E. MAURICE BEESLEY, Ph.D., Associate Professor of Mathematics.
ALDEN J. PLUMLEY, M.A., Assistant Professor of Economics, Business, and Sociology.
WILLIAM C. MILLER,[1] M.A., Assistant Professor of English.
ALICE B. MARSH, M.S., Assistant Professor of Home Economics.
LEONARD E. CHADWICK, B.S., Assistant Professor of Economics, Business, and Sociology.
WILLIAM O. HOLMES,[2] B.A., Assistant Professor of English.
FRANK RICHARDSON, Ph.D., Assistant Professor of Biology.
MICHAEL J. MCCORMICK, Sergeant, U. S. Army, Instructor in Military Science and Tactics.
HELEN JOSLIN, Instructor in Art.

[1]Absent on leave. [2]Deceased: February, 1945.

RUTH IRENE RUSSELL,[1] M.S., Instructor in Physical Education for Women.
J. RAYMOND BUTTERWORTH,[1] M.A., Instructor in English.
ETHEL M. DIXON, B.P.E., Instructor in Physical Education for Women.
VIRGINIA CARROLL, M.A., Assistant in Home Economics.
PENELOPE RICE, Ph.D., Assistant in Home Economics.
MRS. M. B. WOODWARD, Secretary to the Dean.

AIM

The aim of the School of Agriculture is to give such training in scientific and vocational agriculture as will furnish a well-rounded education.

EQUIPMENT

AGRICULTURE BUILDING—For description of Agriculture Building see Buildings, Index.

UNIVERSITY FARM—The University Farm, comprising 200 acres is located three miles south of Reno along the Virginia road.

DAIRY—The laboratory in the Agriculture Building, equipped with machinery and apparatus, furnishes opportunity for instruction in methods of handling milk and dairy products, as milk testing, butter making, and the marketing of milk.

SHOPS—Two shops have been fitted up for carrying on instruction in farm mechanics. One shop, in rear of Lincoln Hall, includes forges and other equipment for farm blacksmithing, tools and equipment for plumbing, soldering, cold metal, machinery, and gas engine repair.

Another shop located above the machine shop in the Mechanical Engineering Building is equipped for farm carpentry, painting, glazing, ropework, and building construction. Actual practice is an outstanding objective in all phases of farm mechanics work.

GREENHOUSE. A greenhouse is available to students for laboratory work in courses in botany and horticulture. A large room is devoted to experimental work in plant physiology, ecology, etc., while other rooms in the greenhouse make available materials for laboratory work in the beginning courses.

THE HERBARIUM. The Herbarium of the University of Nevada contains at the present time approximately 20,000 sheets, representing, in large part, collections made in Nevada. This herbarium is probably the most complete collection of Nevada plants in existence and additional new plants of the State are being added from year to year. It is located in the Agriculture Building and is administered by the botany staff.

ADMISSION REQUIREMENTS

For admission requirements, entrance subjects, and the number of credits belonging to each, see Index for subjects about which information is desired.

REQUIREMENTS FOR A BACCALAUREATE DEGREE IN AGRICULTURE

The degree of Bachelor of Science in Agriculture with majors in general agriculture, agricultural economics, preforestry, range management, agronomy-botany, animal husbandry and vocational agriculture will be conferred upon students who satisfactorily complete the

[1]Absent on leave.

full course of study in the selected major field in the School of Agriculture, aggregating 126 semester units.

Candidates for the degree of Bachelor of Science in Agriculture must present satisfactory evidence of at least twelve weeks' actual farm experience before they will be recommended for the degree.

COLLEGE OF AGRICULTURE

COURSES OF STUDY

Definition of a Major in the College of Agriculture—

To complete a major in the College of Agriculture means that a student has not completed a given number of hours in a specific department, but that he has completed a prescribed curriculum in a given field in the college.

AGRICULTURAL CURRICULA

UNIFORM FRESHMAN YEAR		*1st Sem.*	*2d Sem.*
Philosophy 5	War Issues	1	..
Military 1–2	Basic Course, 1st year	1	1
Physical Education 3–4	Developmental Exercises	½	½
Chemistry 7–8	General Inorganic	4	4
Botany 1	General Botany	3	..
Animal Husbandry 1	Breeds of Livestock	3	..
English 1–2	Composition and Rhetoric	3	3
Agronomy 1–2	Soil Conservation and Forage Crops	2	3
Zoology 2	General Zoology	..	4
		17½	15½

GENERAL COURSE IN AGRICULTURE

SOPHOMORE YEAR			
Military 3–4		1	1
Physical Education 3–4		½	½
Agricultural Economics 1–2		3	3
Geology 1 or 10		3	..
Agronomy 5		3	..
Animal Husbandry 3–30		4	3
Botany 22		..	4
Dairying 1		..	3
Electives		1	1
		15½	15½
JUNIOR YEAR			
Dairy Husbandry 53		3	..
Agricultural Electives		8	8
Electrical Engineering 47		2	..
Nonagricultural Electives		..	5
Open Electives		3	3
		16	16
SENIOR YEAR			
Political Science 79–80		1	1
Agricultural Electives		7	7
Nonagricultural Electives		3	3
Open Electives		4	4
		15	15

The following course of study is designed for students intending to enter the field of forestry or of range management. It includes the fundamental subjects required in forestry schools and makes it possible, upon completion of the course, to obtain a degree in forestry in a professional school of forestry in from one and one-half to two years:

PREFORESTRY AND RANGE MANAGEMENT

SOPHOMORE YEAR		1st Sem.	2d Sem.
Military 3–4	Basic Course	1	1
Physical Education 3–4	Advanced Exercises	½	½
Agricultural Economics 1–2	Principles of Economics	3	3
Botany 21–22	Morphology and Taxonomy	3	4
Geology 1 or 10	Physical or Engineering Geology	3	..
Mathematics 22	General Mathematics	..	4
Botany 53	Dendrology	4	..
English 11	Public Speaking	2	..
Elective	Preforestry	..	3
		16½	15½

Range management students must register in Animal Husbandry 3 and 30. Botany 21 and 53 are not required of range management students.

JUNIOR YEAR			
Physics 1a–1b	General Physics	4	4
Civil Engineering 51	Surveying	4	..
Zoology 59–60	Entomology and Wildlife Ecology	3	3
Agronomy 7	Soils	3	..
Botany 55	Plant Physiology	..	3
Economics 56	Land Economics	..	2
Botany 54	Agrostology	..	3
Civil Engineering 2	Map Making	..	1
		14	16

SENIOR YEAR			
Political Science 79–80	Constitutions of U. S. and Nevada	1	1
Botany 75–76	Ecology	4	4
Business Administration 43–44	Accounting	3	3
Botany 64 or 56	Plant diseases—Poisonous plants	..	4
Agronomy 60	Pasture Management	3	..
Elective		5	3
		16	15

Range management students must register in Animal Husbandry 58. Business Administration 43–44 is not required of range management students.

AGRONOMY–BOTANY

SOPHOMORE YEAR		1st Sem.	2d Sem.
Military 3–4	Basic Course	1	1
Physical Education 3–4	Advanced Exercises	½	½
Chemistry 9–10	Analytical Chemistry	4	4
Agricultural Economics 1–2	Principles of Economics	3	3
Botany 21	Morphology and Development of Plants	3	..
Agronomy 5	Field Crops	3	..
Mathematics 22	General Mathematics	..	4
Botany 22	Taxonomy	..	4
		14½	16½

JUNIOR YEAR			
Physics 1a–1b	General Physics	4	4
Zoology 59–60	Entomology and Wildlife Ecology	3	3
Agronomy 7	Soils	3	..
Botany 56 or	Weeds, Poisonous Plants, and Seed Test	..	..
Botany 64	Plant Diseases	..	4
Agricultural Economics 56	Land Economics	..	2
Botany 55	Plant Physiology	..	3
Civil Engineering 51	Surveying	4	..
Elective		1	..
		15	16

SENIOR YEAR		1st Sem.	2d Sem.
Chemistry 51–52	Organic Chemistry	4	4
Geology 1 or 10	Physical or Engineering Geology	3	..
Agronomy 62	Soil Fertility	..	3
Political Science 79–80	Constitutions of U. S. and Nevada	1	1
Agronomy 60	Pasture Management	3	..
Agricultural Economics 52	Agricultural Economics	..	3
Agronomy 76	History of Agriculture	..	3
Agronomy 63	Land Values	3	..
Elective		2	1
		16	15

AGRICULTURAL ECONOMICS

SOPHOMORE YEAR		1st Sem.	2d Sem.
Military 3–4	Basic Course	1	1
Physical Education 3–4	Advanced Exercises	½	½
Agricultural Economics 1–2	Principles of Economics with Application to Agriculture	3	3
Agricultural Economics 45	Farm Accounting	3	..
Agronomy 7	Soil Management	3	..
Mathematics 22	General Mathematics	..	4
Animal Husbandry 3–30	Livestock Judging and Feed	4	3
Sociology 50	Rural Sociology	..	2
Mathematics 5	Algebra	2	..
Elective		..	2
		16½	15½

JUNIOR YEAR			
Agricultural Economics 57	Marketing of Agricultural Products	3	.
Agricultural Economics 56	Land Economics	..	2
Agronomy 76	History of Agriculture	..	3
Psychology 5	General Psychology	..	3
Geology 1 or 10	Physical or Engineering Geology	3	..
Economics 61	Statistical Methods	3	..
Agricultural Economics 64	Cooperative Organizations	..	2
Agricultural Economics 65	Agricultural Prices	3	..
Agricultural Economics 55	Rural Finance	2	..
English 11–12	Public Speaking	2	2
Elective		..	4
		16	16

SENIOR YEAR			
Political Science 79–80	Constitutions of U. S. and Nevada	1	1
Agricultural Economics 76	Farm Management	..	3
Agronomy 54	Irrigation and Drainage	3	..
Economics 52	Money and Banking	3	..
Agronomy 63	Farm Land Values	3	..
Agricultural Economics 52	Agricultural Economics Policies	..	3
Elective		5	7
		15	14

VOCATIONAL AGRICULTURE

SOPHOMORE YEAR		1st Sem.	2d Sem.
Military 3–4	Basic Course	1	1
Physical Education 3–4	Advanced Exercises	½	½
Agronomy 5	Field Crops	3	..
Animal Husbandry 3–30	Livestock Judging and Feeding	3	3
Agricultural Economics 1–2	General Economics	3	3
Poultry 2	Farm Poultry Management	3	..
Dairy 1	Dairying	..	3
Botany 22	Taxonomy	..	4
Farm Mechanics 1–20	Blacksmithing, General Mechanics	2	2
		15½	16½

		1st Sem.	2d Sem.
JUNIOR YEAR			
Agronomy 7–62	Soil Management and Soil Fertility	3	3
Psychology 5–6	General Psychology	3	3
Animal Husbandry 58	Range Management	..	3
Farm Mechanics 41–32	Machinery and Equipment	2	2
Poultry 8	Turkey Production	3	..
Dairy 53–55	Dairy Products and Sanitation	3	3
Animal Husbandry 66	Livestock Management	..	3
		14	17
SENIOR YEAR			
Education 60–82	Problems of Secondary Education	2	2
Education 24	School Organization and Law	2	..
Education 87–86	Prob. and Methods of Voc. Agri.	3	2
Education 75–76	Practice Teaching	2	2
Farm Mechanics 85	Teaching Farm Mechanics	2	..
Political Science 79–80	Constitutions of U. S. and Nevada	1	1
Agricultural Economics 45	Farm Accounting	3	..
Agronomy 54	Irrigation and Drainage	..	3
Agricultural Economics 76	Farm Management	..	3
Elective		..	2
		15	15

ANIMAL, DAIRY, AND POULTRY HUSBANDRY

		1st Sem.	2d Sem.
SOPHOMORE YEAR			
Military 3–4	Basic Course	1	1
Physical Education 3–4	Advanced Exercises	½	½
Agricultural Economics 1–2	General Economics	3	3
Botany 22	Taxonomy	..	4
Animal Husbandry 3	Livestock Judging	4	..
Animal Husbandry 30	Livestock Feeding	..	3
Dairy Husbandry 1	Dairying	3	..
English 11–12	Public Speaking	2	2
Animal Husbandry 52	Genetics	..	3
Poultry 1	Farm Poultry Management	3	..
		16½	16½
JUNIOR YEAR			
Agronomy 5	Field Crops	3	..
Animal Husbandry 58	Range Management	..	3
Animal Husbandry 53	Registration	..	1
Civil Engineering 51	Surveying	4	..
Animal Husbandry 56	Advanced Livestock Judging	3	..
Agronomy 60	Pasture Management	..	3
Animal Husbandry 63–64	Animal Husbandry Literature	2	2
Elective		3	6
		15	15
SENIOR YEAR			
Political Science 79–80	Constitutions of U. S. and Nevada	1	1
Animal Husbandry 50	Animal Hygiene	..	3
Animal Husbandry 55	Advanced Livestock Feeding	3	..
Animal Husbandry 66	Livestock Management	..	3
Dairy Husbandry 55	Dairy Sanitation	3	..
Dairy Husbandry 57	Advanced Milk Production	..	2
Farm Mechanics 9–20		2	2
Elective		6	4
		15	15

QUALIFICATION OF TEACHERS OF VOCATIONAL AGRICULTURE

A graduate of the College of Agriculture who desires to teach vocational agriculture in this State must fulfill the following requirements:

A. *Farm Experience.* The teacher of vocational agriculture must have had actual farm experience. Preference will be given to those graduates who have lived and worked upon a farm until the age of 18 years. In any case, the graduate must have had experience equal to two years after reaching the age of fourteen years.

B. *Education.* All Agricultural College graduates who wish to qualify as teachers of vocational agriculture in Nevada should arrange to complete the courses as outlined for vocational agriculture education given on page 153. It is essential that vocational agriculture teachers have a broad training foundation in animal and plant production courses, agricultural economics, marketing and farm mechanics. The animal production courses include dairy and poultry.

a. All Agricultural College graduates who wish to qualify as teachers of vocational agriculture in Nevada must also have not less than 18 semester hours of credit in educational subjects, including courses in "Special Methods of Teaching Vocational Agriculture" and "Observations and Practice Teaching of Vocational Agriculture" and certain other educational subjects as specified by law for certification of teachers.

SCHOOL OF HOME ECONOMICS

REQUIREMENTS FOR A BACCALAUREATE DEGREE IN HOME ECONOMICS

Home Economics is a program of studies based on sound fundamental training in the physical, biological, and social sciences with application of these to living—and this involves living with others.

These are days of challenging responsibilities, of great opportunities, to be better equipped to take ones place in the home and in the community.

Four areas of concentration are offered in order to meet individual needs; namely, teaching major; dietetics major; clothing major and a general homemaking major.

The degree of Bachelor of Science in Home Economics is conferred upon satisfactory completion of 126 semester units. Eighteen units are required for a minor in Home Economics.

FIELDS OF CONCENTRATION

TEACHING MAJOR

Freshman Year—First Semester		LAB.	LEC.
English 1	Composition and Rhetoric	..	3
Chemistry 3	General Chemistry	2	2
Physical Education 1	Freshman Practice	1	..
Home Economics 31	Food	2	1
Philosophy 5	War Issues	..	1
Home Economics 15	Clothing	2	1
Elective		..	1

		LAB.	LEC.
	Freshman Year—Second Semester		
English 2	Composition and Rhetoric	..	3
Chemistry 4	General Chemistry	2	2
Physical Education 2	Freshman Practice	1	..
Home Economics 32	Food	2	1
Home Economics 18	Clothing	2	1
Art 6	Art Principles	2	..
			16
	Sophomore Year—First Semester		
Physics 19	Household Physics	1	2
Home Economics 33	Nutrition in Health	..	3
Psychology 5	General Psychology	..	3
Physical Education 3	Sophomore Practice	½	..
English 44	Introduction to Literary Study	..	3
English 11	Public Speaking	..	2
Horticulture 1		..	3
			17½
	Sophomore Year—Second Semester		
Physics 20	Household Physics	1	2
Psychology 6	Educational Psychology	..	3
Home Economics 46	Related Art	2	..
Home Economics 16	Textiles	1	2
Physical Education 4	Sophomore Practice	½	..
Home Economics 42	Food Economics	..	3
			14½
	Junior Year—First Semester		
Home Economics 54	Care of Health and Disease	1	2
Home Economics 99	Demonstration	5	1
Education 60	Problems of Secondary	..	3
Home Economics 87	Home Decoration	2	1
English 55	Speech	..	2
			17
	Junior Year—Second Semester		
Psychology 70	Marriage and Divorce	..	2
Home Economics 84	Special Problems in Foods	..	3
Home Economics 86	Home Management	..	3
Home Economics 66	Advanced Clothing	2	1
Home Economics 88	Household Equipment	1	1
Education 88	Problems in Homemaking Education	..	2
Sociology 80	The Family	..	2
			17
	Senior Year—First Semester		
Education 89	Methods in Teaching Vocational Homemaking	..	3
Home Economics 75	Child Development	..	3
Home Economics 55	Meal Planning	3	1
Education 75	Teaching	2	..
Education 24	School Law	..	2
Political Science 79	Constitutions of U. S. and Nevada	..	1
			15
	Senior Year—Second Semester		
Education 76	Teaching	2	..
Education 82	Noninstructional Responsibilities of High School Teacher	2	..
Home Economics 98	Institutional Management	3	..
Home Economics 67	Children's Clothing	2	1
Political Science 80	Constitutions of U. S. and Nevada	..	1
Philosophy 22	Applied Ethics	..	3
			14

CLOTHING MAJOR

Freshman Year—First Semester		LAB.	LEC.
Horticulture 1		..	3
English 1	Composition and Rhetoric	..	3
Home Economics 15	Clothing	2	1
Physical Education 1	Freshman Practice	1	..
Science (choice of)		3 or	4
Art 5	Art Structure and Composition	2	..
Philosophy 5	War Issues	..	1
			16 or 17

Freshman Year—Second Semester			
English 2	Composition and Rhetoric	..	3
Home Economics 18	Clothing	2	1
Home Economics 16	Textiles	1	2
Physical Education 2	Freshman Practice	1	..
Art 6	Art Structure and Composition	2	..
Science (choice of)		3 or	4
			15 or 16

Sophomore Year—First Semester			
English 41	Appreciation of Literature	..	2
English 11	Public Speaking	..	2
Home Economics 33	Nutrition	..	3
Psychology 5	General Psychology	..	3
Physics 19	Household Physics	1	2
Physical Education 3	Sophomore Practice	½	..
Home Economics 31	Food	2	1
			16½

Sophomore Year—Second Semester			
English 42	Appreciation of Literature	..	2
English 12	Public Speaking	..	2
Home Economics 32	Food	2	1
Physics 20	Household Physics	1	2
Home Economics 46	Related Art	2	..
Physical Education 4	Sophomore Practice	½	..
Elective		..	3
			15½

Junior Year—First Semester			
Art 51	Watercolor and Oil Painting	3	..
Art 53	Advanced Freehand Drawing	3	..
Agricultural Economics 1	Principles of Agricultural Economics	..	3
English 70	American Literature	..	3
Home Economics 87	Home Decoration	2	1
Electives		..	2
			17

Junior Year—Second Semester			
Art 52	Watercolor and Oil Painting	3	..
Art 54	Advanced Freehand Drawing	3	..
Agricultural Economics 2	Principles of Agricultural Economics	..	3
Home Economics 86	Home Management	..	3
Philosophy 22	Applied Ethics	..	2
Home Economics 66	Clothing	2	1
			17

Senior Year—First Semester			
English 55	Technique of Public Discussion	..	2
Home Economics 99	Demonstration	5	1
Home Economics 75	Child Development	..	3
History 69	Recent European History	..	2
Psychology 61	Business Psychology	..	3
Political Science 79	Constitutions of U. S. and Nevada	1	1
Journalism 21	Reporting	2	..
			16

Senior Year—Second Semester		LAB.	LEC.
Psychology 70	Marriage and Divorce	..	3
Political Science 80	Constitutions of U. S. and Nevada	..	1
Journalism 22	Reporting	3	.
Home Economics 67	Children's Clothing	2	1
Home Economics 86	Home Management	..	3
Literature (elective)		..	3
			16

DIETETICS MAJOR

Freshman Year—First Semester			
English 1	Composition and Rhetoric	..	3
Chemistry 7	General Inorganic Chemistry	2	3
Physical Education 1	Freshman Practice	1	..
Home Economics 31	General Foods	2	1
Home Economics 15	Clothing	2	1
Philosophy 5	War Issues	..	1
Elective		..	1
			17

Freshman Year—Second Semester			
English 2	Composition and Rhetoric	..	3
Chemistry 8	General Inorganic Chemistry	2	3
Home Economics 32	General Foods	..	3
Home Economics 16	Textiles	..	3
Home Economics 18	Clothing	..	3
Physical Education 2	Freshman Practice	1	..
			17

Sophomore Year—First Semester			
Physics 19	Household Physics	1	2
Chemistry 9A	Quantitative Analytical Chemistry	1	2
Home Economics 33	Nutrition in Health	..	3
Psychology 5	General Psychology	..	3
Physical Education 3	Sophomore Practice	½	..
Agricultural Economics 1	Principles of Economics	..	3
			15½

Sophomore Year—Second Semester			
Physics 20	Household Physics	1	2
Chemistry 26	Organic Chemistry	..	3
Home Economics 34	Nutrition in Disease	..	3
Physical Education 4	Sophomore Practice	½	..
Home Economics 42	Food Economics	..	3
Agricultural Economics 2	Principles of Economics	..	3
			15½

Junior Year—First Semester			
Zoology 57	Physiology	1	2
Home Economics 75	Child Development	..	3
Home Economics 54	Care of Health and Disease	1	2
Home Economics 55	Meal Planning	3	1
Chemistry 67	Physiological Chemistry	2	2
			17

Junior Year—Second Semester			
Zoology 58	Physiology	1	2
Home Economics 98	Institution Management	..	3
English 55	Public Discussion	..	2
Psychology 40	Mental Hygiene	..	3
Home Economics 96	Quantity Foods	3	..
Sociology 2	Social Problems	..	3
			17

Senior Year—First Semester

		LAB.	LEC.
Home Economics 102	Consumer Education	..	3
Bacteriology 51	General Bacteriology	2	2
Home Economics 91	Education for Dietetic Majors	..	3
Home Economics 99	Demonstration	5	1
Political Science 79	Constitutions of U. S. and Nevada	..	1
			17

Senior Year—Second Semester

Home Economics 94	Experimental Foods	1	1
Home Economics 85	Special Problems	..	3
Political Science 80	Constitutions of U. S. and Nevada	..	1
Philosophy 22	Applied Ethics	..	3
Electives		..	6
			15

GENERAL HOME ECONOMICS

Freshman Year—First Semester

		LAB.	LEC.
English 1	Composition and Rhetoric	..	3
Home Economics 15	Clothing	2	1
Physical Education 1	Freshman Practice	1	..
Music 10	Appreciation of Music	..	2
One Year Science: Zoology, Botany, Chemistry, Mathematics	choice of	3	or 4
Physics 19	Household Physics	1	2
Philosophy 5	War Issues	..	1
			16 or 17

Freshman Year—Second Semester

English 2	Composition and Rhetoric	..	3
Home Economics 18	Clothing	2	1
Physical Education 2	Freshman Practice	1	..
Home Economics 16	Textiles	1	2
One Year Science: Zoology, Botany, Chemistry, Mathematics	choice of	3	or 4
Physics 20	Household Physics	..	3
			16 or 17

Sophomore Year—First Semester

Home Economics 33	Nutrition	..	3
English 11 or 41	Public Speaking or Appreciation of Literature	..	2
Home Economics 31	Foods	2	1
Philosophy 1	Introduction to Philosophy	3	..
Psychology 5	General Psychology	..	3
Horticulture 1	General Horticulture	..	3
			17

Sophomore Year—Second Semester

English 12 or 42	Public Speaking or Appreciation of Literature	..	2
Home Economics 32	Foods	2	1
Home Economics 67	Children's Clothing	2	1
Home Economics 46	Related Art	2	..
Home Economics 42	Food Economics	..	3
Electives		..	4
			17

		LAB.	LEC.
	Junior Year—First Semester		
Art 5	Art Structure and Composition	2	..
Home Economics 53	Care of Health and Disease in the Home	..	3
Home Economics 75	Child Development	..	3
Home Economics 87	House Decoration	2	1
Agricultural Economics 1	Principles of Economics	..	3
Electives		..	3
			17
	Junior Year—Second Semester		
Psychology 40	Mental Hygiene	..	3
Home Economics 66	Advanced Clothing	2	1
Home Economics 86	Home Management	..	3
Home Economics 80	The Family	..	2
Agricultural Economics 2	Principles of Economics	..	3
Psychology 70	Marriage and Divorce	..	2
			16
	Senior Year—First Semester		
Home Economics 55	Meal Planning	3	1
History (choice of)		2	or 4
Home Economics 83	Food Problems	..	3
Home Economics 95	Clothing Problems	..	3
Political Science 79	Constitutions of U. S. and Nevada	..	1
Elective		..	3
			16 or 18
	Senior Year—Second Semester		
Home Economics 88	Household Equipment	1	1
Home Economics 102	Consumer Education	..	3
Home Economics 68	Costume	2	..
Political Science 80	Constitutions of U. S. and Nevada	..	1
Home Economics 67	Children's Clothing	2	1
Philosophy 22	Applied Ethics	..	3
			14

COURSES OF INSTRUCTION

On the following pages, listed under their respective headings, are given all the courses in which instruction is offered by the University. These are arranged in alphabetical order, as in the table below. If all the instruction given by a department is intended for a particular college, this fact is indicated by the name of the college below the name of the department. If certain courses offered by a department are intended for a particular college, this fact is indicated by the name of the college following the number of the course. In all cases where no limitations of this character are found, it may be assumed that, so far as the curricula and regulations of the several colleges permit election, the instruction offered is open to all qualified students of the University.

COURSE OFFERINGS

Agriculture
Agricultural Economics
Agronomy
    Farm Mechanics
Animal Husbandry
Dairy Husbandry
Poultry Husbandry
Art
Astronomy (See Physics 7)
Athletics (See Physical Education)
Biology
    Bacteriology
    Botany
    Horticulture
    Zoology
Business (See Economics, Business, and Sociology)
Chemistry
Civil Engineering
Dairy Husbandry (See Animal Husbandry)
Drawing (See Mechanical Engineering)
Economics, Business, and Sociology
Education
    Kindergarten—Primary
    General Elementary
    Secondary and Vocational
    Educational Psychology
    Vocational Agriculture
Electrical Engineering
English Language and Literature
    Literature and Composition
    Speech
Farm Mechanics (See Agronomy)
Foreign Languages
    French
    German
    Italian
    Latin
    Portuguese
    Spanish
General Engineering
Geology
German (See Foreign Languages)
History and Political Science
Home Economics
Italian (See Foreign Languages)
Journalism
Latin (See Foreign Languages)
Mathematics and Mechanics
Mechanic Arts
Mechanical Engineering
Metallurgy
Military Science and Tactics
Mineralogy (See Geology)
Mining
Music
Orientation
Philosophy
Physical Education
    Men
    Women
Physics
Political Science (See History and Political Science)
Poultry Husbandry (See Animal Husbandry)
Psychology
Sociology (See Economics, Business and Sociology)
Speech (See English)
Zoology (See Biology)

The numbers prefixed to the courses ordinarily denote the classes of students for whom the work is intended, courses numbered from 1 to 49 being designated primarily for freshmen and sophomores, 50 to 100 for juniors and seniors, and 101 to 200 for graduate students.

AGRICULTURAL ECONOMICS

PROFESSOR WITTER,[1] HEAD OF DEPARTMENT
ASSOCIATE PROFESSOR TITUS

1. PRINCIPLES OF ECONOMICS WITH APPLICATIONS TO AGRICULTURE. An introduction to the economics of production, value and exchange, money and credit, business cycles, international trade, distribution of wealth, labor, transportation, agricultural credit, marketing and public finance with special emphasis on their application to agriculture. *Prerequisite:* Sophomore year. *First semester. Three credits.* Wittwer.

2. PRINCIPLES OF ECONOMICS WITH APPLICATIONS TO AGRICULTURE. A continuation of 1. *Second semester. Three credits.* Wittwer.

45. FARM ACCOUNTING. A study of various survey forms and types of record books. Actual farm records will be used and the various factors which make for successful farming criticized and studied. *First semester. Three credits.* Titus.

52. AGRICULTURAL ECONOMIC POLICY. A study of economic policy and practice in connection with such problems as farm tenancy and ownership, taxation, tariff, foreign trade, insurance, farm labor, production, and price control. *Prerequisite:* Agricultural Economics 1 and 2. *Second semester. Three credits.* Wittwer.

55. RURAL FINANCE. Fundamental principles of credit and finance as applied to agriculture. Credit requirements of agriculture, existing agencies for supplying credit and ways and means of utilizing them; strength and weakness of present credit system and proposals for reform. *Junior year. First semester. Two credits.* Wittwer.

56. LAND ECONOMICS. Deals with the underlying principles pertaining to urban, agricultural, mineral, forest, range, and other types of land in their social setting. Attention is focused on land resources, their classification, valuation, and use and related problems of finance, including taxation and rents. *Prerequisite:* Agricultural Economics 1 and 2. *Second semester. Two credits.* Wittwer.

57. MARKETING OF AGRICULTURAL PRODUCTS. A study of the organization, functions and operations of the market structure and of marketing enterprises with special reference to the distribution of agricultural products. *Junior year. First semester. Three credits.* Wittwer.

64. COOPERATIVE ORGANIZATIONS. A study of the development of cooperation in agriculture in the United States and foreign countries. Analysis of principles and problems peculiar in cooperative associations. The organization, financing and management of different types of cooperative marketing and purchasing associations. *Junior year. Second semester. Two credits.* Wittwer.

65. AGRICULTURAL PRICES. A study of prices of farm products in relation to agricultural and industrial conditions. Factors determining prices. Price trends. Adjustment of production to price changes. Price stabilization. Prices and market grades. Price policies. Market quotations. *Senior year. First semester. Three credits.* Wittwer.

71. CURRENT ECONOMIC PROBLEMS. A course designed to acquaint the student with some of the major economic problems of our present

[1]Absent on leave.

day. *Prerequisite:* Agricultural Economics 1 and 2 or consent of instructor. *First semester. Two credits.* Wittwer. For credit only in the College of Agriculture.

76. FARM MANAGEMENT. The relation of capital and labor to farm management; the general management of implements and equipment; ownership versus rental of land; the choice of a farm; systems of farming; farming compared with other lines of business; marketing problems; the management of fields; crops and manures. *Prerequisite:* Senior standing. *Second semester. Three credits.* Titus.

84. RESEARCH AND EXTENSION ORGANIZATION AND METHODS. A study of extension and research organization and methods, with emphasis on economics and marketing problems. Agriculture's part in the war program, project planning, methods of collecting information, organizing data, preparing and presenting reports will be emphasized. *Prerequisites:* Junior standing or consent of instructor. *Second semester. Three credits.* Wittwer.

199–200. THESIS COURSE IN AGRICULTURAL ECONOMICS. *Either semester. Credit to be arranged.* Wittwer.

AGRONOMY

ASSOCIATE PROFESSOR HODGSON,[1] ACTING HEAD OF DEPARTMENT
ASSOCIATE PROFESSOR TITUS

1. SOIL EROSION AND CONSERVATION. A study of soil erosion conditions throughout the United States from an agronomic point of view. A study of the influence of high soil productivity and protective vegetative covering of the soil is emphasized as a means of controlling soil erosion and its conservation. Also stresses the importance of contour strip cropping and terracing on sloping lands. The use of hay and pasture grasses and legumes in controlling soil erosion is emphasized. *First semester. Lectures, two hours. Two credits.* Agriculture building. Hodgson.

2. FORAGE CROPS. Legumes and grasses, the special use of these crops as hay, soiling, silage, pasture, green manure, cover crops, etc.; the care and management of pastures; plans for the rotation of soiling crops; adaptation of grasses and other crops for growing under different climatic and soil conditions. *Second semester. Lectures, three hours. Three credits.* Hodgson.

5. FIELD CROPS. An advanced study of the principal cereal crops—corn, wheat, oats, barley, rye, rice, sorghum, etc. *First semester. Lectures, three hours. Three credits.*

7. SOIL MANAGEMENT. A general lecture and laboratory course in geology of soils, origin, formation, physical composition, soil moisture, moisture movements and conservation, physical processes, surface tension, osmosis, capillarity, aeration and temperature. Influence of erosion, drainage, and irrigation. *Prerequisite: Sophomore standing. First semester. Lectures, three hours. Three credits.*

46. WEEDS, AN ECONOMIC FACTOR IN AGRONOMY. Deals with the effects of weeds on farm values and crop production. Important weeds in the various crops and in the different sections of the United States. Method of weed eradication and control. Control of poisonous plant

losses in livestock and methods of eradicating poisonous plants. A few field trips will be taken to observe weed infestations and control measures. *Two credits, two lectures.* Hodgson.

54. IRRIGATION AND DRAINAGE. A study of the principles of irrigation. Sources of water supply; measurements of water; water requirements of crops; duty of water; losses in use of irrigation water; preparation of land and methods of irrigation; farm ditches and structures; drainage of farm lands and reclamation of alkali lands. *Second semester. Lectures, three hours. Three credits.* Titus.

60. PASTURE MANAGEMENT. Grazing management of tame and native pastures, poisonous plants, and methods of eliminating losses. *Both semesters. Three credits.* Hodgson.

61. SOIL ANALYSIS. A laboratory course involving a study of the chemical analyses of soils. Determination of humus, organic matter, nitrogen, phosphorus, potassium, etc. A study is also made of the so-called quick tests for determining the fertilizer requirements of soil. *Prerequisites:* Senior standing, Chemistry 9 and 10. *Second semester. Laboratory course, three periods. Three credits.* Fee $9.

62. SOIL FERTILITY. Composition and value of fertilizers, barn-yard and green manures; maintenance and improvement of fertility; effect of various crops and different systems of farming on the fertility of the soil. Studies of crop rotation and fertility. Study of productivity and best uses of Nevada soils and their improvement. *Prerequisites:* Agronomy 1 and 7. *Second semester. Lectures, three hours. Three credits.*

63. FARM LAND VALUES. A lecture and field laboratory course dealing with physical properties of soils and crop adaptations, State water right laws, duties of water, acreage water charges in various sections of the State, possible acreage productions, carrying capacity of pastures, crop farm income and expenses, possible returns from sheep, dairy, livestock and poultry units, plating farms from deed descriptions, how to determine values of farm lands, methods of farm taxation, history, forming and operation of irrigation district, average crop and livestock sales prices. *First semester. Three credits.*

65. RANGE PRACTICE. Field work in range management, involving training in making range reconnaissance, estimating palatability and utilization, and conducting of technical range research. Some time also will be devoted to inspecting range improvement and making management plans. *Two lectures, one laboratory period. Three credits. First semester.* Hodgson.

66. ADVANCED SOIL CONSERVATION. History of soil erosion and control in various parts of the United States. Methods of soil conservation and erosion control. The Federal Soil Conservation, A. A. A., and Land Use Planning Programs as they pertain to soil conservation. Influence of varied cultural and grazing practices and type of plant cover upon soil erosion and conservation. *One laboratory period. Three credits. Second semester.* Hodgson.

67. PRINCIPLES OF RANGE MANAGEMENT. A basic course dealing with problems met in managing native range lands, including a study of grazing regions and problems of each; revegetation of range lands,

maintenance of production, utilization of range forage. *Three credits. First semester.* Hodgson.

68. AGRONOMY SEMINAR. Deals with the work of various experiment stations and extension agencies, and also requirements and opportunities for college graduates in different fields of agricultural work. *One credit. Second Semester.* Fee $2. Hodgson.

76. HISTORY OF AGRICULTURE. A review of the history of organized agriculture together with a consideration of the various agrarian movements, their causes and effect. Review of the history of reclamation, of irrigation institutions, economics, water rights, etc. *Second semester. Three credits.*

92. SOIL SURVEY METHODS. Summer Field Course. Methods of mapping and classifying soils, the preparation of soil, reports; field work in soil surveying and field studies of the profile of representative Nevada soils. *Prerequisite:* Agronomy 5. *Four to six credits.*

94. RANGE SURVEY METHODS. Summer Field Course. Methods of mapping and classifying range areas of range lands, the preparation of range reports, field work in range surveying, and field studies of representative Nevada ranges. *Prerequisite:* Junior standing in Range Management. *Four to six credits.*

96. AGRONOMIC SURVEY METHODS. Summer Field Course. Methods of mapping and classifying forage, pasture, and field crop areas. Preparation of agronomic reports. Field work in crop surveying and field studies of representative Nevada farm areas. *Prerequisite: Junior standing. Four to six credits.*

157. ADVANCED FARM MANAGEMENT. A course for graduate students consisting of assigned special problems in farm management. *Either semester. Three to five credits.*

200. THESIS COURSE IN AGRONOMY. *Either semester. Credit to be arranged.*

Farm Mechanics

11. FARM BLACKSMITHING. Instruction and laboratory practice in the heating, bending, shaping, and welding of mild steel. Forging and tempering of tool steel; general farm blacksmithing. *First semester. Two credits.* Fee $3. Titus.

20. FARM UTILITIES. General mechanics including rope work, blocks and tackle, belts, pulleys, pipe fitting, farm plumbing, soldering, sheet metalwork, farm pumps, water supply, and sewage disposal. *Second semester. Two credits.* Fee $3. Titus.

32. FARM MACHINERY AND EQUIPMENT. A study of the construction, operation, care, and repair of farm machinery and equipment. *Second semester. Two credits.* Fee $3. Titus.

41. FARM CARPENTRY. Elementary drawing, use and care of wood working tools, general farm carpentry, painting, glazing, farm building construction, blue print reading, cost estimating. *First semester. Two credits.* Fee $3. Titus.

53. FARM GAS ENGINES AND TRACTORS. The development, principles of operation, care, and repair of farm gas engines and farm tractors. Demonstrations and practice in the operation of farm tractors

will be given whenever practicable. *First semester. Two credits.* Fee $3. Titus.

85. METHODS OF TEACHING FARM MECHANICS. A course designed for students preparing to meet the qualifications of agriculture and farm mechanics instructors in high schools. The organization and administration of a farm mechanics course, including objectives, course content, lesson planning, and teaching methods. *First semester. Two credits.* Titus.

ANIMAL HUSBANDRY

PROFESSOR WILSON, HEAD OF DEPARTMENT
ASSOCIATE PROFESSOR VAWTER

Animal Husbandry

1. BREEDS OF LIVE STOCK. The origin, development, characteristics, and uses of types and breeds of range and ranch animals. For illustration, the animals owned by the department and livestock ranches in the vicinity will be used, also lantern slides of typical animals of the various types and breeds. *First semester. Three credits.* Agriculture Building. Wilson.

3. LIVESTOCK JUDGING. Practice in judging livestock to gain familiarity with the points of excellence in the various breeds and types of range and ranch animals. *Prerequisite:* Animal husbandry 1. *First semester. Lectures, two hours; laboratory, two periods. Four credits.* Fee $3. Wilson.

30. LIVESTOCK FEEDING. The principles underlying and problems connected with the feeding of range and ranch animals. *Prerequisite:* Animal husbandry 1 and 4. *Second semester. Lectures, three hours. Three credits.* Wilson.

50. ANIMAL HYGIENE. A lecture course covering the principles of livestock sanitation and first aid. *Prerequisite:* Bacteriology 51. *Second semester. Three credits.* Vawter.

52. GENETICS. A discussion of the principles underlying the science of breeding, the aim of which is to develop, maintain, and improve the various types and breeds of ranch and range animals, studied with special reference to their application to breeding of range animals. *Prerequisite:* Zoology 2. *Second semester. Lectures, three hours. Three credits.* Wilson.

53. LIVESTOCK REGISTRATION. The details of registering purebred animals, requiring the use of blanks for making application for registry; the use of herd books. A study of the history of the recognized registry associations and the rules governing them; a study of the value of pedigrees and how to keep the herd records. *Prerequisite:* Animal husbandry 1 and 4. *First semester. One credit.* Wilson.

55. ADVANCED LIVESTOCK FEEDING. Continuation of animal husbandry 30. *Prerequisite:* Animal husbandry 30. *First semester. Lectures, three hours. Three credits.* Wilson.

56. ADVANCED STOCK JUDGING. Comparative scoring and judging. The judging of animals in classes, as at fairs and stock shows. *Prerequisite:* Animal husbandry 4. *First semester. Three credits.* Fee $3. Wilson.

58. RANGE MANAGEMENT. Lectures covering the following subjects in animal husbandry: Development and proper distribution of stock salting grounds; rotation and proper location of drift fences; estimation of carrying capacity; methods of mapping in range lands; range destroying rodents; grazing administration within the National forests; various systems of handling range lands within the United States and foreign countries; general range problems. *Prerequisite:* Animal husbandry 1, 4, 30; botany 22. *Second semester. Three credits.* Wilson.

59. PROFESSIONAL JUDGING. *First semester. Laboratory, one period. One credit.* Given in alternate years. Fee $1.50. Wilson.

61–62. ANIMAL HUSBANDRY. Thesis course. Special problems in animal production and management. Problems relative to the open range under the provisions of the Taylor Grazing Act. *Prerequisite:* Animal husbandry 1, 4, 30, 51, 55, 57, 58. (May take this course with course 58.) *Either semester. Four to six credits.* Fee 3. Wilson.

63–64. ANIMAL HUSBANDRY LITERATURE. (Graduate credit given with the consent of the instructor.) A seminar course designed to help the student become familiar with the various sources of livestock information as well as to afford him practice in presenting such information for discussion. *Prerequisite: Junior standing. Both semesters. Two credits each semester.* The course may be repeated in the senior year for the same credit. Wilson.

66. LIVESTOCK MANAGEMENT. A study of the problems confronting the ranch and range; calculating profits under various conditions; systematic keeping of records of livestock operations; selection of animals for the feed yard, show ring, market, and butcher. *Prerequisite:* Animal husbandry 1, 4, 30. *Second semester. Three credits.* Wilson.

Ed. 86. TEACHER TRAINING IN AGRICULTURE. *See Education.*

Dairy Husbandry

1. DAIRYING. The composition and secretion of milk and causes of variation in its composition; the operation of the Babcock test as applied to milk and milk products; the various methods of cream-raising, including the study of the construction and operation of centrifugal separators; methods of making and marketing butter, with special reference to farm conditions, and the proper handling of milk on the farm will be discussed in the lectures. The laboratory work includes the testing of milk and other dairy products, operation of centrifugal cream separators, and the making and scoring of butter, and an observation of the essential points of the sanitary production and husbandry of dairy products. *Second semester. Lectures, two hours; laboratory, one period. Three credits.* Fee $3.

53. MILK PRODUCTION. Dairy husbandry in its relation to the producer of dairy products rather than the manufacturer. The lectures deal with the problems of the dairy farmer, such as adaptations of the dairy breeds, selection, management, feeding of dairy cattle, dairy barns, and calf-raising. The laboratory includes the judging of dairy cattle, visits to the local dairy farms and the observation of systems of dairy management followed by them. *Prerequisite:* Dairying 1.

First semester. Lectures, two hours; laboratory, one period. Three credits. Fee $3.

54. BUTTER-MAKING. Laboratory practice in the manufacture of creamery butter and ice cream. Instruction will cover sampling and testing of cream; pasteurizing and ripening of cream for butter-making, churning, with special attention to the factors that control the composition of butter; preparing butter for the market; the preparation and use of home-made and commercial starters; creamery accounts; determining the amount of water in butter; testing for oleomargarine; manufacture of ice cream, sherbert, ices, lacto. *Prerequisite:* Dairying 1. *Second semester. Lecture, one hour; laboratory, two periods. Three credits.* Fee $3. (This course will not be given unless elected by five or more students.)

55. DAIRY SANITATION. This course is the application of bacteriology to the problems of the producer and consumer of milk. It deals with the fundamental principles upon which are based sanitary production and handling of milk, cream-ripening and curing of cheese, the market milk industry; the relations of milk to the public health and the important relations of butter- and cheese-making. *Prerequisite:* Dairying 1 and zoology 2. *First semester. Lecture, one hour; laboratory, one period. Two credits.* Fee $2.

57. ADVANCED MILK PRODUCTION. Use of dairy herd books; special feeding for high records; interpretation of official tests. *Prerequisite:* Dairying 1. *First semester. Lectures, two hours. Two credits.* Wilson.

61–62. THESIS COURSE. Special problems in production or sanitation and city milk supply. Laboratory material is available through the dairies furnishing milk for the city of Reno. *Prerequisite:* Dairying 1 and 53 or 55. *Either semester. Two to six credits.* Fee $3. Wilson.

Poultry Husbandry

2. FARM POULTRY MANAGEMENT. Raising poultry under farm conditions. This course deals with the housing, raising of poultry, handling of stock for the market, and egg production, killing, dressing, diseases, hatching, and rearing of young chicks. Trips to local poultry farms. It is taught with special reference to farm conditions. *Second semester. Two lectures, one laboratory. Three credits.* Fee $2.

8. TURKEY PRODUCTION AND MANAGEMENT. This course deals with the practical management of turkeys, primarily for meat production. No laboratory period is arranged for, but about two trips are planned each year, one at marketing time and one at hatching and breeding time. *First semester. Two credits.* Fee $2.

ART

MRS. JOSLIN

Requirements for a minor in art: Art 1 and 2 (4 credits), Art 3 or 4 (2 credits), and 12 additional credits in the department, at least 6 of which must be in courses numbered 50 or above.

1–2. ELEMENTARY FREEHAND DRAWING. Principles of drawing, values and perspective taught in the freehand drawing of models and still-life in monochrome. Also rapid figure sketching in charcoal,

conti, pencil, etc. *Both semesters. Two credits per semester.* Fee $1, Electrical Engineering Building. Joslin.

3–4. MODERN TRENDS IN ART EDUCATION. Techniques of handling art media—finger paint, clay, easel paint, chalk, watercolor, etc. Planned especially for elementary grade teachers who wish to use new methods in art teaching. *Both semesters. Two credits per semester.* Fee $1.50. Electrical Engineering Building. Joslin.

5–6. ART STRUCTURE AND COMPOSITION. Principles which underlie all art. Study of color and design and the application of both to the problems of the home economics student. *Both semesters. Two credits per semester.* Fee $1. Electrical Engineering Building. Joslin.

51–52. WATERCOLOR AND OIL PAINTING. The technique and handling of watercolor and oils in still life and landscape. *Both semesters. Three credits per semester.* This course may be repeated for credit as 51A or 51B and 52A or 52B. Electrical Engineering Building. Joslin.

53–54. ADVANCED FREEHAND DRAWING. Drawing from models and still-life in preparation for later work in portrait and life classes. Quick sketch class, also. *Both semesters. Three credits per semester.* Fee $1. This course may be repeated for credit as 53A or 53B and 54A or 54B. Electrical Engineering Building. Joslin.

BIOLOGY

PROFESSOR LEHENBAUER, HEAD OF DEPARTMENT
ASSOCIATE PROFESSORS BILLINGS, LOWRANCE[1]
ASSISTANT PROFESSOR RICHARDSON
MR. HUNGATE

The department of biology includes the following divisions: Bacteriology, botany, horticulture, hygiene, and zoology.

Requirements for a minor in biology, 9 credits in botany and 9 credits in zoology. Of these 18 credits, at least 6 must be in courses numbered 50 or above.

Requirements for a major in biology: A total of 27 credits of which not more than 15 may be in either botany or zoology. Of the 27 credits at least 12 must be in courses numbered 50 or above.

Students who intend to teach in secondary school are advised to take the combination minor or major in biology rather than the major or minor in either subject alone.

Bacteriology

51. GENERAL BACTERIOLOGY. A course of lectures and laboratory exercises on the morphology and life processes of the bacteria, with some references to allied organisms. The relationship of microorganisms to soil fertility, dairy products, water purity, sewage, and the production of disease will be considered. *Prerequisite:* Zoology 2, Botany 26, or Physiology 57–58. *First semester. Lectures, two hours; laboratory, two periods. Four credits.* Fee $5. 212 Agriculture Building. Lowrance.

Botany

Requirements for a minor in botany: Botany 1 (3 credits), Botany 21 (3 credits), Botany 22 (4 credits), Botany 26 (4 credits), and 4 additional credits in the division of botany in courses numbered 50 or above.

Requirements for a major in botany: Botany 1 (3 credits), Botany 21 (3 credits), Botany 22 (4 credits), Botany 26 (4 credits), and 12 additional credits in the division of botany in courses numbered 50 or above.

[1]Absent on leave.

A year of chemistry is recommended for majors or minors in the division of botany.

Students planning to enter the field of forestry and range management should consult course of study listed in College of Agriculture.

1. GENERAL BOTANY. An introduction to the classification, structure, and physiology of the flowering plants. *Either semester. Two lectures; one laboratory period. Three credits.* Fee $3. 109 and 9 Agriculture Building. Billings.

21. THE STRUCTURE AND DEVELOPMENT OF THE SEED PLANTS. A detailed study of their morphology and histology in relation to function. *First semester. One lecture; two laboratory periods. Three credits.* Fee $4. 8 Agriculture Building. Lehenbauer.

22. TAXONOMY. A systematic and comparative study of the principal families of flowering plants represented in the local flora and the indentification of plants by means of manuals. *Prerequisite:* Botany 1 or 3. *Second semester. Two lectures; two laboratory periods. Four credits.* Fee $1. 9 Agriculture Building. Billings

26. CRYPTOGRAMIC BOTANY. The nonflowering plants as illustrated by representative types from the algae, fungi, mosses, and ferns. Representative gymnosperms also may be studied if time permits. *Second semester. Two lectures; two laboratory periods. Four credits.* Fee $4. 9 Agriculture Building. Lehenbauer.

27. ELEMENTS OF FORESTRY. A general course dealing with the history and principles of forestry, and the economic and social importance of forests. *First semester. Two lectures and assigned readings. Two credits.* 7 Agriculture Building. Alternates with botany 53. Billings.

53. DENDROLOGY. The intensive study of the taxonomy, silvics, and practical identification of the important North American forest trees. *Prerequisite:* Botany 22. *First semester. Two lectures; two laboratory periods. Four credits.* Fee $2. 8 Agriculture Building. Alternates with Botany 27. Billings.

54. RANGE AGROSTOLOGY. The study of grasses, and practice in identification. Particular emphasis is given to range grasses. *Prerequisite:* Botany 22. *Second semester. One lecture; two laboratory periods. Three credits.* Fee $2. 8 Agriculture Building. Billings.

55. PLANT PHYSIOLOGY. Intensive study of the basic physiological processes in plants: photosynthesis, digestion, respiration, absorption, transpiration, nitrogen metabolism, mineral deficiencies, growth-promoting and growth-inhibiting substances. *Prerequisite:* Botany 1 or 3 and 1 year of chemistry. *Second semester. Two lectures; one laboratory period. Three credits.* Fee $3. 8 Agriculture Building. Billings.

56. APPLIED BOTANY. The applications of the fundamentals of plant physiology, morphology, genetics, etc., to the growing of plants. *Prerequisite:* Two years of biology. *First semester. Three credits.* 9 Agriculture Building. Lehenbauer.

64. MYCOLOGY AND AN INTRODUCTION TO PLANT PATHOLOGY. The study of fungi and bacteria. Diseases of economic plants, their causes, identification and control. *Prerequisite:* Botany 1 or 3. First

semester. Two lectures; two laboratory periods. Four credits. Fee $4. 8 Agriculture Building. Lehenbauer. This course alternates with Botany 56.

68. WOOD TECHNOLOGY. The structure of economic woods with emphasis upon the identification of these woods by their physical properties and minute anatomy. *Prerequisite:* Botany 21. *Second Semester. One lecture; two laboratory periods. Three credits.* Fee $2. 8 Agriculture Building. Lehenbauer.

70. BIOLOGICAL TECHNIC. The preparation of materials and permanent slides of plants and animal tissues for microscopic study. *Prerequisites:* Junior standing and at least one semester in botany and zoology. *Second semester, one lecture and a minimum of two laboratory periods.* Fee $2 per laboratory credit. Lehenbauer.

75. PLANT ECOLOGY. HABITAT FACTORS. The relationship between native vegetation and environmental factors such as light, water, temperature, biotic, and soil, and the measurement of these factors. *Prerequisite:* Botany 22 and 55. *First semester. Three lectures; one laboratory. Four credits.* Fee $4. 8 Agriculture Building. Billings.

76. PLANT ECOLOGY. PLANT COMMUNITIES, SUCCESSION, AND INDICATOR PLANTS. The study of plant associations and their changes. The use of indicator plants in recognizing overgrazing, soil conditions, and forest sites. *Prerequisite:* Botany 75. *Second semester. Three lectures; one laboratory. Four credits.* Fee $4. 8 Agriculture Building. Billings.

91–92. BOTANICAL PROBLEMS. Special problems in some field of botany. Assigned readings and reports. *Prerequisite:* The equivalent of two years of botany. *Either semester. One to four credits each semester.* 8 Agriculture Building. Lehenbauer and Billings.

93–94. BOTANICAL SEMINAR. The presentation by students of reviews and discussion of assigned reports of research in botanical literature. *Prerequisite:* Nine hours of botany and consent of instructors. *Both semesters. One meeting per week. One or two credits.* 7 Agriculture Building. Lehenbauer and Billings.

201–202. Thesis course for graduates.

Horticulture

1. HORTICULTURE. Plant propagation and ornamental horticulture. The principles of propagation. The culture and care of plants. The principles of ornamental gardening. *First semester. Three lectures and demonstrations; assigned readings. Three credits.* 9 Agriculture Building. Lehenbauer.

2. HORTICULTURE. Tree fruits, berries and vegetables. Growing fruit trees, berry and vegetable plants in the home orchard and garden. Pruning, grafting and propagation. Selection and identification of varieties. *Prerequisite:* Botany 1. *Second semester. Three lectures. Three credits.* 9 Agriculture Building. Lehenbauer.

Zoology

Requirements for a minor in zoology: zoology 1 or 2, zoology 9 or 11, zoology 50, and 8 credits in zoology courses above 50.

Requirements for a major in zoology: zoology 2, zoology 9, zoology 50–52, and 15 credits in other zoology courses above 50.

Additional courses advised: Physics 1–2 (or admission credit), general chemistry, qualitative and quantitative analysis and organic chemistry; German 1–2 and 3–4.

1. SURVEY OF ZOOLOGY FOR ARTS AND SCIENCE STUDENTS. A course introducing the fields of zoology and emphasizing their application to human interests and welfare as in the subjects of functioning of the body, disease, medicine, evolution, and heredity. Designed for general students. *First semester. Lecture, two hours; laboratory, one period. Three credits.* Fee 2. Agriculture Building. Richardson.

2. GENERAL ZOOLOGY. An introductory course dealing with the general principles of animal biology and the evolution of animal structures and functions. The laboratory work consists of the study of the structure, activities, and habits of typical species representing the principal animal groups and chosen as far as possible from local types. *Second semester. Two lecture and two laboratory periods. Four credits.* Fee $4. 110 and 211 Agriculture Building. Richardson.

9. COMPARATIVE ANATOMY OF VERTEBRATES. Lectures on the progressive development of structures and functions from the lower to the higher vertebrates, leading up to human anatomy. Laboratory dissection of the dog-fish, salamander, and a mammal. *Prerequisite:* Zoology 2. *First semester. Lectures, three hours; laboratory, two periods. Five credits.* Fee $5. 5 Agriculture Building. Richardson.

11. HUMAN ANATOMY. A course designed for prenursing and physical education students. Lectures on human anatomy. The laboratory includes demonstrations, a study of human anatomical preparations, and individual dissection of the cat or rabbit. *Prerequisite:* Zoology 1 or equivalent. *First semester. Three lecture and two laboratory periods. Four credits.* Fee $4. Agriculture Building. Lowrance.

19. AMERICAN RED CROSS NURSES' AID COURSE. Lectures, demonstrations, and supervised practice in fundamental principles of nursing. *Prerequisite or parallel:* One general course in college biology, botany, or zoology; the 20-hour Standard Red Cross First Aid Course. *Every semester. Two credits.* Cheney Building, 139 North Virginia Street, Reno.

22. PARASITOLOGY. Introductory study of the relation of animals to the causation and transmission of disease. Methods of recognition, prevention, and control of certain diseases will be emphasized. *Second semester. One lecture; one laboratory. Two credits.* Lowrance. Fee $2. (NOTE—This course will be offered in alternate years only.)

50. GENETICS. A study of the fundamental principles underlying the inheritance of structural and physiological characters in animals and plants. *Prerequisite:* One semester of general botany or general zoology. *Second semester. Two lectures. Two credits.* Lowrance.

52. GENETICS LABORATORY. A laboratory course designed to accompany Zoology 50. *Prerequisite or Parallel:* Zoology 50. *One credit.* Fee $3. Lowrance.

55. EVOLUTION. The study of organic evolution, the fields of evidence for it, and explanations of just how it has taken and may be taking place. Modern species concepts are considered. *Prerequisite:* One year of college biology. *First semester. Two credits.* Agriculture Building. Richardson.

57–58. PHYSIOLOGY. Principles of animal physiology, with special reference to the human being. Zoology 2 or 5 and Chemistry 1 and 2 or 7 and 8 should precede this course. *Both semesters. Lecture, two hours; laboratory, one period. Three credits each semester.* Fee $2.50 *each semester.* 110 and 210 Agriculture Building. Lowrance.

59. GENERAL ENTOMOLOGY. An introductory study of insects, their structure, classification and life-histories, and their relations to human interests. Frequent field trips for collection and observation are taken. *Prerequisite:* Zoology 1 or 2 or working knowledge of the subject. *First semester. Two lectures; one laboratory. Three credits.* Fee $3. Agriculture Building. Richardson.

60. VERTEBRATE ZOOLOGY. A course especially designed for field workers, teachers, and naturalists. It includes a study of the classification, variety, habits, and economic importance of reptiles, birds, and mammals. Regular field trips are taken for the careful identification and observation of local forms. *Prerequisite:* Zoology 1 or 2. *Second semester. Lecture, two hours; laboratory, one period. Three credits.* Fee $2. Agriculture Building. Richardson.

62. GAME MANAGEMENT. Conservation or regulated use as applied to game birds and mammals. Field trips and laboratory studies on observation and identification of western game species, and on application of management principles. *Prerequisite:* Zoology 60 and Botany 22. *Second semester. Lecture, two hours; laboratory, one period. Three credits.* Fee $2. Agriculture Building. Richardson.

64. EMBRYOLOGY. Lectures on comparative embryology of vertebrates. The laboratory work consists of the study of preparations of the frog, chick, pig, and human embryos at various stages of development. *Prerequisite:* Zoology 2 and 9, or 57–58. *Second semester. Lectures, three hours; laboratory, two periods. Four credits.* Fee $2. 212 Agriculture Building. Lowrance.

68. HISTOLOGY AND ORGANOLOGY. Study of elementary tissues, and the study of the development and structure of vertebrate organs. *Three lectures. Two credits.* 212 Agriculture Building. Lowrance.

91–94. ADVANCED ZOOLOGY. Special zoological problems. Major students may select some problem for investigation under the direction of the instructor. Library reading, laboratory work, and reports, with final results embodied in the form of a thesis. *Both semesters. Credits to be arranged.* 212 Agriculture Building. Lowrance and Richardson. Fee determined by type of work.

201. Thesis course for graduates.

BUSINESS

(See Economics, Business, and Sociology.)

CHEMISTRY

PROFESSOR SEARS, HEAD OF DEPARTMENT
ASSOCIATE PROFESSORS DEMING, WILLIAMS

Requirements for a minor in chemistry: Chemistry 7–8 (8 credits) and either 9–10 (8 credits) and 4 additional credits in the department in courses numbered 50 or above, or 9a (3 credits), 26 (3 credits) and 6 additional credits in the department, at least 4 of which must be in courses numbered 50 or above.

Requirements for a major in chemistry: Chemistry 7–8 (8 credits), 9–10 (8 credits), 51–52 (8 credits), 95–96 (1 credit), and 3 additional credits in the department in courses numbered 50 or above.

Requirements for the degree Bachelor of Science in Chemistry: See outline for Course of Study, page 124.

3–4. GENERAL CHEMISTRY. A lecture and laboratory course covering the fundamental principles of chemistry and the properties and uses of the more common elements. Emphasis will be given during the latter part of the course to a study of the compounds of carbon and their uses. Designed for students in the College of Agriculture and Arts and Science desiring only one year of chemistry. *One lecture, two recitations, two laboratory periods, four credits.* Fee $8. Mackay Science Hall. Williams.

7–8. GENERAL INORGANIC CHEMISTRY. A lecture and laboratory course covering the fundamental principles of chemistry and the properties and uses of the more common elements. Emphasis will be given during the latter part of the course to the study of Qualitative Analysis. Designed for students in the College of Engineering and all others planning to take more than one year of chemistry. *Both semesters. One lecture, two recitations and two laboratory periods. Four credits each semester.* Mackay Science Hall. Fee $8. Sears and Staff.

9–10. QUANTITATIVE ANALYSIS. A lecture and laboratory course dealing with the fundamental principles and techniques of accurate volumetric and gravimetric methods. Special emphasis on problems involving the Mass Law and Solubility Product and calculations needed for quantitative determinations. *Prerequisite:* Chemistry 8. *Both semesters. Two lectures; two laboratory periods. Four credits each semester.* Fee $8. Mackay Science Hall. Williams.

9A. QUANTITATIVE ANALYTICAL CHEMISTRY. The same as Chemistry 9 with the exception that there is only one laboratory period each week. *Prerequisite:* Chemistry 8. *First semester. Two lectures; one laboratory period. Three credits.* Fee $4. Mackay Science Hall. Williams.

26. ELEMENTARY ORGANIC CHEMISTRY. A lecture course dealing primarily with the aliphatic carbon compounds. *Prerequisite:* Chemistry 9 or 9a. *Second semester. Three lectures. Three credits.* Mackay Science Hall. Williams.

51–52. ORGANIC CHEMISTRY. A lecture and laboratory course dealing with the compounds of carbon. *Prerequisite:* Chemistry 10. *Both semesters. Two lectures and two laboratory periods. Four credits each semester.* Fee $8. Mackay Science Hall.

53. QUALITATIVE ORGANIC ANALYSIS. (Graduate credit given with consent of instructor.) A lecture and laboratory course. A study of the methods available for the detection and indentification of organic

compounds. *Prerequisite:* Chemistry 52. *First semester. Two lectures and two laboratory periods. Four credits.* Fee $8. Mackay Science Hall.

54. ADVANCED ORGANIC CHEMISTRY. (Graduate credit given with consent of instructor.) A lecture course of advanced topics in aliphatic organic chemistry. Modern theories will be discussed with particular emphasis placed on the physical aspects of the subject. *Prerequisite:* Chemistry 51–52. *Second semester. Two lectures. Two credits.* Mackay Science Hall. Williams.

56. ADVANCED ORGANIC CHEMISTRY. (Graduate credit will be given with consent of instructor.) A laboratory course designed to give the student training in the methods of quantitative organic analysis. Included in the course will be methods of analysis by combustion; the determination of organic halogen; active hydrogen; molecular weight determinations by the Rast method. Whenever possible, semimicro methods will be used. At the request of a sufficient number of students, biochemical analyses will be included with, or substituted for, the above analytical procedures. *Prerequisite:* Chemistry 52. *Second semester. Two laboratory periods. Two credits.* Fee $8. Mackay Science Hall. Williams.

64. SPECIAL PROBLEMS. A laboratory course designed to give the student training in various special fields. Water and gas analysis, potentiometric titrations, conductometric titrations, analysis of foods, minerals, etc., may be taken up. To be arranged by consultation with the head of the department. *Any semester. Two credits.* Fee $8. Mackay Science Hall. Sears and Staff.

67. PHYSIOLOGICAL CHEMISTRY. For students of chemistry, medicine, and nutrition. A lecture and laboratory course dealing with the chemistry of the types of organic compounds which are essential for the fundamental physiological processes. *Prerequisite:* Chemistry 26 or its equivalent. *First semester. Two lectures; two laboratory periods. Four credits.* Fee $8. Mackay Science Hall. Williams.

71. ADVANCED ANALYTICAL CHEMISTRY. A lecture and laboratory course designed particularly for chemistry and mining students but open to all students desiring a more complete knowledge of analytical methods. *Prerequisite:* Chemistry 10. *First semester. One recitation and two laboratory periods. Three credits.* Fee $8. Mackay Science Hall. Sears.

72. ADVANCED INORGANIC CHEMISTRY. (Graduate credit given with consent of instructor.) A lecture and laboratory course involving some of the more difficult inorganic reactions and technic. Special emphasis will be given to the chemistry and technology of the more important light metals including lithium, beryllium, magnesium and aluminum. *Prerequisite:* Chemistry 71. *Second semester. One lecture and two laboratory periods. Three credits.* Fee $8. Mackay Science Hall. Sears.

74. CHEMISTRY OF THE RARER METALS. (Graduate credit given with consent of instructor.) A laboratory course designed to give a more intimate knowledge of the elements. Emphasis will be given to their analytical relations and to the preparation and properties of the metals and their more important compounds. *Prerequisite:* Three

years of college chemistry. *Second semester. Two laboratory periods. Two credits.* Fee $8. Mackay Science Hall. Sears.

75. THE PERIODIC LAW. (Graduate credit given with consent of instructor.) A lecture and seminar course designed to give the student a rather intimate knowledge of the less common elements and their relation to the more common elements. A critical study is made of the periodic law and of the more important periodic tables in the light of recent developments in atomic structure and the known properties of the elements. Practical use is made of the periodic law to correlate the facts of chemistry. *Prerequisite:* Three years of college chemistry. *First semester. Three lectures. Three credits.* Mackay Science Hall. Sears.

80. INTRODUCTION TO PHYSICAL CHEMISTRY. A lecture course designed to illustrate the applications of physical methods to chemical problems. This course is planned primarily for engineering and premedical students desiring a short introductory course and for chemistry students whose previous work indicates a need of more thorough preparation for Chemistry 83–84. *Prerequisite:* Chemistry 10 or 26. *Second semester. Two lectures. Two credits.* Mackay Science Hall. Deming.

83–84. PHYSICAL CHEMISTRY. (Graduate credit given with consent of instructor.) A lecture and laboratory course based on the application of the laws of physics and of the methods of calculus to problems of physical and chemical equilibria. *Prerequisite:* Chemistry 10, Physics 2a, Mathematics 24. *Both semesters. Three lectures and one laboratory period. Four credits each semester.* Fee $4. Mackay Science Hall.

85. ELECTROCHEMISTRY. (Graduate credit given with consent of instructor.) A lecture and laboratory course designed to follow Chemistry 84 and give a more thorough training in the theory and use of Electrochemical Cells. *Prerequisite:* Chemistry 84. *First semester. One lecture and two laboratory periods. Three credits.* Fee $8. Mackay Science Hall. Deming.

86. THE PHASE RULE. (Graduate credit given with consent of instructor.) A lecture and laboratory course designed to follow Chemistry 83 and give a more thorough training in the theory and application of Gibb's Phase Rule. *Prerequisite:* Chemistry 83. *Second semester. One lecture and two laboratory periods. Three credits.* Fee $8. Mackay Science Hall. Deming.

92. HISTORY OF CHEMISTRY. (Graduate credit given with the consent of the instructor.) A lecture course on the history and development of the science of chemistry. *Prerequisite:* Three years of college chemistry. *Second semester. Two credits.* Mackay Science Hall. Deming.

95–96. CURRENT CHEMICAL LITERATURE. (Graduate credit given with consent of instructor.) A seminar course designed to help the student become familiar with the various sources of chemical information as well as to afford him practice in summarizing such information for discussion. Each student will be required to present two reports each semester upon an assigned topic. The class will meet not oftener than once each week for the presentation and discussion of assigned

topics. *Prerequisite:* Two years of college chemistry. *Both semesters. One credit per year.* May be repeated for credit. Mackay Science Hall. Staff.

99–100. THESIS COURSE FOR UNDERGRADUATES. A laboratory and library course based on a special topic chosen from inorganic, analytical, organic or physical chemistry. Careful quantitative work is stressed. To be arranged by consultation with the instructors. *Prerequisite:* Chemistry 15, 51, and 84, German, and recommendation by the head of the department. *Both semesters. Two credits.* Fee $8. Mackay Science Hall. Sears and Staff.

101–102. ADVANCED PHYSICAL CHEMISTRY. A lecture course dealing with the thermodynamic functions and their partial derivatives. *Prerequisite:* Chemistry 84. *Both semesters. Two lectures. Two credits.* Mackay Science Hall. Deming.

200. THESIS COURSE FOR GRADUATE STUDENTS. Special problems for research chosen in consultation with some member of the department and carried on under his direction. No student will be admitted to this course who has not completed four years of work in chemistry and graduated from an approved college. *Both semesters. Credits to be arranged.* Fee $4 per credit hour, according to work. Mackay Science Hall. Sears and Staff.

CIVIL ENGINEERING

PROFESSOR BIXBY, HEAD OF SCHOOL
ASSOCIATE PROFESSORS GRAFTON,[1] WAGNER[1]

2. MAP DRAWING. The work in this course consists of plotting engineering and topographic maps from field survey notes. *Second semester. Laboratory, one period. One credit.* Electrical Building. Bixby.

11–12. ENGINEERING LITERATURE. The presentation and discussion of topics selected from current engineering literature. *Both semesters. One credit each semester.* Engineering Building.

19. TECHNICAL REPORT. A systematic write-up of an approved technical subject in civil engineering. This course is designed primarily for civil engineering students, and those registering in same will be required to obtain their assignments not later than one week after registration. Outlines and bibliography, together with a reasonable showing of progress, must be presented for approval within six weeks after registration. *Prerequisite:* English 1–2. *Either semester. One credit.* Engineering Building. Bixby.

51. ELEMENTARY SURVEYING. A study of the elements of plane surveying, including study of the construction and use of instruments, applications in differential and profile leveling; transit traverse surveys and computation of areas; stadia surveying and mapping; and public land surveys. *Prerequisite:* Mathematics 15. *First semester. Two credits.* Engineering Building. Bixby.

52. HIGHER SURVEYING. A continuation of C. E. 51. A study of field astronomy for engineers; care and adjustment of surveying instruments; triangulation and precise level control nets for large-scale mapping projects; plane table mapping, and mine surveying.

[1]Absent on leave.

Two lecture periods. Second semester. Prerequisite: C. E. 51. *Two credits.* Engineering Building. Bixby.

53. ELEMENTARY FIELD SURVEYING. Field practice in the use of surveying instruments, including the use of tapes; survey of traverse, stadia traverse, differential, and profile leveling with plotting of profile; plotting of all data taken during field surveying operations; plotting of stadia notes and drawing in contours on map. *Prerequisite:* Civil Engineering 51 concurrently. *Two laboratory periods. Two credits. First semester.* Fee $3. Engineering Building. Bixby.

54. HIGHER FIELD SURVEYING. A continuation of C. E. 52. Adjustment of surveying instruments; survey of triangulation network; baseline measurement with standardized tape, with application of temperature and sag correction; topographic survey of portion of campus with stadia board and transit or plane table; mapping of stadia survey. *Prerequisite:* C. E. 51–53. *Second semester. Two credits.* Fee $3. Engineering Building. Bixby.

56. FOUNDATIONS AND SUBSTRUCTURES. A study of the principles and practices of design and construction of bridge, dam, and building foundations, reservoir sites, etc., and relation of geology to various structures. *Two lectures. Two credits. Second semester.* Engineering Building. Bixby.

58. SUMMER SURVEYING. This course starts the first day after Commencement in May. The work consists of topographic surveying, involving careful base-line measurement and triangulation for control, followed by topographic surveying by plane table method. Mine surveying including both surface and underground workings as surveyed by each student. Most of the computations of field surveys are made during the evening following each day's work. *Prerequisite:* C. E. 51, 52, 53, and 54. *Four weeks. Four credits.* Fee $20, including automobile transportation costs. Bixby.

61. HIGHWAY ENGINEERING. A detailed study is made of location, construction, and maintenance of highways. *First semester. Two lectures. Two credits.* Engineering Building. Bixby.

62. CIVIL ENGINEERING DRAWING. This course is designed to train students to plat field notes of topographic surveys, surveys of towns and rural areas. Also the platting from dimensional notes such structures as bridges, buildings, retaining walls, dams, etc. *First semester. Two laboratory periods. Two credits.* Engineering Building.

63–65. ROUTE SURVEYING. Lectures, recitations, and field work on the location and construction of railroads and highways. Also a study of tractive power and train resistance and their effects on the economic location and operation of railroads. *Prerequisite:* C. E. 51, 52, 53, and 54. *First semester. Lectures, three credits; field laboratory, two credits.* Fee $3. Engineering Building. Bixby.

66. ENGINEERING ECONOMICS. The principles of cost comparison and technique of estimating costs, including economic selection, depreciation, salvage value, sinking funds, etc., illustrated by typical everyday problems selected from all fields of engineering. *Prerequisite:* Junior standing. *Two lectures. Two credits.* Engineering Building.

68. GRAPHICAL ANALYSIS. A course which covers the principles of Graphic Statics, and their applications to the analysis of stresses in

statically determinate structures for various conditions of loadings. *Second semester. Lecture—one credit; laboratory—one credit.* Engineering Building. Bixby.

72. STRENGTH OF MATERIALS. A study of the physical properties of engineering materials in relation to behavior under stress. Applications of the principles of mechanics to engineering design, including axial stresses and deformations; flexure in homogeneous and composite beams; sheering stresses and deformations; design of steel tanks; riveted and welded joints; compression members; combined bending and direct stress; stresses in hooks and curved beams; torsional stresses and deformations and design of shafts; resilience and impact stresses; deflection in beams; stresses in continuous and restrained flexural members; applications of photo-elasticity to study of stress concentrations; and theories of failure of materials. *Second semester. Three lecture periods. Three credits. Prerequisite:* Physics 3 and 4; Math. 25, 26, and 55. Engineering Building.

74. TESTING MATERIALS LABORATORY. The experiments are as follows: Study of various testing machines and accessories for testing metals, cement, concrete and wood; tension tests on steel and cements; compression tests of concrete; tests of wood columns; end compression of short wood test specimens; flexure tests of small wood beams; tests of cements; screen tests of sands; specific gravity tests of cements, sand, and aggregates. A carefully prepared report, clearly stated, with required computations, must follow each test. *Prerequisite:* C. E. 74 must be taken as a prerequisite or concurrently with C. E. 72. *Second semester. Laboratory, one period. One credit.* Fee $2.50. Testing Laboratory. Engineering Building. Bixby.

76. STRUCTURAL ANALYSIS. A study of basic principles of stress analysis applied to various types of statically determinate structures, including the analysis of frames, girders, and various types of trusses by algebraic methods; principles of graphical analysis and applications to problems in equilibrium and analysis of trussed structures; analysis of live load stresses in highway and railroad bridges by the use of influence diagrams and by conventional algebraic methods; and discussion of various common types of bridge and building trusses. *Two lectures and one laboratory period. Second semester. Three credits. Prerequisite:* C. E. 72. Engineering Building.

77. ADVANCED STRUCTURAL ANALYSIS AND DESIGN. A study of the principles of stress analysis as applied to structures of statically indeterminate types, including deformations and deflections in structures by graphical and analytical methods; methods of analysis of arches, rigid frames and other closed-ringed structures by analytical methods. Solution of continuous and multiple girders and frames by methods of successive approximation. Study of structural members, details and connections; computations for design and preparation of design drawings for steel framing for a building and plate girder bridge. *One lecture; two laboratory periods. First semester. Three credits. Prerequisite:* C. E. 76. Engineering Building.

78. STRUCTURAL STEEL AND CONCRETE DESIGN. Complete analysis, design and preparation of design drawings for a railway or highway steel truss bridge, reinforced concrete structures, reinforced concrete

arch bridge, and a continuous girder viaduct. *One lecture; two laboratory periods. Second semester. Three credits. Prerequisite:* C. E. 77 and C. E. 85. Engineering Building.

85. REINFORCED CONCRETE DESIGN. A study of the theory and practice of reinforced concrete design and applications to typical design problems, including design and stress analysis of various types of structural members; the design of details in reinforced concrete; computation of design notes and preparation of design drawings for beam, girder, and flat types of floor framing; and design of columns; preparation of schedules for reinforced concrete building construction. *Two lecture and two laboratory periods. Four credits. First semester. Prerequisite:* C. E. 76. Engineering Building.

87. ENGINEERING CONTRACTS AND SPECIFICATIONS. The fundamental law of contracts as it applies to engineering, together with the essentials of correct specifications and the interpretation of the technical terms commonly found therein. A great part of the material covered is presented especially for engineering students in the form of interesting, representative cases. A short period is devoted to employment, ethics and other engineering relations. *Prerequisite:* Junior standing. *First semester. Three credits.*

89. FLUID MECHANICS LABORATORY. Laboratory practice and technique to enable the student to visualize the fundamental principles of the mechanics of fluids and their application to practical engineering problems. Consultation periods with a person skilled in the correct use of English and the correct form of reports will be arranged. *Prerequisites:* Completion of, or enrollment in, C. E. 91 or C. E. 93. *One or two laboratory periods. One or two credits. First semester.* Engineering Building.

91. ELEMENTARY FLUID MECHANICS. The fundamental principles of the mechanics of fluids and their application to practical engineering problems. The study includes: physical properties, fluid statics, kinematics and dynamics of fluid flow, friction, flow through pipes, flow in open channels, hydraulic turbines, centrifugal pumps, etc. *Prerequisite:* Mathematics 55. *Three lectures. Three credits. First semester.* Engineering Building.

93. ELEMENTARY FLUID MECHANICS. This course covers the same material as C. E. 90, but has in addition one computing period per week which is devoted to the solution of supplementary problems to augment the student's skill in practical applications. *Prerequisite:* Mathematics 55. *Three lectures and one computing period. First semester. Four credits.* Engineering Building.

94. IRRIGATION ENGINEERING. A study is made of the collection, storage and distribution of water for irrigation, with special reference to the structures involved. *Prerequisite:* C. E. 91 and 93. *Three lectures. Three credits. Second semester.* Engineering Building. Bixby.

96. SANITARY ENGINEERING. A combination course dealing with public water supplies and the sewerage and drainage of towns. Especial attention is given to methods of sewage disposal and to the purification of water. *Prerequisite:* C. E. 93. *Three lectures. Three credits. Second semester.* Electrical Building. Bixby.

97. HYDROLOGY (A). The fundamental principles of hydrology and its related problems of climatology, stream flow, and run-off, underground water, water rights, etc., from the standpoint of western conditions. Practical field and office problems. *Prerequisite:* Junior standing. *Three lectures. Three credits. First semester.* Engineering Building.

98. HYDROLOGY (B). Conduit distribution systems, pumps, water supply, and purification, storage reservoirs, snow surveying, flood control, etc. Practical field and office problems. *Prerequisite:* Junior standing. C. E. 97 is not a prerequisite to this course. *Three lectures. Three credits. Second semester.* Engineering Building.

99. ENGINEERING PROBLEMS. This course consists of the working of assigned problems, the solution of which requires the application of various phases of engineering practice. A complete report of the work done on each problem, including all necessary drawings, costs, estimates, and conclusions, must be furnished to the department. This course is intended as an optional substitute for a thesis. *Second semester. Two credits.* Engineering Building.

100. THESIS. Thesis on an approved subject in which the student is especially interested. *Second semester. Two credits.* Engineering Building.

110. HYDRAULICS OF OPEN CHANNELS. The hydraulics of uniform and nonuniform flow, together with applications of latest available research to open channel problems. Such topics are treated as sub- and super-critical flow, hydraulic jump, surges and wave phenomena, backwater and dropdown curves, delivery of canals, etc. *Prerequisite:* Elementary fluid mechanics, C. E. 93. *Second semester. Two or three credits.* Engineering Building.

111. ADVANCED HYDRAULICS. Dimensional analysis, model similitude, water hammer, cavitation, wave and surge motion, use of flow net, turbulence, resistance of submerged bodies, etc., depending upon the trend of interests of those enrolled. *Prerequisite:* C. E. 90. *First semester. Two or three credits.* Engineering Building.

112. HYDRAULIC MACHINERY. The theory, construction, installation, operation, and characteristics of hydraulic turbines, centrifugal pumps, and other hydraulic machinery. Special emphasis is placed upon their proper selection to meet specified conditions. Actual field tests will usually be made. *Prerequisite:* C. E. 93. *Two or three credits. Second semester.* Engineering Building.

113–114. ADVANCED WORK IN HYDRAULIC ENGINEERING. Special problems in hydraulics or related fields will be arranged to meet the needs of students wishing to do advanced work in this field. *Prerequisite:* C. E. 93. *Either semester. Credits to be arranged.* Engineering Building.

121. ADVANCED STRUCTURAL DESIGN. A study of theory and practice of design and stress analysis in advanced types of structures, in both concrete and structural steel, including a study of current methods of analysis of statically indeterminate structures. The following are among the subjects considered: Two-hinged rigid frames, subways and large culverts, continuous beams and continuous girder viaducts, a study of influence diagrams as applied to statically indeterminate

structures, effect of variable section in structural members, effect of foundation conditions and abutment rotations and displacements, and a discussion of classical methods of statically indeterminate structural analysis. *Prerequisite:* C. E. 78 and 85. *Two or three credits. First semester.* Engineering Building.

122. ADVANCED STRUCTURAL DESIGN. A continuation of C. E. 121. The following additional subjects are considered: Multiple rectangular frames, including wind stresses in tall buildings, secondary stresses in bridge trusses, continuous arches on elastic piers, continuous and long span bridges, movable bridges, and suspension bridges, a study of rigidity of various bridge types. *Two or three lecture periods. Second semester. Prerequisite:* C. E. 121. *Two or three credits.* Engineering Building.

199–200. GRADUATE RESEARCH OR THESIS. Original theoretical and experimental investigation, designed to give training in methods of research, to serve as theses, and to yield contributions to scientific knowledge. Open only to properly qualified graduate students with the approval of the staff member concerned. *Both semesters. Credits to be arranged.* Engineering Building.

Dairy Husbandry

(See Agriculture.)

ECONOMICS, BUSINESS, AND SOCIOLOGY

PROFESSOR INWOOD, HEAD OF DEPARTMENT
PROFESSOR WEBSTER
ASSOCIATE PROFESSOR SUTHERLAND
ASSISTANT PROFESSORS PLUMLEY, CHADWICK

Requirements for the degree BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION: See course of study outlined on page 132.

Requirements for a minor in economics: Economics 1–2 (6 credits); 12 additional credits in economics or business courses, not less than 6 of which shall be in courses numbered 50 or above.

Requirements for a major in economics: Economics 1–2 (6 credits), economics 91–92 (6 credits), and 9 additional credits in economics or business courses, which shall be in courses numbered 50 or above.

Requirements for a minor in sociology: Economics 1–2, (6 credits), Sociology 1 (3 credits), and nine additional credits in sociology, not less than six of which shall be in courses numbered 50 or above.

Requirements for a major in sociology: Economics 1–2 (6 credits), sociology 1 (3 credits), sociology 71 and 90 (6 credits) and 12 additional credits which shall be in sociology courses numbered 50 or above.

The following courses are recommended but not required for minors and majors in economics: Philosophy 7–8, psychology 5, 51, 61, 64, mathematics 18–20, French and German.

Requirements for a major in commercial education (for students qualifying for the high school teachers certificate in commercial subjects): Economics 1–2 (6 credits), business administration 43–44 (6 credits), business administration 47 (3 credits), business administration 51 (3 credits), business administration 53 (2 credits), and at least seven additional credits selected from the following: Economics 53, 58, and business administration 55–56, 68.

Economics

1. PRINCIPLES OF ECONOMICS. An introduction to economic theory. Emphasis will also be given to the economic causes of war and to the

financial, labor and industrial problems arising therefrom. *Prerequisite:* Sophomore standing. *Either semester. Three credits.* Education Building. The Staff.

2. PRINCIPLES OF ECONOMICS. A continuation of 1. *Either semester. Three credits.* Education Building. The Staff.

7. ECONOMIC GEOGRAPHY. Resources and industries of the world with special reference to their bearing on geographic specialization and international trade. *First semester. Two credits.* Open to freshmen. Education Building. Inwood.

10. ECONOMIC HISTORY OF THE UNITED STATES. Introductory historical treatment of the economic development of America. *Second semester. Two credits.* Open to freshmen. Education Building. Inwood.

17. CONSUMPTION ECONOMICS. A study of the consumer from the standpoint of marketing and income distribution. *Prerequisite:* Economics 1. *Second semester. Two credits.* Education Building. Plumley.

51. PUBLIC FINANCE. Public expenditures and sources of public revenue. *Prerequisite:* Economics 1–2. *First semester. Three credits.* Education Building. Sutherland.

53. MONEY AND BANKING. *Prerequisite:* Economics 1–2. *First semester. Three credits.* Education Building. Plumley.

54. PUBLIC UTILITIES. The development, organization, characteristics and legal status of public service enterprises. *Prerequisite:* Economics 1–2. *Second semester. Three credits.* Education Building. Sutherland.

56. INSURANCE. *Prerequisite:* Economics 1–2, Business 41. *Second semester. Two credits.* Education Building. Plumley. (Offered in even-numbered years.)

58. INTERNATIONAL TRADE. Theory of international trade. Tariffs and tariff history. *Prerequisite:* Economics 1–2. *Second semester. Two credits.* Education Building. Plumley.

61. STATISTICAL METHODS. Elementary statistical methods as used in business and in the social sciences. *First semester. Two lectures and one laboratory period per week. Three credits.* Education Building. Plumley.

62. TRANSPORTATION. The growth and development of transportation in the United States with emphasis on bases of rate structures and regulation. *Prerequisite:* Economics 1–2, Business 41. *Second semester. Two credits.* Education Building. Plumley. (Offered in odd-numbered years.)

63. ECONOMIC HISTORY OF EUROPE. The economic background of national and international development during ancient, medieval and modern times. *First semester. Two credits.* Education Building. Inwood.

64. LABOR ECONOMICS. A study of the wage earner, his compensation and problems of insecurity together with industrial and governmental solutions. *Prerequisite:* Economics 1–2. *Second semester. Three credits.* Education Building. Plumley.

73. BUSINESS CYCLES. *Prerequisite:* Economics 1–2. *First semester. Three credits.* Education Building. Plumley.

91. HISTORY OF ECONOMIC THEORY. *Prerequisite:* Economics 1–2. *First semester. Three credits.* Education Building. Sutherland.

92. ADVANCED ECONOMIC THEORY. *Prerequisite:* Economics 1–2. *Second semester. Three credits.* Education Building. Sutherland.

Business

11–12. STENOGRAPHY. Gregg Shorthand. Students must also take Business 21–22, unless they have had equivalent training. Students who have had one year of high school shorthand may not take Business 11 for credit. *Both semesters. Two credits each semester.* Education Building.

21–22. TYPEWRITING. Touch Typing. Rhythm drills; dictation exercises; arrangement of business letters. Students with one year of high school typing may not take Business 21 for credit. Credit allowed only upon attainment of prescribed production requirements. *Both semesters. Two credits each semester.* Fee $5 per semester. Education Building.

41. FUNDAMENTALS OF BUSINESS ORGANIZATION. An introductory survey of problems and methods of business administration. *Prerequisite:* Sophomore standing. *First semester. Three credits.* Education Building. Inwood.

43–44. ELEMENTARY ACCOUNTING. Accounting theory and practice. Problems and practice sets. *Prerequisite:* Sophomore standing. *Two lectures and one laboratory period per week. Both semesters. Three credits each semester.* Education Building. Chadwick.

47. BUSINESS LAW. A comprehensive study of the forms and procedure with respect to law of contracts, negotiable instruments and general commercial practice. *Second semester. Three credits.* Education Building. Plumley.

51. ADMINISTRATION OF BUSINESS. Various types of business organization and the handling of administrative problems arising therein. *For commercial education majors only. First semester. Three credits.* Education Building. Inwood.

53. OFFICE PRACTICE. A study of general clerical and office practice, includes a study of filing, general business forms, procedures governing the handling of mail, duplicating machines, general business machines. *First semester. Two credits.* Education Building. Inwood. (Offered in even-numbered years.)

55–56. ADVANCED ACCOUNTING. Advanced theory of accounts and its application. Selected problems and readings. *Prerequisite:* Business 43–44. *Both semesters. Three credits each semester.* Education Building. Chadwick.

65. ADMINISTRATION OF FINANCE. Principles and problems of financing business enterprises. *Prerequisite:* Business 41. *First semester. Three credits.* Education Building. Inwood.

66. INDUSTRIAL MANAGEMENT. Internal organization and control of different forms of business enterprise. *Prerequisite:* Business 41. *Second semester. Three credits.* Education Building. Inwood.

67. PERSONNEL MANAGEMENT. Selection, placement, and efficiency of personnel. Employer-employee relationships. *Prerequisite:* Business 41. *First semester. Two credits.* Education Building. Inwood.

68. MARKETING. A study of distribution methods and costs together with advertising and sales promotion methods. *Prerequisite:* Economics 1–2. *Second semester. Three credits.* Education Building. Inwood.

70. INVESTMENTS. Selection, appraisal, and shifting of capital investments. *Prerequisite:* Business 41. *Second semester. Two credits.* Education Building. Inwood.

74. ADVANCED BUSINESS LAW. An advanced course in business law for those who are specializing in a preparation for business. *Prerequisite:* Business 47. *Second semester. Three credits.* Education Building.

85. COST ACCOUNTING. A comprehensive study of all elements of manufacturing cost accounting. *Prerequisite:* Business 43–44. *First semester. Three credits.* Education Building. Chadwick.

86. FEDERAL TAX ACCOUNTING. Study of the history of the Federal income tax; Federal revenue Acts and their interpretation. Actual preparation of individual, partnership and corporation income tax returns, important Treasury Department decisions on income tax problems. *Prerequisite:* Business 43–44. *Second semester. Two credits.* Education Building. Chadwick.

92. AUDITING. The principles and practice of auditing. Practice problems. *Prerequisite:* Business 43–44. *Second semester. Three credits.* Education Building. Chadwick.

Sociology

1. PRINCIPLES OF SOCIOLOGY. The fundamentals of social processes and evolution. *Prerequisite:* Sophomore standing. *First semester. Three credits.* Education Building. Webster.

2. SOCIAL PROBLEMS. The major problems of modern social life and their remedies. *Prerequisite:* Sophomore standing. *Second semester. Three credits.* Education Building. Webster.

50. RURAL SOCIOLOGY. Rural life and problems with special reference to Nevada conditions. *Second semester. Two credits.* Education Building. Webster.

57. CULTURAL ANTHROPOLOGY. Primitive cultures as a basis for modern social organization. *First semester. Two credits.* Education Building. Webster.

70. SOCIAL CONTROL. The social processes providing control of behavior. *Second semester. Two credits.* Education Building. Webster.

71. SOCIAL ORGANIZATION. The structure, forms, functions and development of major social groups and institutions. *First semester. Three credits.* Education Building. Webster.

79. RACE PROBLEMS. The social significance of race and racial minorities. *First semester. Two credits.* Education Building. Webster.

80. THE FAMILY. Forms and functions of the family as a social

institution. Emphasis on present trends. *Second semester. Two credits.* Webster.

81. POVERTY AND DEPENDENCY. Causes of economic inefficiency. Methods used in relief. *Prerequisite:* Economics 1–2. *First semester. Two credits.* Education Building. Webster. (Offered in odd-numbered years.)

83. POPULATION. The social and economic significance of numbers and quality of population. Migration. *First semester. Two credits.* Education Building. Webster. (Offered in even-numbered years.)

84. SOCIAL SECURITY. Theory and development of modern provisions for economic security. Emphasis upon old age and unemployment in the United States. *Prerequisite:* Economics 1–2. *Second semester. Two credits.* Education Building. Webster. (Offered in odd-numbered years.)

86. METHODS IN SOCIAL WORK. Principles and methods in applied sociology. *Prerequisite:* Sociology 1 and 2. *Second semester. Two credits.* Education Building. Webster. (Offered in even-numbered years.)

90. ADVANCED SOCIAL THEORY. Emphasis upon modern schools of social thought. *Prerequisite:* Sociology 1. *Second semester. Three credits.* Education Building. Webster.

EDUCATION

PROFESSOR TRANER, HEAD OF DEPARTMENT
PROFESSOR BROWN
ASSOCIATE PROFESSOR RUEBSAM
ASSISTANT PROFESSORS PUFFINBARGER,[1] CHAPMAN
MISS KLAUS

It is recommended that students present a major and a minor in departments other than Education to meet the Arts and Science requirements; students may submit Education as a second major or minor. Only in special cases should Education be used as the only major or minor.

Requirements for a minor in Education: 18 credits in Education, of which at least 6 credits must be in courses numbered 50 or above.

Requirements for a major in Education: 27 credits in Education, approved by the Dean, of which at least 12 must be in courses numbered 50 or above.

Kindergarten-Primary Education

11. GAMES FOR THE PRE-SCHOOL CHILD AND FOR THE FIRST THREE GRADES. Recommended for those interested in kindergarten and primary grades. *Either semester. One credit.* Sameth.

17. KINDERGARTEN - PRIMARY EDUCATION. This course deals with kindergarten-primary education as a unified experience, emphasizing the history, theory and curriculum of the kindergarten and primary grades. *First semester. Two credits.* Ruebsam.

18. THE KINDERGARTEN-PRIMARY CURRICULUM. This course includes emphasis upon the various phases of the kindergarten-primary course of study (art, music, games, dances, rhythms, nature study, etc.). *Second semester. Two credits.* Ruebsam.

19. LITERATURE IN THE KINDERGARTEN-PRIMARY GRADES. Children's

[1]Absent on leave.

stories as a background to literature will be considered in the course, with practical guidance in selection and teaching. The relation of literature to the activities program will be shown through built-up reading lessons, dramatizations, and simple puppetry. The artistic presentation of poetry as a joyous experience will be included. (Given in alternate years beginning 1941.) *First semester. Two credits.* Ruebsam.

25A. OBSERVATION OF TEACHING. Observation and discussion of specific classroom work in the kindergarten-primary grades as a preparation for practice teaching. *First semester. One credit.* Ruebsam.

28–29. SUPERVISED TEACHING IN KINDERGARTEN-PRIMARY GRADES. Opportunity for teaching open to normal school students and to four-year students desiring to qualify for the elementary teaching certificate. Students enrolled must have had or be taking education 34. Students teach two subjects, one hour daily. *Either semester. Five credits.* Ruebsam.

34. THE TEACHING OF READING AND ENGLISH. Principles underlying the selection and presentation of subject matter for the primary grades. This includes beginning reading, activities, seat work, and tests in reading. Picture studies, stories, dramatization, sentence structure, compositions, and poetry comprise the work in language. *Second semester. Three credits.* Ruebsam.

41. CONSTRUCTIVE ACTIVITIES FOR KINDERGARTEN-PRIMARY GRADES. This course is devoted to a consideration of the materials by means of which the child organizes and expresses his ideas and establishes desirable attitudes and habits. (Given in alternate years beginning in 1940.) *First semester. Two credits.* Fee $1. Ruebsam.

53. EARLY GROWTH AND DEVELOPMENT OF THE SCHOOL CHILD. A study of the factors affecting the physical, motor, intellectual, social, and emotional development of the child through the primary grades of school. (Given in alternate years beginning in 1942.) *First semester. Two credits.* Ruebsam.

54. AUXILIARY SUBJECTS IN THE KINDERGARTEN-PRIMARY CURRICULUM. An intensive study of the contribution of such subjects as arts and crafts, music, games and rhythms, to the education of the kindergarten and primary child. If taken for graduate credit an individual problem pertaining to the philosophy of kindergarten-primary education will be assigned. (Given in alternate years beginning in 1942.) *Second semester. Two credits.* Ruebsam.

55. CONTENT MATERIAL IN KINDERGARTEN-PRIMARY GRADES. This course is an advanced study of recent theory and practice covering objectives, methods, and desirable experiences to be afforded children in the kindergarten-primary grades in the fields of arithmetic and social science. (Given in alternate years beginning in 1941.) *Second semester. Two credits.* Ruebsam.

General Elementary

1. TEACHING IN THE ELEMENTARY SCHOOL. An introduction to teaching as a profession, what it requires of the teacher, what it has to offer, and what problems of classroom teaching and management it presents. *First semester. Two credits.* Ruebsam.

3. MODERN TRENDS IN ART EDUCATION. Techniques of handling art media—finger paint, clay, easel paint, chalk, water color, etc. Planned especially for elementary school teachers who wish to use new methods in art teaching. *Either semester. Two credits.* Fee $1.50. Joslin.

21. TEACHING OF MUSIC. The aims and principles of music teaching in the kindergarten, elementary and upper grades. Group technique, song leading, interpretation, rhythmic activities. Care of the voice through various periods of development. Remedial exercises for improving pitch defects and tone quality. Music materials, rote songs, unison and descant songs, part songs, records, radio, and methods of approach for the listening period. *First semester. Two credits.* Post.

24. STATE SCHOOL ORGANIZATION AND SCHOOL LAW. The principles of good State school organization and how Nevada conforms to those principles as revealed by a careful study of the school code of the State. This course is designed to meet *all* certification requirements for school law. *First semester. Two credits.* Brown.

25B. OBSERVATION OF TEACHING. Observation and discussion of specific classroom work in the intermediate grades, as a preparation for practice teaching. *First semester. One credit.*

30. TEACHING OF THE SOCIAL STUDIES. A study of means by which child participation in the learning of the social studies may be attained. Emphasis will be placed upon such topics as directed study, the problem-discussion method, the unit and project method, and source material. The teaching of the course is based upon the study of fourteen problems. *Second semester. Two credits.* Brown.

31. THE TEACHING OF ARITHMETIC. Particular emphasis will be given to diagnostic and remedial treatment of pupil difficulties. Considerable time will be devoted to studies pertaining to content, pupil readiness to learn arithmetic and the principal objectives of the study. *First semester. Two credits.* Brown.

35. THE TEACHING OF ENGLISH. A study of the principles, materials, and methods involved in the teaching of the language subjects in the intermediate grades. *Second semester. Two credits.* Traner.

37. THE TEACHING OF GEOGRAPHY. A consideration of modern trends in the study of geography in the elementary school, the principles governing the successful teaching of the subject and the selection and organization of subject matter with special reference to the state-adopted texts. *First semester. Three credits.* Traner.

43–44. SUPERVISED TEACHING IN THE INTERMEDIATE GRADES. Opportunity for teaching, open to normal school students and to four-year students desiring to qualify for the elementary teaching certificate. Students enrolled must have had or be taking methods courses. Students teach two subjects, one hour daily. *Either semester. Five credits.* Traner.

46. NONINSTRUCTIONAL PROBLEMS OF THE CLASSROOM TEACHER. A study of those responsibilities and requirements which the elementary teacher must meet outside of class instruction. The course includes a consideration of such aspects of school management and organization

as reports, records, daily program, types of school furniture, equipment and supplies, school lunches, and contacts with parents and community. *Second semester. Two credits.* Brown.

57. HISTORY OF ELEMENTARY EDUCATION. This course will consider the evolution of elementary school practice and theory from the time of the early Greeks and Romans to the present. Its principal objectives will be (1) to give the teacher in service functional knowledge of educational trends, (2) to enlarge the perspective of the teacher, and (3) to aid the teacher to evaluate her status in everyday life. (Given in alternate years beginning in 1941.) *First semester. Two credits.* Brown.

68. EDUCATION TESTS AND MEASUREMENTS. This course will consider the most serviceable tests and scales for measuring the elementary subjects. It is designed to assist teachers in judging and improving their instruction. The course will involve giving the tests, scoring, and interpreting the results. (Given in alternate years beginning in 1940.) *First semester. Two credits.* Brown.

73–74. SUPERVISED TEACHING IN SEVENTH AND EIGHTH GRADES. This course provides opportunity for teaching specific subjects in the seventh and eighth grades of the junior high school. Credits obtained in this course may be applied toward elementary and junior high school teaching certificates. Students enrolled will teach two different classes on Tuesday and on Thursday. *Prerequisite:* Method courses in the subjects to be taught. *Either semester. Four credits.* Brown.

Secondary Education

56A. GROUP LEADERSHIP FOR WOMEN. A study of the development, purposes, and organization of Girl Scout, Girl Reserve and the Camp Fire groups. Whenever possible, national leaders from each group will contribute to the leadership training. Program planning, activities, crafts, etc., adaptable to the three programs are included. Each student will assist as a group leader. *Second semester. Two credits. One lecture, one laboratory.*

56B. SCOUTCRAFT FOR MEN. This course will deal with the theory and practice of scoutcraft as presented by Boy Scouts of America. The course includes not only a study of the nature of the boy and a review of aims and methods of education and their application to the program of scouting, but gives a complete picture of types of leisure-time programs being offered boys in America today. *Second semester. One credit.*

58. HISTORY OF SECONDARY EDUCATION. This course will involve a study of educational trends from the time of the early Greeks and Romans to the present. The principal objective of the work will be to throw light on present day secondary school problems by showing the evolution of secondary school curricula, methods of instruction, and objectives. (Given in alternate years beginning in 1941.) *Second semester. Two credits.* Brown.

60. PROBLEMS OF SECONDARY EDUCATION. A consideration of such fundamental problems of secondary education as the essential characteristics of secondary education as compared with those of elementary

and higher education; the place and extent of secondary education in our school system; the purpose of education in a democracy; and the organization and content of a curriculum based on that purpose. Open to juniors only. *First semester. Two credits.* Traner.

64. ADMINISTRATION AND ORGANIZATION OF HIGH SCHOOL ATHLETICS. A course covering high school competition in general, methods of organizing athletic associations and administration of same. *Second semester. Three periods per week. Two credits.* Martie.

65. HIGH SCHOOL MUSIC. Conducting. Instrumental technique. Practical consideration of instrumentation, transposing instruments, and teaching material of all grades. Choral technique. Voice ranges of boys and girls, the changing voice, remedial exercises. Materials for part singing, girls' and boys' glee clubs, and mixed chorus. High school music curricula. Technical and appreciatory objectives. Active participation in orchestra, glee club or band required and applicant must be a junior or senior with a minor in music or its equivalent. *Second semester. Two credits.* Post.

66. SUBJECT MATTER AND METHODS. A study of the most suitable subject matter for the different high school courses and of the methods of teaching specific subjects. General class discussion and special study and reports and observation.

Section A, foreign languages. *First semester. One credit.* Traner.

Section B, English. *Second semester. Two credits.* Traner.

Section C, mathematics. (Given in alternate years beginning in 1942.) *First semester. Two credits.* Wood.

Section D, science. (Given in alternate years beginning in 1941.) *First semester. Two credits.* Brown.

Section E, social subjects. *Second semester. Two credits.* Brown.

Section F. *The Teaching of Secretarial Subjects.* This course presents a study of the curriculum, methods of teaching, objectives, standards, grading, etc., in the subjects of typewriting, shorthand, and office practice. *Prerequisites:* A knowledge of the theory of shorthand and typewriting. Students will be given an 80-words-per-minute transcription test in shorthand, and a test in typewriting to determine speed and accuracy. (Given in alternate years beginning in 1941.) *First semester. Two credits.* Klaus.

Section G. *The Teaching of Bookkeeping, General Business Training, and Allied Subjects.* This course presents a study of the curriculum, methods of teaching, objectives, standards, grading, etc., in the teaching of bookkeeping, general clerical practice, consumer education, etc. (Given in alternate years beginning in 1942.) *First semester. Two credits.* Klaus.

71. GENERAL METHODS OF HIGH SCHOOL INSTRUCTION. A course dealing with the various methods of presenting subject matter and such topics as the assignments, school discipline, reviews, motor skills, testing the results of teaching, and the teacher's personality will be given detailed consideration. To be taken in the senior year. *First semester. Three credits.* Brown.

75–76. SUPERVISED TEACHING IN THE HIGH SCHOOL. Teaching in grades nine to twelve in major or minor subject of the student.

Required of all candidates for the high school teachers diploma. Students enrolled must reserve ample time either in the forenoon or afternoon to make assignments possible. *Prerequisite:* Method courses in subject to be taught. Students teach one class on Tuesday and Thursday. *Either semester. Two credits.* Brown for academic subjects; Chapman for home economics.

82. NONINSTRUCTIONAL RESPONSIBILITIES OF THE HIGH SCHOOL TEACHER. A study of those responsibilities and requirements which the high school teacher must meet outside of class instruction. The course includes a consideration of the teacher's relations to the profession, to the school authorities and to the State and community. For seniors only. *Second semester. Two credits.* Traner.

85. METHODS OF TEACHING FARM MECHANICS. A course designed for students preparing to meet the qualifications for agriculture and farm mechanics instructors in high schools. The organization and administration of a farm mechanics course, including objectives, course content, lesson planning, and teaching methods. *First semester. Two credits.* Titus.

86. PROBLEMS IN AGRICULTURAL EDUCATION. This course is a study of the most important problems that an agriculture teacher must meet: Selecting the subject matter for high school courses in agriculture and for farmer's short courses; preparing plans for teaching this subject matter; and making contact with the adult farmer. Open to juniors and seniors in the College of Agriculture to meet in part the requirements for the vocational agricultural certificate. *Second semester. Two credits.*

87. METHODS IN TEACHING VOCATIONAL AGRICULTURE. This course involves principles and techniques in course construction for all-day, young farmer and adult farmer classes in vocational agriculture; preparation of teaching plans and job analysis; methods of conducting supervised farm training, including selection of the long-time program, aims and objectives, budgeting, preparation of job plans, keeping farm records and accounts, enterprise analysis and teachers responsibility in supervision. Open to seniors who are preparing to meet the requirements for a high school vocational teaching certificate. *First semester. Three credits.*

88. PROBLEMS IN HOMEMAKING EDUCATION. A study of the curricula, methods of teaching, and making home contacts; use of texts, references and selection of equipment, and determination of aims and goals to be reached in public school home-making courses. Discussion of courses of study to meet various needs. Open to juniors and seniors in the School of Home Economics to meet in part the requirements for the vocational home economics certificate. *Second semester. Two credits.* Chapman.

89. METHODS IN TEACHING HOMEMAKING. Analysis of objectives, content and experiences for a comprehensive program of education for home living in secondary schools to include the following: Provision for food for the family; selection, care and construction of clothing; care and guidance of children; selection, furnishing and care of house; selection, and use of home equipment; maintenance of health; home care of the sick; consumer-buying; management of all materials and

human resources available to the home; maintenance of satisfactory family relationships; application of the arts and sciences to the home. *First semester. Three credits.* Chapman.

90. METHODS OF HOMEMAKING EDUCATION FOR ADULTS. Designed for the homemaking teacher as a help in methods of organizing, selecting content, and promoting work in adult groups as a part of the teacher's community activities; observation and assisting with adult classes. Methods of working with adults in specially organized classes will also be considered. *Either semester. Three credits.* Chapman.

95. SUPERVISION AND INSTRUCTION IN JUNIOR HIGH SCHOOL GRADES. This course will consider the development, present status, and influence of the junior high school on educational perspectives and educational practices in the junior high school and in the corresponding grades of the traditional elementary school. The structural, social, civic, and economic-vocational foundations of the junior high school will be studied briefly. Attention will be given to the psychological foundation of the junior high school and its implications for supervision, for the instructional program, and for the guidance and socialization of pupils in upper elementary and junior high school grades. A major part of the course time will be given to the study of the instructional program of junior high school grades. (Given in alternate years beginning in 1940.) *Second semester. Two credits.* Brown.

108. SUPERVISION IN HOME ECONOMICS. Intended for supervisors of student teaching in home economics. Analysis of objectives, techniques, and experiences which promote student-teacher growth. Study of methods of teaching; establishing a philosophy of supervision; recognizing responsibilities of the teacher and the student teacher; understanding the inter-relationships of various people and departments concerned; evaluation of student teacher and her prospective success. *Second semester. Three credits.* Chapman.

Educational Psychology

6. ELEMENTARY EDUCATIONAL PSYCHOLOGY. A consideration of the applications of psychology to educational problems. *Prerequisite:* Psychology 5. *Second semester. Three credits.* Irwin or Wiederhold.

67. PSYCHOLOGY OF THE ELEMENTARY SCHOOL SUBJECTS. This course sets forth and interprets the scientific experiments and investigations that have been made relating to learning and teaching of the elementary branches. Emphasis is placed on the psychological problems of immediate concern to the teacher in the classroom. *Second semester. Two credits.* Puffinbarger.

69. THE EDUCATION OF RETARDED CHILDREN. Describes the characteristics and capacities of slow-learning children, their place in the school and community, and the procedures basic to planning and carrying out an adequate program of learning experience that satisfies the needs and capacities of such children at each stage of their development. *First semester. Two credits.* Puffinbarger.

70. THE EDUCATION OF SUPERIOR CHILDREN. Designed to acquaint public school teachers with the problems and methods involved in the adjustment and training of superior children, and with educational provisions for the mentally alert, but emotionally unstable, gifted child. *Second semester. Two credits.* Puffinbarger.

72. ADVANCED EDUCATIONAL PSYCHOLOGY. The nature and needs of the child, emphasizing mental and emotional development, nature of learning, conditions affecting learning, problems of transfer, problems of adjustment. *First semester. Two credits.* Puffinbarger.

Graduate Courses

101–102. INDEPENDENT STUDY FOR GRADUATE STUDENTS. The intensive study of some specific educational problem of particular interest to the student, involving an exhaustive survey of research and previous study, such original research and contribution as the problem and time permit, and a comprehensive written report of the study. Intended primarily for candidates for the Master's degree. *Two credits. Time to be arranged.* Members of the Staff.

201–202. GRADUATE THESIS. Preparation of the thesis for the Master's degree. Open only to candidates for the M. A. degree in Education. *Credits to be arranged.* Members of the staff.

ELECTRICAL ENGINEERING

PROFESSOR S. G. PALMER, HEAD OF SCHOOL
PROFESSOR SANDORF[1]
ASSOCIATE PROFESSOR HARRIS[1]

21. INTRODUCTORY ELECTRICAL ENGINEERING. An introduction to the study of electrical engineering which will include lectures, laboratory demonstrations, and class discussions concerning the applications of electricity in modern living. An elective course offered for engineering and nonengineering students. *First semester. One credit.* Electrical Building. Palmer.

24. ELEMENTS OF ELECTRICAL ENGINEERING. A beginning course in electrical engineering. A study of the laws and properties of electric and magnetic circuits, electrical meters and measurements, direct and alternating current machinery. The course will include lectures, recitations, problems and laboratory demonstrations. Course adapted to needs of civil engineers and other nonelectricals. *Second semester. Two credits.* Electrical Building. Palmer.

47. RURAL ELECTRIFICATION. A course intended particularly for students in the College of Agriculture, combining a study of the elementary principles of electrical circuits and machines with the application of these principles in the use of power and light on the farm. The course includes lectures, discussions, and laboratory demonstrations. *First semester. Two credits.* Electrical Building. Palmer.

51. DIRECT CURRENT MACHINERY. The fundamental principles, theory, characteristics, construction and operation of direct current machines and circuits, supplemented by electrical problems. *Prerequisites:* Physics 4, mathematics 25 and 26. *First semester. Three credits.* Palmer.

52. ALTERNATING CURRENT MACHINERY. A study of alternating current motors, generators, transformers, converters, transmission lines, and auxiliary apparatus. The time is largely taken up with mathematical problems involved in the design and operation of such

[1]Absent on leave.

equipment. *Prerequisite:* E. E. 51. *Second semester. Three credits.* Palmer.

53. ALTERNATING CURRENT MACHINERY. ADVANCED COURSE. A continuation of the preceding course, taking up more advanced problems in the theory and characteristics of electrical circuits and machinery. *Prerequisite:* E. E. 52. *First semester. Three credits.*

54. ELECTRICAL DESIGN. A continuation of electrical engineering 53, including a study of the fundamental principles underlying the design of electrical machinery. *Prerequisite:* Electrical engineering 51, 52, 53. *Second semester. Three credits.*

56. ALTERNATING CURRENT CIRCUITS. A study of the fundamental laws and properties of alternating current circuits and metering equipment. Solution of problems involving vectors and complex quantities. *Prerequisite:* E. E. 51. *Second semester. Two credits.*

57. ELECTRICITY AND MAGNETISM. A course for junior electrical engineering students, concerning those principles which pertain primarily to electrical machinery and circuits. The course is intended to accompany E. E. 51, with the same prerequisites as for that course. *First semester. Two credits.*

61–62. ELECTRICAL ENGINEERING LABORATORY. Instruction in the use and care of electrical instruments and apparatus. Elementary tests on direct and alternating current machinery. *Prerequisite:* Physics 3, 4, 5, and 6. Students who have not completed the physics requirements may register in this course upon recommendation of the physics department. Must be preceded or accompanied by E. E. 51 and either 52 or 72. *Both semesters. Lecture, one period; laboratory, one period. Two credits each semester.* Fee $2.50 per semester.

63–64. ELECTRICAL ENGINEERING LABORATORY. A continuation of the preceding laboratory courses. Tests are made on transformers, induction and synchronous motors, alternating current generators, converters, switchboard equipment and other apparatus commonly found in power generation, distribution and use. *Prerequisites:* E. E. 51–52, 61–62. *Both semesters. Four credits each semester.* Fee $2.50 per semester. Palmer.

65. ELECTRICAL ILLUMINATION. A study of the principles of electric lighting and illumination and the practical application of these principles in modern lighting. An elective course for both engineering and nonengineering students. *First semester. Two credits.* Palmer.

66. ELECTRIC POWER EQUIPMENT. A study of generating equipment, switchboards and switching equipment, transformers, relays, and other protective devices as applied to modern generating and substations. Elective for juniors and seniors. *Second semester. Two credits.* Palmer.

67. COMMUNICATION ENGINEERING. A study of fundamental principles in the field of communication including the mathematical theory and application of telephone transmitters and receivers, coupled circuits, transmission lines, and vacuum tube circuits. *Prerequisites:* Electrical engineering 52, mathematics 25 and 26, physics 3 and 4. *First semester. Three credits. Two lecture periods and one laboratory.* Fee $2.50.

68. COMMUNICATION ENGINEERING. A continuation of electrical engineering 67, including a study of rectifying systems, filters, radio and carrier systems of modulation and detection, antennas, and wave propagation. *Second semester. Three credits.* Fee $2.50.

75. ELECTRICITY IN MINING. A study of the theory and application of electrical machinery commonly used in mining and associated fields. *Prerequisite:* Senior standing. *Two lecture periods and one laboratory. Three credits. Second semester.* Fee $2.50. Palmer.

76–77. ELECTRICAL ENGINEERING LABORATORY. The course is intended to offer an opportunity to supplement the required laboratory courses of experiments with further detailed study of laboratory problems in electrical testing. Projects may be assigned in any branch of electrical engineering. Students may register in the course who have completed in a satisfactory manner such other electrical engineering courses as may have a direct bearing on the work to be undertaken. *One or two credits each semester.* Palmer. A laboratory fee of $2.50 per credit may be required, depending upon the work undertaken.

78–79. ELECTRICAL LABORATORY APPARATUS. In this course the student undertakes the design and construction of one or more pieces of permanent laboratory equipment. Satisfactory evidence must be presented of ability to undertake the work agreed upon. *One or two credits each semester.* Palmer.

80. THESIS. Original design or investigation covering a project to be selected with the approval of the instructor. An elective course for seniors whose records indicate ability to successfully complete such a project. *Second semester. One to three credits.* Palmer.

83–84. SEMINAR. Limited to students who have attained junior standing. Presentation of abstracts and discussion of technical articles of interest appearing in current electrical engineering journals. *One credit each semester.* Electrical Building. Palmer.

85–86. COMMUNICATIONS LABORATORY. The course consists of assembling and testing circuits and apparatus used in electrical communications. Prerequisites required will depend upon the student's ability and practical experience. *One to two credits each semester.* Fee $2.50 per credit.

ENGLISH LANGUAGE AND LITERATURE

PROFESSOR GRIFFIN
ASSOCIATE PROFESSORS HARWOOD,[1] LAIRD,[1] HUME
ASSISTANT PROFESSORS MILLER,[1] HUGHES
MR. BUTTERWORTH[1]
MRS. SPENCER

Requirements for a minor in English: English 1–2 (6 credits), English 44–45 (6 credits), and 6 additional credits in the department in courses numbered 50 or above.

Requirements for a major in English: English 1–2 (6 credits), English 44–45 (6 credits), and 15 additional credits in the department, at least 12 of which shall be in courses numbered 50 or above.

Literature, Language, and Composition

1–2. COMPOSITION AND RHETORIC. The study of English as a means

[1]Absent on leave.

of self-expression, with special attention to the writing of exposition, description, and narration. *Both semesters. Three credits each semester.* Staff.

NOTE—Students who receive a grade of A in English 1 may substitute for English 2 one of the courses in the department numbered to 50 of a credit value of not less than two units. In no case may a course be used to meet both first-year and second-year requirements.

Any student who receives a failure in a course which he has substituted for English 2 will be required to register for English 2 the following semester.

A student who is habitually delinquent in the use of English in connection with any course in the University curriculum may be remanded to the Department of English to take without credit such further work in composition as the head of the department thinks advisable.

3–4. ADVANCED COMPOSITION. Extensive practice in various types of writing based upon the reading and discussion of contemporary prose. *Both semesters. Two credits each semester.* Hall of English.

41–42. APPRECIATION OF LITERATURE. A study of the more important types of contemporary literature. *Both semesters. Two credits each semester.* Hume.

44–45. INTRODUCTION TO LITERARY STUDY. A course in the critical examination of creative work, with a view to suggesting the types and forms of expression and the basic methods of literary study. It is required of majors and minors, but a more advanced course may be substituted at the discretion of the head of the department. *Both semesters. Three credits each semester.* Laird and Hume.

NOTE—English 44–45 are prerequisite for all courses in literature numbered 50 or above.

51. CURRENT ENGLISH. A study of modern American speech with a view to elucidating the nature of language and the principles of its change and growth. *Two credits. First semester.* Hall of English. Laird.

52. HISTORY OF THE LANGUAGE. A survey of the origins of the English language and of its growth to modern times. *Two credits. Second semester.* Hall of English. Laird.

NOTE—English 44–45, prerequisite for courses in literature, are not prerequisite for English 51–52.

59–60. NARRATIVE TECHNIQUE. Special practice in the writing of artistic narrative, including the short story. For advanced students only. *Both semesters. Two credits each semester.* Hall of English. Hume.

67. DESCRIPTIVE GRAMMAR. A description of Modern English. This course is planned to furnish a foundation in present English sentence structure and is designed primarily for prospective teachers. *One semester. Three credits.* Hall of English.

68–69. THE ENGLISH NOVEL. A study of the development of the novel in England in the nineteenth and twentieth centuries. *Both semesters. Three credits each semester.* Hume.

70–71. AMERICAN LITERATURE. The development of American literature, exclusive of the drama, from the beginnings to 1900. *Both semesters. Three credits each semester.* Hume.

71A. RECENT AMERICAN LITERATURE. American literature, exclusive

of the drama, since 1900. *Second semester. Three credits.* Hall of English. Hume.

72–73. MODERN DRAMA. Representative English and American dramatists, since 1890. *Both semesters. Two credits each semester.* Hall of English. Miller.

74. AMERICAN NOVEL. A consideration of the American novel with the stress on the contemporary. Some of the novelists studied will be Hawthorne, Cooper, Melville, Lewis, Wolfe, Cather, Dos Passos, Steinbeck, Hemingway. *Second semester. Three credits.* Hall of English. Hume.

75–76. SHAKESPEARE. The reading of Shakespeare's plays and a closer interpretation of his more characteristic dramas. *Both semesters. Three credits each semester.* Hall of English. Laird.

77. THE BIBLE AS LITERATURE. The study of representative literary types found in the Old Testament. *Prerequisite:* English 1–2 and 41–42 or 44–45. *First semester. Three Credits.* Hall of English.

78. MILTON. Minor poems, dramas, and Paradise Lost. *Second semester. Three credits.* Hall of English.

79–79A. THE ROMANTIC MOVEMENT. The rise of romanticism in the eighteenth century and its flowering in the nineteenth, with especial emphasis on the English Romantics. Both semesters. *Three credits each semester.* Hall of English. Laird.

80–80A. THE VICTORIAN AGE. The social and artistic movements of the nineteenth century as exemplified in English poetry and prose. *Both semesters. Three credits each semester.* Hall of English. Laird.

85. ENGLISH DRAMA. A comprehensive survey of English drama from its beginnings to the end of the nineteenth century. *First semester. Three credits.* Hall of English. Hume.

87–88. EIGHTEENTH CENTURY PROSE. Representative prose of the eighteenth century with emphasis on the work of Defoe, Swift, Steele, Addison, Johnson, Boswell, and the novelists. *Both semesters. Two credits each semester.* Hall of English.

94. CHAUCER. The principal works of Chaucer, read in the original for their merit as literature and their reflection of the middle ages. *One semester. Three credits.* Hall of English. Laird.

95. ENGLISH LITERATURE. The development of English literature from its beginnings to the present, with emphasis on the greater writers and the social background of their times. This course is designed primarily for seniors and prospective teachers majoring in literature. *Second semester. Three credits.* Hall of English. Staff.

97–98, 99–100. INDEPENDENT STUDY. Open to juniors and seniors majoring or minoring in English upon consultation with the head of the department. Hours to be arranged with individual students. *One credit a semester.* Staff.

101–102. SEMINAR. Open only to graduate students. *Both semesters.* Hours to be arranged with individual students. *One to three credits each semester.* Staff.

200. THESIS COURSE. Open only to candidates for a master's degree. *Six credits.* Staff.

Speech

11–12. PUBLIC SPEAKING. The principles of effective public speaking studied and practiced through organized student discussions of contemporary controversial problems. Speech form and speech content are equally emphasized. *Both semesters. Two credits each semester.* Griffin and Miller.

16–17. ARGUMENTATION AND DEBATE. The study of the principles of argumentation with the preparation of briefs, the participation in class debates, and the presentation of argumentative talks. The study of thinking, and the expression of thoughtful opinions on current topics are stressed. *Both semesters. Two credits each semester.* This course may be repeated for credit as 16A and 17A. Hall of English. Griffin.

21–22. EXPRESSION. The oral interpretation of the forms of literature with special attention directed to diction, gesture, the voice, and platform poise. The course is recommended to beginning students in public speaking, teaching, and dramatic work. *Both semesters. Two credits each semester.* Hall of English. Miller.

23–24. THE DRAMA OF TODAY. An interpretation of the trend and social significance of modern plays. Primarily for freshmen and sophomores not majors or minors in English. *Both semesters. Two credits each semester.* Miller and Hume.

53–54. ADVANCED INTERPRETATION. The course aims to develop skill in analysis and an understanding of the various types of literature. A study of the finer techniques of oral expression to develop the imagination, the emotional power, reading skill, and platform deportment in all its phases. *Prerequisite:* English 21–22, or the consent of the instructor. *Both semesters. Two credits each semester.* Hall of English. Miller.

55–56. PRINCIPLES AND TECHNIQUES OF PUBLIC DISCUSSION. Study of the principles and techniques involved in the various forms of group discussion: symposium, panel, lecture forum, forensic progression, etc. Duties and problems of the discussion leader. Classroom practice in solving public problems. The course stresses scholarly inquiry on a cooperative basis. *Prerequisite:* English 11–12 or 16–17. Hall of English.

57–58. ADVANCED ARGUMENTATION AND PERSUASION. Study of the intellectual and emotional behavior of the audience. Analysis of complex public problems and the briefing of cases for the advocate. *Prerequisite:* English 16–17. The course may be repeated for credit. Maximum of eight credits may be earned. *Both semesters. Two credits each semester.* 107 Hall of English. Griffin.

61–62. ADVANCED SPEECH COMPOSITION. Study of effective speech composition, based upon application of rhetorical and psychological principles. First semester preparation of extended oration on current social or political problems. Second semester study and preparation of speeches for special occasions: Eulogy, introduction, after-dinner, commemoration, etc. Open to limited number of students with consent of instructor. *Both semesters. Two credits each semester.* Hall of English.

63–64. HISTORY OF ORATORY. Examination of backgrounds, methods, and ideals of modern oratory. Particular attention to the outstanding figures of each period, with study of historical settings and significance of each orator. British oratory is studied the first semester and American oratory the second. *Prerequisite:* English 11–12 or 16–17. *Both semesters. Two credits each semester.* Hall of English.

81–82. PLAY PRODUCTION. The reading, study and production of representative Shakespearean and modern plays, with lectures, readings, and reports. Practice work is offered in all the aspects of play production: management, lighting, scenery, make-up, directing, acting, etc. The course aims to aid the prospective high school teacher. *Prerequisite:* Junior standing. *Both semesters. Three credits each semester.* This course may be repeated for credit as 81A, 81B, etc. Education Auditorium and Hall of English. Miller.

83. PARLIAMENTARY LAW AND PRACTICE. Study and practice of the parliamentary rules and procedure governing deliberative assemblies. Organization of model parliamentary groups, with rotating chairmanship and routine transaction of typical business of such groups. Practice in drawing up model constitutions. *Two credits.* Hall of English.

84. MODERN DEBATE PRACTICE AND PROBLEMS. Study and discussion of the various types of modern debates, with particular attention to the problems of directors and coaches. Bibliographies and collateral readings in textbooks and speech journals. Conduct of debates and methods of judging. *Two credits.* Hall of English. Griffin.

FARM MECHANICS

(See Agriculture)

FOREIGN LANGUAGES

PROFESSOR CHAPPELLE, HEAD OF DEPARTMENT
PROFESSOR MURGOTTEN[1]
ASSOCIATE PROFESSOR GOTTARDI[1]
ASSISTANT PROFESSORS KLINE,[1] MELZ, RODRIGUEZ

Requirements for a minor in French, German, Italian, Latin, and Spanish: With no admission units, courses 1–2 (10 credits), 3–4 (6 credits)*, and 2-additional credits in courses numbered 50 or above; with 2 admission units, courses 3–4 (6 credits), and 6 additional credits in courses numbered 50 or above; with 4 admission units, 6 credits in courses numbered 50 or above.

Requirements for a major in French, German, Italian, Latin, and Spanish: With no admission units, courses 1–2 (10 credits), 3–4 (6 credits)*, and 10 additional credits in courses numbered 50 or above; with 2 admission units, courses 3–4 (6 credits), and 14 additional credits in courses numbered 50 or above; with 4 admission credits, 16 credits in courses numbered 50 or above.

Students intending later to teach foreign languages are urged not to restrict their courses to the minimum requirements for a major or a minor in the particular subjects. All such candidates are to confer with the head of the department.

Courses numbered above 50 and announced as offered in any year may not be given in that year unless there are at least seven candidates for the class. Some courses numbered above 50 are given only in alternate years. Consult the printed schedule of classes for the definite offerings any given semester.

In certain instances and by special permission of the head of the department, a given course numbered above 50 may be repeated for credit, provided

[1]Absent on leave.
*German 9–10 may be offered in lieu of German 3–4.

that the entire content of the course differs from the one given previously under the same number. In such cases the course will be recorded with the catalogue number *plus* A (e. g. French 59–A).

For all foreign-languages courses numbered "4" the prerequisite is three years of high school work or courses 1, 2 and 3 in the same language.

Foreign Languages

200. FOREIGN LANGUAGE THESIS COURSE. Open only to candidates for the masters degree. *Six credits.* Chappelle.

French

1. FIRST YEAR FRENCH. Drill in the essentials of grammar. Elementary composition and conversation. *First semester. Five credits.* Stewart Hall.

2. FIRST YEAR FRENCH (Continued). Grammar, composition and conversation. Translation of simple prose texts. *Prerequisite:* French 1 or one year of high school French. *Second semester. Five credits.* Stewart Hall.

3–4. SECOND YEAR FRENCH. Readings from modern French prose writers. A review of grammar. Conversation and composition. *Prerequisite:* French 1–2 or two years of high school French. *Both semesters. Three credits each semester.* Stewart Hall. Chappelle and Gottardi.

51–52. THE FRENCH NOVEL. Rapid reading of masterpieces of French fiction: Balzac, Sand, Mérimée, Zola, Daudet, etc. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Chappelle.

53–54. FRENCH POETRY. A study of the French lyric poets from Villon to contemporary writers. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Murgotten.

55–56. INTERMEDIATE FRENCH COMPOSITION AND CONVERSATION. This course should be taken simultaneously with the first year of junior-senior reading courses in French. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.*

57–58. GENERAL SURVEY OF FRENCH LITERATURE. The history of French literature with detailed study of special periods. Assigned outside readings and reports on works read. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Chappelle.

59–60. SCIENTIFIC FRENCH. Readings from standard French works on science and from recent numbers of French scientific magazines. This course is particularly recommended to premedical students and to those who intend to specialize in any one of the scientific fields. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Chappelle.

69–70. FRENCH CLASSIC DRAMA. The development of the drama in France with special study of the works of Corneille, Racine, and Molière. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Murgotten.

71. CONTEMPORARY FRENCH DRAMA. A study of French plays of the twentieth century. *Prerequisite:* French 3–4. *First semester. Two credits.* Murgotten.

72. NINETEENTH CENTURY FRENCH DRAMA. A study of the drama

of the nineteenth century with special reference to the romantic school and the works of Victor Hugo. *Prerequisite:* French 3–4. *Second semester. Two credits.* Murgotten.

73–74. ADVANCED FRENCH COMPOSITION AND CONVERSATION. Includes a study of French epistolary style and commercial correspondence. This course should be taken simultaneously with the second year of junior-senior reading courses in French. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.*

81–82. THE EIGHTEENTH CENTURY IN FRENCH LITERATURE. A study of the works of Montesquieu, Voltaire, Rousseau, etc. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Chappelle.

89–90. FRENCH PHONETICS. A study of pronunciation on the basis of practical phonetics. This course is especially arranged for prospective teachers of French. *Prerequisite:* French 3–4. *Both semesters. Two credits each semester.* Gottardi.

German

1. FIRST YEAR GERMAN. A systematic study of grammar, elementary composition and conversation. *First semester. Five credits.* Stewart Hall. Melz.

2. FIRST YEAR GERMAN (Continued). Grammar and composition. Reading of easy prose and poetry. *Prerequisite:* German 1, or one year of high school German. *Second semester. Five credits.* Melz.

3–4. INTERMEDIATE GERMAN. Grammar review. Reading of German short stories, with exercises in conversation and composition. *Prerequisite:* German 1–2, or two years of high school German. *Both semesters. Three credits each semester.* Chappelle.

9–10. INTERMEDIATE PRESCIENTIFIC GERMAN. Grammar review and reading of magazine articles and other texts dealing with the fields of science in which the class is most interested. *Prerequisite:* German 1–2 or two years of high school German. *Both semesters. Three credits each semester.* Chappelle.

51–52. THE GERMAN "NOVELLE." The development of the "Novelle" from the Romantic period to modern times: Hauff, Tieck, Hoffmann, Ludwig, Storm, Keller, Meyer, Mann, etc. Rapid reading and discussion. *Prerequisite:* German 3–4. *Both semesters. Two credits each semester.* Melz.

57–58. GENERAL SURVEY OF GERMAN LITERATURE. The history of German literature with detailed study of special periods. Assigned readings and reports on the works read. *Prerequisite:* German 3–4. *Both semesters. Two credits each semester.* Chappelle.

59–60. SCIENTIFIC GERMAN. Readings from German scientific works, with special emphasis on chemistry and physics. This course is particularly recommended to premedical students and to those who intend to specialize in any one of the scientific fields. *Prerequisite:* German 3–4 or 9–10. *Both semesters. Two credits each semester.* Chappelle.

69–70. GERMAN CLASSICS. Reading and technical study of representative works of Lessing, Schiller, and Goethe. *Prerequisite:* German 3–4. *Both semesters. Two credits each semester.* Chappelle.

71–72. NINETEENTH CENTUBY GERMAN DRAMA. A study of the German drama from Romanticism to Naturalism: Kleist, Grillparzer, Hebbel, Hauptmann, Schnitzler, etc. *Prerequisite:* German 3–4 or the equivalent. *Both semesters. Two credits each semester.* Melz.

79–80. ADVANCED COMPOSITION. A study of German epistolary style, business correspondence, free composition. This course should be taken simultaneously with the junior-senior reading courses. *Prerequisite:* German 3–4 or 9–10. *Both semesters. Two credits each semester.* Chappelle.

Italian

1. FIRST–YEAR ITALIAN. Elementary grammar, composition, and conversation. Reading of modern Italian prose. *First semester. Five credits.* Stewart Hall. Gottardi.

2. FIRST–YEAR ITALIAN (Continued). Grammar, composition, and conversation. Translation of modern Italian prose and poetry. *Prerequisite:* Italian 1 or one year of high school Italian. *Second semester. Five credits.* Gottardi.

3–4. INTERMEDIATE ITALIAN. Grammar review. Reading of prose and poetry. Exercises in conversation and composition. *Prerequisite:* Italian 1–2, or two years of high-school Italian. *Both semesters. Three credits each semester.* Gottardi.

51–52. THE ITALIAN NOVEL. Rapid reading of masterpieces of modern Italian fiction: Manzoni, Fogazzaro, Verga, etc. *Prerequisite:* Italian 3–4. *Both semesters. Two credits each semester.* Gottardi.

53–54. ITALIAN LITERATURE OF THE EIGHTEENTH AND NINETEENTH CENTURIES. Reading of important works of prose and poetry of the period, with a study of literary movements. *Prerequisite:* Italian 3–4. *Both semesters. Two credits each semester.*

55–56. INTERMEDIATE COMPOSITION. *Prerequisite:* Italian 3–4. *Both semesters. Two credits each semester.* Gottardi.

Latin

1. FIRST–YEAR LATIN. Drill in the essentials of Latin grammar. Word study and composition. Roman life and customs. *First semester. Five credits.*

2. FIRST–YEAR LATIN (Continued). Translation of easy Latin prose. Composition. Roman antiquities. *Prerequisite:* Latin 1 or one year of high school Latin. *Second semester. Five credits.*

3. CICERO. Orations. Study of Roman law and government. *Prerequisite:* Latin 2 or two years of high school Latin. *First semester. Three credits.*

4. VERGIL. First six books of the Æneid. Study of classic myths. *Prerequisite:* Latin 3 or three years of high school Latin. *Second semester. Three credits.*

51–52. ADVANCED LATIN. Selected readings of Latin prose. History of Latin literature. Composition. *Prerequisite:* Latin 4 or four years of high school Latin. *Both semesters. Two credits each semester.*

53–54. LATIN LYRIC POETRY. Horace and Catullus. *Prerequisite:* Latin 4 or four years of high school Latin. *Both semesters. Two credits each semester.*

Portuguese

61–62. PORTUGUESE. An intensive rapid reading course in Portuguese based on the language as spoken in Brazil. Grammar, composition, and conversation. Offered only as a free elective and may not be counted towards a major or a minor or towards meeting the language requirement. *Prerequisite:* Course 3–4 in any romance language or Latin or the equivalent. *Both semesters. Three credits each semester.* Chappelle.

71–72. PORTUGUESE–AMERICAN LITERATURE. This course is based on a study of literary works by Brazilian writers. Discussions of the general cultural, social, and economic phases of Brazilian life are included. *Prerequisite:* Portuguese 61–62 or the equivalent. *Both semesters. Two credits each semester.* Chappelle.

Spanish

1. FIRST–YEAR SPANISH. Drill in the essentials of grammar. Elementary composition and conversation. *First semester. Five credits.* Stewart Hall.

2. FIRST–YEAR SPANISH (Continued). Grammar, composition and conversation. Translation of simple prose and poetry. *Prerequisite:* Spanish 1 or one year of high school Spanish. *Second semester. Five credits.*

3–4. SECOND–YEAR SPANISH. Readings from modern Spanish writers. A review of grammar. Conversation and composition. *Prerequisite:* Spanish 1–2 or two years of high school Spanish. *Both semesters. Three credits each semester.* Murgotten.

51–52. THE MODERN SPANISH NOVEL. Rapid reading of masterpieces of Spanish fiction: Galdós; Valdés; Ibáñez; etc. *Prerequisite:* Spanish 3–4. *Both semesters. Two credits each semester.*

53. COMMERCIAL AND JOURNALISTIC SPANISH. Readings dealing primarily with Spanish-American social and economic conditions. *Prerequisite:* Spanish 3–4. *First semester. Two credits.*

55–56. INTERMEDIATE SPANISH COMPOSITION AND CONVERSATION. This course should be taken with the first year of junior-senior reading courses in Spanish. *Prerequisite:* Spanish 3–4. *Both semesters. Two credits each semester.*

57–58. GENERAL SURVEY OF SPANISH LITERATURE. The history of Spanish literature with detailed study of special periods. Assigned outside readings and reports on works read. *Prerequisite:* Spanish 3–4. *Both semesters. Two credits each semester.* Gottardi.

67–68. EARLY SPANISH NOVEL. Reading of Spanish prose of the sixteenth, seventeenth and eighteenth centuries. A study of novelistic movements. Montalvo, Montemayor, Cervantes, Quevedo. Collateral reading. *Prerequisite:* Four credits of junior-senior work. *Both semesters. Two credits each semester.*

69–70. MODERN SPANISH DRAMA. A study of Spanish dramatic literature from the golden age to the twentieth century. *Prerequisite:* Spanish 3–4. *Both semesters. Two credits each semester.*

71–72. SPANISH-AMERICAN LITERATURE. Prose and poetry. *Prerequisite:* Spanish 3–4. *Both semesters. Two credits each semester.* Melz.

79–80. ADVANCED SPANISH PROSE COMPOSITION AND CONVERSATION. This course should be taken simultaneously with the second year of junior-senior reading courses in Spanish. *Prerequisite:* Spanish 3–4. *Both semesters. Two credits each semester.*

81–82. SPANISH CLASSIC DRAMA. Literature of the sixteenth and seventeenth centuries—Lope de Vega; Tirso de Molina, etc. *Prerequisite:* Four credits junior-senior work. *Both semesters. Two credits each semester.*

GENERAL ENGINEERING

1. ENGINEERING ORIENTATION. See Orientation, Index, for description of this course.

2. FREEHAND DRAWING. The application and technique of freehand drawing demonstrated by classroom exercises and practical problems. *First semester. One credit.* Joslin.

5. ELEMENTARY MECHANICAL DRAWING. Training in the use of drawing instruments, lettering, geometrical construction, dimensioning, pictorial projection, working drawings of machine parts from copy and from models, tracing and blue printing. Required of all freshmen. *First semester. Laboratory and lecture. Two credits.*

6. DESCRIPTIVE GEOMETRY. Standard problems on the point, line, plane, curve surface and solid are taken up in lectures and in the drawing room. Special attention is paid to the application of these principles to the problems of the draftsman, and a large number of practical problems are given. *Prerequisite:* General Engineering 5. *Second semester. Laboratory and lecture. Two credits.*

GEOLOGY

PROFESSOR GIANELLA, HEAD OF DEPARTMENT
ASSOCIATE PROFESSOR WHEELER[1]
MR. HUMPHREY

Requirements for a minor in geology: Geology 1, 2, 11 and 12 (10 credits), and 8 additional credits in the department, at least 6 of which must be in courses numbered 50 or above.

Requirements for a major in geology: Geology 1, 2, 11, 12 and 14 (12 credits), and 15 additional credits in the department, at least 12 of which must be in courses numbered 50 or above.

1. PHYSICAL GEOLOGY. An elementary study of the forces on or within the earth, dealing chiefly with the dynamic and structural aspects of the subject. The interpretation of topographic maps. *Prerequisite:* At least sophomore standing. *Either semester. Three credits.* Mackay School of Mines. Gianella and Wheeler.

2. HISTORICAL GEOLOGY. An outline of the origin and history of the earth, including the diastrophic changes, stratigraphic relationships, and the description of the physical geography and life of the successive geological periods, with especial reference to the North American continent. *Prerequisite:* Geology 1 or 10. *Either semester. Three credits.* Mackay School of Mines. Wheeler.

10. ENGINEERING GEOLOGY. (Engineering and Agricultural students only.) A study of the forces active on and within the earth, and their results, with especial emphasis on their effects on engineering problems. The recognition of common rocks and minerals and the interpretation

[1]Absent on leave.

of topographic maps. *Second semester. Three credits.* Mackay School of Mines. Wheeler.

11. DETERMINATIVE MINERALOGY. The first few weeks are devoted to elementary crystallography, followed by the determination of the more common minerals, chiefly by means of their physical properties. *Prerequisite:* Chemistry 7 and 8, or the equivalent. *First semester, Two credits.* Fee $2. Mackay School of Mines. Gianella.

12. BLOWPIPE ANALYSIS. The determination of minerals by blowpipe analysis. *Prerequisite:* Chemistry 7 and 8, or the equivalent, and Geology 11. *Second semester. Two credits.* Fee $3. Mackay School of Mines. Wheeler.

14. DESCRIPTIVE MINERALOGY. Lectures and recitations on the classification, characteristic properties, occurrence, association genesis, and uses of the more important minerals, illustrated by typical specimens. *Prerequisite:* Geology 11. *Second semester. Two credits.* Mackay School of Mines. Gianella.

51. PETROLOGY. Laboratory study of rocks and rock-forming minerals in hand specimens. Lectures on the characters, origin, and classification of rocks. *Prerequisite:* Physics 1A–2 or 3–4, Geology 1 or 10, 2, 11 and 12. *First semester. Two credits.* Fee $2. Mackay School of Mines. Wheeler.

52. PETROGRAPHY. Lectures on the genesis of rocks, and the study of thin sections of rock-forming minerals and rocks under the petrographic microscope. *Prerequisite:* Geology 11 and 12 and 51. *Second semester. Three credits.* Fee $2. Mackay School of Mines. Gianella.

53. STRATIGRAPHIC PALEONTOLOGY. A laboratory study of invertebrate fossils, and the application of paleontologic methods to stratigraphy. *Prerequisite:* Geology 1 or 10, and 2 (Zoology 2 recommended). *First semester. Two credits.* Mackay School of Mines. Wheeler.

55–56. ADVANCED MINERALOGY. Advanced work in either blowpipe analysis, crystallography, or the determination of minerals under the petrographic microscope. *Prerequisites:* Geology 11, 12, and 14. *Either semester. One or two credits.* Fee $2. Mackay School of Mines. Gianella and Wheeler.

60. ECONOMIC GEOLOGY OF THE NONMETALS. Geology of ground water and petroleum, followed by a study of the occurrence, distribution, origin, and economic value of other nonmetals. *Prerequisite:* Geology 1 or 10, 2, 11, 12, and 14. *Second semester. Three credits.* Mackay School of Mines. Wheeler.

61. ECONOMIC GEOLOGY OF THE METALS. The geology of ore deposits, including distribution, origin, mode of occurrence, and alteration; with special reference to the more important mining districts of North America. *Prerequisite:* Geology 11, 12, 14 and 51 (geology 52 recommended). *First semester. Three credits.* Mackay School of Mines. Gianella.

70. FIELD GEOLOGY. Instruction in field methods and investigation of geologic features of several areas in the Reno region. Transportation is provided by the S. Frank Hunt Foundation. *Prerequisite:*

Geology 11, 12, 14 and 51. *Second semester. One credit.* Mackay School of Mines. Gianella.

71. SUMMER FIELD GEOLOGY. Eight weeks' study of Nevada areas where both surface and subsurface geology may be investigated and mapped. Reports, field notes, and geologic maps will be required. Living and traveling expenses for instructors and students are paid by funds from the S. Frank Hunt Foundation. *Prerequisite:* Geology 51 and 60 or 61 (and preferably geology 52 and 82). *Four credits.* Gianella and Wheeler.

NOTE—Geology 71 may be substituted for civil engineering 58 (summer surveying).

79. GEOLOGY PROJECT. Original investigation of a geologic problem. *Prerequisite:* Geology 51, 52 and 60 or equivalent training. *First semester. One or two credits to be arranged.* Mackay School of Mines. Gianella and Wheeler.

80. GEOLOGY PROJECT. A continuation of geology 79. *Second semester. Credits to be arranged.* Mackay School of Mines. Gianella and Wheeler.

82. STRUCTURAL GEOLOGY. A study of the deformation of the earth's crust. *Prerequisite:* Geology 14 and 51. *Second semester. Two credits.* Mackay School of Mines. Gianella.

179–180. ADVANCED GEOLOGIC INVESTIGATION. Credits and fee to be arranged according to work undertaken. Mackay School of Mines. Gianella and Wheeler.

199–200. THESIS. Six to ten credits total. Fee to be arranged according to work undertaken. Gianella and Wheeler.

GERMAN

(See Foreign Languages.)

HISTORY AND POLITICAL SCIENCE

PROFESSOR HICKS, HEAD OF DEPARTMENT

ASSOCIATE PROFESSORS SMITH,[1] MAZOUR, HUTCHESON, AUCHAMPAUGH

Requirements for a minor in History: History 1–2 (6 credits), History 5–6 (6 credits), and six additional credits in History.

Requirements for a major in History: History 1–2 (6 credits), History 5–6 (6 credits), and fifteen additional credits in History.

Requirements for a minor in Political Science: History 1–2 (6 credits), Political Science 1–2 (4 credits), and eight additional credits in Political Science. History 87–88 and 89a–90a may be used to satisfy this requirement of eight additional hours.

Requirements for a major in Political Science: History 1–2 (6 credits), Political Science 1–2 (4 credits), and seventeen additional credits in Political Science. History 87–88 and 89a–90a may be used to satisfy part of these requirements.

Political Science 55 satisfies the legal requirements for Political Science 79; and Political Science 56 satisfies the legal requirements for Political Science 80.

Any course in History and Political Science numbered 50 or above is open to juniors and seniors, subject only to the consent of the instructor concerned.

History

1–2. UNITED STATES. Colonial times to the present: Social, political,

[1]Absent on leave.

and diplomatic. *Both semesters. Three credits each semester.* Stewart Hall. Hicks, Smith, Hutcheson, Auchampaugh.

5–6. EUROPEAN CIVILIZATION. The development of civilization in Europe from the Roman Empire to the present. Designed to furnish perspective for the understanding of the present-day world. *Both semesters. Three credits each semester.* Stewart Hall. Mazour.

56. THE WESTWARD MOVEMENT IN THE UNITED STATES. The westward movement of peoples from the Atlantic Coast, and the influence of this movement upon United States history. *Second semester. Two credits.* Stewart Hall. Auchampaugh.

58. WESTERN NORTH AMERICA. The Far West: The Rocky Mountain and West Coast States; activities of the Spanish, Russians, British, and Americans on the Pacific Coast. *Second semester. Three credits.* Stewart Hall. Hutcheson.

59–60. LATIN AMERICA. History of Spanish and Portuguese America from the age of discovery to the present: domestic and international. *Both semesters. Two credits each semester.* Stewart Hall. Hicks.

63–64. ENGLAND AND THE BRITISH EMPIRE. History of England and its empire: social, economic, and political. *Both semesters. Two credits each semester.* Stewart Hall. Hutcheson.

65–66. NEVADA HISTORY. First half ends at Statehood and early Comstock, about 1866. One hour lecture weekly, added credit for extra reading reports. *Both semesters. One, two, or three credits.* Stewart Hall. Hutcheson.

67. UNITED STATES; COLONIAL PERIOD. History of the English colonies, 1607–1776; with some attention to the influence of Spain and France. *First semester. Two credits.* Stewart Hall. Auchampaugh.

69. RECENT EUROPEAN HISTORY, 1870–1914. Background of the World War: nationalism, colonial expansion, problems of peace, and the collapse of world order. *First semester. Three credits.* Stewart Hall. Mazour.

70. EUROPE BETWEEN THE FIRST AND SECOND WORLD WARS, 1914–1939. A detailed analysis of a turbulent era. *Second semester. Three credits.* Stewart Hall. Mazour.

71–72. ANCIENT CIVILIZATION. Origins of Western civilization in the Near East, Greece, and Rome: art, culture, society, and politics. *Both semesters. Two credits each semester.* Stewart Hall. Hutcheson.

76. MEDIEVAL HISTORY, 400–1500. Civilization of medieval Europe: culture, the Church, and law. Background of modern nations. *Second semester. Three credits.* Stewart Hall.

77A–78A. IMPERIALISM AND WORLD PEACE. A study of European colonial expansion and the problem of maintaining peace. *Both semesters. Two credits each semester.* Stewart Hall. Mazour.

79–80. THE FRENCH REVOLUTION AND NAPOLEON. An intensive study of the great epoch extending from 1789 to 1815. *Both semesters. Two credits each semester.* Stewart Hall. Mazour.

81–82. THE FAR EAST. Domestic and international relations of

China and Japan from the earliest times to the present. *Both semesters. Two credits each semester.* Stewart Hall. Hicks.

83–84. HISTORY OF RUSSIA. Foundations of the Russian state and society. The imperial and revolutionary eras. *Both semesters. Three credits each semester.* Stewart Hall. Mazour.

85. UNITED STATES, 1776–1865. The Revolution; constitution-making; problems of peace; War of 1812; domestic problems; slavery and State rights; the Oregon question; Texas; the Mexican War; the Civil War. *First semester. Three credits.* Stewart Hall. Auchampaugh.

87. ENGLISH CONSTITUTIONAL HISTORY. The rise and development of institutions—such as free, representative government, the jury system, and English law—which were transmitted to Colonial America to become the basis of government in the United States. *First semester. Three credits.* Stewart Hall. Hutcheson.

89A–90A. AMERICAN CONSTITUTIONAL HISTORY. A narrative and interpretative study of the origin and growth of the institutional forms and principles which have crystalized into the American constitutional system. *Both semesters. Three credits each semester.* Stewart Hall. Auchampaugh.

94. UNITED STATES SINCE 1865. Reconstruction; economic and diplomatic affairs; the Far West; the tariff; war with Spain; the World War and its aftermath. *Second semester. Three credits.* Stewart Hall. Auchampaugh.

97–98. MODERN GERMANY. The problem and achievement of unification; Germany as a world factor. *Both semesters. Two credits each semester.* Stewart Hall. Mazour.

99–100. SEMINAR. *Both semesters. Credits arranged.* Stewart Hall. Staff.

199–200. GRADUATE THESIS. *Both semesters. Credits arranged.* Staff.

Political Science

1–2. COMPARATIVE GOVERNMENT. A study of the frameworks, functions, and motivating ideals of various representative democratic and totalitarian governments. *Both semesters. Two credits each semester.* Stewart Hall. Hicks, Smith, Hutcheson.

55. GOVERNMENT OF THE UNITED STATES. A basic course dealing with the organization and working principles of the United States Government, with its structural problems and functional processes. *First semester. Two or three credits.* Morrill Hall. Smith.

56. STATE AND LOCAL GOVERNMENT IN THE UNITED STATES. The executive, legislative, judicial and administrative organization of the States and of local areas of government; inter-State and Federal-State relations; recent trends in administration and constitution-making. Special reference to Nevada. *Second semester. Two or three credits.* Morrill Hall. Smith.

57. ELEMENTS OF POLITICAL SCIENCE. An introduction to certain concepts, distinctions and terminology necessary for an intelligent approach to a study of the science of politics; theories as to the

origin, nature, and functions of the State. *First semester. Three credits.* Morrill Hall. Smith.

59. HISTORY OF POLITICAL THOUGHT. A survey course designed to portray the historical development of political thinking from the classical period to the present. A discussion of types of inquiry, or methods of approach. *First semester. Two credits.* Morrill Hall. Smith.

64. INTERNATIONAL LAW AND ORGANIZATION. The elements of International Law, and a study of organizational forms as they relate to international law and procedure. *Second semester. Two credits.* Morrill Hall. Smith.

68. POLITICAL PARTIES. The party system in the United States; the history, composition, and functions of parties—their organization and methods. *Second semester. Three credits.* Morrill Hall. Smith.

76. PUBLIC PERSONNEL ADMINISTRATION. A study of methods of recruiting, examining, training, and of other techniques utilized in the management of employees in Government service. *Second semester. Two credits.* Morrill Hall. Smith.

77. AMERICAN DIPLOMACY. Foreign relations of the United States; principles, policies, and methods. Monroe Doctrine; arbitration; Open Door policy; freedom of the seas; disarmament; cooperation. *First semester. Two credits.* Morrill Hall. Smith.

79–80. CONSTITUTIONS OF THE UNITED STATES AND NEVADA. Origins, history, and essentials of these constitutions—with emphasis upon devotion to American institutions and ideals. United States Constitution the first semester; Nevada Constitution the second semester. *Both semesters. One credit each semester.* Hicks, Smith, Auchampaugh.

83–84. PRINCIPLES OF PUBLIC ADMINISTRATION. Principles and problems of public administration; the budget; forms of administrative action; types of control; administrative law. *Both semesters. Two credits each semester.* Morrill Hall. Smith.

99–100. SEMINAR. *Both semesters. Credits arranged.* Morrill Hall. Staff.

199–200. GRADUATE THESIS. *Both semesters. Credits arranged.* Smith.

HOME ECONOMICS

PROFESSOR SWIFT, HEAD OF THE DEPARTMENT
ASSOCIATE PROFESSOR POPE
ASSISTANT PROFESSOR MARSH
MISS CARROLL
MRS. RICE

A Home Economics minor in Clothing and Textiles is offered to students in the College of Arts and Science.

Requirements for a Home Economics minor in Clothing and Textiles; Home Economics 15–18, 16, 45, and 7 additional credits in the department in courses numbered 50 or above.

Requirements for a Home Economics minor in Home Management: Home Economics 16, 31–32, 42, 88, and 5 additional credits in the department in courses numbered 50 or above.

3. INTRODUCTORY COURSE. The course is planned to help freshmen solve their present student problems, assist them in the selection of

courses for succeeding years, and to acquaint students with the scope of home economics and the opportunities offered in this field. *First semester. Lecture, two periods. Two credits.* 110 Agriculture Building. Pope.

15–18. CLOTHING. Emphasis on good grooming, selection, care and construction. Use of commercial patterns. Equipment, and making of clothing budget. *Lecture, one hour. Workshop, two hours. Three credits.* Fee $4. *Both semesters.* Pope.

16. TEXTILES. Textile fibers and fabric construction; label study and consumer demand. *Lecture, two hours. Laboratory, one hour. Three credits.* Fee $4. *Second semester.* Pope.

31–32. GENERAL FOODS. A study of food selection-costs and preparation. Emphasis placed on food substitution and ration foods. *Lecture, one hour. Laboratory, two hours. Three credits.* Fee $5. *Both Semesters.*

33. NUTRITION IN HEALTH. A scientific study of nutrition involving digestive and metabolic processes and products. Emphasis on community nutritional problems. *Lecture, three hours. Three credits. First semester.*

34. NUTRITION IN DISEASE. Dietary adjustments for abnormal conditions. *Lecture, one hour. Laboratory, two hours. Three credits. Second semester.*

42. FOOD ECONOMICS. How to select and purchase food for home and institution with regard to rationing and income. Laws and agencies affecting foodstuffs. *Lecture, three hours. Three credits.* Fee $2. *Second semester.*

46. RELATED ART. Practical application of color and design to home needs. *Laboratory, two hours. Two credits.* Fee $4. *Second semester.* Pope.

50. FOODS AND NUTRITION. Elementary nutrition and food preparation. Open to pre-nursing and arts students. *Lecture, two hours. Laboratory, one hour. Three credits.* Fee $5. *Second semester.* Swift.

53. CARE OF HEALTH AND DISEASE. How to maintain health and care for illness in the home; community health and first aid. Red Cross certificate included. *Lecture, two hours. Laboratory, one hour. Three credits.* Fee $2. *First semester.*

55. MEAL PLANNING. Actual purchase of food, preparation and service by each individual student. Time and fuel studies included. *Lecture one hour. Laboratory, six hours. Four credits.* Fee $10. *First semester.* Pope.

56. FOOD MANAGEMENT FOR LAY GROUPS. Practical budgeting, planning, and buying of foods. *Lecture, two hours. Two credits.* Marsh. (Not offered in 1945–1946.)

57. CAMP COOKERY FOR MEN. Practical food selection and preparation. *Lecture, one hour. Laboratory, camp, or both. Three credits.* Fee $5. (Not offered in 1945–1946.)

66. ADVANCED CLOTHING. A study of the human figure, stressing silhouette. History of period-costume; planning and construction of

complete costume; workshop include tailoring. *Lecture, one hour. Workshop, two hours. Three credits.* Fee $4. *Second semester.* Pope.

67. CLOTHING. Children's clothing. Construction of layette, self-help "toddlers," and "runabout" clothing. Workshop includes outer garment construction. *Lecture, one hour. Workshop, two hours. Three credits* Fee $4. *First semester.* Pope.

68. COSTUMING. Application of color and design to creative costuming. Especially helpful for the elementary and grade teacher. *Laboratory, two hours. Two credits. Second semester.* Pope.

75–76. CHILD DEVELOPMENT. Growth and development of the normal pre-school child. Each student makes consistent observations of child in a home situation. *Lecture, three hours. Three credits. Both semesters.* Swift.

83–84. SPECIAL PROBLEMS IN FOODS. Field work for seniors or graduates. *Lecture, three hours. Three credits.* Fee $5. *Both semesters.* Swift.

87. HOME DECORATION. Practical application of art principles to planning and furnishing a home. Emphasis on reconditioning the old; and economy of the new. *Lecture, one hour. Laboratory, two hours. Three credits.* Fee $3. *First semester.* Pope.

88. HOUSEHOLD EQUIPMENT. Evaluation of costs, time, and labor-saving equipment; how to operate, care for, and repair it. *Lecture one hour. Laboratory, one hour. Two credits.* Fee $2. *Second semester.* Pope.

91. EDUCATION FOR DIETETIC MAJORS. This course meets the requirements of the American Dietetics Association. *Lecture, three hours. Three credits. First semester.* Swift.

94. EXPERIMENTAL COOKERY. Development of experimental methods; their application to investigations in cookery and skills involved. *Lecture, one hour. Laboratory, two hours. Two credits.* Fee $10. *Second semester.* Swift.

95. SPECIAL PROBLEMS IN CLOTHING. On request. Field work for senior or graduates. *Lecture, three hours. Three credits.* Fee $4. *Second semester.* Pope.

96. QUANTITY COOKERY. Planning, selecting, preparing, and serving of foods in quantity for large groups. Special emphasis given to school lunch and emergency feeding. *Two, three-hour laboratories. Three credits.* Fee $4. *Second semester.*

98. INSTITUTION MANAGEMENT. Organization, management of food, and cost control, equipment, floor plans, personnel problems, and labor laws of various institutions. *Lecture, three hours. Three credits. Second semester.*

99. DEMONSTRATION. Principles and techniques involved in food-demonstrations with practical experience. Each student gives one five minute, ten minute, fifteen minute, thirty minute, and one hour demonstration. *Five hours laboratory. One hour lecture. Three credits.* Fee $10. Swift.

102. CONSUMER EDUCATION. Consumer interest problems that concern the home and community at the present time. *Lecture, three hours. Three credits. First semester.*

ITALIAN

(See Foreign Languages.)

JOURNALISM

PROFESSOR HIGGINBOTHAM, HEAD OF DEPARTMENT
MR. DUNCAN[1]
MRS. MERGEN
COOPERATING NEWSPAPERMEN

Requirements for a minor in journalism: Journalism 1–2 (4 credits, journalism 21–22 (6 credits), journalism 51–52 (4 credits), and 4 additional credits in journalism courses numbered 50 or above.

Requirements for a major in journalism: Journalism 1–2 (4 credits), journalism 21–22 (6 credits), journalism 51–52 (4 credits), journalism 53 (3 credits), journalism 72 (1 credit), journalism 81–82 (2 credits), and 7 additional credits in journalism in courses numbered 50 or above.

In their sophomore, junior, and senior years, students specializing in journalism are advised to include Journalism 31–32, 61–62, etc., in their schedules whenever possible in order to build up a background of the news of each year.

Courses in the social sciences and in literature should supplement those in journalism.

For an explanation of the four-year professional Course in Journalism, see page 125.

1–2. INTERPRETING THE DAY'S NEWS IN WAR TIME. Study of the news of the day, particularly news of the war and its effect, and the function of the newspaper in American life. *Both semesters. Two or three credits each semester.* 104 Hall of English. Higginbotham and Mergen.

21–22. NEWS GATHERING AND WRITING. What makes news, how news is obtained, and how news is written are studied and the principles applied in reporting news for the U. of N. Sagebrush, the Reno newspapers, and the United Press. Discussions and laboratory. *Prerequisite:* sophomore standing and the consent of the instructor. *Both semesters. Three credits each semester.* 105 Hall of English. Mergen.

31–32, 61–62, 91–92. ADVANCED INTERPRETATION OF THE DAY'S NEWS. Study and interpretation, upon an advanced level, of the news of the day. *Prerequisite:* Journalism 1–2. *Both semesters. One or two credits each semester.* 104 Hall of English. Higginbotham.

51–52. NEWS EDITING. Work in copy reading, rewriting, headline writing, news evaluation, the mechanics of publishing, and make-up accompanied by study of the principles which govern these and similar duties of the newspaper copy editor. *Prerequisite:* Journalism 21–22 and the consent of the instructor. *Both semesters. Two or three credits each semester.* 105 Hall of English. Mergen.

53. THE EVOLUTION OF THE NEWSPAPER AS A SOCIAL INSTITUTION. The development of the newspaper in America, from colonial times to the present, especially in relation to political, economic, and social movements, is studied, as are the men and the newspapers which created the traditions of modern journalism. Open to juniors and seniors. *First semester. Three credits.* 105 Hall of English. Higginbotham.

54. ADVANCED REPORTING. Study of the background and materials

[1]Absent on leave.

of the news of public affairs, together with the actual reporting of such news from representative sources in Reno and Carson City. *Prerequisite:* Journalism 21–22. *Second semester. Three credits.* 105 Hall of English. Higginbotham.

56–57. ADVERTISING AND ADVERTISEMENT COPY WRITING. Study of the principles of advertising and their practical application in the writing of copy for the newspaper and the magazine. *Prerequisite:* Journalism 21–22, or the consent of the instructor. *Both semesters. Two credits each semester.* 105 Hall of English. Mergen. (Not offered in 1945–1946.)

65–66. COMMUNITY NEWSPAPER MANAGEMENT. Study of the problems of journalism peculiar to the country weekly and small city daily, especially as found in Nevada. Editorial, circulation, and advertising management will be stressed. *Prerequisite:* Journalism 21–22. *Both semesters. Two credits each semester.* 105 Hall of English. Mergen. (Not offered in 1945–1946.)

67. EDITORIAL WRITING. The study of the interpretation of contemporary events through the newspaper and magazine editorial, coupled with extensive practice in writing. Emphasis will be put upon war-time subjects. *Prerequisite:* Journalism 21–22 or the consent of the instructor. *Second semester. Two or three credits.* 105 Hall of English. Higginbotham. (Not offered in 1945–1946.)

68. THE FEATURE ARTICLE. The study, writing, and marketing of the special feature article for magazines and newspapers. *Prerequisite:* Journalism 21–22, or the consent of the instructor. *Second semester. Two credits.* 105 Hall of English. Mergen.

72. THE LAW OF THE PRESS. Study of state and federal laws affecting the reporting of news, the expression of opinion, advertising, and the publication of newspapers and magazines. *Prerequisite:* Journalism 21–22. *Either semester. One or two credits.* 105 Hall of English. Higginbotham. (Not offered in 1945–1946.)

75. NEWS PHOTOGRAPHY. Study of the principles of reporting news through photography and the application of them in practice work for various publications. Discussion and laboratory. *Prerequisite:* Journalism 21–22. *Either semester. Two credits.* 105 Hall of English. Duncan. (Not offered in 1945–1946.)

79. SOCIAL PROBLEMS IN JOURNALISM. Sociological aspects of journalism, especially those arising out of the war, including public opinion, newspaper leadership and responsibility, censorship, propaganda, the world's press, and other war-time problems. *Prerequisite:* Journalism 21–22 or the consent of the instructor. *First semester. Two or three credits.* 105 Hall of English. Higginbotham. (Not 1945–1946.)

81–82. JOURNALISM INTERNSHIP. Reporting and copy reading as members of the staffs of the Nevada State Journal, the Reno Evening Gazette, the United Press Association, the Associated Press, or advertising work with Wilson Advertising Agency. *Prerequisite:* Open only to seniors in the course in journalism and senior majors in journalism. *Both semesters. One, two, or three credits each semester.* 105 Hall of English. Higginbotham and cooperators in journalism.

86. JOURNALISM ON THE AIR. The principles and practice of writing journalistic types—the news story, the column features, advertising—so that they are adapted to broadcasting. Special emphasis is given to news processing. *Prerequiiste:* Journalism 21–22. *Either semester. Two credits.* 105 Hall of English. Higginbotham. (Not offered in 1945–1946.)

93–94, 95–96. INDEPENDENT STUDY. Open only to juniors and seniors in the course in journalism or majoring in journalism who have attained an average grade of B in all their work. Hours to be arranged with individual students. *One credit each semester.* Higginbotham.

LATIN

(See Foreign Languages.)

MATHEMATICS AND MECHANICS

PROFESSOR WOOD, HEAD OF DEPARTMENT

ASSOCIATE PROFESSOR BEESLEY, ACTING HEAD OF DEPARTMENT

MRS. WILLIAMS

Requirements for a minor in mathematics: Mathematics 11 (3 credits), 13 (2 credits), 14 (3 credits), 23–24 (6 credits), or their equivalent, and 4 additional credits in the department in courses numbered 50 or above.

Requirements for a major in mathematics: Mathematics 11 (3 credits), 13 (2 credits), 14 (3 credits, 23–24 (6 credits), or their equivalent, and 13 additional credits in the department in courses numbered 50 or above.

Mathematics 15 (5 credits) and 16 (5 credits) may be substituted for 11, 13, and 14 in the major and minor requirements.

A. ALGEBRA. A thorough review of algebra for students of the College of Engineering who fail to pass the qualifying examination in Mathematics 15. This course carries no university credit but may be used to remove entrance deficiencies. *First semester.* Mackay Science Hall.

5. ALGEBRA. A second course in algebra for students who have had one year of algebra in the high school. *Each semester. Two credits.* Mackay Science Hall. The Staff.

8. SOLID GEOMETRY. The geometry of the plane, the cone, the prism, the pyramid, and the sphere, with practical applications. *Second semester. Two credits.* Mackay Science Hall.

11. COLLEGE ALGEBRA. The usual topics of college algebra, with special emphasis upon the topics that will be most helpful in the higher courses in mathematics. *Prerequisite:* Mathematics 5 or 1½ years of high school algebra. *Each semester. Three credits.* Mackay Science Hall. The Staff.

13. PLANE TRIGONOMETRY. A study of the trigonometric functions, indentities, and the solution of triangles. Not required of students who have had high school trigonometry. *Each semester. Two credits.* Mackay Science Hall. The Staff.

14. ANALYTIC GEOMETRY. An analytical treatment of the properties of the straight line, circle, parabola, ellipse, and hyperbola. Polar coordinates, the transformation of coordinates, and the general second-degree equation in two variables will be studied. *Prerequisites:* Mathematics 11, 13. *Second semester. Three credits.* Mackay Science Hall.

15–16. ELEMENTARY MATHEMATICAL ANALYSIS. A unified treatment of the elements of college algebra, trigonometry, and analytic geometry, with special emphasis upon the applications. This course is required of all engineering students and is recommended for all others who intend to specialize in mathematics or who desire mathematical preparation for scientific work. This course will begin with a two-weeks intensive review of algebra, including quadratics, exponents, and radicals. At the end of this period an examination will be given. Students who fail to pass this examination or those who fail to carry mathematics 15 will be transferred to mathematics A. *Both semesters. Five credits each semester.* Mackay Science Hall. The Staff.

18. MATHEMATICS OF FINANCE. A mathematical study of interest, annuities, sinking funds, depreciation, amortization and other topics relating to business problems, including an introduction to the mathematics of life insurance. *Prerequisite:* Mathematics 11. *Second semester. Three credits.* Mackay Science Hall. Alternates with mathematics 20.

20. MATHEMATICAL STATISTICS. A mathematical study of frequency distributions, averages, dispersion, probable error, correlation, graphical methods and other related topics, with application to problems in the social and natural sciences. *Prerequisite:* Mathematics 11. *Second semester. Three credits.* Mackay Science Hall. Alternates with mathematics 18.

22. MATHEMATICS FOR STUDENTS OF AGRICULTURE AND BIOLOGICAL SCIENCES. A study of the essentials of algebra, trigonometry, elementary mechanics, statistics, graphical methods, logarithmic paper, and other topics with applications. This course is designed to meet the needs of students in the College of Agriculture, premedical students, preforestry students, and other students in the biological sciences. Students planning to continue their mathematical work should take Mathematics 14 upon completion of this course. *Second semester. Four credits.* Mackay Science Hall.

23–24. DIFFERENTIAL AND INTEGRAL CALCULUS. The elements of the calculus with applications. Designed for students in the College of Arts and Science. *Prerequisite:* Mathematics 11, 13, 14, or Mathematics 15, 16. *Both semesters. Three credits each semester.* Mackay Science Hall.

25–26. CALCULUS. A unified course in differential and integral calculus, with special emphasis upon the applications. Required of all engineering students. *Prerequisite:* Mathematics 15, 16. *Both semesters. Three credits each semester.* Mackay Science Hall. The Staff.

34. MATHEMATICS OF AIR NAVIGATION. Maps and charts, piloting, dead reckoning and radio. Celestial methods may be discussed briefly but emphasis is upon problems whose solutions do not require the methods of spherical trigonometry. *Prerequisite:* Mathematics 13. *Either semester. Two credits.* Mackay Science Hall.

35. SPHERICAL TRIGONOMETRY. A study of the spherical triangle with applications in astronomy and navigation. This course will furnish a desirable background for study of modern methods in celestial navigation. *Either semester. Two credits.* Mackay Science Hall.

51. HISTORY OF MATHEMATICS. Lectures and assigned readings on the history of the mathematical science. Recommended for students preparing to teach mathematics in high school. *First semester. Two credits.* Mackay Science Hall. Cannot be used for graduate credit.

55–56. ANALYTIC MECHANICS FOR ENGINEERS. Work in the resolution of forces, moments of inertia, laws of motion, friction, dynamics of machinery, work and energy, and impulse. Special emphasis is given to practical problems. *Prerequisite:* Mathematics 25, 26; Physics 3. *First semester, three credits. Second semester, two credits.* Mackay Science Hall.

57. DETERMINANTS AND THE THEORY OF EQUATIONS. The study of determinants and their applications. The theory of the quadratic, cubic, quartic, and the general algebraic equation. Methods of finding approximate values of the roots of equations. *First semester. Three credits.* Mackay Science Hall.

59–60. COLLEGE GEOMETRY. A study of advanced geometrical topics such as The Nine Point Circle, Ceva's Theorem, etc., using the methods of proof of elementary geometry. Recommended for students preparing to teach mathematics in high school. *Both semesters. Two credits each semester.* Mackay Science Hall. Alternates with Mathematics 73–74.

66. TEACHING OF MATHEMATICS. See Education 66.

70. SOLID ANALYTICAL GEOMETRY. A study of the plane, ellipsoid, paraboloid, hyperboloid, and the general equation of the second degree in three dimensional space. *Second semester. Two credits.* Mackay Science Hall.

73–74. PROJECTIVE GEOMETRY. A synthetic development of the more fundamental projective properties of conic sections, including also an elementary treatment of involutions, anharmonic ratios, and the principle of duality. *Both semesters. Two credits each semester.* Mackay Science Hall. Alternates with Mathematics 59–60.

85–86. DIFFERENTIAL EQUATIONS. A study of ordinary and partial differential equations of the first and second orders with special attention to geometrical and physical applications. *Both semesters. Two credits each semester.* Mackay Science Hall.

87. ADVANCED CALCULUS. A more rigorous study of the differential and integral calculus, with extensive applications to geometrical and physical problems. *First semester. Three credits.* Mackay Science Hall.

105–106. THEORY OF FUNCTIONS OF THE REAL AND COMPLEX VARIABLE. The first semester deals with real numbers, point sets in metric space, real functions, and properties of continuity, semicontinuity, discontinuity, differentiability and integrability of functions. The second deals with complex numbers, integral theorems, power series, singularities, Riemann Surfaces and conformal mapping. *Both semesters. Three credits each semester.* Mackay Science Hall.

115. VECTOR ANALYSIS. A study of the Vector notation applied to problems of physics. *Second semester. Three credits.* Mackay Science Hall. Given in alternate years.

135. HARMONIC ANALYSIS. A study of the properties of Fourier

Series, Legendre and Bessel Functions, and their use in the solution of partial differential equations of mathematical physics. *Second semester. Three credits.* Mackay Science Hall. Given in alternate years.

150. SEMINAR. Library work and reports on various topics of mathematical interest. *Both semesters. Two or three credits each semester.* Mackay Science Hall.

199–200. THESIS COURSE FOR GRADUATE STUDENTS. *Six credits.* Mackay Science Hall. The Staff.

MECHANIC ARTS

PROFESSOR VAN DYKE, ACTING HEAD OF THE DEPARTMENT
SUPERINTENDENT RYAN

3. MACHINE SHOP. A basic course in machine work following a definite plan throughout the semester, includes instruction in bench work, lathe, shaper, drill and milling machine. *Both semesters. Two credits.* Mechanical Building. Fee $5 per credit. Ryan.

5. MACHINE SHOP. An advanced course in gear cutting, face plate work, elementary die making and construction and use of special tools, jigs, and fixtures. *Prerequisite:* M. A. 3 or equivalent. *Either semester. One or two credits.* Mechanical Building. $5 per credit. Ryan.

6. PATTERN AND FOUNDRY PRACTICE. Study of the products and methods of the foundry. Practical instruction is given in pattern making and molding. *First semester. One credit.* Mechanical Building. Fee $5. Ryan.

7. MACHINE SHOP. An advanced course in general machine work for students wishing to develop projects in connection with thesis or special work. *Prerequisite:* Mechanic arts 3. Also for students desiring to fill in a program in which case the work will consist of problems arising in the repair and maintenance of laboratory and shop equipment. *Either semester. One or two credits.* Mechanical Building. Ryan. Fee to be arranged in accordance with the work undertaken.

11. MACHINE SHOP. An elementary shop course in machine work includes instruction in bench work and in the use of drill, lathe, and milling machines. *Both semesters. One credit.* Mechanical Building. Fee $5. Ryan.

20. ELEMENTARY WELDING PRACTICE. This course is offered particularly for upper division engineering students who want to study the fundamental principles of oxyacetylene and electric welding with emphasis on its application to design and production. *Either semester. One credit.* Mechanical Building. Fee $5. Ryan.

50. ENGINEERING MATERIALS AND PROCESSES. The study of engineering materials and the methods and tools used in forming them. Laboratory work consists of practical heat treating, testing of machine and cutting tools under various conditions and power requirements. *Prerequisite:* M. A. 3 or equivalent. *Either semester. One lecture, two laboratory periods. Three credits.* Mechanical Building. Ryan. Fee $5.

MECHANICAL ENGINEERING

PROFESSOR VAN DYKE, ACTING HEAD OF SCHOOL
ASSOCIATE PROFESSOR HARRIS[1]
ASSISTANT PROFESSOR OLIVER[1]

19. ELEMENTS OF MECHANICAL ENGINEERING. A course designed to acquaint the student with the various types of equipment and machinery usually encountered in mechanical engineering practice. *No prerequisite.* Required of all mechanical engineering students. *First semester. One credit.* Oliver.

30. INTRODUCTORY AERODYNAMICS. A course in elementary aerodynamics covering theory of flight, engines, instruments and other accessories. *Prerequisites:* Mathematics 15–16. *Either semester. Two credits.*

41–42. ADVANCED MACHINE DRAWING. An exacting drill in projections, intersections, accurate and neat instrumental drawing, including layout, and methods of reproducing drawings. *Prerequisite:* G. E. 5 and 6. *Either semester. Three credits per semester.*

51. KINEMATICS. The study of the laws of motion as they affect the design of machine elements. Forms for gear teeth and cams. Analysis of the motion of machine parts. *Prerequisite:* Physics 3 and 4, Mathematics 25 and 26. *First semester. Three credits.* Oliver.

54. THERMODYNAMICS. Principles of engineering thermodynamics; properties of gases; thermodynamic processes of gases; gas cycles; internal combustion engines; air compressors and elements of different types of power plants. *Prerequisites:* Physics 3 and 4. *First semester. Three credits.* Van Dyke.

55. APPLIED THERMODYNAMICS. Additional work in thermodynamics; properties of vapors; thermodynamic processes of vapors; vapor cycles; steam engines; steam turbines. *Prerequisite:* M. E. 54. *Second semester. Three credits.* Van Dyke.

57. MACHINE DESIGN. The study of the application of the laws of velocity, force, and strength of materials to the design of machinery. Tooth and belt gearing, shafts, journals, bearings, cylinders, springs, bolts, keys, etc. *Prerequisite:* C. E. 72. *First semester. Three credits.* Harris.

58. MACHINE DESIGN PROBLEM. A design problem in the field of engines, machinery, or heat power, that is approved by the teacher, is to be analyzed. Each student is to choose his own problem. *Prerequisite:* M. E. 57. *Second semester. Three credits.*

64. MECHANICAL LABORATORY. Calibration of measuring instruments, gages, scales, thermocouples, thermometers, tachometers, etc. Errors in instruments. Colorimetry, heat transfer, fluid metering. Technical report writing. *Prerequisite:* M. E. 54. *Second semester. Three credits.* Fee $5. Oliver.

65. MECHANICAL POWER LABORATORY. Study of construction, operation and characteristics of steam power plant, steam and internal combustion engines, fans and pumps. Technical report writing and fundamentals of research methods. *Prerequisite:* M. E. 64, M. E. 54

[1]Absent on leave.

(thermodynamics completed or taken concurrently). *First semester. Three credits.* Fee $5. Oliver.

71. HEAT-POWER ENGINEERING. Power plants, fuels, combustion, steam generators, turbines, heat transmission, and steam generator accessories. *Prerequisite:* M. E. 55. *First semester. Three credits.* Van Dyke.

72. HEAT-POWER ENGINEERING. Condensers, feed water heaters, water softening, mixtures of air and water vapor, flow of compressible fluids, heating and ventilating, refrigeration. *Prerequisite:* M. E. 71. *Second semester. Three credits.*

76. ADVANCED DYNAMICS OF MACHINERY. Theory of vibrations with applications to problems involving bending and torsion, dynamic balancing, vibration damping, the dynamical vibration absorber, elastic mounting of machines, critical speeds of rotating shafts, etc. Lectures, laboratory demonstrations and experiments and problems. *Prerequisites:* Mathematics 85 and M. E. 57. *Second semester. Three credits.*

77. INTERNAL COMBUSTION ENGINES. A study of modern internal combustion engines of the stationary, automotive and aeronautic types, including spark ignition and compression ignition. Thermodynamics for engine analysis, fuels, mixture requirements, combustion, detonation and its effects, efficiencies, engine performance, etc., are included. *Prerequisite:* M. E. 54 and 55. *First semester. Three credits.* Van Dyke.

78. AERODYNAMICS. A more advanced course than M. E. 30. The theory of flight, air flow, and principles of design of aircraft structures are covered. The requirements of the aircraft power plant are studied, and data covering modern engines presented. *Prerequisite:* C. E. 93. *First or second semester. Three credits.*

79. HEAT TRANSFER. Review of fundamentals of the transfer of thermal energy and radiant energy. Design problems in heat transfer, and applications of technical design data to specific problems. *Prerequisite:* M. E. 55. *Second semester. Three credits.*

80. THESIS. An original design or an investigation intended to give the student a knowledge of research methods in engineering. This course is elective for seniors and graduates at the discretion of the instructors in the department. *Second semester. One to three credits.* Staff. Laboratory fee of $2.50 per credit may be required.

METALLURGY

PROFESSOR W. S. PALMER, HEAD OF DEPARTMENT
ASSOCIATE PROFESSOR SMYTH

4. ENGINEERING METALLURGY. Lectures and recitations for engineering students on the properties and uses of industrial metals and alloys, metallurgical processes and apparatus, and an introductory course on the metallurgy of iron and steel. *Prerequisite:* Chemistry 8 and physics 1A or 3. *Second semester. Two credits.* Mackay School of Mines. Smyth.

51. FIRE ASSAYING. Lectures, recitations, and laboratory work in assaying. Methods of assaying, systems of weights used, calculations

and problems, equipment of assay laboratories, sampling, chemistry of assaying. The assay of gold and silver ores of the simpler types followed by the assay of difficult ores and metallurgical products. *Prerequisite:* Geology 12, Chemistry 10. *First semester. Lectures, one hour; laboratory, three periods. Four credits.* Mackay School of Mines. Fee $15. Smyth. Students who do not complete their laboratory work during the regular periods are required to pay an additional fee to cover the extra cost of such work. This fee will be $1 per laboratory period for each period the furnaces are used, plus the cost of any chemicals and supplies used.

56. METALLOGRAPHY. This course is designed to cover the methods of preparation and microscopic examination of specimens of some of the common metals and alloys, illustrating the microstructure of pure metals and alloys, the effect of heat treatment in tempering and annealing, cooling curves, the detection of the presence of flaws and defects in metals, a study of welds, and the effects of strain and mechanical treatment. *Prerequisite:* Metallurgy 4. *Second semester. Lecture, one hour; laboratory, two periods. Three credits.* Mackay School of Mines. Fee $2.50. Palmer.

58. FERROUS METALLURGY. Lectures and recitations on the principles and practice of producing iron and steel, the properties and uses of the ferrous metals, the iron-carbon diagram, mechanical and heat treatment of steel, and alloy steels. *Prerequisite:* Metallurgy 4. *First semester. Two credits.* Mackay School of Mines. Smyth.

61. PYRO-METALLURGY NONFERROUS METALS. Lectures and recitations on the smelting or fire methods of extracting the common metals from their ores and refining processes for these metals by fire methods. The principal metals covered will be copper, lead, zinc, mercury and nickel. *Prerequisite:* Geology 11 and Metallurgy 4 and 51. *First semester. Three credits.* Mackay School of Mines. Palmer.

62. METALLURGY OF THE MINOR AND RARE METALS. Lectures and recitations on the metallurgy of minor and rare metals including the following: Antimony, arsenic, aluminum, bismuth, molybdenum, platinum, tin, and tungsten. *Prerequisite:* Metallurgy 61 and 71. *Second semester. One credit.* Mackay School of Mines. Palmer.

66. ORE DRESSING. Lectures and recitations in ore dressing. Laws of crushing, sizing, and concentration of ores, including flotation. *Prerequisite:* Metallurgy 4, Geology 12 and 14. Course to be taken only with Metallurgy 68. *Second semester. Lectures, two hours. Two credits.* Mackay School of Mines. Palmer.

68. ORE DRESSING LABORATORY. A laboratory course to be taken only with Metallurgy 66. This course covers general practice in the use of the various machines used in ore dressing. *Prerequisite:* Chemistry 10, Metallurgy 51. *Second semester. Laboratory, two periods. Two credits.* Mackay School of Mines. Fee $5. Palmer and Smyth.

71. HYDRO-METALLURGY. Lectures, recitations, and laboratory, exercises on the various hydro-metallurgical methods used in the recovery

and refining of the metals gold, silver, copper, lead and zinc. *Prerequisites:* Metallurgy 51 and 66; Chemistry 10. *First semester. Lectures, two hours; laboratory, one period. Three credits.* Mackay School of Mines. Fee $5. Palmer.

72. ELECTROMETALLURGY. Lectures and recitations on electric smelting and the electrolytic processes involved in the metallurgy of the common and precious metals. *Prerequisite:* Metallurgy 61 and 71. *Second semester. Two credits.* Mackay School of Mines. Palmer.

76. PROBLEMS AND SEMINARS. This course covers common technical and economic problems related to the design, operation, and management of metallurgical plants, and a discussion of articles upon metallurgical subjects. Open only to students after they have completed metallurgical subjects to the second semester of the senior year. *Second semester. Two credits.* Mackay School of Mines. Palmer or Smyth.

79–80. PROJECT. Two laboratory periods weekly devoted to individual problems in metallurgy. Stress is placed upon amplifying the subject matter of previous metallurgy courses, and in the methods of searching for, summarizing, and presenting the data gathered and worked out. *Prerequisite:* Metallurgy courses to the senior year and taken with Metallurgy 61 and 71. *Both semesters. Two credits.* Mackay School of Mines. Palmer. Fee to be arranged according to work undertaken, and only required with laboratory which uses apparatus, chemicals, etc. When projects involve laboratory work, students shall pay a charge to be based on the number of assays made or the type of work undertaken. The amount to be paid will be determined near the end of the project course and is to be paid as soon as the amount of the charge can be determined.

MILITARY SCIENCE AND TACTICS

PROFESSOR FIELD, LT. COLONEL, INFANTRY, U. S. ARMY

INSTRUCTOR MCCORMICK, DEML (ROTC), TECHNICAL SERGEANT, U. S. ARMY

Requirements for a minor in military science: Military 1–2 (2 credits), 3–4 (2 credits), and 14 additional credits in the department, at least 6 of which must be in courses numbered 50 or above.

The following courses of instruction are prescribed by the War Department for Infantry Units of the Reserve Officers Training Corps:

MILITARY 1–2. Basic course, first year. Practical and theoretical. Orientation: the National Defense Act and the R. O. T. C.; obligations of U. S. citizenship; military history and policy of the U. S.; military discipline, courtesy, and customs of the service; military sanitation and first-aid; military organization: army in general; infantry arm; map reading; leadership, principles of, and drill and command; weapons: the rifle and rifle marksmanship. Required of all first-year men students. *Four hours per week. Both semesters. One credit each semester.*

MILITARY 3–4. Basic course, second year. Practical and theoretical. Leadership: Infantry Drill Regulations; drill and command; infantry weapons, characteristics of: combat principles and training; musketry and the technique of rifle fire; scouting and patrolling; the

small infantry units in security, offensive and defensive combat. Required of all second-year men students. *Four hours per week. Both semesters. One credit each semester.*

MILITARY 51–52. Advanced course. First year (elective). Practical and theoretical. Military fundamentals: aerial photography and its restitution and reading; care and operation of motor vehicles; administration, records, reports, finance, supply and mess management; leadership: principles, instructional methods, drill and command, manuals of the various arms and pieces, and ceremonies; weapons: review of rifle marksmanship; heavy and anti-tank weapons; the automatic pistol; combat principles and training: general, in the estimate of the situation, combat orders, solution of map problems; marches, security, development for combat, offensive and defensive combat, and organization of the ground; training of small infantry units: the heavy weapons sections and platoons, the anti-tank squad and section, the rifle platoon, in security, offensive and defensive combat; field fortification and obstacles; defense against chemical warfare. *Prerequisite:* Military 3–4, or its equivalent at this University or in some other institution having a senior unit. *Five hours per week. Both semesters. Three credits each semester.* (Not offered for the duration of the war.)

MILITARY 53A. Advanced camp course. *Two credits.*

NOTE—Students taking advanced military training and receiving a daily money allowance from the Government are required to attend a camp of instruction for a period of six weeks at the end of the third year. Only under very exceptional circumstances will the Commanding General, Ninth Corps Area, grant deferments of this camp training until the end of the fourth year. Students attending the advanced camp receive pay at the rate of $30 per month from the United States Government. (Not offered for the duration of the war.)

MILITARY 53–54. Advanced course. Second year (elective). Practical and theoretical. Military fundamentals: military history and policy of the U. S.; military law (of offenses only); property, emergency procurement, and funds; Officers' Reserve Corps Regulations; leadership, principles of; instructional methods; drill and command: manuals of the various arms and pieces; ceremonies; weapons: tanks and mechanization; combat principles and training: review of offensive and defensive combat, security, organization of the ground, field fortification and obstacles, and the solution of map problems; training of infantry units, the anti-tank platoon, heavy weapons and rifle platoons and companies in offensive and defensive combat, security; anti-tank and anti-aircraft defense; combat intelligence; infantry signal communications. *Five hours per week. Both semesters. Three credits each semester.* (Not offered for the duration of the war.)

MILITARY BAND. Students enrolled in the military department and assigned to the band will receive credit for required military training at the rate of one credit for each semester. Such students are required to attend at least two periods of band rehearsals and one of drill per week, and will attend with the band when required for parades, reviews, and other military ceremonies. (Not offered for the duration of the war.)

MINERALOGY

(See Geology.)

MINING

PROFESSOR CARPENTER, HEAD OF DEPARTMENT
ASSOCIATE PROFESSOR SMYTH
MR. COUCH[1]

5. PRACTICAL MINING. Practical work in mining or metallurgy during the summer vacation. Such work must extend over a period of at least one month, and a satisfactory report must be prepared upon it. *Freshman, sophomore, or junior vacation. Required for graduation. No credit.*

51. EXCAVATION. Lectures and recitations on the principles and practice of excavation, including earth excavation, rock drills and drilling practice, explosives and blasting practice, quarrying, tunneling, shaft sinking and boring. Stress is placed upon the underlying principles of physics and chemistry. *Prerequisite:* Physics 3 and 4; Chemistry 7 and 8. *Junior year. First semester. Three credits.* Smyth.

52. MINE PLANT. Lectures on the principles and practice of underground and surface haulage, hoisting, air compression, mine drainage, ventilation and illumination. Stress is placed upon the underlying principles of physics and mechanics. *Prerequisite:* Physics 3 and 4; Mathematics 55. *Junior year. Second semester. Three credits.* 101 Mackay School of Mines. Carpenter.

61. MINING METHODS. Lectures and recitations on the prospecting, development, and exploitation of mineral deposits, including underground metal mining methods in detail, with quarrying, coal mining, and placer mining methods in brief. *Prerequisite:* Mining 51 and 52. *Senior year. First semester. Three credits.* Carpenter.

72. MINE ADMINISTRATION. Lectures and recitation on the business, sociology, and laws of mining, including mine examination, organization of staff, problems concerning power, labor and supplies, compensation and accident insurance, welfare work, accidents and their prevention, Federal and State mining laws with mine maps and models. *Prerequisite:* Mining 61. *Senior year. Second semester. Three credits.* Smyth.

74. MINERAL INDUSTRY ECONOMICS. Lectures and recitations on economic problems of mining and metallurgy and mine accounting, including incorporations and securities, depreciation, depletion, amortization, taxes, assessments and dividends, and laws governing the same, the costs of mining, milling, and marketing, and cost accounting methods. *Prerequisite:* Mining 61. *Senior year. Second semester. Three credits.* Carpenter and Couch.

79–80. MINING PROJECT. Two laboratory periods weekly devoted to individual problems in mining, progressing from those of small properties to specific problems concerning shaft sinking, tunneling, or the like on a large scale, and finally to working of mines based upon those in actual operation in important mining camps. Stress is placed upon amplifying the subject matter of previous mining courses and in the methods of searching for, correlating, and presenting the data gathered and worked out. *Prerequisite:* Mining 51–52. *Both semesters. Two credits each semester.* Carpenter. A charge based on equipment and material used.

[1]Absent on leave.

MUSIC

PROFESSOR POST, HEAD OF DEPARTMENT

Requirements for a minor in music: 1–2 (2 credits), 5 or 65 (2 credits), 10 (2 credits), 11–12, or 15–16, or 17–18 (2 credits), 50–51 (6 credits), 54–55, or 59–60, or 63–64 (2 credits), 57 (2 credits).

1–2. MUSIC READING AND EAR TRAINING (for elementary teachers and students preparing for harmony). Learning to read by "sol-fa" system of simple unison and two-part folk songs in all keys and common rhythms. Notation, terminology, intervals, scales, and a listening experience with selected music literature contained in the library of phonograph records. *Both semesters. One credit each semester.* 204 Education Building. Post.

5. TEACHING OF MUSIC. (Same as Education 21.) The aims and principles of music teaching in the kindergarten, elementary, and upper grades. Group technique, song leading, interpretation, rhythmic activities. Care of the voice through various periods of development. Remedial exercises for improving pitch defects and tone quality. Music materials, rote songs, unison and descant songs, part songs, records, radio, and methods of approach for the listening period. *First semester. Two credits.* Education Building. Post.

9. EIGHTEENTH-CENTURY MUSIC. (Open to all students and visitors with admission cards. No previous experience necessary.) Content of music as found in the pre-Bach and eighteenth-century classic period. Recorded examples of Gregorian chant, minstrelsy, folk-songs, the Netherland School and Palestrina; Bach, Handel, Gluck, Haydn, Mozart, and Beethoven. Historical and biographical background. Lectures, recitals, and illustrations from the Carnegie University Library of records and scores. *First semester. Two credits.* 204 Education Building. Post.

10. NINETEENTH-CENTURY MUSIC. (Open to all students and visitors with admission cards. No previous experience necessary.) The music of the Romantic period. Schubert, Weber, Schumann, Mendelssohn, Berlioz, Liszt, Wagner, Brahms, Chopin, Grieg, Dvorak, Saint Saens, and Franck. Period background, records, scores, lectures, and recitals provide material for observation and study. *Second semester. Two credits.* 204 Education Building. Post.

11–12. CAMPUS CHORAL CLUB AND UNIVERSITY SINGERS. Open to all students, men and women, interested in choral singing, who have at least average qualifications of voice and are approved by the director. Representative selections from the best vocal literature such as the oratorio "Messiah" by Handel, the "Requiem" by Brahms; concert versions of parts of the operas such as "Carmen" by Bizet, "Tannhauser" by Wagner; other selections and part songs. One or more public concerts are given each year in joint performance with the Reno Civic Chorus. *Two semesters. One credit each semester.* 204 Education Building and New Gymnasium. Post.

15–16. RENO CIVIC ORCHESTRA. Open to all men and women students who play orchestral instruments, subject to examination and approval of the director. The orchestra assists the Reno Civic Chorus in the performance of Handel's "Messiah" and other large works for chorus and orchestra. In addition, attractive instrumental works are

prepared and played in one or more public concerts each year. *Two semesters. One-half credit each semester.* New Gymnasium. Post.

17–18. BAND. (See under military for a description of the requirements and credits for men assigned to the band as a substitute for military.) University students, both men and women are eligible for membership in the University band. The schedule calls for appearances at civic and university parades, athletic contests, rallies, and an annual spring concert. One out-of-town trip with the football team is usually made each year. *Two semesters. One credit each semester.* New Gymnasium. Post.

50–51. HARMONY (open to all students who have had Music 1 and 2 or the equivalent). Study of scales, intervals, fundamental triads, seventh chords, in the major and minor modes. Ear training, keyboard drill, simple analysis, harmonization of melodies. Some original work. *Two semesters. Three credits each.* 204 Education Building. Post.

52–53. ADVANCED HARMONY. Study of secondary sevenths, ninth chords, altered chords, modulation, suspension and passing tones, analysis, original work. Continued ear training. Open to all students who have had music 50–51, or the equivalent. *Two semesters. Three credits each.* 204 Education Building. Post.

54–55. CAMPUS CHORAL CLUB AND UNIVERSITY SINGERS. *For* description, see music 11 and 12. *Prerequisite:* Music 11–12. *Two semesters. One credit each semester.* 204 Education Building and New Gymnasium. Post.

57. RUSSIAN MUSIC. (Open to all students and visitors with admission cards. No previous experience necessary.) A survey of the music of Glinka, Tschaikowsky, Rimsky-Korsakoff, and the Russian "Five"; Russian Nationalism; Scriabin, Stravinsky, Prokofieff, Rachmaninoff, Shostakovich, and other moderns, with illustrations from the records. Historical and biographical background. *First semester. Two Credits.* 204 Education Building. Post.

58. MUSIC OF TODAY. (Open to all students and visitors with admission cards. No previous experience necessary.) Late nineteenth- and twentieth-century composers of all nations with special emphasis upon American music. Consideration of modern trends in both classical and popular fields. Debussy, Richard Strauss, Sibelius, Ravel, Schonberg, MacDowell, Harris, Copeland, Gershwin, Taylor, Chadwick, Hindemuth, Milhaud, Grofe, Griffis, Vaughan Williams, Carpenter, Block, Whiteman, Foote, Hadley, Loeffler, Schelling, Cowell, Herbert, and others. Film and radio music and Latin-American contributions illustrated by the records. *Second semester. Two credits.* 204 Education Building. Post.

59–60. RENO CIVIC ORCHESTRA. For description see music 15–16. *Prerequisite:* Music 15–16. *Two semesters. One-half credit each.* New Gymnasium. Post.

63–64. BAND. For general description, see music 17–18. *Prerequisite:* Music 17–18. New Gymnasium. Post.

65. HIGH SCHOOL MUSIC. (Same as Education 65.) Conducting. Instrumental technique. Practical consideration of instrumentation,

transposing instruments, and teaching material of all grades. Choral technique. Voice ranges of boys and girls, the changing voice, remedial exercises. Materials for part singing, girls' and boys' glee clubs, and mixed chorus. High school music curricula. Technical and appreciatory objectives. Active participation in orchestra, glee club, or band required and applicant must be a junior or senior with a minor in music or its equivalent. *Second semester. Two credits.* Education Building. Post.

ORIENTATION

1. ENGINEERING ORIENTATION. This course is discontinued for the present, and Philosophy 5 is required in its place.

PHILOSOPHY

PROFESSOR THOMPSON,[1] HEAD OF DEPARTMENT
ASSISTANT PROFESSOR WIEDERHOLD

Requirements for a minor in philosophy: Psychology 5 (3 credits), philosophy 7 or 8 (3 credits), and 21 (3 credits), and 9 credits in the department in courses numbered 50 or above.

Requirements for a major in philosophy: Psychology 5 (3 credits), philosophy 7 or 8 (3 credits), and 21 (3 credits), and 15 credits in the department in courses numbered 50 or above.

The following courses are recommended, but not required, for majors and minors in philosophy: Psychology 51 and 62, economics 1 and 2, sociology 81, and political science 1 and 2.

1. INTRODUCTION TO PHILOSOPHY. A brief study of the problems of philosophy with the solutions suggested by the various schools. Designed both for the student who wishes a perspective for further work in philosophy, and for the student who desires a general knowledge of the scope and methods of philosophy. *Open to freshmen. Either semester. Three credits.* 202 Morrill Hall. Wiederhold.

5. WAR ISSUES. The historical and economic background of the present war; the conflict of ideas and purposes involved. *Required of all freshmen and open to others. First semester. One credit.* Thompson and others.

7. DEDUCTIVE LOGIC. Terms, definition, division, syllogism and fallacies. Text, lectures and exercises. *Open to freshmen. First semester. Three credits.* 202 Morrill Hall. Thompson.

8. INDUCTIVE LOGIC. The assumptions of induction methods of scientific investigation, fallacies, the tests of truth. Text, lectures and exercises. *Open to freshmen. Second semester. Three credits.* 202 Morrill Hall. Thompson.

21. ETHICAL THEORIES. A study of the leading theories of moral principles and ideals. Among the topics discussed will be the concept of the good, duty, egoism, altruism, freedom, responsibility, and the doctrine of virtues. Open to sophomores. *First semester. Three credits.* 202 Morrill Hall. Thompson.

22. APPLIED ETHICS. The application of ethical theory to typical problems of institutional life, property, and the family. Open to sophomores. *Second semester. Three credits.* 202 Morrill Hall. Thompson.

[1]Absent on leave; second semester, 1944-1945

51. HISTORY OF ANCIENT PHILOSOPHY. A study of Greek and Roman philosophy, and of Medieval philosophy to the decline of scholasticism. *Prerequisite:* One course in philosophy. *First semester. Two or three credits according to the work done.* 202 Morrill Hall. Wiederhold. (Not offered in 1945–1946.)

52. HISTORY OF MODERN PHILOSOPHY. A study of the problems and concepts of philosophy from Descartes to the present time. *Prerequisite:* One course in philosophy. *Second semester. Two or three credits according to the work done.* 202 Morrill Hall. Wiederhold. (Not offered in 1945–1946.)

53–54. PHILOSOPHICAL TENDENCIES OF THE PRESENT. A review and criticism of the main tendencies in present philosophical thought with reference to concrete social problems. Special attention will be given to absolutism, pragmatism, pluralism, and the philosophy of James. *Prerequisite:* One course in philosophy. *Both semesters. Two credits each semester.* Alternates with philosophy 51 and 52. 202 Morrill Hall.

55. AESTHETICS. A philosophic analysis and appraisal of the aesthetic experience to determine the meanings of beauty and of ugliness. Special consideration will be given to the origin and nature of art; its significance for religion, morality, and social life. Contemporary theories of aesthetics will be analyzed and their standards of criticism evaluated. *Prerequisite:* Junior standing. *First semester. Two credits.* 202 Morrill Hall. Wiederhold.

61. INTRODUCTION TO RELIGION. A study of the forms and psychological aspects of religious experience with special reference to typical historic religions. *Prerequisite:* One course in philosophy and psychology 5. *First semester. Two to three credits according to work done.* 202 Morrill Hall. Thompson.

62. PHILOSOPHY OF RELIGION. The meaning and validity of religious experience. Among the topics discussed will be the religious conception of God, the world, revelation, faith, prayer, evil, immortality. *Prerequisite:* One course in philosophy and psychology 5. *Second semester. Two or three credits according to the work done.* 202 Morrill Hall. Thompson.

82. PHILOSOPHY OF POLITICAL PROBLEMS. The metaphysical basis of the state, the state and its citizens, the state and other states, sovereignty, freedom, democracy, fascism and communism, are among the problems discussed. *Prerequisite:* Junior standing and one course in philosophy. *Second semester. Two credits.* 202 Morrill Hall. Thompson.

84. METAPHYSICS. A constructive study of the problems of being, unity, order, and individuality, with practical applications of the theory developed. *Prerequisite:* Two courses in philosophy and psychology 5. *Second semester. Three credits.* 202 Morrill Hall. Wiederhold.

100. RESEARCH COURSE. The thesis may be selected in any field of philosophy. For seniors only. *Prerequisite:* The equivalent of a minor in philosophy. *Either semester. Two credits.* 202 Morrill Hall. Thompson and Wiederhold.

PHYSICAL EDUCATION

Men

PROFESSOR MARTIE, HEAD OF DEPARTMENT
ASSOCIATE PROFESSORS SCRANTON, COLEMAN[1]

Requirements for a minor in physical education: Courses 1–2 (1 credit), 3–4 (1 credit), or equivalent, 9–10 (2 credits), and 10 credits in the department in courses numbered 50 or above.

Requirements for a major in physical education: Courses 1–2 (1 credit), 3–4 (1 credit), 9–10 (2 credits), 53 (2 credits), 58 (2 credits), 60 (2 credits), 63 (2 credits), 64 (2 credits), and 8 additional credits in the department in courses numbered 50 or above. Zoology 57 and 58, and a year of chemistry is strongly recommended. Participation in at least one major sport is required of both majors and minors.

1. DEVELOPMENTAL EXERCISES. Physical examinations are required at the beginning of the semester. Strength tests are given at beginning and again at end of semester. Practical work consists in mass athletics; games selected with a view of developing alertness, coordination, muscular control, vigor and rhythm. *Freshman year.* (Required.) *First semester. Two hours per week. One-half credit.* Scranton.

2. DEVELOPMENTAL EXERCISES. Continuation of course 1 with addition of calisthenics and light apparatus. *Second semester. One-half credit.*

3. ADVANCED EXERCISES. Strength tests will be continued as in freshman year. Practical work consists in mat work, tumbling, heavy apparatus using long and short horse and buck. *Sophomore year.* (Required.) *First semester. Two hours per week. One-half credit.*

4. ADVANCED EXERCISES. Continuation of course 3. Heavy apparatus consisting of work with parallel bar, low and high horizontal bars, ladder and stall bar. *Second semester. One-half credit.* Scranton.

By obtaining consent of the head of the department a student may elect any of the following sports as a substitute for the practical work in courses 1, 2, 3, and 4: Football, basketball, track, tennis, cross country, wrestling and tumbling.

5–8. SPECIAL CORRECTIVE EXERCISES. This course is designed for all freshman and sophomores whose physical examinations show they are unfitted to take courses 1, 2, 3, and 4. *One-half credit for each semester's work up to and including four semesters.* Martie.

9. ADVANCED WORK (paralleling courses 3 and 4). *Aim:* To develop squad leaders and to assist men to qualify for a State certificate to teach physical education in high schools. *First semester. Three hours per week. One hour credit.* Scranton.

10. CONTINUATION OF COURSE 9. *Second semester. Three hours per week. One hour credit.* Scranton.

51. FOOTBALL IN THEORY AND PRACTICE. A course of lectures and practical demonstrations for those who may wish to coach, or for players who are out for the varsity or for those who are interested in and wish a more intimate knowledge of America's greatest game. Open only to juniors or seniors who have had two or more years' college experience in this sport. *First semester. One lecture per week and*

[1]Absent on leave.

one hour laboratory. Two credits. Not given unless eight or more are enrolled.

52. BASKET BALL IN THEORY AND PRACTICE. A course of lectures and practical demonstrations in America's leading winter indoor sport. *Second semester. One lecture and one hour laboratory work per week. Two credits.* The same conditions for enrollment must be met as in course 51. Martie.

53. TREATMENT OF ATHLETIC INJURIES. This is a course in first aid with special emphasis on common athletic injuries. It will include the various uses of tape, bandages, splints, etc. Time will be given to the study of the prevention of injuries such as sprains, charley horse, tackle shoulder, blood poison, blisters, etc., as well as treatment for same. *Three periods per week. Two credits. First semester.* Martie.

54. TRACK AND FIELD ATHLETICS. Lectures and demonstrations on each track and field event. *Second semester. One lecture and one hour laboratory per week. Two credits.* The same conditions for enrollment must be met as in course 51.

55. PLAYGROUND. *Prerequisite:* Physical education 53. A study of playground methods, apparatus, and organization. Special attention is given to group games for all ages. Also to the "gang" problem as related to playground. *Three periods per week. Two credits. First semester.*

56. ANTHROPOMETRY. This is a course in physical measurements and methods of detecting physical defects. It will include practical use of charts in connection with physical development. *Three periods per week. Two credits. Second semester.*

57. OFFICIATING MAJOR SPORTS. A careful study of the rules of football, basket ball, and track, with interpretations, methods of officiating, and characteristics of officials. *Three periods per week. Two credits. First semester.*

58. See Education 64. Martie.

59. CORRECTIVE GYMNASTICS. The work will consist of lectures covering the biological, sociological, and physiological aspect of the causes of functional and structural defects. Practical work will include the use of apparatus and the adaption of various forms of exercises to the needs of the individual.

(a) Improving functional organic capacity.
(b) Correction of physical defects.
(c) Measurements of motor ability.

Three periods per week. Two credits. First semester. Martie.

60. INTRODUCTION TO PHYSICAL EDUCATION AND HEALTH. This course will consider the aims and objectives of physical education and health; the principles underlying the curriculum, standards for selection of activities and criteria for judging the work. Application will be made to the capacities and needs of different age groups. *Three periods per week. Two credits. Second semester.*

61. PHYSICAL DIAGNOSIS AND HEALTH EXAMINATION. The purpose of this course is to enable the teacher to perform a physical examination and detect gross defects in structural and organic development

and function. Infectious diseases are studied and common diseases of the vital organs briefly covered. Laboratory includes practice in diagnosis. *Three periods per week. Two credits. First semester.* Martie.

62. PSYCHOLOGY OF COACHING. Emphasizes the application of practical psychology in all forms of athletic activities. Of special interest to prospective leaders and coaches. Illustrations of applied psychology are collected and analyzed as to values in the relations to specific forms of athletics. *Three periods per week. Two credits. Second semester.* Martie.

63. PHYSIOLOGY OF EXERCISE. This course acquaints students with physiological changes in human organisms due to physical exercise. It furnishes a physiological basis for planning a program of physical education for schools and training programs for the athletic teams. Laboratory experiments deal with simple observations of respiration, circulatory, nervous and metabolic adjustments to physical exercise. *Three periods per week. Two credits. First semester.* Martie.

64. CHARACTER EDUCATION THROUGH PHYSICAL EDUCATION. An application of the principles of leadership to the particular problems in the program of character education in general, but with special references to the character training situations that arise in physical education activities. *Three periods per week. Two credits. Second semester.* Martie.

65. RECREATION LEADERSHIP. A study of community recreation with special emphasis upon its relation to physical education. Designed to aid in preparation for community service. *Three periods per week. Two credits. First semester.* Martie.

PHYSICAL EDUCATION

Women

PROFESSOR SAMETH, HEAD OF DEPARTMENT
MISS RUSSELL[1]
MISS DIXON

All P. E. Minors—1, 2, 3, 4, 9 or 10, 23, 31, 55, 56, 57.
Dance Minors—11, 32, 101.
Sports Minors—59 or 60, and 61.
Recommendations—(All) Chemistry, 3–4, Home Economics 33, Education 56.
(Dance) Art 5–6, English 81–82.

1, 2, 3, 4. FRESHMAN AND SOPHOMORE PRACTICE. Required for graduation. Courses numbered in the order in which they are taken, regardless of the activity. Courses include types of activity offered in the department. The student receives one unit of credit each for Physical Education 1 and 2 (three periods), and one-half unit each for Physical Education 3 and 4 (two periods). When restricted work seems necessary, the student receives individual attention for four shorter periods per week. Fee $1 to $12.

11. GAMES FOR THE PRE-SCHOOL CHILD AND FOR THE FIRST THREE GRADES. Recommended for those who like to work with young children. Required of all Physical Education minors who do not take Physical Education 12. *One credit.*

[1]Absent on leave.

12. FOLK DANCING FOR ELEMENTARY GRADES AND HIGH SCHOOL. The object of this course is to give those who intend to teach, folk dances suitable for use in the four upper grades. It stresses dance, terminology, the fundamental steps of many countries, calls, etc., and includes short and not very difficult dances. Required for Physical Education minors who do not take Physical Education 9. *Prerequisite:* Physical Education 1–2 or the equivalent. *Two periods. One semester. One credit.* Gymnasium.

13. CONTINUATION OF PHYSICAL EDUCATION 12. With special attention to material suitable for junior and senior high school. This class will meet twice a week for one month. The remainder of the semester will be devoted to one period of teaching, preferably of recreation groups, and one of class discussion. Required for Physical Education minors in the dance. *One semester. One credit.*

23. FIRST AID AND HEALTH IN THE HOME, SCHOOL, AND COMMUNITY.

A—*First Aid.* A Red Cross certificate may be had if the grade is C or better. *Six weeks.*

B—*Health in the Home.* Not required of students who are taking Home Economics 54. *Six weeks.*

C—*Health in the School and Community.* This course may be elected for 1, 2, or 3 units. Required for Physical Education minors. *Six weeks.*

One semester. Three credits.

25, 26, 27, 28. ACTIVITIES. For those who have completed requirements for graduation and who wish to improve their skills in any activity offered. *Each semester. One-half credit.*

31–32. CONTEMPORARY DANCE. Open to all who have had the equivalent of Physical Education 1–2–3. *Three periods. Each semester. One credit.* Gymnasium.

35. APPLIED ANATOMY AND PHYSIOLOGY OF THE NEUROMUSCULAR SYSTEM. This course will familiarize the student with the mechanism and function of the neuromuscular system. The student will be prepared to study intelligently cases of round shoulders, spinal curvature, flat feet, and the effects of fatigue. *Prerequisite:* Physical Education 1 and 2; Zoology 57–58 or Zoology 11. *First semester. Three credits.* Gymnasium.

36. RECONSTRUCTIVE PHYSICAL EDUCATION. Application of Physical Education 55 to the needs of the child, his growth, development, and physical activity. Required for Physical Education minors. *Laboratory, two periods. Two credits.*

53–54. HISTORY AND DEVELOPMENT OF THE DANCE. This course will deal with a historical development of the dance, a study of dance forms, their relationship to one another and to the contemporary dance. It will include social dancing as well as the dance as an art form. Material suitable for use in elementary and high school will be studied. *Prerequisite:* Physical Education 31 or its equivalent. Required for Physical Education minors in the Dance. *First semester. One lecture; two laboratory periods. Three credits.* (Not offered in 1944–1945.)

57. HISTORY, ADMINISTRATION, AND ADAPTATION OF PHYSICAL EDUCATION AND RECREATIONAL ACTIVITIES. The course studies elementary, junior high and senior high school physical education programs, after-school programs, and extra-curricular activities. There will be opportunity to direct after-school activities, either in athletic associations or on playgrounds. *First semester. Three credits.*

59–60. THEORY AND PRACTICE OF DIRECTING TEAM GAMES. This course includes a study of the rules, techniques, and game forms leading up to games for elementary, junior high, and senior high schools. Opportunity will be given for practice in teaching and officiating. *Prerequisite:* Physical Education 57 and at least two years participation, including at least one group activity. *Two lectures; one practice period per week. Both semesters. Two credits.*

61. THEORY AND PRACTICE OF DIRECTING INDIVIDUAL AND DUAL SPORTS. *Two lectures; one practice period per week. Two credits.*

101–102. PROBLEMS IN HEALTH AND PHYSICAL EDUCATION. Not open to freshmen or sophomores except by special arrangement. Where work is done in the field of health education the student must also have had the equivalent of a minor in Zoology. *Two to five credits.*

RECREATION. All women may receive instruction and participate in all activities sponsored by the Women's Athletic Association. (See page 66.) In addition, *all* activity classes are open to any who wish to attend *without* University credit. The only requirements are physical fitness and regular attendance.

PHYSICS

PROFESSOR LEIFSON, HEAD OF DEPARTMENT
ASSOCIATE PROFESSORS BLAIR, BATDORF[1]

Requirements for a minor in physics: Physics 3–4 (8 credits), Physics 5–6 (4 credits), and 6 additional units in the department in courses numbered above 50.

Requirements for a major in physics: Physics 3–4 (8 credits), Physics 5–6 (4 credits), and 12 additional units in the department in courses numbered above 50. Other requirements: General chemistry, Calculus (to be taken concurrently with Physics 3–4), Mechanics, and German.

Requirement for a teacher's recommendation in physics: a major or a minor in the department.

1A–2A. GENERAL PHYSICS. A course in general physics primarily for students in arts and science, medicine and agriculture. Lectures and recitations with experimental demonstrations and problem work. No credit for either semester of this course will be given unless accompanied by the corresponding course in Physics 1b-2b. *Prerequisite:* Plane geometry. A knowledge of trigonometry is desirable. *Both semesters. Three credits each semester.* Mackay Science Hall. Blair.

1B–2B. GENERAL PHYSICS LABORATORY. A laboratory course to make the student an intelligent observer of natural phenomena. To accompany physics 1a-2a. Experimental work, largely quantitative in character and designed to illustrate fundamental physical principles and to develop skill and accuracy in the methods of physical measurement. No credit for either semester will be given unless accompanied by the

[1]Absent on leave.

corresponding course in physics 1a-2a. *Prerequisite:* Plane geometry. A knowledge of trigonometry is desirable. *Both semesters. One credit each semester.* Fee $3. Mackay Science Hall. Blair.

3–4. GENERAL PHYSICS FOR ENGINEERS. Mechanics, Heat, Sound, Light, Electricity, and Magnetism. Two lectures and two recitations per week. *Prerequisites:* Trigonometry and Analytical Geometry. *Both semesters. Four credits each semester.* 321 Mackay Science Hall. Leifson and Batdorf.

5–6. PHYSICAL MEASUREMENTS. Experimental work of distinctly quantitative character in mechanics, heat, sound, light, electricity and magnetism. *Prerequisites:* Trigonometry and Analytical Geometry. *Both semesters. One or two credits per semester. Maximum of four credits for the course.* 127 Mackay Science Hall. Fee $1.50 per credit. Leifson and Batdorf.

7. *Descriptive Astronomy.* A brief course in astronomy designed to acquaint the student with the more important facts relating to the heavenly bodies. Descriptive rather than mathematical in character. During the war emergency, this course will emphasize those facts of astronomy which afford a foundation for the later study of navigation, either nautical or areonautical. By special arrangement, interested members of the class may become familiar with the use of the sextant and with the underlying principles involved in the determination of the location of the observer upon the surface of the earth. *Either semester. Three credits. Two scheduled periods and one evening hour to be arranged.* Mackay Science Hall. Blair.

9–10. INTRODUCTORY PHYSICS. A nonmathematical course dealing with the fundamental principles of physics. Practical applications will be emphasized, and lectures will be illustrated by numerous experiments and lantern slides. *No prerequisite. Two credits each semester.* Mackay Science Hall. Leifson.

15–16. *Elementary Radio.* The characteristics of electron tubes and their applications. The principles underlying radio receivers and transmitters. Liberally illustrated by laboratory demonstrations. *Prerequisite:* Two years of high school mathematics. *Both semesters. Three credits per semester.*

17–18. *Meteorology.* A brief presentation of the fundamental principles of weather observation, mapping and forecasting. This course will be found most helpful to men planning to enter any branch of aviation. Not only will the student be able to use more intelligently the information supplied to him by the meteorologist but to a considerable extent he will become his own forecaster, utilizing his knowledge of the probable consequences of local weather phenomena. This is especially important under war conditions when the flier is often unable to obtain weather reports by radio. The content of the course also affords a solid foundation for more advanced work in meteorology. The complex mathematical theory underlying modern meteorology is left for later consideration. *Either semester. Three credits.*

19–20. HOUSEHOLD PHYSICS. A course in general physics for students in home economics. The practical applications of physics in the home will be emphasized. *Prerequisite:* A thorough knowledge of

elementary algebra and plane geometry. *Both semesters. Lecture, recitation and quiz, two hours; laboratory, one period. Three credits each semester.* Fee $3. Mackay Science Hall. Blair.

51–52. PRACTICAL CALCULATION. Graphical methods of determining the relationship between physical quantities. The adjustment of graphs to increase the accuracy of computed results. Practice in the arrangement of logarithmic calculation so that the minimum amount of labor is involved in the solution of complicated equations. Differential correction of results. Interpolation and the use of interpolation formula. Computation of probable error, and estimation of accuracy of data and results. *Prerequisite:* Differential calculus. *Either semester. One credit. One three-hour computing period per week.* Mackay Science Hall. Blair.

57–58. ELECTRICAL MEASUREMENTS. Precise measurements of current electromotive force and power, with both alternating and direct current. Calibration of instruments, determination of resistance, capacity, mutual inductance, and self-inductance. Hysteresis. Photometry. Illumination. *Prerequisite:* General physics, differential and integral calculus. *Both semesters. Two credits each semester.* Fee $3. Mackay Science Hall. Leifson.

59–60. HEAT AND THERMODYNAMICS. Lectures and recitations accompanied by experimental work of a quantitative character. This course, together with physics 61–62, is introductory to mathematical physics. Many of the more difficult subjects merely touched upon in general physics will be fully treated. *Prerequisite:* General physics, differential and integral calculus. *Both semesters. Two credits each semester.* Mackay Science Hall. Batdorf.

61–62. LIGHT AND PHYSICAL OPTICS. Lectures: Experimental illustration of selected topics in light, including discussion of the corpuscular and wave theories of light, the restricted theory of relativity, lenses, mirrors and prisms, prism spectra, Doppler's principle and its applications, diffraction, interference, the theory of the grating, double refraction and polarization. *Prerequisite:* General physics, differential and integral calculus. *Both semesters. Two credits each semester.* Mackay Science Hall. Blair.

63. PHYSICAL OPTICS. Laboratory exercises in connection with course 61–62. *First semester. Two credits.* Fee $3. Mackay Science Hall. Blair and Leifson.

65–66. HISTORY OF PHYSICS. Lectures and recitations. Preparation of reports and discussion of assigned topics by members of the class. *Prerequisite:* General physics. *Both semesters. Two credits each semester.* Mackay Science Hall.

68. SPECTROSCOPY. Theory and method of production, measurement, examination, and identification of spectra. Study and use of prism and grating spectrographs. *Prerequisites:* General Physics, General Chemistry, and Calculus. *One lecture and one laboratory period per week. Two credits.* 325 Mackay Science Hall. Leifson.

71–72. INTRODUCTION TO MODERN PHYSICS. Lectures and experimental illustrations. Discussion of important topics in the fields of radiation and the structure of atoms and molecules. Introduction to

quantum mechanics. *Prerequisite:* General physics. *Two credits each semester.* Mackay Science Hall. Leifson.

73–74. ELECTRICITY AND MAGNETISM. Introduction to the mathematical theory of electricity and magnetism. Solution of problems by exact reasoning from fundamental principles. *Prerequisite:* General physics, differential and integral calculus. *Either semester. Two credits per semester.* Mackay Science Hall. Batdorf.

75–76. GLASSBLOWING. A laboratory course of instruction in methods of making simple glass apparatus. *Either semester. One credit.* Fee $6. Mackay Science Hall. Leifson.

77–78. THERMIONIC VACUUM TUBES. A laboratory course of selected problems involving the determination of constants of vacuum tubes and vacuum tube circuits. One hour each week will be devoted to discussion and reports. *Prerequisite:* Physics 3–4–5–6 (or the equivalent), differential and integral calculus. *Either semester. Two credits per semester.* Fee $3. Mackay Science Hall. Leifson.

101–102. THEORETICAL PHYSICS. An introduction to the more advanced mathematical analysis as applied to general physical problems. *Prerequisite:* Physics 53–54, 55–56, 57–58, and 59–60, differential and integral calculus and differential equations. *Both semesters. Two credits each semester.* Mackay Science Hall. Batdorf.

103–104. THESIS WORK, and all special laboratory work not in the courses announced above. *Both semesters. Credits to be arranged.* Mackay Science Hall. Staff.

POLITICAL SCIENCE

(See History and Political Science)

POULTRY HUSBANDRY

(See Agriculture)

PSYCHOLOGY

PROFESSOR YOUNG, HEAD OF DEPARTMENT
PROFESSOR IRWIN
ASSISTANT PROFESSOR WIEDERHOLD

Requirements for a minor in psychology: Psychology 5 (3 credits), 10 (2 credits), 51 (3 credits), 62 (3 credits), and 7 additional credits in the department.

Requirements for a major in psychology: Psychology 5 (3 credits), Psychology 14 (2 credits), Psychology 51 (3 credits), Psychology 55 (3 credits), Psychology 59 (2 credits), Psychology 60 (2 credits), Psychology 62 (3 credits), Psychology 63 (2 credits), plus 7 hours, 3 of which shall be in courses numbered above 50.

Recommended elective courses: Mathematics 20, Elementary Statistics, Philosophy 1, Introduction to Philosophy, Philosophy 8, Inductive Logic, Sociology 2, Social Problems.

2. HUMAN NATURE. A freshman course in personal and social efficiency, emphasizing the most practical principles of elementary social psychology. Topics included are psychological factors in effective study, the hereditary and environmental sources of individual capacities, attitudes, and other traits, the measurement of personality traits

and aptitudes, techniques in influencing people, etc. *No prerequisite. Either semester. Two credits.* Irwin, Wiederhold.

5. GENERAL PSYCHOLOGY. An introductory course dealing with forms and laws of human behavior and consciousness. Lectures, prescribed readings, term paper. Not open to freshmen. *Prerequisite to all other courses in the department except psychology 2 and psychology 11. Either semester. Three credits.* Young, Irwin, Wiederhold.

6. ELEMENTARY EDUCATIONAL PSYCHOLOGY. A consideration of the applications of psychology to educational problems. *Prerequisite:* Psychology 5. *Second semester. Three credits.* Irwin, Wiederhold.

10. PSYCHOLOGY OF ADOLESCENCE. An intensive study of the characteristics dominant in the adolescent, with special emphasis upon applications to the work of the high school teacher. *Prerequisite:* Psychology 5. *Second semester. Two credits.* Young.

14. APPLIED PSYCHOLOGY. A general course in the applications of psychology: Psychology of vocational guidance, personal efficiency, scientific management, social work, propaganda and public opinion, law, medicine, athletics, business, art. *Prerequisite:* Psychology 5. *Second semester. Alternate years, starting 1942–1943. Two credits.* Irwin.

40. MENTAL HYGIENE. A consideration of the principles of psychology in their relationship to mental health and efficiency. *Prerequisite:* Psychology 5. *Second semester. Three credits.* Young.

51. SOCIAL PSYCHOLOGY. A study of the applications of psychology to the social relations of the individual and the group life of society: Interaction of individual and social factors in the formation of personality, leadership, propaganda, audiences, communities, nations, crowds, amusements, personality problems, etc. *Prerequisite:* Psychology 5. *First semester. Three credits.* Irwin.

52. PSYCHOLOGY OF PROPAGANDA AND PUBLIC OPINION. This is a socio-psychological study of (1) the psychological bases of public opinion, (2) the techniques of leadership, (3) the forces which mould public opinion and the channels through which it is expressed, and (4) quantitative techniques in the measurement of attitudes and the effects of publicity campaigns. Current war propaganda will be analyzed. *Prerequisite:* Psychology 5. *Second semester. Two credits.* Irwin.

55. ABNORMAL PSYCHOLOGY. A study of the abnormal mind in its relation to behavior. The theory of the unconscious mind, sleep, dreams, hypnotism, and obsessions are major topics in the course. *Prerequisite:* Psychology 5. *First semester. Three credits.* Young.

57. PSYCHOLOGY OF ADVERTISING. An intensive study of the psychological principles basic to effective advertising. Emphasis will be placed on techniques of experimental investigation useful to advertisers in solving problems on the job for which psychology does not provide ready-made answers. *Prerequisite:* Psychology 5. *First semester. Alternate years, starting 1942–1943. Two credits.* Irwin.

59. MENTAL, PERSONALITY, AND VOCATIONAL APTITUDE TESTS. Lectures, practice, readings. Description, demonstration, and training in the construction, use, and interpretation of standard tests. Special attention will be given to test uses for school purposes, industrial and

personnel practice, clinical diagnosis, vocational guidance, social service work, etc. *First semester. Two credits. Alternate years, starting 1942–1943.* Irwin.

60. COMPARATIVE PSYCHOLOGY. The genetic history of consciousness in animals, savages and civilized human beings. *Prerequisite:* Psychology 5. *Second semester. Two credits.* Wiederhold.

61. BUSINESS PSYCHOLOGY. Discussions, readings, and practical assignments on the mental laws basic to effective buying, selling, advertising, and management of men. Salesmanship will be emphasized. *Prerequisite:* Psychology 5. *First semester, alternate years, starting 1943–1944. Two credits.* Irwin.

62. EXPERIMENTAL PSYCHOLOGY. A laboratory course in the application of scientific methods to the study of mental processes. Lectures, assigned readings, and laboratory. *Prerequisite:* Psychology 5. *Second semester. Three credits.* Young.

63. ADVANCED PSYCHOLOGY. An intensive study of the historical background of psychology and of the various schools which have developed. *Prerequisite:* Psychology 5. *First semester. Two credits.* Young.

64. INDUSTRIAL PSYCHOLOGY. Application of the principles of psychology to the problems of personnel management, vocational selection, training the worker, fatigue, monotony, accident prevention, morale, leadership, strikes, and emotional and social adjustment of the worker. *Prerequisite:* Psychology 5. *Second semester. Alternate years, starting 1943–1944. Two credits.* Irwin.

65. CRIMINAL AND LEGAL PSYCHOLOGY. The individual and social factors of crime and legal relationships, with special emphasis on juvenile delinquency. Problems of the lawyer, educator, and social worker are considered. A study is made of criminal personality and the nature, development, prevention, detection, and treatment of crime and the criminal. Field trips will be taken. *Prerequisite:* Psychology 5. *First semester. Alternate years, starting 1943–1944. Two credits.* Irwin.

67. PSYCHOLOGY OF WAR. A consideration of the psychological causes of war, the development of the war mood, panic, the maintenance of morale, and post-war adjustments. *First semester. Two credits.* Young.

70. MARRIAGE, HOMEMAKING, AND DIVORCE. A presentation of the psychological principles involved in these three types of social adjustment. Open to juniors, seniors and graduates who have had general psychology. *Second semester. Two credits.* Young.

101–102. RESEARCH IN PSYCHOLOGY. The thesis subject may be chosen from any field of psychology in which the student has had at least one advanced course. For graduate students and seniors. *Either semester. Two credits.* Young.

SOCIOLOGY

(See Economics, Business, and Sociology)

SPEECH

(See English)

ZOOLOGY

(See Biology)

SUMMER SESSIONS OF THE UNIVERSITY OF NEVADA

INTERSESSION

June 4 through July 13, 1945

SUMMER SESSION

July 16 through August 24, 1945

Officers of Administration

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
HAROLD N. BROWN, Ed.D., Director of Summer Sessions.
JEANETTE C. RHODES, B.A., Registrar.
JAMES J. HILL, M.A., B.S. in L.S., Director of Libraries.

OPPORTUNITY AND PURPOSE

The Summer Sessions are an integral part of the University of Nevada organization. The same high standards prevail as in the regular session; equivalent work carries equivalent credit and the same high quality of teaching personnel is maintained.

One of the primary purposes of the Summer Sessions is to meet the needs of teachers who wish to spend a part of the summer vacation in serious study or investigation. The Summer Sessions afford unusual opportunity to increase teaching skill, to improve teaching personality, to obtain help with individual classroom problems, to acquire new cultural and recreational interests, and to become better informed concerning current and social problems.

Of almost equal importance is the opportunity given by the Summer Sessions to students desiring to accelerate their programs. Moreover, some students find it advantageous to attend summer school to gain a desired classification or to study a particular subject not offered in the regular sessions.

Specific courses are designed for high school teachers, elementary teachers, and teachers of departmental work. All courses offered in either of the Summer Sessions may be applied for advancement toward a normal school diploma, a bachelor's or master's degree, and toward certification by the Nevada State Board of Education. A bulletin describing the faculty, the curriculum, and the facilities available during the summer may be obtained by addressing the Director of Summer Sessions.

ADMISSION AND CREDITS

Anyone with ability to do scholastic work on the University level may be admitted to the Summer Sessions. However, credit toward any University degree or diploma will be granted only after the student has met all requirements for admission to the University.

As a special war-emergency concession the Committee of Admission, Entrance Examinations, and Advanced Standing has ruled that any student with the recommendation of his high school principal may be

admitted to the Summer Sessions of the University with fourteen high school units.

A maximum of six hours credit may be gained in either of the Six-Week Sessions. The number of credits allowed for each course is determined on the basis that fifteen University lecture periods of fifty minutes each, together with two hours of out-of-class preparation for each class, earn one hour of credit.

A maximum of fourteen credits may be earned by attendance in the Summer Sessions. Any student desiring to take advantage of this accelerated program must enroll on June 4 for the entire twelve-week period of summer school. Also, such additional hours must have the approval of the Director of Summer Sessions.

OUT-OF-STATE TEACHERS

Teachers from other States may fulfill requirements to validate certificates to teach in Nevada schools by attending either or both the Summer Sessions. Out-of-State teachers are required to pass State examinations in, or to receive University credit for, School Law and Organization and the Constitutions of the United States and of Nevada. Teachers from other States must meet the requirement in Nevada Constitution should they already have credit in United States Constitution. All of these courses are offered in the Summer Sessions.

TEACHER REPLACEMENT

Teachers are eligible for teacher placement service after twelve weeks of summer school attendance at the University of Nevada.

The policy of the appointment director has always been to consider the welfare of the children of the State paramount to the interests of prospective teachers. Consequently, recommendations for teaching positions are confined largely to those whose achievement, ability, and character are known. The appointment office will, however, be instrumental in bringing competent teachers and school officers into contact.

The fee for enrollment in the appointment service is $2.50. For this fee, five sets of credentials are prepared, to be sent to school authorities. If additional credentials are required, a fee of $1.50 will be charged for each set of five. No commission is charged on the appointee's salary.

SUMMER SESSION FEES

The fee for each of the six-week sessions is $20. However, a student enrolling for the twelve weeks of school work will be charged a fee of $35. In addition the ordinary laboratory fee will be charged those students enrolling for courses requiring laboratory classes. A deposit of $10 will be assessed each student.

THE NEVADA AGRICULTURAL EXPERIMENT STATION

Staff

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
SAMUEL B. DOTEN, M.A., Director of Agricultural Experiment Station.
AGNES L. SCHMITH, Administrative Secretary and Librarian.
GLORIA GHIGLIERI, Assistant Librarian.
CHARLES E. FLEMING, B.S.A., In Charge of Range Management.
MARK A. SHIPLEY, B.S., Associate in Range Management.
WALTER NEILSON, Assistant in Range Management.
CHESTER A. BRENNEN, B.A., Economist in Range Management.
GRANT H. SMITH, JR.,[1] B.S., Assistant Economist in Range Management.
EDWARD RECORDS, V.M.D., In Charge of Veterinary Science.
LYMAN R. VAWTER, D.V.M., M.S., Associate in Veterinary Science.
M. R. MILLER, M.S., Chemist.
V. E. SPENCER, M.S., Associate in Soils Research.
LOUISE LILLARD, Clerk, Soils Research.
GEORGE HARDMAN, M.S., Chief in Irrigation and Agronomy.
HOWARD G. MASON, B.S., Assistant in Estimating and Land Use Planning.
F. B. HEADLEY, Chief in Farm Development.
MABEL HARTLEY, B.A., Statistician in Farm Development.
ZETTA CAPRIOTTI, Clerk in Farm Development.
J. E. CHURCH, Ph.D., Chief in Station Meteorology.
CARL ELGES, JR.,[1] M.S., Assistant in Meteorology.
WINIFRED MOORE, Clerk in Meteorology.

Under provisions of the Hatch Act, approved March 2, 1887, the Agricultural Experiment Station was organized in December of that year. From the Hatch Fund the Experiment Station receives $15,000 annually, from the Adams Fund, created by the Adams Act of 1906, it receives a like amount, and from the Purnell Fund, created by the Purnell Act, approved February 25, 1925, it receives $60,000 annually. In addition, for the fiscal year 1940–1941 it received $2,460.64 from the Federal Bankhead-Jones Fund. The total of these Federal appropriations for the current fiscal year will be $92,460.64. None of these funds can be applied to teaching or to the work of agricultural extension, because the object of all these funds is the investigation by scientific methods of problems in the agricultural industry.

The Nevada Experiment Station has chosen problems for study in five fields:

I. The problems of the most effective use of a limited water supply in crop production.

II. The problems of animal disease in the livestock industry of the State.

III. The problems arising from the depleted condition of Nevada ranges for sheep and cattle.

IV. The problems of small farm development in Nevada.

V. Economic problems in the Nevada cattle industry.

For 1943–1944 the active project list of the Station is as follows:

[1]Absent on leave.

RANGE MANAGEMENT—

Project 22—Adams Fund. *Poisonous Range Plants.* 1916–Continuous. Project Leader, C. E. Fleming, assisted by M. R. Miller, Dr. L. R. Vawter and Walter Neilson. In cooperation with U. S. Grazing Service.

Project 24—Hatch Fund. *Methods of Producing More and Better Lambs in Nevada Range Flocks.* 1919–Continuous. Project Leader, C. E. Fleming, assisted by Walter Neilson. In cooperation with Bureau of Animal Industry, U. S. D. A., and the U. S. Sheep Experiment Station and Western Sheep Breeding Laboratory.

Project 26—Hatch Fund. *Feeding and Finishing Range Ewes and Lambs.* 1920–Continuous. Project Leader, C. E. Fleming, assisted by Walter Neilson. In cooperation with Bureau of Plant Industry, U. S. D. A., Newlands Field Station, Fallon, Nevada.

Project 31—Purnell Fund. *Studies of the Economics of Cattle and Sheep Production Under Nevada Ranch and Range Conditions.* 1939–Continuous. Project Leader, C. A. Brennen, assisted by C. E. Fleming and Grant H. Smith. In cooperation with Bureau of Agricultural Economics and other Bureaus of U. S. D. A., and U. S. Grazing Service.

Project 45—Purnell Fund. *Development of a Rotation Paddock System of Grazing on Irrigated Meadows by Range Flocks of Sheep.* Reno, 1920–Continuous; Elko, 1934–Continuous. Project Leader, C. E. Fleming, assisted by C. A. Brennen.

Project 52—Bankhead-Jones Fund. *Annual Brome Grasses as Invaders of Sheep and Cattle Ranges in Nevada.* 1936–Continuous. Project Leader, C. E. Fleming, assisted by Departments of Veterinary Science, Chemistry, and Soils. In cooperation with U. S. Forest Service and U. S. Grazing Service.

Range Plant Inventory and Range Forage Improvement Studies. 1937–Continuous. Project Leader, C. E. Fleming, assisted by C. A. Brennen and Grant H. Smith. In cooperation with the U. S. Forest Service.

Project 55—Station Sales Fund. *Weed Control by Plant Competition.* 1937–Continuous. Project Leader, C. E. Fleming, assisted by C. A. Brennen. In cooperation with the Nevada Agricultural Extension Service and the Bureau of Plant Industry, U. S. D. A., Newlands Field Station, Fallon, Nevada.

Project 60—Purnell Fund. *Forage Acre Allowances.* 1940–Continuous. Project Leader, C. E. Fleming, assisted by Mark A. Shipley, C. A. Brennen, and M. R. Miller. In cooperation with U. S. Grazing Service.

METEOROLOGY—

Project 57—Purnell Fund. *Snow Surveying and Runoff Forecasting, Development and Applications.* 1940–Continuous. Project Leader, J. E. Church, assisted by Carl Elges. In cooperation with Soil Conservation Service, U. S. D. A.

CHEMISTRY—

Project 58—Purnell Fund. *Quality of Irrigation Waters of Nevada.* 1940–Continuous. Project Leader, M. R. Miller. In cooperation with Bureau of Plant Industry, U. S. D. A., and Rubidoux Laboratory, Riverside, California.

Project 59—Adams Fund. *Chemical Composition of Nevada Range Plants and Forage Crops.* 1940–Continuous. Project Leader, M. R. Miller, assisted by Departments of Range Management, Farm Development, and Veterinary Science. In cooperation with the U. S. Grazing Service.

IRRIGATION—

Project 50—Purnell Fund. *An Inventory and History of the Water Resources of the Truckee, Carson, and Humboldt Rivers, and Minor River Basins.* 1934–Continuous. Project Leader, George Hardman. In cooperation with Soil Conservation Service and Bureau of Agricultural Economics, U. S. D. A.

FARM DEVELOPMENT—

Project 30—Purnell Fund. *Farm Accounts and Land Utilization.* 1941–Continuous. Project Leader, F. B. Headley. In cooperation with the Nevada Agricultural Extension Service.

Project 32—Purnell Fund. *A Test of the Economic Efficiency of Alfalfa Hay as a Sole Ration for Dairy Cattle and Its Relation to Sterility.* 1925–Continuous. Project Leader, F. B. Headley. In cooperation with Bureau of Plant Industry, U. S. D. A., Newlands Field Station, Fallon, Nevada.

Project 41—Hatch Fund. *Hog Feeding Experiments.* 1930–Continuous. Project Leader, F. B. Headley. In cooperation with Bureau of Plant Industry, U. S. D. A., Newlands Field Station, Fallon, Nevada.

Project 42—Purnell Fund. *Turkey Feeding Experiments.* 1933–Continuous. Project Leader, F. B. Headley. In cooperation with Bureau of Plant Industry, U. S. D. A., Newlands Field Station, Fallon, Nevada.

Project 61—Purnell Fund. *Corn Silage with Alfalfa and Barley for Fattening Beef Cattle.* 1942–Continuous. Project Leader, F. B. Headley, assisted by F. M. Willhite. In cooperation with Division of Western Irrigation Agriculture, U. S. D. A., Newlands Field Station, Fallon, Nevada.

VETERINARY SCIENCE—

Project 16—Purnell Fund. *Hemorrhagic Disease Among Cattle.* 1940–Continuous. Project Leader, Dr. Edward Records, assisted by Dr. L. R. Vawter.

Project 39—Purnell Fund. *A Study of Types of Malnutrition, Diminished Reproductive Activity, and Lowered Resistance to Disease in Cattle which Appear To Be Due to Deficiencies in the Content of Certain Forms of Mineral Matter in Soil, Water, and Forage.* 1939–Continuous. Project Leader, Dr. Edward Records, assisted by Dr. L. R. Vawter, M. R. Miller, and V. E. Spencer.

SOIL FERTILITY—

Project 48—Adams Fund. *A Study of Various Organic and Inorganic Phosphates, with Special Reference to their Ability to Penetrate Soils and to their Positional and Chemical Availability to Plants.* 1939–Continuous. Project Leader, V. E. Spencer, assisted by F. E. Fink. In cooperation with the U. S. D. A. Experimental Farm at Beltsville, Maryland; New Jersey Experiment Station at Brunswick, New Jersey; Ohio Experiment Station at Wooster, Ohio; Illinois Experiment Station at Des Plaines, Illinois; and University of Illinois at Urbana, Illinois.

ESTIMATING AND PLANNING—

Project 62—Purnell Fund. *Estimating and Planning of Agricultural Production in Nevada.* 1943–Continuous. Project Leader, H. G. Mason, assisted by F. M. Willhite and F. B. Headley. In cooperation with U. S. Bureau of Agricultural Economics and U. S. D. A.

NEVADA AGRICULTURAL EXTENSION DIVISION

Cooperating Parties

The President and the Board of Regents of the University of Nevada.

The Extension Service of the United States Department of Agriculture.

The State and County Farm Bureaus.

Staff

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
CECIL W. CREEL, Agr. D., Director of Agricultural Extension.
THOMAS E. BUCKMAN, M.S., Assistant Director for Agriculture.
MARGARET M. GRIFFIN, B.S., Assistant Director for Home Economics.
MARIE WATKINS, Chief Clerk.
ADA L. CARLSON, B.S., State Supervisor, Emergency War Food Preservation Program.
L. E. CLINE, M.S., Extension Agricultural Economist.
VERNER E. SCOTT, M.S., Extension Agricultural Economist.
OTTO R. SCHULZ, B.S., Soil Conservationist and Supervisor Emergency Farm Labor.
THOMAS B. GLAZEBROOK,[1] M.S., Extension Forester.
A. L. HIGGINBOTHAM, A.M., Extension Editor. University of Nevada.
LYLE F. SMITH, B.S., Extension Forester.
JOHN P. AHERN, B.S., District Extension Agent, Clark and Nye Counties.
ARCHIE R. ALBRIGHT, B.S., County Extension Agent, Washoe County.
JULIUS AMSIEJUS, D.V.M., War Food Production Assistant, Clark County.
CLARENCE E. BYRD, M.A., War Food Production Assistant, Esmeralda County.
ROYAL D. CROOK, M.S., County Extension Agent, Churchill County.
LOUIE A. GARDELLA, B.S., County Extension Agent, Lyon County.
H. LEE HANSEN, B.S., District Extension Agent, Douglas and Ormsby Counties.
LENA HAUKE, B.S., County Extension Agent, Churchill County.
M. GERTRUDE HAYES, B.S., County Extension Agent, Washoe County.
MILDRED HUBER,[1] B.S., District Extension Agent, Lyon and Douglas Counties.
C. W. HODGSON, Ph.D., District Extension Agent, South Eureka and White Pine Counties.
STEVE JAMES, B.S., County Extension Agent, Lincoln County.
PAUL L. MALONEY, B.S., District Extension Agent, Humboldt and North Lander Counties.
OLIVE C. MCCRACKEN, B.S., War Food Preservation Assistant, Ormsby and Storey Counties.
MARK W. MENKE, B.S., County Extension Agent, Elko County.
A. J. REED, B.S., County Extension Agent, Pershing County.
E. C. REED, M.S., County Extension Agent, Washoe County.
ALMA SCHELT, B.S., District Extension Agent, Douglas and Lyon Counties.
ROSE SPEZIA, B.S., War Food Preservation Assistant, Humboldt and Pershing Counties.
J. W. WILSON, B.S., District Extension Agent, Elko and North Eureka Counties.
J. H. WITTWER, County Extension Agent, Clark County.

Cooperative extension work in agriculture and home economics is conducted in Nevada under the provisions of the following Acts of Congress: The Smith-Lever Act, approved May 8, 1914; the Capper-Ketcham Act, approved May 22, 1928; the Bankhead-Jones Act, approved June 29, 1935.

[1]Absent on leave.

The Agricultural Extension Division as established under the Memorandum of Understanding with the United States Department of Agriculture dated September 8, 1914, is a "definite and distinct administrative division" of the University of Nevada, coordinate in rank and affiliation with the College of Agriculture and the Agricultural Experiment Station. All the extension activities of the College of Agriculture and the United States Department of Agriculture in Nevada are conducted through this division.

The nature of the work is defined in general terms by law as "the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications and otherwise." Instructions and demonstrations are given to rural people in both adult and junior organized groups through the County Farm Bureau Community Centers, and Boys and Girls 4-H Clubs.

Besides the regular extension program outlined above, the Agricultural Extension Division is also charged during the war with administering in Nevada the Federal Emergency Farm Labor Program and the Federal War Food Production and Preservation Program.

County Farm Bureau Community Centers serve as a forum where farm men and farm women together find a solution for many of their problems by cooperating with Agricultural Extension Service.

Extension work is outlined in written projects and budgets entered into by the cooperating parties. Major projects are range livestock, dairying, poultry, crops, home improvement, human nutrition, and rural organization.

The organization for extension work in Nevada comprises an administrative and specialist staff, resident at the University, and seventeen county and district agents, four Emergency County and District War Food Assistants, and eight County and District Farm Labor Assistants. Thirteen Nevada counties have organized farm bureaus pursuant to Acts of the Legislature, approved April 1, 1919, and March 4, 1921.

All extension work in these counties is conducted in cooperation with the County Farm Bureaus.

STATE PUBLIC SERVICE DEPARTMENTS

1. THE STATE ANALYTICAL LABORATORY.
2. THE STATE BUREAU OF MINES.
3. THE PURE FOOD AND DRUGS CONTROL, WEIGHTS AND MEASURES, AND PETROLEUM PRODUCTS INSPECTION.
4. THE STATE VETERINARY CONTROL SERVICE.

THE STATE ANALYTICAL LABORATORY

Staff

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
WALTER S. PALMER, E.M., Director.
WILLIAM I. SMYTH, E.M., Chemist.
VINCENT P. GIANELLA, Ph.D., Geologist.

The State Analytical Laboratory was organized at the University of Nevada in 1895 under the provisions of an Act approved on March 16 of that year. Its object is to assist the mining industry of Nevada by making free analyses of minerals and ores taken from within the boundaries of Nevada by its citizens, and by reporting to the senders the results of such analyses, together with the uses and market values of the substances submitted.

The routine work of the laboratory is done by the director and chemist, with the geologist and mineralogist assisting with the unusual rocks and minerals.

Samples and specimens are listed and distributed in the order in which they are received at the laboratory, and are analyzed essentially in this order, but reports do not go out in the same order since some assays take much longer than others. The results obtained by analysis are given upon the reports for all substances.

The records of the laboratory are open to inspection, but visitors will not be permitted to see copies of reports until sufficient time has elapsed for the original reports to reach the hands of the senders.

THE STATE BUREAU OF MINES

Staff

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
JAY A. CARPENTER, E.M., Director.
WALTER S. PALMER, E.M., Metallurgist.
VINCENT P. GIANELLA, Ph.D., Geologist.
WILLIAM I. SMYTH, E.M., Analyst.
HARRY E. WHEELER,[1] Ph.D., Stratigrapher.
FRED L. HUMPHREY, Mining Engineer.
B. F. COUCH,[1] Secretary.

The Bureau of Mines of the State of Nevada was established by the Legislature of 1929. The Act lodges the supervision of the Bureau

[1]Absent on leave.

with the Board of Regents of the University of Nevada. Under this Act it is the duty of the Board of Regents to select a Director and, upon the Director's nomination, such assistants and employees as necessary and to fix the compensation of these employees. The purposes of this Bureau are to conduct a mineralogical survey of the State to catalogue both metallic and nonmetallic deposits, with addresses of the discoverer, owner or agent; to serve as a bureau of information and exchange in Nevada mining; to collect and publish statistics relative to Nevada mining; to prepare a bibliography of literature pertaining to Nevada mining and geology; to experiment in problems of Nevada concentration, dry placer, flotation methods, etc., and to publish the results; to collect geological and mineralogical specimens; to educate miners and prospectors through lectures and publications; to collect models, drawings and descriptions of appliances used in mining and metallurgical work; and to give consideration to such other kindred scientific and economic questions as in the judgment of the board shall be deemed of value to the people of the State.

DEPARTMENTS OF FOOD AND DRUGS. WEIGHTS AND MEASURES, AND PETROLEUM PRODUCTS INSPECTION

(Sierra and Fifth Streets, Reno)

Staff

JOHN O. MOSLEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
WAYNE B. ADAMS, B.S., Commissioner.
EDWARD L. RANDALL, M.S., Chemist.
VICTOR COKEFAIR, Inspector.
J. M. MCLEOD, B.A., Inspector.
JOHN W. GRANT, Inspector.
A. J. RAFAEL, Resident Inspector, Las Vegas
JUANITA L. HOLMES, Clerk.

These three departments were created by separate specific Acts of the State Legislature. Since the enforcement of each of these laws has been delegated to the Commissioner of Food and Drugs, they have been consolidated under one department. The consolidation has proved to be of considerable benefit, because the laboratory control necessary in carrying out the provisions of these laws can be used to a great extent by the three departments, and because much of the work and many of the duties overlap.

An entirely new Food, Drugs, and Cosmetic Law was enacted in 1939. As this law is patterned very closely after the Federal Law of the same title, there is little conflict in the provisions of the two laws. Products manufactured and sold within the State, subject to the approval of this Department, can be sold interstate where the provisions of the Federal Act apply, or vice versa. Essentially this law prohibits the manufacture or sale of misbranded or adulterated food, drugs, and cosmetics. This includes commodities which constitute a danger to health, as well as an economic fraud. The laboratory of the department is completely equipped to examine practically all types of food, drugs, and cosmetics.

Under the provisions of the State Weights and Measures Act the department is required to keep a complete set of reference standards

of weight, volume, and linear measure. The standards are calibrated for accuracy at intervals of not less than ten years by the Bureau of Standards in Washington. Field-testing equipment is calibrated against the office standards and is used in checking all weighing or measuring devices, regardless of type, throughout the State. Citizens of the State are privileged to submit measuring devices of any description for calibration with the office standards. Commodities sold by weight, measure, or numerical count are periodically checked by the Department for compliance with their declared weights.

To the Petroleum Products Inspection Department is delegated the duty of enforcing the State specifications and standards for gasoline and lubricating oils. Specifications for gasoline are incorporated in the law. Such standards insure that a product sold as gasoline is entirely suitable for internal combustion engines and is not a petroleum product of less volatile nature, such as kerosene, stove oil, or distillate. Lubricating oil must be of the same grade as advertised on the dispensing container.

In addition to the duties described above, prescribed by law, this Department is pleased at any time to investigate cases in which the products involved constitute a public health menace or an economic fraud.

THE STATE VETERINARY CONTROL SERVICE

Staff

JOHN O. MOSELEY, M.A., LL.D., President of the University.
CHARLES H. GORMAN, Honorary M.S., LL.D., Vice President and Comptroller.
EDWARD RECORDS, V.M.D., Director.
AGNES HILDEN, B.S., Technician.
VIOLET A. OSHIMA, Secretary.

The State Veterinary Control Service was organized during 1915, under the provisions of an Act of the Legislature approved March 11, 1915. The primary object of this department is to provide facilities for the routine diagnosis of communicable diseases of domesticated animals in the laboratory and the field. Minor research into the nature, cause, and means of control of such diseases is also carried on. Special sera and vaccines, which cannot be procured in the open market, are also prepared and supplied when needed. From time to time bulletins, circulars, and press releases dealing with the communicable diseases of domesticated animals and the most modern means of controlling the same are prepared and distributed. This is intended to supplement the more elaborate research projects of the Department of Veterinary Science of the Agricultural Experiment Station and to aid in the field work conducted by the State Department of Agriculture, the State Board of Sheep Commissioners, and the United States Bureau of Animal Industry.

The services of the staff are available to the veterinarians, livestock owners and ranchers of the State in connection with any problem coming within the scope of the work of this department.

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF MINES, RARE AND PRECIOUS METALS EXPERIMENT STATION

Staff

ANDREW C. RICE, Ph.D., Acting Supervising Engineer.
CLYDE E. ARRINGTON, M.S., Analyst.
RALPH V. THURSTON, E.Met., Metallurgist.
EDWARD S. SHEDD, M.S., Metallurgist.
JAMES A. MCLAUGHLIN, Assayer.
FRED J. ALLEN, Chemical Analyst.
NARBUT S. BARSKI, Chemical Analyst.
GEORGE W. BREGAR, Chemical Analyst.
FRANCES R. CATTOIR, Ch.E., Chemical Analyst.
CARLTON G. COFFIN, B.S. (M.E.), Chemical Analyst.
MILDRED G. ELLIOTT, B.S., Chemical Analyst.
JONELLE P. HAMLET, Chemical Analyst.
HAROLD J. HEINEN, B.S., Chemical Analyst.
CHARLES L. HILL, M.S., Chemical Analyst.
GLADYS R. MACKENZIE, B.S., Chemical Analyst.
WALTER R. VREELAND, Chemical Analyst.
ADA COLQUHOUN, B.S., Chemical Analyst.
ENID P. NEWELL, Scientific Aide.
MARJORIE B. SMITH, Scientific Aide.
WILLIAM A. CONLEY, Laboratory Mechanic.
ELLEN D. JENSEN, Laboratory Mechanic.
HARRY F. MCCRAY, Chief Clerk.
THERESA V. CAPRIO, Clerk.
KATHLEEN M. JENSEN, Clerk-Typist.
MADALYN B. MURRAY, Clerk-Typist.
GEORGE S. BANKS, Laborer.
ADA K. HARTMAN, Laborer.
CHARLES A. MEUNK, Laborer.

BUREAU OF MINES, GEOPHYSICAL SECTION

EDGAR L. STEPHENSON, M.S., Associate Geophysicist.
HAROLD RAUCH, Chief Instrument Maker.
LOIS L. CAZIER, Clerk.

The Legislature of Nevada passed an Act in March 1919, providing funds to house an experiment station of the United States Bureau of Mines at the University of Nevada. The building was completed in July 1921, and at once fully equipped as the Rare and Precious Metals Experiment Station.

The scope of this Station's work is now entirely based on aid for our war requirements and embraces investigation for beneficiation of war minerals and the analysis of large numbers of ore samples to enable field engineers to locate strategic minerals, of which the United States lacks an adequate supply.

In addition to this technical service, a District Engineer's Office is maintained in the downtown business district which conducts surveys of the mineral resources of the State of Nevada.

RECIPIENTS OF SCHOLARSHIPS AND HONORS

1943–1944

The JEWETT W. ADAMS SCHOLARSHIPS of $75 each for students of outstanding scholarship and ability, awarded to

Arthur Boardman
Judy Bogard
Helen Corica
Eileen Kerr
Jane McQuistion
Virginia Olesen
Dace Ricketts
Ethel Crouch Wright
Adele Marsh

The ASSOCIATED WOMEN STUDENT'S SCHOLARSHIP of $25 given to the woman student attaining the highest average grade for the year and who receives no other scholarship, awarded to

Jane Perkins

The AZBO E. CHENEY SCHOLARSHIP of $75 for the freshman or sophomore judged as the best student in English, awarded to

Mary Ancho
Patricia Traner

The NEVADA SAGEBRUSH CHAPTER OF THE DAUGHTERS OF THE AMERICAN REVOLUTION SCHOLARSHIP of $50 for a deserving student, awarded to

Jacqueline Prescott

The MAJOR MAX C. FLEISCHMANN SCHOLARSHIPS of $400 each, for a combination of worthy traits, awarded to

Frances Cook
Leonore Hill
Kathleen Kinneberg
D. Arlene Merialdo
Gordon Mills

Divided between

Lillian Sloan
Maurya Wogan

Divided between

Mryl Nygren
Maie Nygren

Divided between

John McIntosh
Delmar Taylor

The GRAND ARMY OF THE REPUBLIC SCHOLARSHIP of $50 for a descendant of a Civil War veteran, awarded to

Eugene Grotegut

The CARRIE BROOKS LAYMAN MEMORIAL SCHOLARSHIP of approximately $200, awarded to

Patricia Thomas

The WILLIAM S. LUNSFORD SCHOLARSHIP IN JOURNALISM of $75 for excellence in journalistic work, awarded to

Isabel Blythe

The ROSE SIGLER MATHEWS SCHOLARSHIPS of $75 each to worthy students, awarded to

Virginia Hand
Estella Hicks
Lucille Shea
Betty Waugh

The GRAND LODGE OF THE INDEPENDENT ORDER OF ODD FELLOWS SCHOLARSHIPS of $150, awarded to

Ruth Armstrong

The PREMEDICAL–PRENURSING SCHOLARSHIP of $100 for excellence in premedical work, awarded to

Lorraine Serpentino

NEVADA STATE PRESS SCHOLARSHIP IN JOURNALISM of $50 for excellence in journalistic work, awarded to

Betty Molignoni

The REGENTS' SCHOLARSHIPS of $50 each for excellence in scholarship, awarded to

Patricia Traner — Charlotte Ferris

The ROTARY CLUB OF RENO SCHOLARSHIP of $100 for a deserving student, awarded to

Walter Case

The MARY ELIZABETH TALBOT MEMORIAL SCHOLARSHIP of $300 for excellence in the department of mathematics, awarded to

Charlotte Ferris

The WOMEN'S CHRISTIAN TEMPERANCE UNION SCHOLARSHIPS of $50 each, awarded to

Eleanor Corle — Genevieve Johns
Norma Ferguson — Harriet McNeil
Florence Gonzales — Nora Saunders
Eleanor Jensen — Marjorie Whipple

SPECIAL PRIZES AND AWARDS

The ARMANKO SENIOR LIBRARY PRIZE of $60 worth of books to be given to the graduating senior who has the best private library, awarded to

Marguerite Williams

The HENRY ALBERT SENIOR PUBLIC SERVICE PRIZE of $25 to a member of the graduating class for scholarship, character, and worthy service to the University, awarded to

Dorothy Reynolds

The GINSBURG JEWELRY COMPANY award of a seventeen jewel gold watch, awarded to

Gordon Mills

The GOVERNOR'S MEDAL for proficiency in military training, awarded to

Lemley E. Crocker

The GOLD MEDAL, gift of R. Herz and Brothers of Reno, for the highest scholarship attained during four years, awarded to

Ada May Bachman

The AMERICAN ASSOCIATION OF UNIVERSITY WOMEN honorary memberships, awarded to

Helen Batjer — Doll Corbett

Muriel Westergard

Elected to PHI KAPPA PHI, national honor scholarship fraternity:

Graduate Student Proctor R. Hug

Senior Students—

Ada May Bachman — Janet McClellan
Lois Welden — Nita Reifschneider
Leroy Talcott — John Aberasturi

HONOR ROLL OF THE SENIOR CLASS—For excellence in scholarship during the two semesters:

Lois Bradshaw
Janet McClellan
Nita Reifschneider
Lois Welden

SENIOR HONOR ROLL FOR THE FOUR-YEAR COURSE for excellence in scholarship during the past eight semesters:

Ada May Bachman
Janet McClellan
Lois Welden

GRADUATES

Diplomas and Degrees were awarded on Commencement Day, May 22, 1944, as follows:

MASTER OF ARTS

Proctor R. Hug

BACHELOR OF ARTS

John Manuel Aberasturi
*Ada May Bachman
Amelia Freddie Baldini
*Helen Ann Batjer
Mary Alice Holmes Bean
Edith Lois Bradshaw
Margaret Helen Cashbaugh
Ellenlou Connolly
*Doll Corbett
†Dixie Joan Davis
Marjory Jane Dugan
†Adey May Dunnell
John Val Du Pratt
Gloria Rose Eather
†Hazel Eather
Fonita Florine Ferguson
Jeanne Frances Forsyth
Lillian Funk
Margaret Douglass Gould
Molly Morse Griswold
†Doris Rice Ham
Betty Josephine Hanna
Marian Helen Hecker
Lela Hazel Iler
Mary Kirstina Jensen
†June Julian
Morio Kubota
Kathrine Marlatt Little
Mary Margaret Mason
Geraldine Eleanor McFarland
†Ethel B. McGuire
†Otto Oshida
Nita Reifschneider
*Dorothy Ellen Reynolds
†Alyce La Mar Savage
Dorothy J. Savage
*Darden Delia Tibbs
Joseph Marvin Trigero
Shirley Layman Vigil
Ruth Virginia Waltenspiel
Lois Yvonne Welden
*Muriel Marguerite Westergard
Melba Deen Whittaker
Marguerite Anne Williams
Saralee Wylie
Frances Yee

BACHELOR OF SCIENCE

Emma May S. K. Chen Fong
Clara Beth Haley

BACHELOR OF SCIENCE IN CHEMISTRY

Helen Gung
Eleanor Pearl Hecker

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Warren Clough Estes
John Don Layson
Fera Robert Preece

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Thomas James Boland
Carlos M. Danao
Carl Dietz Jesch
William Fairchild Richter

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Nathaniel James Devlin

BACHELOR OF SCIENCE IN METALLURGICAL ENGINEERING

John Murray Fox, Jr.

*Also receives the High School Teacher's Diploma.
†Work completed August, 1943.

BACHELOR OF SCIENCE IN GEOLOGICAL ENGINEERING

Frank Maynard Fitz

BACHELOR OF SCIENCE IN MINING ENGINEERING

Otto Atsushi Oshida
†George Raymond Homer
†Nye Woodrow Tognoni

BACHELOR OF SCIENCE IN AGRICULTURE

†Alfred Leroy Talcott

BACHELOR OF SCIENCE IN HOME ECONOMICS

*Frances Julia Baumann
Bertha Ruth Diessner
Shirley Lorainne Dimock
Katharine Henningsen
Janet Foreman McClellan
*Edith Menke
*Ruth Mary Noble
*Geraldine Merle Streshley

TWO-YEAR NORMAL DIPLOMA

Marian Elizabeth Hennen

*Also receives the High School Teacher's Diploma.
†Work completed August, 1943.

ROSTER OF STUDENTS

FALL AND SPRING SEMESTERS

1944–1945

Explanation of Abbreviations

A&S	Arts and Science	Fr.	Freshmen
Ag	College of Agriculture	So.	Sophomore
CE	School of Civil Engineering	Jr.	Junior
EE	School of Electrical Engineering	Sr.	Senior
HE	School of Home Economics	Gr.	Graduate
ME	School of Mechanical Engineering	Sp.	Special
MM	Mackay School of Mines		

Name	College	Classification	Home Address
Abbott, Eileen	A&S	Fr.	Winnemucca
Abel, Dorothy	A&S	Sr.	Los Angeles, Calif.
Abercrombie, Fred	A&S	Fr.	Boulder City
Acree, Edward J.	CE	Fr.	Reno
Aldrich, Catherine	A&S	Fr.	Fernley
Aldrich, Marie	A&S	Sr.	Fernley
Alles, Arthur	MM	So.	Fallon
Amodei, Marilyn	A&S	So.	Reno
Ancho, Mary	A&S	Jr.	Battle Mountain
Anderson, Donna	A&S	So.	Reno
Anderson, Harriet	A&S	So.	Reno
Anderson, James A.	A&S	Fr.	Petaluma, Calif.
Anderson, Norma	A&S	Fr.	Reno
Apa, Frank	EE	Jr.	Sparks
Armstrong, Blanche	A&S	So.	Reno
Armstrong, Ruth	HE	So.	Reno
Auchampaugh, Virginia	A&S	So.	Reno
Babb, Patricia	HE	Fr.	Fallon
Bagley, Katherine Mason	A&S	Fr.	Reno
Bagley, Lois Poulsen	A&S	Jr.	Reno
Baker, Betty	A&S	Fr.	Sparks
Baker, John	EE	Fr.	Yerington
Balzar, Beverly Ann	A&S	Fr.	Reno
Barker, Jean	A&S	Fr.	Alliance, Nebraska
Barski, Norbut	ME	Sp.	Reno
Bates, Jennie	A&S	Fr.	Fallon
Batjer, Grace Naomi	A&S	Fr.	Smith
Baumann, Phyllis	HE	Sr.	Fallon
Beard, Bonnie Jean	A&S	Fr.	Sparks
Beardall, Royden, Jr.	A&S	Fr.	Sparks
Bearss, Maxine	A&S	So.	Reno
Bent, Eleanor Ulke	A&S	Sp.	Reno
Bicknell, Jean	A&S	So.	Reno
Bieroth, Ellen	A&S	Fr.	Mountain City

Name	College	Classification	Home Address
Biglieri, Eva	A&S	Fr.	Reno
Birks, Wilma Frances	A&S	So.	Reno
Black, Lorne	A&S	Fr.	Reno
Blair, Florene Richards	A&S	Fr.	Manteca, Calif.
Blenio, Charles	A&S	Sp.	San Francisco, Calif.
Blythe, Isabel	A&S	Jr.	Berkeley, Calif.
Blythe, Kathleen	A&S	Jr.	Berkeley, Calif.
Boardman, Arthur	A&S	So.	Reno
Boardman, Mrs. Mary	A&S	Sp.	Reno
Bogard, Julia	A&S	So.	Pueblo, Colorado
Bony, Beverly	A&S	So.	Reno
Bony, Maureen		Gr.	Reno
Booth, Audrey Maxine	A&S	Fr.	Yerington
Booth, Marian S.	A&S	Fr.	Reno
Bornet, Mary Beth W.	A&S	Sr.	Susanville, Calif.
Bossert, Richard M.	CE	Fr.	West Orange, N. J.
Bowen, Shirley J.	A&S	Jr.	Reno
Boyle, Kathryn	A&S	Fr.	Reno
Boyle, Peggy	A&S	Jr.	Reno
Braae, Floy	A&S	Sp.	Sparks
Bradley, John Grover	A&S	Fr.	Reno
Bradley, Marilyn	A&S	Sr.	Reno
Bradley, Mary Alice	A&S	Fr.	Reno
Bradshaw, Betty Jean	A&S	Fr.	Elgin
Brania, Helen	A&S	So.	Reno
Bray, Mildred		Gr.	Carson City
Bregar, George W.	A&S	Sp.	Reno
Brown, Eleanor Frances	A&S	Fr.	Reno
Brown, Jerry Marianne	A&S	Fr.	Reno
Brown, Lois Carol	A&S	Fr.	Smith
Brown, Lucile M.	A&S	Jr.	Smith
Browne, Patricia	A&S	Fr.	Reno
Bruce, Irene	A&S	Sp.	Reno
Bruff, James Irving	A&S	Sp.	Reno
Bruff, Ruth Walker	A&S	Jr.	Reno
Brunner, Alberta	A&S	Fr.	Winnemucca
Burke, Frances	HE	Jr.	Wellington
Burns, Neil James	A&S	Fr.	Yerington
Burrus, Don	MM	Sr.	Reno
Busey, William A.	MM	Fr.	Reno
Butler, Roberta	A&S	Fr.	Santa Maria, Calif.
Byington, Barbara Ann	A&S	Sr.	Reno
Cain, Darrel	A&S	So.	Reno
Cammerano, Augustine	A&S	Sp.	Garfield, N. J.
Campbell, Laura Marjean	A&S	Fr.	Winnemucca
Campbell, Rosa E.	A&S	Fr.	Mountain City
Campbell, Shirley	A&S	So.	Fernley
Canady, Alta June	A&S	So.	Sparks
Capurro, Blanche	A&S	So.	Reno
Case, Mrs. Ferne	A&S	Sp.	Sparks
Casey, Dorothy		Gr.	Sparks

Name	College	Classification	Home Address
Cassidy, M. Louise	A&S	Fr.	Los Angeles, Calif.
Cate, Genelle Clara	HE	Sp.	Reno
Ceccarelli, Raymond	A&S	So.	Sparks
Charlton, Earle P.	A&S	Fr.	Reno
Charlton, Thelma	A&S	Jr.	Reno
Chartier, Jeanne	A&S	Jr.	Sparks
Chickese, Ernest	A&S	Jr.	Reno
Chism, Miriam Clark		Gr.	Reno
Cian, Louis	A&S	Fr.	Garfield, N. J.
Clarke, Harold V.	A&S	Fr.	Reno
Clarkson, James T.	CE	Fr.	E. Rutherford, N. J.
Clinton, Mary Elizabeth	HE	Fr.	Elko
Cloud, Jeanette Taylor	A&S	Sr.	Reno
Cobia, Lois	A&S	Fr.	Loyalton, Calif.
Cobia, Vivian	A&S	Jr.	Loyalton, Calif.
Coe, Zina Ellen	A&S	Fr.	Boulder City
Coffin, Carleton G.		Gr.	Reno
Coker, Phyllis	A&S	Fr.	Reno
Cole, Georgia L.		Gr.	Reno
Cole, Virginia	A&S	Fr.	Ely
Coleman, James	A&S	So.	Reno
Collins, Raylyn	A&S	Jr.	Reno
Connolly, Nancy	A&S	Fr.	San Francisco, Calif.
Cook, Frances Ann	A&S	Jr.	Lovelock
Cooke, Patricia Herz	A&S	Sr.	Reno
Coren, Benedict	A&S	Fr.	Philadelphia, Pa.
Corica, Helen	A&S	Fr.	Reno
Corle, Eleanor Jean	A&S	So.	Reno
Corrigan, Philip	A&S	Sp.	Las Vegas
Coughlin, Walter E.	EE	Fr.	Reno
Craig, Robert Russell	Ag	Jr.	Reno
Creel, Jane	HE	Sr.	Reno
Crehore, Margaret K.	A&S	So.	Fallon
Cristani, William	ME	Sr.	Fallon
Crosby, Betty Jane	A&S	Fr.	Sparks
Crummer, Patricia E.	HE	Fr.	Reno
Cummings, Camille	A&S	Fr.	Troy, N. Y.
Cundiff, George	ME	Sp.	Harahan, Louisiana
Cusick, Kenneth	A&S	Fr.	Reno
Damron, Louise	A&S	Fr.	Ruth
Darrigrand, Odette	A&S	Fr.	Battle Mountain
Dave, Glen Gilbert	EE	Fr.	Winnemucca
Davis, Frederick A.	ME	Fr.	Reno
Davis, Laurel	A&S	So.	Oakland, Calif.
Davis, Vivian B.	A&S	Fr.	Las Vegas
deLongchamps, Galen	MM	Jr.	Reno
deLongchamps, Joanne	A&S	So.	Reno
Denton, Nixon Edward	A&S	Fr.	Bridgeport, Calif.
Devlin, Neiline R.	A&S	So.	Reno
Devlin, Patrick E.	MM	Fr.	Reno
Dickerson, Bryl Ellen	A&S	Fr.	Reno

Name	College	Classification	Home Address
Diercks, Edward V.	EE	Fr.	Glen Ridge, N. J.
Dieringer, Jack	A&S	So.	Reno
Dilly, Barbara Smith	A&S	Sr.	Reno
Di Miro, Frank	A&S	Fr.	Glen Ridge, N. J.
Donati, Annette	A&S	Sr.	Reno
Dorr, Jack George	A&S	Sp.	Sacramento, Calif.
Doyle, Alice Ruth	A&S	So.	Reno
Doyle, Howard, Jr.	A&S	Fr.	Reno
Duffy, Herbert	A&S	Sp.	Reno
Duffy, Mary Agnes	A&S	Fr.	Reno
Dugan, Marilyn	A&S	So.	Reno
Dukes, Charles Dean	A&S	Jr.	Reno
Dulgar, James Richard	Ag	Fr.	Sparks
Dunbar, Lolamae	A&S	Fr.	Boulder City
Dunham, Homer M.	ME	Sp.	Reno
Dunn, Carl Eugene		Gr.	Reno
Dunn, Irving Schenk	A&S	Sp.	Logan, Utah
DuPratt, Ronald	A&S	So.	Yerington
Durham, Robert C., Jr.	A&S	Fr.	Fort Lauderdale, Fla.
Eather, Josephine	A&S	Fr.	Eureka
Edwards, Claude Warren	A&S	Sp.	Carson City
Egan, Marjorie Rae	A&S	Fr.	Carson City
Egenstafer, L. Frank	EE	Fr.	Philadelphia, Pa.
Elder, Madeline	HE	Sr.	Reno
Elges, Kenneth L.		Gr.	Reno
Elkins, Maribeth	A&S	Jr.	Reno
Epler, Nan S.	A&S	Fr.	New York, N. Y.
Erbe, Shirley Ann	HE	Fr.	Babbitt
Escobar, Francis	A&S	So.	Austin
Etchart, Alice	A&S	Fr.	Winnemucca
Evans, Suzanne	A&S	Fr.	Woodland, Calif.
Farmer, Hugh R.	A&S	Fr.	Reno
Farrar, Toy	A&S	Fr.	Reno
Feiring, Robert W.	A&S	Fr.	Kansas City, Mo.
Ferguson, Mrs. Clara		Gr.	Reno
Ferguson, Marilou	A&S	So.	Reno
Ferguson, Norma	A&S	Sr.	Reno
Ferrari, Evelyn	A&S	Fr.	Sparks
Ferraris, Lillian	A&S	So.	Reno
Ferris, Charlotte	A&S	Jr.	Reno
Fitch, Ardis	A&S	Fr.	Reno
Fitz, Katherine K.		Gr.	Reno
Flavin, Wilburta	A&S	So.	Montello
Forson, Jeanne	A&S	Fr.	Reno
France, Clifford L.	A&S	Fr.	Chicago, Ill.
Fransway, Dorothy	HE	So.	Winnemucca
Frazee, Patricia	A&S	Fr.	Reno
Friberg, John	EE	Fr.	Fallon
Frick, George Jr.	A&S	Sp.	Reno
Friel, John Jr.	A&S	Fr.	Tonopah
Fry, Robert F.	A&S	Sp.	Chicago. Ill

Name	College	Classification	Home Address
Fryer, Wilton B.	Ag	So.	Concord, Calif.
Funkhouser, Merla	A&S	Fr.	Reno
Garamendi, Anna	A&S	So.	Ely
Gardner, Neva	A&S	Fr.	Reno
Gardner, Virginia	A&S	Fr.	Reno
Garner, Roma Frances	A&S	Fr.	Winnemucca
Garrett, Robert E.	Ag	Fr.	Sparks
Gavazzi, Italo	A&S	Sr.	Virginia City
Gent, Ruth	A&S	Fr.	Reno
Geraghty, Sylvy	A&S	Fr.	Ely
Gerrans, Mary Lou	A&S	Fr.	Reno
Gezelin, Emile		Gr.	Reno
Gibson, Nadine	A&S	Sr.	Eureka
Gildone, Adeline	A&S	So.	Reno
Gillespie, Annie Belle	A&S	Fr.	Sparks
Golick, Esther	A&S	So.	Reno
Gonzales, Florence	A&S	So.	Reno
Good, Jack	A&S	Sr.	Reno
Gotberg, Marion Elizabeth	A&S	Fr.	Reno
Grafton, Virginia K.	A&S	Jr.	Reno
Green, Elmer T.	A&S	Fr.	Philadelphia, Pa.
Green, Phyllis A.	A&S	Fr.	Manitoba, Canada
Gregory, Arthur R.	EE	Fr.	Elko
Grubic, Bob	A&S	So.	Ruth
Grundel, Carmelina	HE	Sr.	Reno
Haddow, Beulah	A&S	Sr.	Carlin
Haley, Gloria	A&S	Fr.	Litchfield, Calif.
Hamilton, Patricia Ellen	A&S	Fr.	Fallon
Hamlet, Jonelle	A&S	Jr.	Reno
Hand, Elma D.	A&S	Fr.	Reno
Hand, Virginia	A&S	So.	Reno
Hansen, Anna Lu	A&S	Fr.	Reno
Hanssen, Alice	A&S	So.	Sparks
Harp, Merrie Jo	A&S	Fr.	Susanville, Calif.
Harrington, Rosemary	A&S	Jr.	Reno
Harris, Patricia Ann	A&S	Fr.	Reno
Harvey, Marion Leslie	A&S	So.	Carson City
Hayes, Harold B.	A&S	Fr.	Fort Lauderdale, Fla.
Heany, Barbara	A&S	Sr.	Reno
Heath, Billy Jane	A&S	Fr.	Reno
Hecker, Richard C.	Ag	Sr.	Reno
Heiner, Harold J.		Gr.	Reno
Heinz, Lawrence J.	A&S	Fr.	Henderson
Helstowski, John T.	A&S	Fr.	Irvington, N. J.
Hendel, Dorothy V.	HE	Fr.	Babbitt
Henrichs, Velma	A&S	Fr.	Yerington
Herz, Nancy	HE	Sr.	Reno
Hicks, Estella	A&S	So.	Sparks
Hicks, Georgianna	A&S	So.	Sparks
Hill, Carl	MM	Sr.	Reno
Hill, Leonore	A&S	Sr.	Susanville, Calif.

Name	College	Classification	Home Address
Hill, Jr., Starr	MM	Jr.	Lovelock
Hilliard, Emily	A&S	Jr.	Reno
Himes, George Hadley	A&S	Fr.	Carson City
Hincelot, Anita	A&S	So.	Mountain View, Calif.
Holgate, Nancy	A&S	Fr.	Reno
Holland, Einna Ann	A&S	Jr.	Reno
Holmes, Edith, Mrs.		Gr.	Reno
Holmes, William O.		Gr.	Reno
Holt, William Therrel, Jr.		Gr.	Reno
Honeywell, Lois	A&S	Sr.	Reno
Hooper, Dorothy	A&S	Fr.	Eureka
Horning, Vernon Keith	EE	Jr.	Reno
Hovenden, Mary	A&S	So.	McGill
Hurst, Clayton R.	A&S	Fr.	Reno
Ilg, Herman C.	CE	Fr.	Philadelphia, Pa.
Ireland, Patricia	A&S	Fr.	McGill
Iriarte, Ann	HE	So.	Winnemucca
Irland, Estella	A&S	Fr.	Mountain City
Jackson, Ruth H.		Gr.	Reno
Jamieson, Robert	EE	Fr.	Reno
Jensen, Dawn Ella	A&S	Fr.	Reno
Jensen, Elinor	A&S	So.	Gardnerville
Jensen, John M.	A&S	Jr.	Reno
Jensen, Kathleen Meeks	A&S	Sr.	Reno
Jeppesen, Dawna	HE	Sr.	Reno
Johns, Genevieve	A&S	Sr.	Reno
Johnson, Charlie S.	A&S	Fr.	Philadelphia, Pa.
Johnson, Donald	A&S	Fr.	Golconda
Johnson, Laura Lue	HE	Fr.	Fallon
Johnson, Maridee Ann	A&S	Fr.	Lovelock
Johnson, Bob	EE	Fr.	Fallon
Johnstone, Thelma	A&S	Fr.	Reno
Jones, Audrey	A&S	So.	Reno
Jones, Maxine	A&S	Fr.	Winnemucca
Jones, Robert J.	EE	So.	McGill
Keele, David	CE	Fr.	Sparks
Kelley, Marjorie	A&S	Jr.	Eureka
Kellough, Ida Mae	A&S	Fr.	Eagleville, Calif.
Kelly, Kathryn Wilkes	A&S	Sr.	Pioche
Kemper, Anna May	A&S	So.	Beverly Hills, Calif.
Kennedy, Frances	A&S	Fr.	Standish, Calif.
Kentera, Chris Jr.	A&S	Fr.	Tonopah
Kerr, Eileen	A&S	So.	Ely
Kincaid, Grace	A&S	So.	Reno
King, William L.	A&S	So.	Reno
Kinneberg, Kathleen	A&S	Jr.	Battle Mountain
Kirk, Terry	A&S	Fr.	Memphis, Tenn.
Kirkley, Betty	HE	Jr.	Reno
Kirman, Jean	A&S	Fr.	Reno
Kluge, Frederick	EE	Fr.	West Orange, N. J.
Klus, Leo L.	CE	Sp.	Muncie, Indiana

Name	College	Classification	Home Address
Knight, Doris	A&S	Sr.	Reno
Koontz, Mary Alice	HE	Fr.	Henderson
Kornmayer, Mary C.		Gr.	Reno
Kraft, Juanita	A&S	Fr.	Reno
Kroll, Mrs. Bette	A&S	Sp.	Reno
Krulewich, Edith	A&S	Fr.	Reno
Kyse, Warren Edward	MM	Fr.	Clifton, N. J.
Lamb, Roger	A&S	Fr.	Fallon
Lampman, Barbara	A&S	Fr.	Sparks
Landers, Jacqueline	A&S	Fr.	Reno
Lane, Georgeanne	A&S	Fr.	Carson City
Lane, William I.	MM	Sp.	Reno
Larson, Bruce	A&S	Fr.	Manhattan
Larson, Novella	A&S	Jr.	Winnemucca
Launer, Douglas	MM	So.	San Gabriel, Calif.
LaVoy, Dolores	A&S	Fr.	Sparks
Leavitt, Zella	A&S	Fr.	Mesquite
Lemaire, Beth Grant	A&S	Fr.	Reno
Leonard, Lucille	A&S	Sr.	Reno
Leveille, Pauline	A&S	So.	Wellington
Levison, David	MM	Fr.	Reno
Lewis, Benjamin Jr.	MM	Fr.	Los Angeles, Calif.
Libbey, Mary	A&S	Fr.	Nevada City, Calif.
Lind, Elizabeth	A&S	Fr.	Elko
Littlefield, Jane	A&S	Fr.	Elko
Livierato, Eli	A&S	Fr.	Reno
Lockridge, Mary Ann		Gr.	Sparks
Loftis, Maxine	A&S	Sp.	Santa Monica, Calif.
Lokke, Gerald	A&S	Fr.	Sparks
Long, Marjorie	A&S	So.	Susanville, Calif.
Longabaugh, Ethel	A&S	Fr.	Henderson
Longwill, Joyce	A&S	Fr.	Fallon
Lowrance, Elizabeth	A&S	Sr.	Reno
Lusich, George Jr.	EE	Fr.	Sparks
Macaulay, Tom	A&S	Fr.	Reno
Mackrides, William	ME	Fr.	Philadelphia, Pa.
Maestretti, Madeline	A&S	So.	Austin
Maestretti, Marjorie	A&S	Fr.	Austin
Magleby, Gloria	A&S	Fr.	Pittsburg, Calif.
Magleby, Mavis	A&S	Fr.	Las Vegas
Mallin, Irvin	A&S	So.	Kansas City, Mo.
Mapes, Gloria	A&S	So.	Reno
Marisquirena, Josephine	A&S	Fr.	Elko
Marmor, Leonard	EE	Fr.	Passaic, N. J.
Marsh, Adele	A&S	So.	Reno
Martinez, Stella	A&S	Fr.	Reno
Masini, Tosca	A&S	So.	Sparks
Matekovic, Nelly	A&S	Fr.	Helper, Utah
Mayhew, Rose Marie	A&S	Sr.	Caliente
McBride, Gerald John	EE	Fr.	Elko
McClure, Robert	A&S	Fr.	Dardanelle, Ark.

Name	College	Classification	Home Address
McCuistion, Jane	A&S	Jr.	Elko
McFarland, Melba Trigero	A&S	Jr.	Reno
McGee, Clara Belle	A&S	Fr.	Reno
McGee, Frederick	EE	Sp.	Reno
McIntosh, John	A&S	Jr.	Reno
McMichael, Junerwanda	A&S	So.	Reno
McNeil, Harriet	A&S	Sr.	Sparks
McNeil, Rachel	A&S	So.	Sparks
McQueary, Barbara	A&S	Fr.	Reno
McQueen, Mrs. Effie	A&S	Sp.	Reno
McQuerry, Margie	A&S	Jr.	Reno
McVicar, Anna Belle	HE	Sr.	Smith
Meaker, Hellen	A&S	Sr.	Reno
Meckes, Alice	A&S	Fr.	Carson City
Mentaberry, Delores	A&S	Fr.	Winnemucca
Menu, Marjorie	A&S	Fr.	Reno
Meredith, Margaret	A&S	Fr.	Portola, Calif.
Mergen, Katharine		Gr.	Sparks
Merialdo, Arlene	A&S	Sr.	Eureka
Metzker, Donald	A&S	Fr.	Reno
Midgley, Betty J.	A&S	Fr.	Auburn, Calif.
Miller, Florene	A&S	Fr.	Reno
Miller, Gwendolyn	A&S	Jr.	East Ely
Miller, Jo-Ann	A&S	So.	Reno
Mills, Barbara	A&S	So.	Fallon
Mills, Gordon	A&S	Jr.	Fallon
Minor, Beverly Jean	A&S	Fr.	Winnemucca
Molignoni, Betty	A&S	Sr.	Reno
Montague, Ralphia	A&S	Sp.	Reno
Moody, Norma Joyce	A&S	Fr.	Hawthorne
Moore, Elizabeth	A&S	Sp.	Reno
Moore, Stephen	EE	Jr.	Reno
Morris, Nora	A&S	Fr.	Tonopah
Morris, William G.	A&S	Sp.	Reno
Morton, Robert W.	A&S	Fr.	Reno
Moseley, Margaret	A&S	So.	Reno
Mugler, Laura Mae	A&S	So.	Rockport, Wash.
Musick, Winkie	A&S	Fr.	Reno
Musselman, Jack	A&S	Fr.	Fort Lauderdale, Fla.
Musson, Malcolm	A&S	Jr.	Hawthorne
Nagle, Theresa	A&S	Sr.	Roseville, Calif.
Nannini, Rose Marie	A&S	So.	Sparks
Neustadt, Samuel	A&S	Sp.	Los Angeles, Calif.
Nevins, Richard		Gr.	Pasadena, Calif.
Nickell, William	EE	Fr.	Boulder City
Nielsen, Joyce	A&S	Fr.	Reno
Nocciolo, Albert	A&S	Fr.	Belleville, N. J.
Norris, Kathleen	A&S	Sr.	Sparks
Norton, Forry W.	A&S	Sp.	Reno
Nygren, Maie	HE	Jr.	Fallon
Nygren, Myrl	HE	Jr.	Fallon

Name	College	Classification	Home Address
O'Connell, Richard	MM	Fr.	Milton, Mass.
Okholm, Harold C.	EE	Fr.	Fallon
O'Leary, Katherine	A&S	Sr.	Winnemucca
Olesen, Barbara	A&S	Fr.	Lovelock
Olesen, Virginia	A&S	So.	Lovelock
Olsen, Homer J.	ME	Sp.	Reno
Onofrietto, Victor	A&S	Fr.	Newark, N. J.
Orr, Marian	HE	Fr.	Pioche
Osborne, Lawrence		Gr.	Reno
Owen, Marjorie	HE	Fr.	Reno
Oxborrow, Jed		Gr.	Reno
Oyarbide, Pela	A&S	Fr.	Battle Mountain
Paletti, Bonnie	A&S	Fr.	Reno
Palmer, Arthur J.	A&S	Jr.	Bloomfield, N. J.
Parigini, Harry	EE	Fr.	Sparks
Parker, Blanche	HE	Jr.	Goldfield
Parker, Fred	ME	Fr.	Hawthorne
Parks, Warren	MM	Jr.	Los Angeles, Calif.
Patten, Dorman	A&S	Sr.	Reno
Patterson, Doris	A&S	Fr.	Dyer
Payne, Evelyn	A&S	So.	Reno
Percy, Vivian Joyce	A&S	Fr.	Reno
Perkins, Jane	A&S	So.	Tonopah
Petersen, Beth	A&S	So.	Wells
Petersen, Jacquelyn	A&S	Fr.	Reno
Peterson, Mary M.	A&S	Fr.	Peoria, Ill.
Pettis, Ethel	A&S	Fr.	Reno
Pflum, Wilda	HE	Jr.	Fallon
Phillips, Nan	A&S	Sp.	Reno
Piccini, Matthew	MM	Fr.	Newark, N. J.
Pilkington, Dorothy	A&S	Fr.	Reno
Pittman, Carol (Mrs.)		Gr.	Reno
Platt, Shirley	A&S	Fr.	Reno
Poe, Bette Marie	A&S	Sr.	Sparks
Pohl, Elinor	A&S	Fr.	Carson City
Post, Lois	A&S	Fr.	Reno
Potts, Margery	HE	Fr.	Reno
Prescott, Jacqueline	A&S	So.	Reno
Pringle, Patricia	A&S	Fr.	Reno
Proctor, Jean Marie	A&S	So.	Kimberly
Prucha, Gilbert	A&S	Fr.	Reno
Pulver, Robert J.	EE	Fr.	Auburn, Indiana
Quiriconi, Dareo	CE	Fr.	Reno
Ramelli, Lavina	A&S	Jr.	Reno
Rand, Rachel	A&S	Fr.	Reno
Records, Mildred	A&S	Fr.	Reno
Reed, Hazel	A&S	Sp.	Reno
Reed, Marjorie A.	A&S	Fr.	Sparks
Reeves, Lois	A&S	Fr.	Fallon
Reynolds, Marillyn	A&S	Fr.	Sacramento, Calif.
Ricketts, Dace	HE	So.	Yerington

Name	College	Classification	Home Address
Ricketts, Rex Allen	CE	Fr.	Yerington
Riley, Ellen (Pat)	A&S	So.	Yerington
Riley, Phyllis D.	A&S	So.	Reno
Robinson, Nancy Jane	HE	Fr.	Caliente
Root, William W.	EE	Fr.	Reno
Rosaschi, Gloria	A&S	So.	Yerington
Ross, Jackalyn M.	A&S	Fr.	Carson City
Rovetti, Melvin	A&S	Fr.	Reno
Rovetti, Patricia	A&S	Fr.	Reno
Rowley, Janeth	A&S	Fr.	Sparks
Rowley, Myra Caroline	A&S	So.	Sparks
Ryan, James	ME	Fr.	Reno
Salk, Erwin		Gr.	Chicago, Ill.
Sanford, Bobby Jo	A&S	Jr.	Reno
Saunders, Nora	A&S	So.	Winnemucca
Scalera, Vincent	A&S	Fr.	Newark, N. J.
Scheeline, Valerie	A&S	Jr.	Reno
Scholz, Betty	A&S	Fr.	Fallon
Schroeder, James	CE	Sp.	Portsmouth, Ohio
Schwartz, Mary Ellen	A&S	So.	Goodsprings
Scott, Dorothy Jean	HE	Fr.	Tulelake, Calif.
Scranton, Chester		Gr.	Reno
Segerstrom, Donald I.	A&S	So.	Sonora, Calif.
Segerstrom, Mary F.		Gr.	Sonora, Calif.
Serpentino, Lorraine	A&S	So.	Reno
Sewell, Dorothy K.	A&S	So.	Reno
Shakarian, Florence	A&S	Jr.	Downey, Calif.
Shannon, Shirley	A&S	Fr.	Alliance, Neb.
Sharar, Lafe	A&S	So.	Reno
Shaw, Erma	A&S	So.	Reno
Shaw, Evelyn	A&S	Fr.	Redding, Calif.
Shaw, Helen C.	A&S	So.	Goldendale, Wash.
Shea, Lucille K.	A&S	Sr.	Reno
Shea, Merlin	A&S	Fr.	Sparks
Shelley, Gordon C.	A&S	Fr.	Reno
Shidler, Wilburta	A&S	So.	Reno
Shinall, May	A&S	Jr.	Sparks
Shovelin, Margaret	A&S	Jr.	Battle Mountain
Simon, Peter Edwin	A&S	Fr.	Passaic, N. J.
Simons, Calvin H.	A&S	Fr.	Pittsburg, Calif.
Simpson, Patricia	A&S	Fr.	Yerington
Sinofsky, Kenneth	A&S	Fr.	E. Rutherford, N. J.
Siri, Genevieve	A&S	Jr.	Reno
Sirkegian, Pauline	A&S	So.	Kimberly
Smith, Carol	HE	Jr.	Fallon
Smith, Emerson Reed	EE	Sp.	Reno
Smith, Harland L.	MM	Sp.	Reno
Smith, James	MM	Fr.	Reno
Smith, Lucille	A&S	Sp.	Reno
Smith, Norma	A&S	Fr.	Reno
Smith, Wilma	A&S	Sr.	Reno

SUMMER SESSION, 1944

Abbott, Maurine.....Mesquite
Abel, Dorothy.....Los Angeles, Calif.
Abelman, Harriet.....Bessemer, Mich.
Abelman, Robert.....Reno
Allen, Babette.....Reno
Amodei, Marilyn.....Reno
Anderson, James.....Petaluma, Calif.
Arnold, Binnie.....Reno
Asher, Bernice.....Brooklyn, N. Y.
Auchampaugh, Virginia.....Reno
Ayer, Constance.....Reno
Bart, Maud E.....Reno
Banks, Kathrina.....Santa Cruz, Calif.
Bean, Bryan.....Wendover, Utah
Beardall, Royden.....Sparks
Beckman, Carol.....Fallon
Berry, Edmund.....Lovelock
Blunt, Adelaide.....Reno
Borghi, Lillian.....Sparks
Bowler, George.....Logandale
Bradshaw, Merle.....Elgin
Braun, George.....Reno
Burkett, Jessie.....Boulder City
Buzaid, Emile.....Reno
Campbell, David.....Reno
Canady, Alta June.....Montello
Carl, Loelia.....Austin
Caryl, Virginia.....Laporte, Minn.
Case, Ferne.....Sparks
Charlton, Earle.....Reno
Charlton, Thelma.....Reno
Clark, Kathryn.....Reno
Clayton, Evalyn.....Las Vegas
Coffin, Lois.....Reno
Cook, Frances.....Lovelock
Cox, Lowell.....Orovada
Curtion, Fred.....Turlock, Calif.
Damon, Marian.....Winnemucca
Davis, Laurel.....Reno
Dean, Emily.....Juneau, Alaska
De Nevi, Angela.....Reno
Dieringer, Jack.....Reno
Di Miro, Frank.....Glen Ridge, N. J.
Dukes, Charles Dean.....Reno
Echevarria, Margaret.....Reno
Elges, Kenneth L.....Reno
English, Lena.....Whitney
Everett, Bernard.....Sparks
Fleming, Charles.....Reno
Folsom, Doris.....Yerington
Gamble, Lura.....Hazen
Gardella, Evelyn.....Reno
Gezelin, Emile.....Reno
Gibbs, Anne.....Fallon
Gibson, Janet.....Eureka
Gonfiantini, Nello.....Reno
Gordon, Selma.....Brooklyn, N. Y.
Grotegut, Eugene.....Sparks
Grubic, Robert.....Reno
Haddow, Beulah.....Carlin
Hagans, Mabel.....Reno
Hancock, Sue.....Reno
Harper, Jean W.....Reno
Haweis, Renee.....Montreal, Canada
Hawkins, Douglas.....Ely
Heany, Barbara.....Reno
Heim, Esther.....Reno
Hemphill, Harriette.....Las Vegas
Higgins, Mary.....Reno
Howard, LaVerne.....Fallon
Howarth, Merle.....Las Vegas
Hunt, Dorothy M.....Reno
Hurst, Clayton.....Reno
Jacobsen, Vida.....Reno
Johnson, Ruth.....Lovelock
Jones, Dessie.....Logandale
Jones, Olga.....Reno
Kelly, Kathryn W.....Pioche
Kirst, Marjorie.....Atascadero, Calif.
Lee, Eva B.....San Jose, Calif.
Livierato, Eli.....Reno
Lowrance, Elizabeth.....Reno
Lowry, Jean.....Henderson
Macaulay, Tom.....Reno
MacDonald, Elizabeth.....Reno
Marsh, Adele Mary.....Reno
Mathews, Afton.....Panaca
McBride, John.....Elko
McClurkin, Marjorie.....Willows, Calif.
McElwee, Sara.....Sparks
McNoughton, Mary.....Reno
Meaker, Hellen.....Reno

Milburn, Florence.....Las Vegas
Milne, Gertrude.....Flanigan
Monday, Camille.....Sparks
Moore, Hilda.....
Morgan, Margaret.....Fallon
Murdock, Margaret.....Reno
Ninnis, Robert.....Reno
Norris, Louise.....Dyer
Oldham, Mary Lou.....Elko
Olson, Florence.....Caliente
Owens, Verna L.....Austin
Parham, Nora L.....Alameda, Calif.
Park, Laverne.....Hawthorne
Petersen, Constance.....Reno
Peterson, Margaret.....Peoria, Ill.
Pilkington, Margaret.....Reno
Post, Lois.....Reno
Prucha, Golda.....Reno
Ramelli, Lavina.....Reno
Rand, Rachel.....Reno
Rast, Sheila.....Sparks
Ray, Emmet R.....Reno
Read, Patricia.....Sacramento, Calif.
Reed, Flo Zoe.....Wells
Reed, Hazel Smith.....Reno
Rhoades, Billie (Miss).....Sparks
Riley, Phyllis.....Reno
Rivers, Russell.....Reno
Roberts, Agnes.....San Andreas, Calif.
Rom, Mita.....New York, N. Y.
Rosa, Nevio.....Reno
Sander, Lida.....Fallon
Sandstedt, Ruth.....Paxton, Ill.
Schooley, Elvamay.....Reno
Sewell, Dorothy.....Reno
Sharar, Lafe.....Sparks
Shinall, May L.....Sparks
Shovelin, Margaret....Battle Mountain
Siri, George.....Reno
Smith, Mary Daly.....Cambridge, Neb.
Springer, Gloria.....Hawthorne
Steele, Virginia.....Reno
Sturman, Clara.....Downieville, Calif.
Sullivan, Vern.....Las Vegas
Swalley, Rubymae.....Corning, Calif.
Tarlow, Haskell.....Reno
Tate, Caroline.....Reno
Taylor, Delmar.....Reno
Thacker, Irene.....Owyhee
Thompson, Tom.....Reno
Wager, Carol.....Reno
Wankier, Irene.....Whitney
Watkins, Don.....Glen Ridge, N. J.
Waugh, Betty.....Ely
Wenthe, Lucile.....Montello
Werner, Jean.....Wellington
Whitmore, Cordelia.....Palisade
Wikstrom, Hilma.....Reno
Wilcox, Mary.....Reno
Williams, Howard C.....Reno
Wilson, Patricia C.....Hiko
Witham, Elizabeth..Grand View, Ida.
Woosley, Mabel.....Babbitt
Zunino, Olga L.....Reno

ENROLLMENT SUMMARY
1944-1945

Graduate Students		37
COLLEGE OF ARTS AND SCIENCE		
Seniors	35	
Juniors	55	
Sophomores	95	
Freshmen	221	
Specials	33	
		439
COLLEGE OF ENGINEERING		
Mackay School of Mines—		
Seniors	2	
Juniors	5	
Sophomores	2	
Freshmen	7	
Specials	4	
		20
School of Civil Engineering—		
Sophomores	1	
Freshmen	9	
Specials	2	
		12
School of Electrical Engineering—		
Juniors	3	
Sophomores	1	
Freshmen	19	
Specials	2	
		25
School of Mechanical Engineering—		
Seniors	1	
Sophomores	1	
Freshmen	4	
Specials	3	
		9
COLLEGE OF AGRICULTURE		
School of Agriculture—		
Seniors	1	
Juniors	2	
Sophomores	1	
Freshmen	3	
		7
Department of Home Economics—		
Seniors	9	
Juniors	7	
Sophomores	6	
Freshmen	16	
Specials	1	
		39
Total University		588
Enrollment of men	190	
Enrollment of Women	398	
Total Summer School, 1944		156
		744
Less names counted twice		43
Grand Total Enrollment		701

DIRECTORY

OFFICERS, FACULTY, PUBLIC SERVICE WORKERS, AND OTHER EMPLOYEES CONNECTED WITH THE UNIVERSITY

All addresses are Reno, unless otherwise specified. Phone numbers given at end of each address.

Adams, Wayne B., Commissioner, Food and Drugs Laboratory, Fifth and Sierra Sts., 4202. Home: 2097 Plumas St., 7732.

Ahern, John, District Extension Agent, Las Vegas.

Aiken, James W., Director of Athletics, Head Football Coach, New Gymnasium, 23192. Home: 1375 Lander St., 24174.

Albright, Archie R., County Extension Agent, 57 Sierra St., 24051. Home: 1163 Buena Vista Ave., 23710.

Allen, Fred J., Principal Chemical Analyst, U. S. Bureau of Mines, 5542. Home; 220 Maple St., 5580.

Amsiejus, Julius, War Food Production Assistant, Agricultural Extension Division, Logandale.

Arrington, Clyde E., Associate Analyst, U. S. Bureau of Mines, 5542. Home: 429 W. Sixth St., 24185.

Arthur, Mrs. Virginia, Secretary, Catalogue Committee, Mackay Science Hall. Home: 24B Birch St.

Auchampaugh, Philip G., Associate Professor of History and Political Science, Stewart Hall. Home: 853 University Ave., 21922.

Bachman, A. M., Watchman, Buildings and Grounds. Home: 117 W. 10th St., 8073.

Bailey, Mrs. Annie, Janitress. Home: 9 E. 8th St., 3347.

Banks, George S., Laborer, U. S. Bureau of Mines, 5542. Home: 1853 C St., Sparks, 92782.

Barski, Narbut S., Senior Chemical Analyst, U. S. Bureau of Mines, 5542. Home: 1219 Wilson, 7905.

Batdorf, Samuel B.,[1] Associate Professor of Physics, Mackay Science Hall, 3813.

Beckwith, Carolyn M., Emeritus Secretary to the President and Board of Regents. Home: Apt. 306, 580 McAllister St., San Francisco, Calif.

Beesley, E. Maurice, Associate Professor and Acting Head of the Department of Mathematics, Mackay Science Hall, 7282. Home: 1431 Terrace Drive, 24262.

Bibb, John D., University Physician, University Infirmary, 22101 or 5202. Home: 327 Clay St., 5691.

Bicknell, Jean E., Junior Clerk, U. S. Bureau of Mines, 5542. Home: 442 Washington St., 8044.

Billings, W. D., Associate Professor of Biology, Agricultural Bldg., 7253. Home: 1331 Hillside Drive, 5229.

Bixby, F. L., Professor and Head of the Department of Civil Engineering, New Engineering Bldg., 3902. Home: 1015 Sierra St., 3994.

Bixby, Mrs. Freda, Bookkeeper, Agricultural Extension Division, 3188. Home: 1015 Sierra St., 3994.

Blair, G. B., Associate Professor of Physics and Astronomy, Mackay Science Hall, 3813. Home: 1059 Sierra St., 21135.

Boardman, Horace P., Emeritus Professor of Civil Engineering. Home: 735 West St., 5466.

Boland, Mrs. Clara, Janitress. Home: 1088 So. Virginia St., 22856.

Boylan, John M.,[1] Senior Chemical Analyst, U. S. Bureau of Mines, 5542.

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[1]Absent on leave.

Bregar, George W., Principal Chemical Analyst, U. S. Bureau of Mines, 5542. Home: 419 Ralston St., 22296.

Brennen, Chester, Range Economist, Agricultural Experiment Station, Elko.

Brown, Charles, Emeritus Associate Professor of Biology. Home: 339 W. Baltimore Ave., Larkspur, Marin County, Calif.

Brown, Harold N., Professor of Education and Director of Summer Sessions, Education Bldg., 6547. Home: 555 University Terrace, 7075.

Buckman, Thomas E., Assistant Director, Agricultural Extension Division, 3188. Home: 722 Arlington Ave., 5028.

Butterworth, J. Raymond,[1] Instructor in English, Hall of English, 3217. Home: 1316 Hillside Drive, 3001.

Byrd, Clarence E., War Food Production Assistant, Agricultural Extension Division, Tonopah.

Callahan, Mrs. Marguerite, Stenographer, Agricultural Extension Division, 3188. Home: 728 N. Virginia St., 23227.

Caprio, Theresa V., Clerk, U. S. Bureau of Mines, 5542. Home: 831 Forest St., 5570.

Capriotti, Zetta, Clerk, Farm Development, Morrill Hall, 23533. Home: 205 Vine St., 22207.

Carlson, Mrs. Eda L., Emergency Supervisor, War Food Conservation Program, Agriculture Extension Division. Home: 554 Roberts St., 3866.

Carpenter, Jay A., Director, Mackay School of Mines, 3523. Home: 245 University Terrace, 6334.

Carrick, Gertrude F., Assistant Cataloger, University Library, 7292. Home: 489 E. 9th St., 7032.

Carroll, Virginia, Assistant in Home Economics, 7243. Home: 1009 N. Virginia St.

Cattoir, Francis R., Assistant Chemist, U. S. Bureau of Mines, 5542. Home: 747 N. Virginia St., 4815.

Cazier, Mrs. Ora Lee, Clerk, Soil Conservation Service, Morrill Hall, 21101. Home: 570 Claremont St.

Chadwick, Leonard E., Assistant Professor of Economics and Business Administration, Education Bldg., 7803. Home: 1009 N. Virginia St., 22445.

Champagne, Mrs. Edna, Clerk, Agricultural Extension Division, 3188. Home: 437 Wonder St., 21083.

Chapman, Joanna, Assistant Professor of Education, Agricultural Bldg. Home: 942 Sierra St., 8068.

Chappelle, B. F., Professor and Head of the Department of Foreign Languages, Stewart Hall, 21620. Home: 576 Ridge St., 5645.

Church, J. E., Jr., Emeritus Professor of the Classics and Chief in Station Meteorology, Agricultural Experiment Station, 5101. Home: 358 Washington St., 8097.

Clark, Walter E., President Emeritus. Home: 524 Cheney St., 23157.

Cline, Lewis E., Economist, Agricultural Extension Division, 3188. Home: 693 Chestnut St., 3900.

Coffin, Carlton G., Principal Chemical Analyst, U. S. Bureau of Mines, 5542. Home: 1145 The Strand, 7297.

Cokefair, V. E., Inspector, Food and Drugs Laboratory, Fifth and Sierra Sts., 4202. Home address: 434 Roberts St., 3814.

Coleman, James W.,[1] Associate Professor of Physical Education for Men, Gymnasium, 6323. Home: 311 Elm St., 21227.

Colquhoun, Mrs. Ada, Assistant Scientific Aide, U. S. Bureau of Mines, 5542. Home: 434 Moran St., 21122.

Conley, William A., Assistant Laboratory Mechanic, U. S. Bureau of Mines, 5542. Home: 345 California Ave., 3758.

[1]Absent on leave.

Couch, B. F.,[1] Instructor in Mines Accounting, Mackay School of Mines, 3523. Home: Lovelock.

Creel, Cecil W., Director, Agricultural Extension Division, 3188. Home: 1331 Hillside Drive, 24102.

Crook, Royal D., County Extension Agent, Fallon.

Daniels, A. H., Yardman. Home: 609 W. 11th St., 7686.

Deming, M. W., Associate Professor of Chemistry, Mackay Science Hall, 22793. Home: 150 W. 10th St., 4956.

DeRuff, Mrs. Alene, Loan Librarian, Library, 7292. Home address: P. O. Box 515.

Dixon, Ethel, Instructor in Physical Education for Women, Gymnasium, 6313. Home: Manzanita Hall, 3876.

Doten, S. B., Director, Agricultural Experiment Station, 5101. Home: 129 Elm St., 3048.

Duncan, Charles T.,[1] Instructor in Journalism, Hall of English.

Elges, Carl,[1] Assistant in Meteorology, Agricultural Experiment Station, 5101.

Elliott, Mrs. Mildred G., Assistant Scientific Aide, U. S. Bureau of Mines, 5542. Home: 744 Lander St., 4720.

Field, E. Lewis, Lt. Colonel, Professor of Military Science and Tactics, New Gymnasium, 5302. Home: 1009 No. Virginia St., 4776.

Fink, F. E., Technical Assistant, Soils Research, Agricultural Bldg., 8162. Home: 466½ E. Ninth St., 6778.

Fleming, Charles E., In Charge of Range Management, Agricultural Experiment Station, 5101. Home: 1055 Evans Ave., 4246.

Flyge, Betty M., Secretary, Nevada State Bureau of Mines and Mackay School of Mines, 3523. Home: 1010 Holcomb Ave., 8570.

Frandsen, Peter, Emeritus Professor of Biology. Home: Oroville, Calif.

Gadda, Charles, Janitor. Home: 412 Laurel St., 21941.

Gardella, Louis A., County Extension Agent, Yerington.

Ghiglieri, Gloria, Assistant Librarian, Agricultural Experiment Station, 5101. Home: R. F. D. No. 1, Box 152; 23903.

Gianella, Vincent P., Professor of Geology, Mackay School of Mines, 3523. Home: Valley Road and Sadlier Way, 24952.

Gilliam, B. F., Watchman. Home: 332 Roberts St., 24794.

Glazebrook, Thomas R.,[1] Forester, Agricultural Extension Division, Carson City.

Goodale, William A., Assistant State Farm Labor Supervisor, Agricultural Extension Division, 3188. Home: 724 Balzar Drive, 25205.

Gorman, Charles H., Vice President and Comptroller, Morrill Hall, 5343. Home: 430 Moran St., 21330.

Gottardi, John R., Associate Professor of Foreign Languages, Stewart Hall, 21620. Home: 820 H St., Sparks, 9407.

Grafton, Eldon C.,[1] Associate Professor of Structural Engineering, New Engineering Bldg., 3902. Home: 917 N. Virginia St., 8408.

Grayson, James, Chef, Dining Hall, 21538. Home: 1395 N. Virginia St., 23504.

Griffin, Margaret M., Assistant Director for Home Economics, Agricultural Extension Division, 3188. Home: 1320 Humboldt St., 5314.

Griffin, Robert S., Assistant in Administration, Professor of English, and Acting Master of Lincoln Hall, President's Office, 3643. Home: Lincoln Hall, 4892.

Hall, John W., Emeritus Professor of Education. Home: 235 W. Tenth St., 3747.

Hamlet, Jonelle R., Assistant Scientific Aide, U. S. Bureau of Mines, 5542. Home: 1032 Ralston St., 6033.

Hansen, H. Lee, District Extension Agent, Minden.

[1]Absent on leave.

Hardman, George, State Conservationist, Soil Conservation Service, Agricultural Experiment Station, 21101. Home: 1162 Buena Vista, 21685.

Harris, Everett W.,[1] Associate Professor of Mechanical Engineering, Mechanical Bldg., 21052. Home: 661 Ralston St., 5554.

Hartley, Mrs. Mabel, Associate in Farm Development, Morrill Hall, 23533. Home: 642 St. Lawrence Ave., 3957.

Hartman, Mrs. Ada K., Janitress, U. S. Bureau of Mines, 5542. Home: 1610 D St., Sparks.

Harwood, Paul A.,[1] Associate Professor of English and Master of Lincoln Hall, Hall of English, 3217.

Hauke, Lena, County Extension Agent, Fallon.

Hayes, M. Gertrude, County Extension Agent, 57 Sierra St., 24051. Home: 693 Chestnut St., 3900.

Headley, F. B., Chief, Department of Farm Development, Morrill Hall, 23533. Home: 432 Court St., 8397.

Heehs, Mrs. Gertrude, Housekeeper, Girls' Dormitories. Home: 524 North St.

Heinen, Harold J., Principal Chemical Analyst, U. S. Bureau of Mines, 5542. Home: 421 Ralston St., 22518.

Henningsen, Mrs. C. W., Member of the Board of Regents. Home: Gardnerville.

Hicks, Charles R., Professor and Head of the Department of History and Political Science, Stewart Hall. Home: 336 E. Ninth St., 22456.

Higginbotham, A. L., Professor and Head of the Department of Journalism, Hall of English, 8388. Home: 341 University Terrace, 3278.

Hilden, Agnes, Technician, Veterinary Control Service, Veterinary Science Bldg., 7332. Home: 516 West St., 3907.

Hill, A. E., Emeritus Professor of English. Home: 2343 Webster St., Palo Alto, Calif.

Hill, James J., Librarian, University Library, 7292. Home: Manzanita Hall, 3876.

Hill, Leland W., Assistant Chemist, U. S. Bureau of Mines, 5542. Home: 26 Stewart St., 21691.

Hodgson, C. W., District Extension Agent, Ely.

Holmes, Mrs. Juanita, Clerk, Food and Drugs Laboratory, Fifth and Sierra Sts., 4202. Home: 1240 Gordon Ave., 21751.

Hook, Mrs. Dora M., Janitress. Home: 224 E. Seventh St., 7839.

Horn, Carl M., Superintendent of Maintenance, Morrill Hall, 5363. Home: 1040 Sierra St., 6253.

Hoskins, W. F., Chemistry Storekeeper, Mackay Science Hall. Home: 205 W. Tenth St., 8596.

Hubbler, Frank, Heating Plant Attendant. Home: 423 E. Seventh St.

Huber, Mildred,[1] District Extension Agent.

Hughes, Muriel J., Assistant Professor of English, Hall of English, 3217. Home: Manzanita Hall, 3876.

Hume, Robert A., Associate Professor of English, Hall of English, 3217. Home: 1145 Seminary Ave., 4293.

Humphrey, Fred L., Assistant in Geology, Mackay School of Mines, 3523. Home: 619 Evans Ave., 4959.

Hungate, Frank P., Acting Instructor in Biology, Agriculture Bldg., 7253. Home: 245 University Terrace, 6334.

Hutcheson, Austin E., Associate Professor of History and Political Science, Stewart Hall. 621 W. 9th St., 5832.

Ibarra, Julia, Stenographer, Agriculture Extension Division, 3188. Home: 41 Park St., 7821.

Inwood, Ernest L., Professor and Head of the Department of Economics, Business and Sociology; Education Bldg., 7803. Home: Box 9055, University Station, 22943.

[1]Absent on leave.

Irwin, Ralph A., Professor of Psychology, Education Bldg., 7803. Home: 1217 Ralston St., 8565.

James, Steve, County Extension Agent, Pioche.

Jensen, Mrs. Ellen D., Laborer, U. S. Bureau of Mines, 5542. Home: 343 E. 6th St., 3090.

Jensen, Mrs. Kathleen M., Junior Clerk, U. S. Bureau of Mines, 5542. Home: 343 E. 6th St., 3090.

Johnson, Clare Louise, Cataloguer, Library, 7292. Home: 542 S. Center St., 23856.

Johnson, Fred M., Janitor, Agricultural Experiment Station, 5101. Home: 139 Caliente St., 8469.

Joslin, Mrs. Helen, Instructor in Art, Electrical Bldg., 6383. Home: 31 W. Ninth St., 23620.

Kelly, Mrs. Mae, Janitress. Home: 521 Lake St., 6223.

Kirk, Mrs. Berna K., Janitress. Home: 752 University Ave., 7503.

Klaus, Mildred, Lecturer in Secondary Education, Education Bldg., 7803. Home: 60 Washington St., 4706.

Kline, Lawton B.,[1] Assistant Professor of Foreign Languages, Stewart Hall, 21620. Home: 616 Wells Ave., 3206.

Knieke, Ed, Janitor. Home: 803 Lake St., 21716.

Laird, Charlton G.,[1] Associate Professor of English, Hall of English, 3217. Home: 1145 Seminary Ave., 4293.

Layman, Joseph D., Emeritus Librarian. Home: 4260 Terrace St., Oakland, Calif., Piedmont 6180-W.

Lehenbauer, Philip A., Professor and Head of the Department of Biology, Agricultural Bldg., 7253. Home: 1208 Patrick Ave., 8323.

Leifson, Sigmund W., Professor and Head of the Department of Physics, Mackay Science Hall, 3813. Home: 226 College Drive, 5410.

Lewis, Maurice E., Janitor. Home: 101 W. Fourth St., 4154.

Lewis, Sarah L., Emeritus Professor of Home Economics. Home: Benton Hotel, Corvallis, Ore.

Lillard, Louise, Clerk, Soils Research, Agricultural Extension Division, Agricultural Bldg., 8162. Home: 627 C St., Sparks, 9-2486.

Long, Joe, Plumber. Home: 227½ Washington St.

Lowrance, E. W.,[1] Associate Professor of Biology, Agricultural Bldg., 7253. Home: 630 W. Tenth St., 24310.

Lowry, Patricia, Dietitian, University Dining Hall, 1538. Home: Manzanita Hall, 3876.

Lynch, Mrs. J. B., Matron and Assistant Nurse, University Infirmary, 5202. Home: University Infirmary, 5202.

MacKenzie, Mrs. Gladys R., Assistant Scientific Aide, U. S. Bureau of Mines, 5542. Home: Belmont Apts. 23856.

Maloney, Paul L., District Extension Agent, Winnemucca.

Marsh, Mrs. Alice B., Assistant Professor of Home Economics and Acting Dean of Women, Stewart Hall, 6473. Home: Apt. 3, 942 Sierra St., 5857.

Martie, John E., Professor and Head of the Department of Physical Education for Men, New Gymnasium, 6323. Home: 250 Frey Lane, 24961.

Mason, Howard G., In Charge of Estimating and Planning, Morrill Hall, 23533. Home: 1139 The Strand, 7729.

Mazour, Anatole G., Associate Professor of History and Political Science, Stewart Hall. Home: 2321 Sunrise Drive, 5256.

McCormick, Michael J., Instructor in Military Science and Tactics, New Gymnasium, 5302. Home: 826 University Ave.

McCracken, Mrs. Olive C., War Food Preservation Assistant, Agricultural Extension Division, Carson City.

McCray, Harry F., Principal Clerk, U. S. Bureau of Mines, 5542. Home: Fairfield Heights, 5062.

[1]Absent on leave.

McDonnell, J. T.,[1] Graduate Manager, Student Union Bldg., 24272. Home: 1066 Evans Ave., 23709.

McLaughlin, James A., Metallurgist, U. S. Bureau of Mines, 5542. Home: 418 Cheney St.

McLeod, J. M.,[1] Inspector, Department of Weights and Measures, Fifth and Sierra Sts., 4202. Home: 617 Walker Ave., 21014.

McNamee, Leo A., Member of the Board of Regents, El Portal Bldg., Las Vegas.

McNew, Lois E., Stenographer, Agricultural Extension Division, 3188. Home: 227 East 5th St., 21510.

Melz, Christian W. F., Assistant Professor of Foreign Languages, Stewart Hall, 21620. Home: 1340 Faland Way, 23249.

Menke, Mark W., County Extension Agent, Elko.

Mergen, Mrs. Katharine N., Instructor in Journalism, Hall of English, 8388. Home: 1652 F St., Sparks, 9-368.

Meunk, Charles A., Laborer, U. S. Bureau of Mines, 5542. Home: 653 Vine St., 24713.

Miller, M. R., Chemist, Agricultural Experiment Station. Veterinary Science Bldg., 22033. Home: 265 College Drive, 7706.

Miller, William C.,[1] Assistant Professor of English, Hall of English, 3217. Home: 638 Washington St., 24923.

Moore, Mrs. Winifred, Clerk, Agricultural Experiment Station, 5101. Home: 53 W. 9th St., 4836.

Moseley, John O., President, Morrill Hall, 3643. Home: University Campus, 3446.

Mullen, James, Heating Plant Attendant. Home: 639 Washington St., 6780.

Murdock, Shirlee, Secretary to the Dean of Engineering, Electrical Engineering Bldg., 5313. Home: 802 Gordon Ave., 24288.

Murgotten, F. C.,[1] Professor of Foreign Languages, Stewart Hall, 21620. Home: 31 W. 9th St., 5693.

Murray, Madalyn B., Clerk, U. S. Bureau of Mines, 5542. Home: 512 Humboldt St., 7671.

Neilson, Walter A., Assistant in Range Management, Agricultural Experiment Station, 1140 Valley Road, 23552.

Newell, Enid P., Assistant Scientific Aide, U. S. Bureau of Mines, 5542. Home: 546 W. 6th St., 21045.

O'Leary, Katherine, Stenographer, State Analytical Laboratory, 3523. Home: 863 Sierra St., 22532.

Oliver, R. M.,[1] Assistant Professor of Mechanical Engineering, New Engineering Bldg., 24463.

Oshima, Violet A., Secretary, Veterinary Control Service, Veterinary Science Bldg., 7332. Home: 824 E. 6th St., 4873.

Palmer, Stanley G., Dean of the College of Engineering and Professor of Electrical Engineering, Electrical Bldg., 5313. Home: 533 University Terrace, 4427.

Palmer, Walter S., Professor of Metallurgy and Director of State Analytical Laboratory, Mackay School of Mines, 3523. Home: 201 State St., 5609.

Peacocke, Mrs. Florence, Social Director, Artemisia Hall, 2–3080. Home: Artemisia Hall, 2–3080.

Pistone, L., Yardman. Home: 750 Lake St., 23824.

Plumley, Alden J., Assistant Professor of Economics, Business, and Sociology; Education Bldg., 7803. Home: 466 E. 9th St., 22080.

Pope, Jessie P., Associate Professor of Home Economics, Agricultural Bldg., 7243. Home: 439 Marsh Ave., 6227.

Post, Theodore H., Professor and Director of Music, Education Bldg., 7803. Home: 747 Washington St., 8696.

Preuss, Herbert, In Charge of Greenhouse, University Campus.

[1]Absent on leave.

Puffinbarger, John P.,[1] Assistant Professor of Education, Education Bldg., 7803. Home: 624 Manor Drive, 8667.

Quaid, Dorothy, Stenographer, Agricultural Extension Division, 3188. Home: 1162 Buena Vista, 21685.

Rafael, A. J., Deputy, Department of Weights and Measures, Las Vegas.

Randall, E. L., Assistant Chemist, Food and Drugs Laboratory, Fifth and Sierra Sts., 4202. Home: University Terrace, 21318.

Rauch, Harold Glenn, Chief Geophysical Instrument Maker, U. S. Bureau of Mines, Basement, Mackay Science Hall. Home: 2003 Arlington Ave., 3681.

Records, Edward, Director, Veterinary Control Service, Veterinary Science Bldg., 7332. Home: 303 Elm St., 3956.

Reed, Albert J., County Extension Agent, Lovelock.

Reed, Edward C.,[1] County Extension Agent, 3188. Home: 915 Gordon Ave., 4348.

Reynolds, Mrs. Ethel M., Janitress. Home: 1089 Bell St., 7863.

Rhodes, Mrs. Jeanette C., Registrar, Morrill Hall, 5392. Home: 803 Sierra St.

Rice, Andrew C., Acting Supervising Engineer, U. S. Bureau of Mines, 5542. Home: 1401 N. Virginia St., 8603.

Rice, Mrs. Penelope, Assistant in Home Economics, Agricultural Bldg., 7243. Home: 1401 N. Virginia St., 8603.

Richards, Gloria, Secretary to the Dean of Arts and Science, Mackay Science Hall, 7282. Home: 475 E. 9th St., 5334.

Richardson, Frank, Assistant Professor of Biology, Agricultural Bldg., 7253. Home: Rt. 1, Box 281, Plumb Lane, 3925.

Riegelhuth, Katharine, Emeritus Professor of English. Home: 543 Lake St., 24129.

Rickabaugh, Charles, Carpenter. Home: 497 Highland Ave.

Rodriguez, Mario B., Acting Assistant Professor of Foreign Languages, Stewart Hall, 21620. Home: 236 W. Liberty St., Apt. C, 24665.

Romano, Esther, Clerk, Comptroller's Office, Morrill Hall, 5343. Home: 104 Keystone Ave., 3547.

Rosasco, J., Assistant, Buildings and Grounds. Home: 555 W. Ninth St., 5253.

Ross, Silas E., Chairman, Board of Regents, 4154. Home: 1043 N. Virginia St., 3464.

Ruebsam, Edith M., Associate Professor of Education, Education Bldg., 7803. Home: 118 West St., 3181.

Russell, Ruth Irene,[1] Instructor in Physical Education for Women, Gymnasium, 6313.

Ryan, Jack T., Superintendent of Shops and Supervisor of Shop Instruction, Mechanical Bldg., 21052. Home: 605 University Terrace, 21366.

Sameth, Elsa, Professor of Physical Education for Women, Gymnasium, 6313. Home: 942 Sierra St., 23117.

Sandorf, Irving J.,[1] Professor of Electrical Engineering, Electrical Bldg.

Sandry, Ernest, Janitor, Veterinary Science Bldg., 7332. Home address: 451½ Colorado Riener Dr.

Schelt, Alma, District Extension Agent, Agricultural Extension Division, Yerington.

Schmidt, Joseph, Laborer, Buildings and Grounds. Home: 38 W. Eleventh St., 5820.

Schmith, Agnes L., Administrative Secretary and Librarian, Agricultural Experiment Station, 5101. Home: 244 Ryland St., 4008.

Schulz, Otto R., Soil Conservationist, Agricultural Extension Division, 3188. Home: 901 Bell St., 3056.

Schumacher, Phyllis, Clerk, Comptroller's Office, Morrill Hall, 5343. Home: 766 West St., 7419.

[1]Absent on leave.

Scott, V. E., Economist, Agricultural Extension Division, 3188. Home: 442 Washington St., 21430.

Scranton, Chester M., Associate Professor of Physical Education for Men, New Gymnasium, 6323. Home: 941 No. Virginia St., 21662.

Sears, George W., Professor and Head of the Department of Chemistry, Mackay Science Hall, 22793. Home: 1341 Hillside Dr., 4308.

Shedd, Edward S., Assistant Metallurgist, U. S. Bureau of Mines, 5542. Home: 9 Sunset Way, Carson City, 90-W.

Sheerin, Chris H., Member of the Board of Regents, Elko.

Shipley, Mark A., Associate in Range Management, Agricultural Experiment Station, 5101. Home: Surprise Valley Road.

Sirkegian, Paul J., Member of the Board of Regents, Kimberly.

Sissa, Louise M., Emeritus Registrar. Home: 2507 Pine St., San Francisco, Calif.

Smith, C. C.,[1] Associate Professor of History and Political Science, Stewart Hall. Home: 621 Washington St., 21534.

Smith, Grant H.,[1] Assistant Range Economist, Agricultural Experiment Station, Elko.

Smith, Lyle F., Extension Forester, Agricultural Extension Division, Carson City.

Smith, Marjorie B., Assistant Scientific Aide, U. S. Bureau of Mines, 5542. Home: 734 W. 6th St., 23643.

Smyth, William L., Associate Professor of Metallurgy and Mining, Mackay School of Mines, 3523. Home: 1406 Tonopah St., 7940.

Spencer, V. E., Associate in Soils Research, Agricultural Bldg., 8162. Home: 1325 Terrace Drive, 7755.

Spencer, Mrs. Harriet B., Assistant in English, Hall of English, 3217. Home: 1325 Terrace Drive, 7755.

Spezia, Mrs. Rose, War Food Preservation Assistant, Agricultural Extension Division, Winnemucca.

Steiner, Mrs. Adelaide, Clerk, Comptroller's Office, Morrill Hall, 5343. Home: 333 Twelfth St., Sparks, 9784.

Stephenson, Edgar L., Associate Geophysicist, U. S. Bureau of Mines, 21724. Home: 480 W. Pueblo St., 22718.

Stewart, Robert, Emeritus Professor of Agronomy. Home: Box 487, Oroville, Calif.

Sutherland, Edward G., Associate Professor of Economics, Business, and Sociology; Education Bldg., 7803. Home address: R. F. D. 1, Box 192, 23997.

Swett, Mrs. Phoebe, Stenographer, Agricultural Extension Division, 3188. Home: 611½ Alvaro St., 8694.

Swift, Mildred, Professor and Head of the Department of Home Economics, Agricultural Bldg., 7243. Home: 1009 N. Virginia St.

Tait, J. R., Janitor. Home: 482 E. Ninth St., 5447.

Terry, Alice, Secretary to the President and Board of Regents, Morrill Hall, 3643. Home: 215 Rock St., 6975.

Thompson, R. C.,[1] Dean of Men, Professor and Head of the Department of Philosophy, Morrill Hall, 21576. Home: 1101 Riverside Ave., 6256.

Thurston, Ralph V., Metallurgist, U. S. Bureau of Mines, 5542. Home: 530 University Ave., 23750.

Titus, Louis, Associate Professor of Agronomy, Agricultural Bldg., 7333. Home address: R. F. D. 2, Box 16, 5679.

Traner, Fred W., Dean and Professor of Education, Education Bldg., 7803. Home: 210 Wonder St., 7470.

Upson, Elsie, Clerk-Typist, Agricultural Extension Division, 3188. Home: 615½ Eureka Ave., 24110.

[1]Absent on leave.

Van Dyke, James R., Professor and Acting Head of the School of Mechanical Engineering, New Engineering Bldg., 24463. Home: 460 E. Eighth St., 23654.

VanLew, Velma R., Stenographer, Agricultural Extension Division, 3188. Home: 1017 Sierra St.

Vawter, Lyman R., Associate Professor of Veterinary Science, Veterinary Science Bldg., 7332. Home: 1071 Evans Ave., 3773.

Vreeland, Walter, Principal Chemical Analyst, U. S. Bureau of Mines, 5542. Home: 320 W. Fifth St., 23183.

Wagner, Warren O.,[1] Associate Professor of Civil Engineering, New Engineering Bldg., 3902.

Warren, Mrs. Beatrice, Infirmary Nurse, University Infirmary, 5202. Home: University Infirmary, 5202.

Watkins, Mrs. Marie, Chief Clerk, Agricultural Extension Division, 3188. Home: 954 University Terrace, 22848.

Webster, Milan J., Professor of Economics, Business and Sociology; Education Bldg., 7803. Home: 1481 Genesee Drive, 3864.

Weller, William T., Janitor. Home: 533 N. Virginia St., 6482.

Welsh, J. K., Watchman. Home: 328 Morrill Ave., 4438.

Wheeler, Harry E.,[1] Associate Professor of Geology.

Wiederhold, Albert G., Assistant Professor of Philosophy and Psychology, Morrill Hall. Home: 609 Imperial Blvd., 4043.

Wier, Jeanne E., Emeritus Professor of History and Political Science. Home: 120 E. Ninth St., 3284.

Williams, Loring R., Associate Professor of Chemistry, Mackay Science Hall, 22793. Home: 1061 Evans Ave., 8544.

Williams, Mrs. Margaret, Assistant in Mathematics, Mackay Science Hall, 7282. Home: 1061 Evans Ave., 8544.

Wilson, F. W., Professor of Animal Husbandry and Acting Dean of the College of Agriculture, Agricultural Bldg., 7333. Home: 155 University Terrace, 7533.

Wilson, Joseph W., District Extension Agent, Elko.

Wilson, Maud A., Janitress. Home: 420 University Ave., 24197.

Wittwer, Eldon,[1] Professor of Agricultural Economics, Agricultural Building, 7333. Home: 811 Washington St., 21467.

Wittwer, John H., County Extension Agent, Las Vegas.

Wood, Fredrick, Professor and Head of the Department of Mathematics and Dean of the College of Arts and Science, Mackay Science Hall, 7282. Home: 203 College Drive, 3226.

Woolcock, Fred E., Janitor, Mackay School of Mines, 3523. Home: 348 West St., 4587.

Young, J. R., Professor and Head of the Department of Psychology, Education Bldg., 7803. Home: 122 Maple St., 8306.

[1]Absent on leave.

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