

BULLETIN OF THE UNIVERSITY OF NEW MEXICO
CATALOGUE SERIES NO. 33. NO. 2.
WHOLE NO. 99.

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THE STATE UNIVERSITY OF NEW MEXICO

TWENTY-EIGHTH ANNUAL CATALOGUE

1919



ANNOUNCEMENTS

1920

ALBUQUERQUE
PUBLISHED BY THE UNIVERSITY
APRIL, 1920

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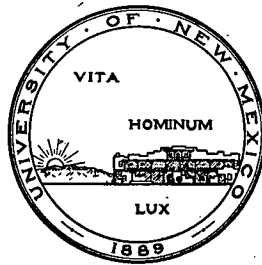
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SOCIOLOGICAL SERIES, VOL. I; No. 1-3; whole numbers, 57, 62, 66.

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Press of Central Printing Co.



Albuquerque, N. M.
1920

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GENERAL CALENDAR.

JANUARY, 1920							MAY, 1920							SEPTEMBER, 1920						
Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S	Su	M	Tu	W	Th	F	S
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4	5	6	7	8	9	10	2	3	4	5	6	7	8	5	6	7	8	9	10	11
11	12	13	14	15	16	17	9	10	11	12	13	14	15	12	13	14	15	16	17	18
18	19	20	21	22	23	24	16	17	18	19	20	21	22	19	20	21	22	23	24	25
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15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
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14	15	16	17	18	19	20	11	12	13	14	15	16	17	14	15	16	17	18	19	20
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16	17	18	19	20	21	22	22	23	24	25	26	27	28	18	19	20	21	22	23	24
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FEBRUARY, 1921							JUNE, 1921							OCTOBER, 1921						
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20	21	22	23	24	25	26	17	18	19	20	21	22	23	20	21	22	23	24	25	26
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10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17
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24	25	26	27	28	29	30	28	29	30	31	25	26	27	28	29	30	31
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UNIVERSITY CALENDAR.

SPRING TRIMESTER, 1920.

- March 29, Monday—Registration Day.
March 30, Tuesday—Instruction begins in all departments.
May 7, 8, Friday-Saturday—Annual Interscholastic Track Meet and Lyceum Contest.
June 6, Sunday—Baccalaureate Sunday.
June 9, 10, to noon 11th, Wednesday, Thursday, Friday—Final examinations for all students except Seniors, who will be examined in the preceding week.
June 11, Commencement Exercises, Friday 10 A. M. Alumni Association Meeting and Banquet at 6 P. M. Reception by President and Board of Regents at 8 P. M.
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ACADEMIC YEAR, 1920-1921.

First Semester.

- September 20, Monday—Registration Day for students resident in Albuquerque and vicinity.
September 21, Tuesday—Registration for all other students.
September 22, Wednesday—Instruction begins in all departments.
November 25, Thursday—Thanksgiving Day, holiday.
December 23, Thursday—Holiday recess begins at 5 P. M.
January 3, 1921, Monday—Instruction is resumed in all departments at 8 A. M.
January 26, 29, Wednesday-Saturday—Semester examinations. Semester ends noon, January 29.

Second Semester.

- February 1, Tuesday—Registration Day for all students.
February 2, Wednesday—Instruction begins in all Departments.
February 22, Tuesday—Washington's Birthday, holiday.
May 29, Sunday—Baccalaureate Sunday.
May 30, Monday—Memorial Day, holiday.
May 31, June 3, noon, Tuesday-Friday—Final Examinations.
June 3, Friday—3 P. M., Commencement Exercises.

ORGANIZATION and ADMINISTRATION

ORGANIZATION.

During the academic year, 1919-1920, the State University was reorganized as follows:

THE COLLEGE OF ARTS AND SCIENCES.

THE COLLEGE OF ENGINEERING.

THE GRADUATE SCHOOL.

THE EXTENSION DIVISION.

THE DEPARTMENT OF HYGIENE, including the STATE HEALTH LABORATORY.

THE BOARD OF REGENTS OF THE STATE UNIVERSITY.

HIS EXCELLENCY, THE GOVERNOR OF NEW MEXICO, Ex-Officio
THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, Ex-Officio.

NATHAN JAFFA, President.....Roswell
JOHN A. REIDY, Secretary-Treasurer.....Albuquerque
ANTONIO A. SEDILLO.....Albuquerque
NESTOR MONTOYA.....Albuquerque
WILLIAM E. GORTNER.....Las Vegas

ADMINISTRATIVE OFFICERS OF THE STATE UNIVERSITY, 1919-1920.

President: DAVID SPENCE HILL, Ph. D., LL. D.

Vice-President: CHARLES ELKANAH HODGIN, B. Pd.

Dean of College of Arts and Sciences: LYNN BOAL MITCHELL, Ph. D.

Dean of Graduate School: JOHN DUSTIN CLARK, Ph. D.

Acting Dean of College of Engineering: JESSE MEYERS COAHRAN,
B. S.*

Financial Secretary: JOSEPHINE S. PARSONS, B. A.

Registrar and Business Director: JOHN PAYNE WILLIAMS, B. A.*

Librarian: PEARL ANJANET STONE, B. Pd.*

Acting Proctor of Men's Residential Hall: JOHN FRANCIS MCGOUGH,
A. B., LL. B.

Acting Proctor of Women's Residential Hall: MINNIE VELMA WITT-
MEYER (SARGENT).

Campus Superintendent: HARRY FRANK.

*Resigned.

ALPHABETICAL LIST OF THE FACULTY, 1919-1920.

HILL, DAVID SPENCE, B. A., (Randolph-Macon); Ph. D., (Clark University); LL. D., (State University of Kentucky); LL. D., (State University of Arizona), President.

BARDSLEY, GEORGE HENRY, B. S., (Grinnell); M. S., (University of California), Associate Professor of Physics.

BARNHART, CHARLES ANTHONY, B. A., (University of Illinois); M. A., (University of Illinois), Professor of Mathematics.

CLARK, JOHN DUSTIN, B. S., (New Hampshire College of Agriculture and Mechanic Arts); M. S., (ibid), Ph. D., (Stanford University); Dean of Graduate School and Professor of Chemistry.

*COAHRAN, JESSE MEYERS, B. S., (Purdue University); Acting Dean of College of Engineering and Professor of Electrical Engineering.

ELLIS, ROBERT WALPOLE, B. S., (University of South Dakota); M. A., (University of Wisconsin), Professor of Geology.

HICKEY, ETHEL, B. A., (University of Kansas); Professor of English Literature.

*HILL, ROSCOE R., B. A., (Eureka); Professor of History and Political Science.

HODGIN, CHARLES ELKANAH, B. Pd.; (University of New Mexico), Vice-President and Professor of Education.

*HOWARD, RUSSELL MARION, B. S., (Oregon A. C.); Professor of Economics and Business Administration.

IBARRA Y ROJAS, HANNIBAL, B. de CC. LL., (Barcelona), LL. B., J. D., (Chicago Law School), Assistant Professor of Romance Languages.

LANDERS, JOSEPH SAMUEL, B. A., M. A., (University of Colorado), Professor of Psychology and Philosophy.

*LEUPOLD, ARNO KARL, B. S., (University of New Mexico); Professor of Practical Mechanics.

LUKKEN, JOHN, B. S., (Fremont); B. M., (American Conservatory of Chicago), Acting Professor of Music.

MITCHELL, LYNN BOAL, B. A., (Ohio State University); A. M., (Cornell University), Ph. D., (Cornell University), Dean of College of Arts and Sciences, and Professor of Greek and Latin.

MOSHER, EDNA, B. S., (Cornell); Ph. D., (University of Illinois); Acting Professor of Biology.

*OAKLEY, EDNA BEE, B. A., (University of Kansas), Instructor of Spanish.

*SHERWIN, PROCTOR FENN, B. A., (St. Lawrence University), Professor of English Language.

SIMPSON, MRS. WALTER, (Ypsilanti), Professor of Home Economics and Supervisor of Dining Hall.

*STONE, PEARL ANJANET, (University of Illinois Library School), Librarian.

*Resigned.

WEESE, ASA ORRIN, B. A., (University of Minnesota); M. A., (University of Illinois), Professor of Biology and Acting Director of Department of Hygiene.

*WEIR, HARRY EDWARD, B. S., (University of Pennsylvania); Professor of Civil Engineering.

INSTRUCTORS AND ASSISTANTS.

BEAR, FRANCES ARMITAGE, Assistant in Supervision of Dining Hall.
DUNCAN, ANNIE LEE, B. A., Fellow in Biology.

FAW, MRS. JENNIE STEVENS, Instructor in Piano.

FETZER, CLAIR ALLISON, Assistant in Civil Engineering.

HART, MAYME BURNETTE, First Assistant Librarian.

MEYERS, RALPH EDMUND, Assistant in Chemistry.

NICHOLS, LOUISE, Instructor in Piano.

ROSENBAACH, SAMUEL JOSEPH, Assistant in Physics and Electrical Engineering.

ROY, EDNA, Instructor in Home Economics.

SCHUMAKER, MARGARET, Assistant in Chemistry.

SHARP, JONATHAN, Meteorological Observer.

*WARREN, SHIRLEY, B. S., Instructor in Home Economics.

WICKLUND, IRENE, Second Assistant Librarian.

STAFF OF DEPARTMENT OF HYGIENE AND STATE HEALTH LABORATORY.

WEESE, ASA ORRIN, B. A., (University of Minnesota); M. A., (University of Illinois), Acting Director of Department of Hygiene.

WALLER, C. E., M. D., State Commissioner of Health, Consultant.

ELLER, CHARLES ASBURY, D. D. S., (Indianapolis University), Dental Advisor.

FRISBIE, EVELYN, M. D., Medical Advisor of Women.

GREENFIELD, MYRTLE, B. A., (University of Kansas); A. M., (University of Kansas), Bacteriologist in State Public Health Laboratory.

McCAHILL, MORTON, M. D., (University of Pittsburgh), Medical Advisor of Men.

*McGOUGH, JOHN FRANCIS, B. A., (Colgate University); LL. B., (Gonzaga University), In Charge of Physical Education of Men and Supervisor of Men's Residential Hall.

WITTMAYER, MINNIE VELMA, (Sargent), In Charge of Physical Education of Women and Supervisor of Women's Residential Hall.

SPECIALIST IN RURAL EDUCATION, 1919-1920.

MONTOYA, ATANASIO, Formerly County Superintendent of Public Schools, Bernalillo County.

*Resigned.

ADVISORY COUNCIL AND STANDING COMMITTEES OF THE UNIVERSITY. 1919-1920.

The first named member of each Committee is Chairman.

The President is Ex-Officio member of all Committees.

PRESIDENT HILL, VICE-PRESIDENT HODGIN, DEANS MITCHELL, CLARK, ACTING DEAN COAHRAN, REGISTRAR AND BUSINESS DIRECTOR WILLIAMS.

Admission and Standing: DEAN MITCHELL, ACTING DEAN COAHRAN, PROFESSORS SHERWIN, LANDERS, REGISTRAR WILLIAMS.

Schedule and Curriculum: PROFESSORS BARNHART, LANDERS, LEUPOLD, WEESE, COAHRAN, SIMPSON.

Graduate Study: DEANS CLARK and MITCHELL, PROFESSORS WEESE, LANDERS, ELLIS, MOSHER.

Relations with Secondary Schools: PROFESSORS LANDERS, R. HILL, DEAN MITCHELL.

Student Affairs: DEAN CLARK, PROFESSORS SHERWIN, HICKEY, WEIR, MR. MCGOUGH, MRS. WITTMAYER.

Public Exercises: DEAN CLARK, PROFESSORS HICKEY, ELLIS, LUKKEN, BARNHART.

Audit of Student Accounts: PROFESSORS HOWARD, LEUPOLD, BUSINESS DIRECTOR WILLIAMS, SECRETARY PARSONS.

Student Eligibility: PROFESSORS WEESE, BARNHART, R. HILL.

Athletic Council (Faculty Representatives): PROFESSORS WEESE, BARNHART, CLARK.

Literary Contests (Faculty Representatives): VICE-PRESIDENT HODGIN, PROFESSOR R. HILL, MISS OAKLEY.

Library: MISS STONE, PROFESSORS R. HILL, SHERWIN.

Publications: VICE-PRESIDENT HODGIN, PROFESSOR SHERWIN.

Extension Activities: VICE-PRESIDENT HODGIN, PROFESSORS HICKEY, WEESE.

HISTORY.

New Mexico was acquired from Mexico by the treaty of Guadalupe Hidalgo, February 2, 1848, and held under military control until the first territorial legislature was assembled in 1850. During the early years of territorial existence conditions were unfavorable for educational development and little was accomplished in the scattering efforts to establish schools of any kind. The centers of population were small and far apart, in the sparsely settled territory of that day. Unfriendly Indians were a source of considerable annoyance to the citizens. The passing between New Mexico and the states was infrequent, mail coming at long intervals. The expense of getting teachers was great, and there was a disposition on the part of many citizens to oppose public education. In the face of this discouraging situation successive legislatures sent memorials to the Federal Congress, making strong appeals for direct government aid in establishing some kind of educational facilities in New Mexico. Congress early made land appropriations (which brought in no funds) and turned a deaf ear to every appeal, not making provision even for teaching English to the Spanish-speaking people gathered under the American flag.

Various inadequate school laws were passed by the territorial legislatures from time to time, but nothing was done to provide for higher educational institutions until 1889, when a bill introduced by the Honorable Bernard S. Rodey was passed by the Legislative Assembly, creating the University of New Mexico, to be located at Albuquerque. The new institution was opened in rented rooms as a summer normal school, June 15, 1892, beginning regular instruction September 21, in the first building erected on the campus. The Honorable E. S. Stover, a member of the charter Board of Regents, was made the nominal president, and served five years. During this term Principal George S. Ramsay was in direct charge of the institution for two years, followed by Professor Hiram Hadley, Vice-President in charge from 1894 to 1897. During this administration, the period of organization, there were many difficulties to encounter. Education throughout the territory was at an exceedingly low ebb, the law creating the University having preceded the general school law which made possible the establishment of high schools in the towns. And while the territorial institution bore the name of University, it was in reality a preparatory school. Throughout the administration there was but one building on the campus for educational purposes, and legislative appropriations for maintenance were very meagre. In addition to the normal and preparatory curricula, a commercial school was instituted in 1893.

The Board of Regents in the summer of 1897 elected Dr. C. L. Herrick, of Denison College in Ohio, as active president to take full charge of the University. President Herrick was a man of scholarly attainments in science and philosophy, and though in ill health he put into the science work new life which gave it an interest and impetus that meant continued growth. The great need for a science building, and the failure of the Legislature to provide for this need, prompted an effort on the part of President Herrick to solicit funds for a new building from friends of the

institution. Mrs. W. C. Hadley made a gift of \$10,000 for a science hall, other smaller donations from New Mexico citizens were added to this amount, and in 1899 an excellent three-story building was erected, and named the Hadley Laboratory. About the same time a small gymnasium was built on the campus and physical training was made a part of the curriculum. President Herrick materially strengthened the teaching force of the University, and gathered about him a number of science students from the East and from New Mexico, giving to the small institution something of a college atmosphere.

In 1901 Dr. William G. Tight, a geologist, also from Denison College, was elected as successor to President Herrick, and served until 1909. Upon entering the work of the University and learning its needs, Dr. Tight found it necessary to sacrifice much of his professional scientific work to the duties of his executive office, into which he threw the vigor of his physical and mental energy for the larger interests of the institution. He conceived large plans for a greater University for New Mexico. The grounds were laid out with a thought of permanency, and hundreds of trees were placed in orderly arrangement as a start for a beautiful campus. A deep well was dug, a large windmill for motive power constructed, and an irrigating reservoir built, in an effort to furnish the abundance of water needed, on an economical basis. After studying and photographing various buildings in Indian villages throughout New Mexico, President Tight formulated plans for a distinctive type of University architecture, choosing the style from the native soil, instead of borrowing ideas from foreign lands. A power house was first constructed on the new plan, and then dormitories—one for women, named Hokona, the Indian significance being virgin butterfly, and one for men, called Kwataka, or man-eaglet. The Administration Building, a large three-story structure and the first building on the campus, was remodeled on the lines of the adapted Pueblo plan, and an assembly room added and designated Rodey Hall, in recognition of the valuable services rendered the University by the Honorable B. S. Rodey in the Territorial Legislature and the Federal Congress. The administration of Dr. Tight was marked also by definite advance in all college departments as well as in athletic activities. While special emphasis was placed upon the science work, other courses were not neglected. A school of music and expression was organized, and housed in the upper rooms of the Albuquerque Public Library building. A beginning was also made in putting the University into closer touch with the few high schools then in existence throughout the territory.

In 1909 Dr. E. D. McQueen Gray was chosen to succeed President Tight, and served until 1912. Dr. Gray, although a resident of the United States and of New Mexico for a number of years, had been educated in English universities and had spent much time traveling in European countries. His scholarly attainments lay in the classics, modern languages, and history. He was of assistance to Rhodes scholarship candidates, for he had spent a number of years preparing men for Oxford University. He held also to English tradition in many features of university administration. With the beginning of the academic year 1909-1910 President Gray introduced a number of changes. The burning of

Hadley Laboratory in 1910 made necessary the erection of a new building with very limited funds, to serve as a temporary science building. In this construction a deviation from the Pueblo type of architecture was introduced.

In 1912, President Gray was succeeded by Dr. David Ross Boyd, who brought to the position a ripe experience in educational work and university administration, having been for a number of years president of the University of Oklahoma, from its struggling days to its successful establishment as a thriving state institution. Upon election President Boyd began a study of the general educational situation in New Mexico and the needs of the University. One of the first things to demand attention was the securing of a larger campus for immediate and future needs, while land could be purchased at a reasonable price. By persistent effort, the Campus was extended from twenty-five acres, when President Boyd assumed office, to a tract of over three hundred acres. With a view to unity in the development of plans for the greater university, the administration secured the services of Mr. Walter Burleigh Griffin of Chicago, a landscape architect and expert in city planning, who had planned and supervised the construction of the new capital city of Australia at Canberra, and had laid out the grounds of the new federal district. His plans are now in the hands of the Regents for the permanent arrangement and beautification of the grounds, and the attractive grouping of new buildings. The rapidly growing Department of Chemistry called for the first building under the new plans. It is a plain, substantial structure, covering a ground space of 165 by 50 feet, with the interior marked by modern arrangement, and latest equipment for laboratory work. The well was deepened and the capacity of the irrigation system sufficiently increased to supply the needs of the University grounds for many years to come. The entire frontage of the campus was levelled and terraced, and planted with grass, trees, and shrubbery.

With President Boyd's administration also came changes in the University curriculum. A beginning was made in university extension and correspondence study. The Department of Home Economics was introduced with electrical equipment. A chair of psychology was added to the College of Arts and Sciences. Courses in Latin-American and Spanish history were provided and greater emphasis was placed upon the teaching of the Spanish language. In addition, curricula in music were organized. The University became better known both within and without the State than ever before, and the college instruction as distinct from preparatory work, was increased.

Several important changes were wrought by the World War in the administration and the life of the University. The chief changes in administration were due to the change in the academic calendar by which four quarters running through the year were substituted for the old calendar of two semesters with the summer vacation—to which the University returned in 1920. This temporary change was brought about in the first instance by the necessity of accommodating the calendar of the University to the large proportion of men students who wished to take part in the movement for increased and intensified agricultural production during the spring and summer months of the year. Engagement in agricultural and industrial services and in military and naval forces of

the nation had drawn practically all men students from the University by the opening of summer in 1918. Many alumni and former students were similarly engaged. But in October the establishment of a unit of the Students' Army Training Corps brought 160 men between 18 and 21 to the campus and classrooms of the institution. After the signing of the Armistice, however, the Students' Army Training Corps was demobilized at the close of the autumn session in December, and the University in the early months of 1919 returned to normal status as rapidly as permitted by after-war conditions in a thinly populated State which contributed liberally in men and resources to the national effort.

Upon the resignation of President Boyd, the Regents, during July, 1919, appointed as his successor Dr. David Spence Hill, who came from the position of Professor of Education at the University of Illinois. Dr. Hill immediately entered upon his duties with characteristic energy, setting himself at the outset, and with greater success than had been attained at any previous time in the history of the institution, to win for the State University a high degree of community interest and cooperation. The new Applied Mechanics Building, which also for the present houses the Department of Civil Engineering and Mathematics, was completed in December. In that month he launched, with the help of the Chamber of Commerce of Albuquerque, a successful campaign to raise, by popular subscription, a minimum of \$12,000 toward the initial expense of constructing and equipping a building unit for the Department of Home Economics.

During this academic year the University became the seat in this State of the Department of Hygiene, for which the Federal government through the Interdepartmental Social Hygiene Board bears a part of the charge of maintenance. This Department provides free physical examinations, and instruction in hygiene for all students and preserves all of its records for statistical purposes.

In December a State Health Laboratory was also instituted at the University, through the cooperation of the New Mexico Department of Health, to provide free service to poor citizens and to physicians and health officials in the examination of specimens submitted to it in the interest of the public health.

At the opening of the academic year President Hill and the Board of Regents effected a partial reorganization in the administration of the University. In addition to the Vice-President and the Dean of the College of Arts and Sciences, a Dean of the Graduate School and an Acting Dean of the College of Engineering were also appointed. To the work of the Registrar was added the duty of a Business Director, an executive assistant with functional activities appropriate to this twofold office. These five officers made up an advisory council to advise the president on important matters of administrative policy. In view of the rapid improvement in the provision of high school instruction throughout the counties of the State it became the definite policy of the University, at the opening of the present academic year, to end all preparatory instruction and to admit only students qualified by the regular standards of the University, for admission to the Freshman class. At this writing the State University is giving promise of an auspicious future.

SITUATION AND ENVIRONMENT.

Albuquerque, the most populous town in New Mexico, and the commercial capital of the State, is the seat of the State University. The situation of the City is in every respect admirable. It occupies the center of a strip of highly fertile land on the left bank of the Rio Grande—the Rio Grande del Norte of the Spanish discovers—at an elevation of five thousand feet above the level of the sea. On the Mesa, or elevated plateau, about a mile east of the City, stand the thirteen buildings of the University, overlooking the wide valley of the Rio Grande. The pure air of the Mesa, bracing and invigorating, surrounds the spot, and lassitude and depression are almost unknown in this atmosphere. Extremes of temperature, whether of heat or cold, which not infrequently impedē the progress of educational work in other localities, seldom visit this part of New Mexico.

The New Town of Albuquerque—for there is also an Old Albuquerque, dating from the times of the first Spanish settlers, and still typically Spanish in appearance—is an essentially modern city, with paved streets, concrete sidewalks, electric light, street railway, two daily newspapers, and important mercantile and manufacturing establishments.

Albuquerque is also an educational center, possessing in addition to the State University many schools of various kinds; while the public school system of the City compares favorably with the systems of much larger eastern towns. All the leading religious denominations are efficiently represented; and the members of all churches gladly welcome university students to share in their religious and social life. The University's position in regard to religion is strictly non-sectarian, but the students are encouraged to attach themselves to the religious organizations with which their families are connected.

Albuquerque lies on the main line of the Atchison, Topeka & Santa Fe Railway system, at the junction of the lines to El Paso and Mexico on the south, Arizona and California to the west, the Pecos valley and southwestern Texas to the east, and through Colorado to Kansas City and Chicago to the north, so that it enjoys railroad facilities unequalled by any other town in this region. The advantageous position of the City on the main line of passenger traffic east and west, furnishes to the citizens many opportunities of seeing and listening to persons of distinction in almost every department of public effort; and ~~lectures and addresses, concerts and plays, musical and literary~~ gatherings occur throughout the year.

AIM, SUPPORT, AND GOVERNMENT.

The State University of New Mexico is the culmination of the educational system of the State. The State University is closely connected with high schools in the same way as the high schools are related to the grade schools. Just as it is not expected that all who complete the grammar grades will advance to and through the high school, it is likewise not expected that all who complete the high school course will go forward to and through the State University. The relation between the State University and high schools is such that the graduates from the latter may enter the University on a certificate plan in much the same way as graduates of the grammar school may pass to the first year of the high school, as easily and naturally as possible.

The State University encourages scholarship and learning and the application of scientific knowledge to the arts of life. Its aim is to place the resources of the University, so far as possible and with the least possible restriction, at the disposal of any qualified person who desires and has sufficient qualifications to use them. Training for leadership in true American citizenship as well as in the arts, sciences, and professions, is constantly kept in view as a goal.

The University is supported by the income from the proceeds of the sale of lands granted to it by the Federal Government on New Mexico's becoming a state, together with the income from leases and other uses of lands. Its chief support, however, is that of appropriations made for its maintenance by the State Legislature. Small beginnings have been made in the way of donations by interested friends of the University. The beginning of a rotating loan fund for the benefit of worthy and needy students has been made. The chief contributors to this beginning were the Honorable Felix Martinez and the Honorable George A. Kaseman. A gift of \$500 has been made by

Mrs. William Jennings Bryan, and is known as the Philo Sherman Bennett Fund, the income of which, after a certain amount has been realized, is to be used to assist needy students. Numerous valuable donations have been made of collections of scientific interest and of valuable books for the Library.

During the year 1919-1920, President Hill, with the assistance of the Albuquerque Chamber of Commerce, solicited subscriptions to the amount of \$12,000 toward the erection of a Home Economics Building. Again Mr. George A. Kaseman manifested his interest in the institution by starting the movement with a cash gift of \$2,000. Scores of other subscriptions quickly followed until practically the whole amount desired was paid in cash—a united effort splendidly significant of the faith of citizens in the State University.

The government of the University is vested in a Board of Regents who possess the powers to accomplish the objects of the University's establishment and to perform the various duties prescribed by law. Five regents are appointed by the Governor of the State; the Governor and Superintendent of Public Instruction are ex-officio members of the Board. The Regents have delegated to the President of the University the power of naming all officers, instructors, and employees of the institution. These appointments and all faculty rules regarding the government of the students are subject to their approval. The University Faculty exercises authority, subject to the approval of the President and the Board of Regents, in educational policy, scholastic standards, and general matters relating to the University.

BUILDINGS.

At the southwest corner of the campus is the ADMINISTRATION BUILDING. This, the oldest building on the campus, has been remodeled to conform with the adapted Pueblo style of architecture in which the newer buildings have been constructed. The ground floor contains the Home Economics laboratories and classrooms, and a part of the stacks of the Library. The first floor houses the administration offices, and the reading and checking rooms and the remainder of the stacks of the Library. The two upper floors are given up to classrooms and departmental offices.

Just north stands RODEY HALL, an exact replica of the centuries-old Pueblo church at Taos, New Mexico. It has a seating capacity of five hundred, and is used for all assemblies and public lectures.

Further to the north and west is the POWER HOUSE, the heating plant which supplies all the buildings on the campus, it also is constructed in the adapted Pueblo style.

North and east of the Power House is the NEW ENGINEERING BUILDING, known as the APPLIED MECHANICS BUILDING, containing over eleven thousand square feet of floor space. The building contains shops, stock rooms, drawing rooms, class rooms, and offices.

To the east is the UNIVERSITY COMMONS, a wooden frame building which contains a dining room with seating capacity of one hundred seventy-five, and kitchen, scullery, and servants' quarters.

Just east of this building is ENGINEERING HALL, a one-story cement structure having laboratories, classrooms, a lecture room, and departmental offices for Electrical Engineering, Geology, and Physics.

The new CHEMISTRY BUILDING, north of ENGINEERING HALL, is of the adapted Pueblo style of architecture with an open patio in the center. It has laboratories, lecture rooms, and classrooms, as well as stock rooms and departmental offices for Chemistry, Animal Biology, and Botany.

Facing these buildings on the east stand the MEN'S and the WOMEN'S RESIDENTIAL HALLS, both good examples of the adapted Pueblo architecture. They are divided into suites of rooms, each consisting of a study and two bedrooms and intended for two students.

Southeast is the WOMEN'S GYMNASIUM, and further to the south are the MEN'S GYMNASIUM and the SWIMMING POOL. Considerably to the east of the main campus are the athletic field and the UNIVERSITY FIELDHOUSE for the use of the athletic teams. These three buildings are frame structures, but are well provided with showers, lockers, dressing rooms, apparatus, and floor space for training classes and indoor athletic sports. The MEN'S GYMNASIUM contains the examination room and departmental office for Physical Training.

The HOME ECONOMICS BUILDING, provided for by the philanthropy of the citizens of Albuquerque is in course of erection, and will be a unit of a still larger structure planned for the future.

THE LIBRARY.

The University Library consists of sixteen thousand bound volumes and pamphlets, the publications of many learned societies, and the files of over one hundred magazines. In addition, the Library is a depository for publications of the United States Government.

The resources of the Library are also made available to the people of the State through extension work. Loans of books to individuals are made on proper conditions and payment of postage, and traveling libraries are sent for periods of three months each to communities having no library facilities. The War Service Department of the American Library Association has recently made a gift of several hundred technical books for the use of ex-service men in the State.

The Library is open every day except Saturday and Sunday from 8 A. M. to 5 P. M.; on Saturday from 8 A. M. to 12 M.

ADMISSION TO THE UNIVERSITY.

METHODS OF ADMISSION.

Students are admitted either upon examination at the University or upon presentation at the University of certificates, such as that to be found at the end of this catalogue, from accredited schools, except that adult special students are admitted in accordance with the provisions stated under the Admission of Adult Special Students.

The following high schools in New Mexico are at present accredited by the North Central Association of Secondary Schools and by the State University of New Mexico:

Albuquerque: Bernalillo County High School
Alamogordo: Otero County High School
Artesia
Carlsbad
Clayton
Clovis
Deming: Luna County High School
East Las Vegas: High School and Normal University Preparatory School.
Gallup: McKinley County High School
Las Cruces
Raton: Colfax County High School
Roswell: High School and New Mexico Military Institute
Santa Fe
Silver City: New Mexico Normal School, Preparatory Division
State College: Agricultural College, Preparatory Division
Tucumcari

Diplomas from or fifteen units of acceptable subjects earned in these high schools admit the holders thereof to the Freshman class whenever the course of study pursued meets the entrance requirements of the College in which the student desires to matriculate.

ADMISSION TO THE COLLEGES.

The requirements for admission are stated in terms of units. The term "unit" means the completion of a course of study consisting of five recitation periods of at least forty minutes each per week during thirty-six weeks. A laboratory or other practice period should extend over at least two consecutive recitation periods and is considered the equivalent of one recitation.

UNIFORM REQUIREMENTS OF ADMISSION.

Fifteen units of subjects acceptable towards entrance are invariably required for admission to either undergraduate college, and must include **List A**, as follows:

English	3 units
Algebra	1 unit
Plane Geometry.....	1 unit
Total	5 units

FOR ADMISSION TO THE COLLEGE OF ARTS AND SCIENCES.

List A (see above).....	5 units
Foreign language, in one language.....	2 units
History, including Civics.....	1 unit
Laboratory Science.....	1 unit
Total prescribed.....	9 units
From List B (see below).....	2-6 units
From List C (see below).....	0-4 units
Total	15 units

(Note.—A high school science, in order to be accepted as a laboratory science, must be truly scientific in its nature, and represent some real laboratory work. This work involves the development of abilities to observe carefully and correctly the phenomena of science and to state clearly the deductions drawn therefrom.)

CONDITIONED ENTRANCE

Students, who offer for admission to the College of Arts and Sciences a total of fifteen units in subjects acceptable for entrance but who lack as much as two units of the prescribed subjects (except List A), are admitted as conditioned Freshmen. This condition is to be removed by the end of the first year of residence by taking extra courses in the subjects in which they are deficient at the ratio of one three-hour course for each unit of deficiency. Courses thus required to cancel entrance deficiencies can not be counted toward fulfilling group requirements for graduation, but are counted as electives towards a degree.

FOR ADMISSION TO THE COLLEGE OF ENGINEERING

List A (see above).....	5 units
Other acceptable subjects.....	10 units
Total	15 units

While ten of the fifteen units required for entrance may be offered in subjects acceptable for entrance, subject to certain limitations (see below), the following subjects are recommended (but not prescribed) for students who expect to matriculate in the College of Engineering:

Solid Geometry.....	½ unit
Intermediate Algebra	½ unit
Foreign language, one language.....	2 units
English, fourth year.....	1 unit
Physics	1 unit
History, including Civics.....	1 unit

List B.

Limitations.—Not more than four units will be accepted from any one group in List B except in the case of foreign languages, including the amounts of that group prescribed and elective.

1. English Grammar and Composition, English and American Literature 3 units
 Additional Composition, English or American Literature... 1 unit

(Note.—In the case of foreign students, their native language and literature will be accepted in lieu of the above requirement of English, if equal to this requirement in nature and amount. When this substitution is made, a reading and speaking knowledge of English is to be offered to meet the requirement of two units in a foreign language.)

2. Group of Foreign Languages.

Six units is the maximum accepted from this group.

French	1-4 units
German	1-4 units
Greek	1-3 units
Latin	1-4 units
Spanish	1-4 units
Other foreign languages.....	1-4 units each

3. Group of History, Government, and Economics.

Ancient History	½-1 unit
Medieval and Modern History.....	½-1 unit
American History	½-1 unit
English History	½-1 unit
Civics	½ unit
Economics	½ unit

4. Group of Mathematics.

Algebra to Quadratics.....	1 unit
Algebra, completed	½ unit
Plane Geometry	1 unit
Solid Geometry	½ unit
Algebraic Theory, advanced.....	½ unit
Trigonometry	½ unit

- 5A. Group of Laboratory Sciences.

Physics	1 unit
Chemistry	1 unit
Geology	½-1 unit
Physical Geography	½-1 unit
Botany	½-1 unit
Zoology	½-1 unit
Physiology-Biology	1 unit

5B. Group of Non-Laboratory Sciences.

Any of the above if given without adequate laboratory work, and the following:

General Science	½-1 unit
Astronomy	½ unit
Psychology	½ unit

List C.

The maximum amount that may be offered from this list for entrance to the various Colleges of the University is four units. The maximum that will be accepted in any one subject contained in the group is shown below:

Agriculture	½-2 units
Home Economics (Domestic Science).....	½-3 units
Industrial Subjects	½-2 units
Manual Training and Arts.....	½-2 units
Commercial Subjects	½-4 units
Music	½-2 units

COURSES ACCEPTED FOR ADMISSION.**1. GROUP OF ENGLISH.**

Three units prescribed, one additional elective.

It is expected that three years of the high school course in English will conform to the following standard. This amount of work, if of satisfactory quality, will be accepted as fulfilling the prescribed requirement of three units in English.

Uniform college entrance requirements in English.—The study of English in school has two main objects which should be considered of equal importance: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation, and the development of the habit of reading good literature with enjoyment.

Grammar and composition.—The first object requires instruction in grammar and composition. English grammar should be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description, and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

Literature.—The second object is sought by means of two lists of books, headed respectively **Reading** and **Study**, from which may be framed

a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

A. Reading—The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature, by means of a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to large freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as provided under Group I.

Group I—Classics in Translation.

The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther.

The Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI.

The Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI.

The Aeneid.

The Odyssey, Iliad, and Aeneid should be read in English translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group II—Drama.

Everyman.

Shakespeare:

Midsummer Night's Dream,

Merchant of Venice,

As You Like It,

Twelfth Night,

Tempest,

Romeo and Juliet,

King John,

Richard II,

Richard III,

Henry V,

Coriolanus,

Július Caesar, { If not chosen

Macbeth, { for study

Hamlet. { under B.

Goldsmith: She Stoops to Conquer.

Sheridan: The Rivals.

Group III—Prose Fiction.

Malory: Morte d'Arthur (about 100 pages).

Bunyan: Pilgrim's Progress, Part I.

Swift: Gulliver's Travels (voyages to Lilliput and Brobdingnag).

Defoe: Robinson Crusoe, Part I.

Goldsmith: Vicar of Wakefield.

Frances Burney: Evelina.

Scott's Novels: any one.

Jane Austen's Novels: any one.

- Maria Edgeworth: *Castle Rackrent*, or *The Absentee*.
 Dickens' Novels: any one.
 Thackeray's Novels: any one.
 George Eliot's Novels: any one.
 Mrs. Gaskell: *Cranford*.
 Kingsley: *Westward Ho!* or *Hereward, the Wake*.
 Reade: *The Cloister and the Hearth*, or *Griffith Gaunt*.
 Lytton: *Last Days of Pompeii*.
 Blackmore: *Lorna Doone*.
 Hughes: *Tom Brown's Schooldays*.
 Stevenson: *Treasure Island*, or *Kidnapped*, or *Master of Ballantrae*,
 or *Dr. Jekyll and Mr. Hyde*.
 Kipling: *Kim*, or *Captains Courageous*, or *Jungle Books*.
 Cooper's Novels: any one.
 Poe: *Selected Tales*.
 Hawthorne: *The House of the Seven Gables*, or *Twice Told Tales*, or
Mosses From an Old Manse.
 Howells: *The Rise of Silas Lapham*, or *A Boy's Town*.
 Wister: *The Virginian*.
 Cable: *Old Creole Days*.
 A collection of *Short-Stories* by various standard writers.

Group IV—Essays, Biography, Oratory, Etc.

- Addison and Steele: *The Sir Roger de Coverly Papers*, or *Selections from The Tatler and Spectator* (about 200 pages).
 Boswell: *Selections from the Life of Johnson* (about 200 pages).
 Franklin: *Autobiography*.
 Washington: *Farewell Address*.
 Burke: *Speech on Conciliation With America*.
 Irving: *Selections from the Sketch Book* (about 200 pages), or *Life of Goldsmith*.
 Southey: *Life of Nelson*.
 Lamb: *Selections from the Essays of Elia* (about 100 pages).
 Lockhart: *Selections from the Life of Scott* (about 200 pages).
 Thackeray: *Lectures on Swift, Addison, and Steele in the English Humorists*.
 Macaulay: Any one of the following: *Lord Clive*, *Warren Hastings*, *Milton*, *Addison*, *Goldsmith*, *Frederick the Great*, *Madame d'Arblay*, *Life of Johnson*, *Two Speeches on Copyright*, *History of England*, *Chapter III*.
 Trevelyan: *Selections from the Life of Macaulay* (about 200 pages).
 Carlyle: *Essay on Burns*, with a selection from *Burns' Poems*.
 Ruskin: *Sesame and Lilies*, or *Selections* (about 150 pages).
 Dana: *Two Years Before the Mast*.
 Webster: *First Bunker Hill Oration*.
 Lincoln: *Selections*, including at least the *Speech at Cooper Union*, the two *Inaugurals*, the *Speeches in Independence Hall* and at *Gettysburg*, the *Last Public Address*, the *Letter to Horace Greeley*; together with a brief memoir or estimate of Lincoln.
 Parkman: *The Oregon Trail*.
 Emerson: *Manners*, or *Self-Reliance*.

- Thoreau: Walden.
 Lowell: Selected Essays (about 150 pages.)
 Holmes: The Autocrat of the Breakfast Table.
 Burroughs: Selected Essays.
 Warner: In the Wilderness.
 Curtis: Prue and I, or Public Duty of Educated Men.
 Stevenson: An Inland Voyage and Travels With a Donkey.
 Huxley: Autobiography and selections from Lay Sermons, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk.
 Hudson: Idle Days in Patagonia.
 Clemens: Life on the Mississippi.
 Riis: The Making of an American.
 Bryce: The Hindrances to Good Citizenship.
 A collection of Essays by Bacon, Lamb, DeQuincey, Hazlitt, Emerson, and later writers.
 A collection of Letters by various standard writers.

Group V—Poetry.

- Palgrave: Golden Treasury (First Series): Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns.
 Palgrave: Golden Treasury (First Series): Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under B).
 Milton: L'Allegro, Il Penseroso, Comus, Lycidas.
 Goldsmith: The Traveler and The Deserted Village.
 Pope: The Rape of the Lock.
 A collection of English and Scottish Ballads, as, for example, some Robin Hood ballads, the Battle of Otterburn, King Estmere, Young Beichan, Bewick and Grahame, Sir Patrick Spens, and a selection from later ballads.
 Coleridge: The Ancient Mariner, Christobel, and Kubla Khan.
 Byron: Childe Harold, Canto III or IV, and The Prisoner of Chillon.
 Scott: The Lady of the Lake, or Marmion.
 Macaulay: The Lays of Ancient Rome, The Battle of Naseby, The Armada, Ivry.
 Tennyson: The Princess; or The Coming of Arthur, Gareth and Lynette, Lancelot and Elaine, The Holy Grail, and the Passing of Arthur.
 Browning: Cavalier Tunes, The Lost Leader, How They Brought the Good News From Ghent to Aix, Home Thoughts From Abroad, Home Thoughts From the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City, The Italian in England, The Patriot, The Pied Piper, "De Gustibus—", Instans Tyrannus.
 Arnold: Schrab and Rustum, The Forsaken Merman, and Balder Dead. Selections from American Poetry, with special attention to Bryant, Poe, Lowell, Longfellow, Whittier, and Holmes.
B. Study.—This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases,

and the understanding of allusions. The books provided for study are arranged in four groups, from each of which one selection is to be made.

Group I—Drama.

Shakespeare: Julius Caesar, Macbeth, Hamlet.

Milton: L'Allegro, Il Penseroso, and Comus.

Tennyson: The Coming of Arthur, The Holy Grail, and The Passing of Arthur.

Palgrave: Golden Treasury (First Series): Book IV, with special attention to Wordsworth, Keats, and Shelley.

Group III—Oratory.

Burke: Speech on Conciliation With America.

Macaulay: Two Speeches on Copyright; and Lincoln: Speech at Cooper Union.

Washington: Farewell Address; Webster: First Bunker Hill Oration; and Lincoln: Gettysburg Address.

Group IV—Essays.

Carlyle: Essay on Burns, with a selection from Burns' Poems.

Macaulay: Life of Johnson.

Emerson: Essay on Manners.

Examinations.—However accurate in subject-matter, no paper should be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The examinations should be divided into two parts, one of which should be on grammar and composition, and the other on literature.

In grammar and composition, the candidate should be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors. The main test in composition should consist of one or more essays, developing a theme through several paragraphs; the subjects should be drawn from the books read, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose the examiner should provide several subjects, perhaps eight or ten, from which the candidate may make his own selections. He should not be expected to write more than four hundred words an hour.

The examination in literature should include:

A. General questions designed to test such a knowledge and appreciation of literature as may be gained by fulfilling the requirements defined under **A. Reading**, above. The candidate should be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but this list should not be made the basis of detailed questions.

B. A test on the books prescribed under **B. Study**, which should consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the

authors, their other works, and the periods of literary history to which they belong.

The work outlined above is suggested for a three years' course in English in high schools. It will be accepted by the University as meeting the prescribed entrance requirement of three units in English.

An additional full year's study, which should consist of one period of composition and four periods given to the study of either American or English literature taught as a systematic historical survey with textbook and supplementary readings, may be offered as a fourth unit in English.

2. GROUP OF FOREIGN LANGUAGES.

For admission to the College of Arts and Sciences two units in one foreign language should be offered. The students, who are deficient in this requirement, may be admitted conditionally. See page 22 for Conditioned Entrance.

For admission to the College of Engineering a modern language is recommended. A maximum of six units may be offered from this group for admission.

1. French.

First year's work.—Elementary grammar, with the more common irregular verbs: Careful training in pronunciation. About 100 pages of easy prose should be read.

Second year's work.—Advanced grammar, with all the irregular verbs. Elementary composition and conversation. About 300 pages of modern French should be read.

About 500 pages of standard authors should be read, including a few classics.

Third year's work.—Intermediate composition, and conversation.

Fourth year's work.—Advanced composition, and conversation. Standard modern and classical authors should be read and studied to the extent of 700 pages.

2. German.

Pupils should be trained to understand spoken German, and to reproduce freely, in writing and orally, what has been read. Whatever method of teaching is used, however, a thorough knowledge of grammar is expected.

First year's work.—Pupils should learn to read intelligently and with accurate pronunciation simple German prose, to translate it into idiomatic English, and to answer in German easy questions on the passage read. A few short poems may well be memorized. Elementary grammar should be mastered up to the subjunctive as arranged in most books for beginners. Easy prose composition rather than the writing of forms will be the test of this grammatical work.

Second year's work.—About 250 pages of modern writers should be read, preferably material which lends itself readily to conversational treatment in the classroom. Recitations should afford constant oral and written drill on the elementary grammar of the previous year. More importance is attached to accuracy and facility in simple modes of expression than to theoretical knowledge of advanced syntax.

Third year's work.—Most of the time should be devoted to good modern prose. There should be work in advanced prose composition

—based on German models—and daily oral practice. Pupils ought by this time to understand spoken German fairly well.

Fourth year's work.—The reading should be divided about equally between modern and classical authors. At the end of this year a pupil should be able to read at sight prose or verse of moderate difficulty. He should also express himself orally or in writing with considerable readiness and a high degree of accuracy. Composition should include both free reproduction of the texts studied, and translation of English selections.

3. Greek.

First year's work.—The exercises in any of the beginning books, and one book of the *Anabasis* or its equivalent.

Second year's work.—Two additional books of the *Anabasis* and three of Homer, or their equivalent, together with an amount of Greek prose composition equal to one exercise a week for one year.

4. Latin.

The requirements for admission in Latin are those recommended by the Commission on College Entrance Requirements in Latin, as follows: (a) In grammar and prose composition a knowledge of forms and syntax shall be acquired sufficient for writing simple Latin prose. (b) In reading, the amount shall not be less than Caesar: *Gallie War*, I-IV; Cicero: six orations; and Vergil: *Aeneid* I-IV, and shall be chosen from Caesar (complete), Nepos, Cicero (Orations, Letters, and *De Senectute*), Sallust, Ovid, and Vergil (complete). (c) Out of the above, the following reading is prescribed: Cicero: *Manilian Law* and *Archias*; and the *Aeneid* I, II, and either IV or VI. (d) Sight translation shall be performed of prose and verse of such difficulty as the scope of the above would justify.

5. Spanish.

First year.—The first year should include: The elements of grammar including all the regular and the more common irregular verbs, the forms and order of the personal pronouns, the uses and meanings of the common prepositions, adverbs, and conjunctions, the uses of the verbs *ser*, *estar*, *haber*, and *tener*, the personal accusative, and other elementary rules of syntax. The reading of not less than 100 pages of prose texts. Careful drill in pronunciation, including accentuation. Occasional dictations and oral and written composition should be employed as aids to memory and expression. Suitable text books are: Hills and Ford's *First Spanish Course* or Wagner's, or Coester's *Spanish Grammar*; Harrison's *Elementary Spanish Reader*; Hills' *Tales of Beginners*; Johnson's *Cuentos Modernos* (too difficult for a first reader).

Second year.—In addition to the foregoing, the reading of not less than 300 pages of easy modern prose in the form of stories, plays, and short novels. Conversation, grammar, and composition based upon the reading. Suitable texts for the second year are: *Gil Blas de Santillana* (Padre Isla); *Marianela* (Galdós); *La Barraca* (Ibáñez); *Novelas Cortas* (Alarcón); *Spanish Short Stories* (edited by Hills and Reinhardt); *El Pájaro verde* (Valera); *Zaragueta* (Ramos Carrión and Vital Aza); *Fortuna* (Pérez Escrich).

Third year.—The third year calls for the ability to use the language effectively as a means of written and oral expression. The work should

comprise: The study of a more complete and detailed grammar. The reading of not less than 500 pages of Spanish prose and poetry of ordinary difficulty. The translation of English into Spanish, conversation, letter writing, and simple business forms. Suitable texts for the third year are: Ramsey's Text Book of Modern Spanish; Umphrey's Spanish Composition; José (Valdés); María (Jorge Isaacs); Amalia (José Mármol); Pepita Jiménez (Valera); Guzmán el Bueno (Gil y Zárate); El Haz de Leña (Núñez de Arce); Consuelo (López de Ayala); Bécquer's Legends, Tales, and Poems (edition by Olmstead); Selections from Mesonero Romanos (edition by Northup).

The Department of Romance Languages will be particularly pleased to supply upon request additional information concerning Spanish texts, periodicals, bibliography, foreign study, etc.

3. GROUP OF HISTORY, GOVERNMENT, AND ECONOMICS.

A maximum of four units may be accepted from this group towards admission.

1. History.

Each year's work should cover some standard high school text, together with a book of readings and the drawing of maps. The McKinley Outline Topics are recommended as providing excellent material for map work, as well as giving outlines, references, illustrations, and additional source materials for collateral reading. It is advisable that students present their map work and notebooks upon entering the University.

The following texts and source books are indicated as examples of the amount and character of the material for each unit:

A. Ancient history.—Botsford: History of the Ancient World (Macmillan); West: The Ancient World (Allyn and Bacon); Wolfson: Essentials of Ancient History (American Book Co.); Davis: Readings in Ancient History (Allyn and Bacon); G. W. and L. S. Botsford: Source Book of Ancient History (Macmillan).

B. Mediaeval and modern history.—West: The Modern World (Allyn and Bacon); Harding: Essentials in Mediaeval and Modern History (American Book Co.); Robinson: Readings in European History, abridged edition (Ginn); Ogg: Source Book of Mediaeval History (American Book Co.).

C. English history.—Cheyney: Short History of England (Ginn); Andrews: History of England (Allyn and Bacon); Walker: Essentials of English History (American Book Co.); Cheyney: Reading in English History (Ginn); Tuell and Hatch: Selected Readings in English History (Ginn).

D. American history.—Muzzey: American History (Ginn); Montgomery: Student's American History (Ginn); James and Sanford: American History (Scribners); Muzzey: Readings in American History (Ginn); James: Readings in American History (Scribner's); Hart: Source Book of American History (Macmillan).

If only one year's work is offered in high school, Ancient History is recommended; if two years', Ancient and American; if three years', Ancient, Mediaeval and Modern, and American; if four, the order should be Ancient, Mediaeval and Modern, English, and American.

2. Government and Economics.

Civics.—This course must not be confined to the study of the form of our government, but must investigate the functions that it performs and the manner in which it performs them. Only modern texts should be used. Among the best of these are: Beard and Beard: American Citizenship (for first-year courses); Garner: Government in the United States; and Guitteau: Government and Politics in the United States. Students should have access to Macy and Gannaway: Comparative Free Government.

Economics.—Acceptable work in this subject necessitates the use of modern texts, such as Johnson: Introduction to Economics; or either of Bullock's texts in Economics. Reference books should be available to the students.

4. GROUP OF MATHEMATICS.

One unit of Algebra and one of Plane Geometry are required for entrance to either College. A maximum of four units may be offered from the group.

1. **Algebra.**—One unit. Elementary Algebra through simple Quadratics, including the elementary operations of polynomials and fractions, the solution of linear equations, factoring, powers, and roots.

2. **Algebra.**—One and one-half units. Complete elements of algebra and thorough work in quadratic equations, surds, exponents, and graphs, such as is given in standard textbooks.

3. **Plane geometry.**—One unit. The work in Plane Geometry, in order to be acceptable, must cover a whole year's work in a good text and should include the applications of algebra to geometry and geometry to algebra.

4. **Solid geometry.**—One half unit. The work, to be acceptable, must cover one-half of a year's work in such texts as that of Wentworth or Wells.

An additional one-half unit in advanced algebra beyond 2, outlined above, and one-half unit in trigonometry will be accepted only upon the approval of the Department of Mathematics.

5. GROUP OF SCIENCES.

A. Laboratory Sciences.

1. **Physics.**—One unit. One year's high school work covering the elements of physical science as presented in the best of the current high school textbooks of physics. Laboratory practice in elementary quantitative experiments should accompany the textbook work. The candidate's laboratory notebook must be presented as part of the requirement.

2. **Chemistry.**—One unit. The instruction must include both textbook and laboratory work. The work should be so arranged that at least one-half of the time shall be given to the laboratory. The course as it is given in the best high schools in one year will satisfy the requirements of the University for the one unit for admission. The laboratory notes, bearing the teacher's endorsement, must be presented as evidence of the actual laboratory work accomplished.

3. **Physical geography.**—One-half or one unit. The time should be distributed in the ratio of three recitations and two double periods of

laboratory work per week. When offered to meet the requirement in laboratory science, the applicant should present certified statement of teacher or principal, showing the nature and amount of work done.

4. **Botany.**—One-half or one unit. A familiar acquaintance with the general structure of plants, and of the principal organs and their functions, derived to a considerable extent from a study of the objects, is required; also a general knowledge of the main groups of plants; and the ability to recognize the more common species. Laboratory notebooks and herbarium collections should be presented.

5. **Zoology.**—One-half or one unit. The instruction must include laboratory work equivalent to four periods a week for a half-year, besides the time required for textbook and recitation work. Notebooks and drawings must be presented to show the character of work done and the types of animals studied. The drawings are to be made from the objects themselves, not copied from illustrations, and the notes are to be a record of the student's own observations of the animals examined. The amount of equipment and the character of the surroundings must of course, determine the nature of the work done and the kinds of animals studied; but in any case the student should have at least a fairly accurate knowledge of the external anatomy of each of eight or ten animals distributed among several of the larger divisions of the animal kingdom, and should know something of their life histories and of their more obvious adaptations to environment. It is recommended that special attention be given to such facts as can be gained from a careful study of the living animal. The names of the largest divisions of the animal kingdom, with their most important distinguishing characteristics, and with illustrative examples selected, when practicable, from familiar forms, ought also to be known.

6. **Biology-Physiology.**—One unit. A profitable year's work may be done, consisting of a half-year of Zoology, as described above, and a half-year of Physiology. There should be laboratory work throughout, with carefully kept notebooks which should be presented when this combination course is offered to satisfy the requirement of one unit of laboratory science. The laboratory work in physiology should consist of demonstrations and simple experiments. The compound microscope should be used occasionally, but microscopic studies are more important. A large place in the course should be left for such practical topics as diet, sanitation, and personal hygiene.

B. Non-Laboratory Sciences.

Four units are the maximum amount acceptable from groups 5A and 5B combined towards admission to the University. Group 5B consists of any of the subjects in 5A, if taught without laboratory work, and also the following:

1. **General science.**—One-half or one unit. Intended for the first year of high school. Hessler, or Caldwell and Eikenberry is recommended as a textbook.

2. **Astronomy.**—One-half unit. In addition to a knowledge of the descriptive matter in a good textbook, there must be some practical familiarity with the geography of the heavens, with the various celestial mo-

tions, and with the positions of the heavenly bodies conspicuous to the naked eye.

3. **Psychology.**—One-half unit is allowed for the completion of some such textbook as Halleck: Psychology and Psychic Culture; or Pillsbury; Essentials of Psychology.

LIST C.

This list consists of various industrial subjects and Music. A maximum of four units is acceptable from the subjects contained in this list. The amount that is acceptable in each subject of the list is also to be noticed.

1. Agriculture, $\frac{1}{2}$ -2 Units.

The courses under this head may consist of Agronomy, Crops, Horticulture, Irrigation, Animal Husbandry, etc. There should be laboratory work given as a part of each course, and notebooks should be presented.

2. Home Economics (Domestic Art and Science). $\frac{1}{2}$ -3 Units.

(a) An equivalent of 180 hours of prepared work in foods, with at least two recitation periods a week. (b) An equivalent of 180 hours of prepared work in clothing, with at least one recitation period a week. (c) An equivalent of 180 hours of prepared work on the home, with at least two recitation periods a week. (Two periods of laboratory work are considered equivalent to one period of prepared work.) Of the foregoing, (a) will be accepted as a unit's work; or two half units taken from (a) and (b), or (a) and (c), or (b) and (c) will be accepted as a unit's work. The work is to be done by trained teachers, with individual equipment for students.

3. Industrial Subjects. $\frac{1}{2}$ -2 Units.

4. Manual Training and Arts. $\frac{1}{2}$ -2 Units.

1. **Drawing.**—Free-hand or mechanical drawing, or both. Drawing books or plates must be submitted. The number of units allowed depends on the quantity and quality of the work submitted.

2. **Bench, lathe, and forge.**—The number of units allowed depends upon the amount and quality of work done and evidence of the work completed should be submitted.

5. Commercial Subjects. $\frac{1}{2}$ -4 Units.

1. **Bookkeeping.**—One unit. This unit should consist of a working knowledge of both single and double entry bookkeeping for the usual kinds of business. The student should be able to change his books from single to double entry and from individual to proprietorship. At least one set of transactions should be kept by single entry and at least two sets by double entry in which the uses of the ordinary bookkeeping books and commercial papers should be involved. The student should be drilled in the making of profit and loss statements and of balance sheets and should be able to explain the meanings of the items involved in both kinds of instruments. The work should be done under the immediate supervision of a teacher and the student should devote to it at least ten periods of not less than forty minutes full time in class each week for one academic year.

2. **Business law.**—One-half or one unit. The fundamental legal principles governing the business relations of men should be presented in this

course by means of simple, concrete examples and problems so far as possible. While no attempt should be made to present the intricate phases of the subject, the student should not be led to believe that he has mastered the whole of the law as applied. The recommended text for this work is Huffcut: Essentials of Business Law.

3. **Commercial arithmetic.**—One-half unit.

4. **Commercial geography.**—One-half or one unit. The amount and character of the work accepted in this subject is indicated by the scope of textbooks such as Adams: Elementary Commercial Geography; Brigham: Commercial Geography; Macfarlane: Commercial and Industrial Geography; Redway: Commercial Geography; Robison: Commercial Geography; and Trotter: Geography of Commerce.

5. **Stenography.**—One-half to two units.

6. **Music.** $\frac{1}{2}$ -2 Units.

1. **Elements of composition; harmony and structure.**—One-half to one unit. Harmonic series. Intervals. Erection of the three primary triads. Root positions and doubling in major. Formation of scales. Relations of scale constituents to root and their tendencies. Consonance and dissonance. Chord connection in four parts. Harmonizing of melodies. Elements of melodic construction; cadence; phrase and double phrase. Minor mode. Secondary triads and their use. Other sevenths (within the key). Suspension and retardation. Modulation (simple). Anticipation and embellishment.

2. **Instrumentation and vocal technique.**—One-half to one unit. Ability to perform with satisfactory technique and intelligent interpretation one or more numbers in one of the following sections: (a) piano-forte: Bach: Well-Tempered Clavichord; Prelude or Fugue; 2 and 3 part inventions; Mozart or Beethoven: a sonata; Chopin: Study, nocturne, or prelude of moderate difficulty; (b) violin: Bach, Handel, Mozart, Beethoven: a sonata; Rode, Fiorillo: a study of moderate difficulty; Viotti, Spohr: a concerto; (c) orchestral instruments: similar ability to perform on any orchestral instrument; (d) voice: Bach, Mozart, Schubert, Schumann, Brahms, Franz, Wagner: songs; or an aria by an old Italian master.

In order to obtain entrance credit for voice or any instrument, the candidate must submit to an examination, given by the department concerned, on one of the above numbers or a similar one and upon ability to read at sight a piece of moderate difficulty.

ADMISSION FROM OTHER COLLEGES AND UNIVERSITIES.

Students from other institutions who have pursued standard college courses will be admitted and will receive credit for such courses upon the presentation of proper certificates of creditable standing and honorable dismissal.

Students entering with advanced standing must complete in this University at least thirty hours of work before graduation, including six hours in their major study.

ADMISSION OF ADULT SPECIAL STUDENTS.

Students over twenty-one years of age who are not working for a degree may register for courses of their selection without fulfilling the entrance requirements, provided they give evidence of ability to pursue such courses with profit.

ADMISSION TO THE GRADUATE SCHOOL.

Students are admitted to the Graduate School upon the completion of all the scholastic requirements for the Bachelor's degree in this University or some other institution of approved rank.

GENERAL ACADEMIC REGULATIONS.

REGISTRATION.

REGISTRATION OF NEW STUDENTS.

All persons who expect to attend the University for the first time should send to the Registrar at their earliest convenience a certified record of their work beyond the eighth grade. No fee is charged and no obligation whatever is incurred in having the Committee on Admission pass upon the credentials of prospective students. The Committee will gladly accredit records of past work no matter how remote are the prospects of attendance. These transcripts should be received by the University before Registration Day.

The steps necessary to complete registration are as follows:

(1) Presentation of certified transcripts of secondary work before Registration Day.

(2) The student supplies the Registrar with the data called for by the Census Card blanks.

(3) He then pays the matriculation, tuition, and other fees at the office of the Financial Secretary.

(4) He then presents himself before the Committee on Admission and receives his classification which he then presents to the Committee on Enrollment.

(5) The Committee on Enrollment, consisting of all members of the Faculty not otherwise engaged, will then advise and assist the student in selecting his program of studies, due care being taken to include in this program of studies courses which are prescribed in the curriculum which the student elects to pursue.

(6) The matriculant then must secure the approval of the Dean of his College on the program of studies which he has selected.

LATE REGISTRATION.

Certification of records of past work, registration in courses, physical examinations, or payment of fees after the time appointed for these purposes, except for reasons approved by the President or Dean, may be effected only after the payment of the late registration fee of two dollars.

CHANGE IN PROGRAM OF STUDIES.

A student who desires to make a change in his program of studies must make application to the Dean of his College for the proper blank. The change in program must receive the endorsement of the instructors of the courses dropped and added, of the head of the department in which the student has elected his major study, and of the Dean of his College.

CREDIT HOURS.

CLASS HOURS AND CREDIT HOURS.

A class hour consists of 53 minutes, and one class hour a week of recitation or lecture throughout a semester earns a maximum of one credit hour. One class hour of laboratory work, orchestra, chorus, or physical training a week throughout a semester earns a maximum of one-third to one-half credit hour. One lesson in voice, or piano a week throughout a semester earns a maximum of two credit hours.

DEDUCTIONS IN CREDIT HOURS.

Deductions from the maximum number of credit hours that may be earned in a course in one quarter are made for the following delinquencies and in the following ways:

1. Three tardinesses may be counted by the instructor as one absence.
2. Absences due to late registration are counted on the same basis as absences incurred after registration.
3. Absences on the last day before and the first day after a holiday or recess are counted double.
4. When the number of absences exceeds the maximum number of credit hours that may be earned in a course, credit is deducted at the rate of one-tenth of a credit hour for each unexcused absence and for each excused absence where the lost work is not made up.
5. When deductions under the foregoing clause exceed one-fifth of the maximum of credit hours which may be earned in a course, the student is dismissed from the course involved and given a grade of F.

EXCUSED ABSENCES.

A student may, within two weeks after absences are incurred, offer reasons for absence to the Dean and if these reasons are accepted he is given a permit, in the discretion of the instructor involved, to make up lost work. If the permit is filed with the

Registrar before the end of the quarter and bears a statement that the lost work is made up, deduction for such absence will not be made in the record of credit hours.

GRADING AND EXAMINATIONS.

THE SYSTEM OF MARKING.

The grades of students are based upon daily work and upon examinations, and are intended to be an indication of the quality of work done. The markings are A, B, C, D, I, X, and F, valued respectively as follows:

A	-----93-100-----	Excellent.
B	-----92-85-----	Good.
C	-----84-77-----	Average.
D	-----76-70-----	Barely passing.
X	-----69-60-----	Conditioned.
F	-----60 and below-----	Failed.
I	—Work not completed.	

Students receiving I in a course are permitted, in the discretion of the instructor, to complete the unfinished work within the first six weeks of the period of residence following the semester wherein the I was incurred. When the work is completed they will receive the grade and amount of credit to which their record entitles them. If the unfinished work, which caused the grade of I, is not completed within the allotted time, the grade of I automatically becomes F.

Students receiving an X in any course are "conditioned" in that course. Such students may receive a passing grade and credit in that course if the condition is removed by special examinations held for this purpose on Saturday of the sixth week of the following semester. (Cf. Special Examinations.) Any condition remaining unremoved becomes automatically a failure after the time limit has expired for the removal of such conditions. Only one opportunity is allowed for the removal of a condition.

This system of marking went into effect in the Spring Semester, 1920, and replaces the system of marking previously used.

SPECIAL EXAMINATIONS.

A special examination is one taken at another time than regularly with a class, and a fee of \$2 is charged for such an examination, except for entrance examinations and examinations for advanced standing. Before the student is admitted to a special

examination he must present a permit signed by the Dean of his College and a receipt for the special examination fee signed by the Financial Secretary. The fee is charged for each final semester examination given at any but the time scheduled for the final examination of the course and for each special examination held on a set date to remove conditions. The instructor shall decide whether the fee shall be collected for special examination given within the semester.

No final examination may be given to a class or to an individual before the time appointed by the Committee on Schedule and Curriculum.

SUSPENSION FOR DISHONESTY IN EXAMINATIONS.

A student detected in giving or receiving aid in a quiz, test, or examination renders himself liable to suspension or expulsion.

SUSPENSION FOR LOW GRADES.

Any student who fails to maintain a passing grade in one-half of the schedule for which he has been registered, in the discretion of the Dean and of the President may be suspended from the University and debarred from registration until such time as they see fit to readmit him. (See also rule 5 under Deductions in Credit Hours.)

HONORABLE DISMISSAL.

A student leaving the University after fulfilling all his obligations to the University is entitled to receive from the Registrar a statement of honorable dismissal.

UNIFORM GRADUATION REQUIREMENTS.

ACADEMIC REQUIREMENTS (QUANTITATIVE).

The academic requirements for a degree in either College are based upon both quantity and the quality of the work completed by the candidate. The quantitative requirement is 124 credit hours in the College of Arts and Sciences, and 144 in the College of Engineering, in both cases, based on average quality of work. These amounts include credit hours earned in the prescribed courses in Hygiene, but do not include credit hours earned in prescribed courses in Physical Training or those earned in attending Public Assemblies.

QUALITATIVE REQUIREMENTS.

The number of credit hours required for all diplomas and degrees conferred by the University is based upon average

work, which is designated by C. For every 15 credit hours of A work, the amount required for graduation is diminished by one credit hour. For every 30 credit hours of B work, the amount required for graduation is diminished by one credit hour. For every 15 credit hours of D work, the amount required for graduation is increased by one credit hour.

HYGIENE.

Hygiene 1 and 2 must be taken by all students in all Colleges of the University in their Freshman year or in the first year of residence in the case of students who enter with advanced standing but without credit in this subject.

PHYSICAL TRAINING.

Physical Training 1 and 2 or 5 and 6 must be taken by all students of all Colleges of the University, in their Freshman year, or in the first year of residence in the case of students who enter with advanced standing but without credit in this subject. Physical Training 51 and 52 or 61 and 62 must be taken during the sophomore year or the second year in residence. Each course earns one-half credit hour. A total of two credit hours, four semesters' work, must be earned for any baccalaureate degree, in addition to the amounts required in academic subjects.

PUBLIC ASSEMBLIES.

Assemblies are held in Rodey Hall regularly on Fridays, and when called by the President of the University. At such times all class exercises are suspended and attendance at such assemblies is required of all students. The records of attendance are based upon the reports of student monitors appointed by the President of the Student Body. Lectures and addresses are delivered on various topics of interest by members of the Faculty and by visitors to the University and to the City, musical and dramatic recitals, and contests in oratory and debating are held. A fair share of the time set apart for assemblies is given to the Student Body for the transaction of its business.

Regular attendance at these assemblies earns one-half credit hour, each semester. This credit is to be earned in addition to the academic requirements for degrees.

FEES, EXPENSES AND EMPLOYMENT.

EXPENSES.

In accordance with the desire of the people of the State it is the policy of the State University to reduce its fixed charges to a minimum sum. Board and lodging for a limited number of students is furnished upon an approximate cost-basis. The Board of Regents reserves the right to change the rates at any time as the interests of the institution may demand.

Registration fee per semester.....	\$ 3.00
Tuition, per semester.....	5.00
Non-resident tuition, per semester.....	12.00
Student activities fee (voted by students), per semester..	3.75
Guarantee deposit	10.00

At the time of registration a deposit of \$10 to cover possible breakage or damage to University property, is required of each student. This sum, or the remainder thereof after deduction for breakage or damage, is returned to the student at the end of the year or at withdrawal.

SPECIAL FEES.

Late registration fee.....	\$2.00
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All students who present records of past work, register in courses, or pay fees at a later date than the time appointed for these purposes, pay an extra fee of \$2.

Laboratory fee, per semester credit hour.....	\$3.00
Special examination fee.....	2.00

BOARD AND LODGING.

In the Residential Halls for Men and Women respectively, in connection with the Dining Hall, or University Commons, board and lodging are furnished for \$27.50 per month in advance. By order of the Board of Regents, students occupying University property for residential purposes are required to pay this sum (\$27.50 per month). The rate is not subject to deduction except on account of absence on seven consecutive days, excused by Deans. The privilege of the Residential and Dining Halls may be withdrawn from any person violating the rules and regulations of the University.

Quarters for resident students are provided in the two Residential Halls, one for men and one for women. These Halls

are divided into suites, each consisting of two bedrooms and a study. Two students, as a rule, occupy a suite. The rooms are furnished and electric light and steam heat provided, but students supply their own bedding, towels, etc., and pay their own laundry bills. The Men's Residential Hall is in charge of a Proctor, and the Women's Residential Hall is in charge of a Supervisor. Accommodations are limited, therefore prospective students will remit as soon as possible to the Registrar a reservation fee of five dollars, to be applied toward the first month's account.

MEALS.

Persons connected with the State University who do not reside in University property may procure meals at the following rates:

Meals for one month, \$22.50, cash in advance. Tickets for students or faculty members not domiciled in University property, non-transferable and good only during current month, and the rate is not subject to deduction except on account of absence on seven consecutive days, excused by Deans.

COUPON BOOKS.

Good only for noon-day luncheon on weekdays (except on holidays). Price, \$7.00 for 20 coupons, which are non-transferable.

SINGLE MEALS.

In the interest of service, economy, and health, the buying of single meals is discouraged. However, single meals will be supplied to those connected with the University at the following rates:

Breakfast	40c
Dinner	60c
Supper	60c
Dinner (Sundays and Holidays)	85c

It is the intention of the Board of Regents to supply good board and lodging at cost. The above prices are subject to change at any time.

STUDENT EMPLOYMENT.

Some students earn the whole or part of their expenses while attending the University. Students are employed on the campus wherever advisable, as janitors, waiters in the dining room,

helpers in the kitchen, etc. There is also some demand from the homes and business houses of Albuquerque for student help.

The attention of new students who intend to earn the whole or part of their living is called to the following results of past experiences:

(1) There is always a waiting list for the jobs available on the campus. These jobs are usually assigned a year in advance to the students who have been in residence a year and who have made a good record in their studies and labor.

(2) Students who can do any kind of domestic or manual labor well, and who have very good health, often earn their board and room. But no student is advised to come to the University without resources sufficient for the expenses of one semester.

(3) The University curriculum is adapted to those who have control of their entire time for study. The student who must earn his living, therefore, should expect to enroll for less than the usual amount of University work.

Inquiries concerning opportunities for employment should be addressed to the President.

SCHOLARSHIPS AND HONORS.

THE CECIL RHODES SCHOLARSHIPS.

In accordance with the provisions of the will of Cecil Rhodes, awarding two scholarships every three years to each State and Territory in the United States, tenable at Oxford, England, and of the annual value of \$1,500, New Mexico has the privilege of electing a scholar from the candidates who present themselves.

The selection from the State, without the examinations formerly required, is made by a State Committee appointed by the American Society of the Rhodes Trustees. Recommendations of candidates are made to the State Committee by the authorities of the University.

The scholars hitherto selected are: 1906, Thomas S. Bell; 1908, Frank C. Light; 1910, Hugh M. Bryan; 1911, Karl G. Karsten; 1914, W. Coburn Cook; 1916, George Adlai Feather; 1917, Donovan M. Richardson (appointment delayed one year because of the war).

HONOR FRATERNITY.

The national honor fraternity of Phi Kappa Phi granted a chapter to the University of New Mexico in May, 1916. Elections from the Senior class only are made in the spring quarter of each year. A Senior, in order to be eligible for election, must have been in residence for three semesters and must stand in the highest fourth of his class in scholarship. The students elected from the class of 1919 were: Vera Kiech and Eleanor G. Anderman.

STUDENT ORGANIZATIONS.

The students of the University form a general student body organization which controls the other organizations of general interest. The editorial and managerial boards of the newspaper, the U. N. M. Weekly, and year-book, The Mirage, are elected by the Student Body. Under the direction of the Dramatic As-

sociation an annual play or musical comedy is presented. The Glee Club, the Orchestra, and the Chorus are of interest to many students. The University participates in the State Oratorical Contest held annually at the meeting of the New Mexico Educational Association. Debates are held with other educational institutions. All athletic activities are under the direction of the Athletic Association, which is controlled by the Athletic Council. All members of the Student Body are members of the Association. The University has been a member of the Rocky Mountain Conference since 1916.

The students support several other organizations which are independent of the Student Body control. Among these are the Y. M. C. A., the Y. W. C. A., El Circulo Español, and the Tennis Club.

Two national fraternities and one local fraternity are represented among the University men, and three national fraternities and one local fraternity among the women. The women's fraternities have formed a local Panhellenic Association which regulates "rushing" and other fraternity matters. Some fraternities own houses near the campus.

COLLEGE OF ARTS AND SCIENCES.

FACULTY.

- HILL, DAVID SPENCE, B. A., Ph. D., LL. D., President.
- MITCHELL, LYNN BOAL, B. A., A. M., Ph. D., Dean of College of Arts and Sciences and Professor of Greek and Latin.
- HODGIN, CHARLES ELKANAH, B. Pd., Professor of Education and Vice-President.
- CLARK, JOHN DUSTIN, B. S., M. A., Ph. D., Professor of Chemistry and Dean of Graduate School.
- WEESE, ASA ORRIN, B. A., M. A., Professor of Biology and Acting Director of Department of Hygiene.
- *SHERWEN, PROCTOR FENN, B. A., Professor of English Language.
- HICKEY, ETHEL, B. A., Professor of English Literature.
- LANDERS, JOSEPH SAMUEL, B. S., M. A., Professor of Psychology and Philosophy.
- BARNHART, CHARLES ANTHONY, B. A., M. A., Professor of Mathematics.
- ELLIS, ROBERT WALPOLE, B. S., M. A., Professor of Geology.
- *HOWARD, RUSSELL MARION, B. S., Professor of Economics and Business Administration.
- *HILL, ROSCOE R., B. A., Professor of History and Political Science.
- SIMPSON, MRS. WALTER (Ypsilanti), Professor of Home Economics and Supervisor of Dining Hall.
- LUKKEN, JOHN, B. S., B. M., Acting Professor of Music.
- MOSHER, EDNA, B. S., Ph. D., Acting Professor of Biology.
- *McGOUGH, JOHN FRANCIS, B. A., LL. B., In Charge of Physical Education of Men and Supervisor of Men's Residential Hall.
- WITTMAYER, MINNIE VELMA, In Charge of Physical Education of Women and Supervisor of Women's Residential Hall.
- BARDSLEY, GEORGE HENRY, B. S., M. S., Associate Professor of Physics.
- IBARRA Y ROJAS, HANNIBAL, B. de CC. LL., LL. B., J. D., Assistant Professor of Romance Languages.
- FAW, JENNIE STEVENS, Instructor in Piano.
- NICHOLS, LOUISE, Instructor in Piano.
- DUNCAN, ANNIE LEE, Fellow in Biology.
- MEYERS, RALPH EDMUND, Assistant in Chemistry.
- ROSENBAUGH, SAMUEL JOSEPH, Assistant in Physics and Electrical Engineering.
- SCHUMAKER, MARGARET, Assistant in Chemistry.
- ROY, EDNA, Assistant in Home Economics.

*Resigned.

COLLEGE OF ARTS AND SCIENCES.

The College of Arts and Sciences aims to provide a liberal as well as a thorough education. It offers courses of both cultural and practical nature in various departments, including animal biology, botany, chemistry, economics and business administration, education, English language and rhetoric, English literature, geology, government, Greek language and literature, history, home economics, Latin language and literature, mathematics, philosophy, physics, psychology, and romance languages and literatures. It gives opportunity also for special work in the Curricula Preparatory to Law and to Medicine. In addition, it accepts a certain amount of work from the College of Engineering.

GRADUATION REQUIREMENTS.

A total of 124 credit hours of work of C grade (see page 40) is required for graduation with the Bachelor of Arts degree. A small proportion of the course is prescribed for the program of the first two years with the intention that every student shall lay a sufficiently broad foundation in English, other languages, the sciences and mathematics, and history, government, economics, and philosophy. During the last two years he devotes about one-half of his time to his major and minor studies and chooses his electives under the advice and approval of his major professor.

Requirements in Hygiene, Physical Training, and Public Assembly (see page 41).

The remainder of the required work is arranged in groups and a specified amount of work must be taken in each group.

GROUP I.

- A. English.
- B. Foreign Language.

GROUP II.

- Economics.
- Education.
- History.
- Philosophy.
- Political Science.

GROUP III.

Biology.

Chemistry.

Geology.

Home Economics (food courses only).

Mathematics.

Physics.

Psychology (51 and 52 when accompanied by 61 and 62, and other laboratory courses.)

REQUIREMENTS IN GROUP I-A.

English language 1 and 2 must be taken in the first year. The student elects courses earning three credit hours in the field of English Literature.

REQUIREMENTS IN GROUP I-B.

Courses earning 12 credit hours must be taken in languages other than English in the first two years. By the end of the second year the student must have studied at least two foreign languages, including offerings towards entrance earned in his secondary school.

REQUIREMENTS IN GROUP II.

Courses earning nine credit hours must be completed in subjects contained in this group. This requirement must be met by the end of the second year and not more than two-thirds of the amount required may be taken in one subject.

REQUIREMENTS IN GROUP III.

Courses earning 12 credit hours must be completed in subjects contained in this group. This requirement must be met by the end of the second year and not more than two-thirds of the amount required may be taken in one subject.

REQUIREMENTS IN MAJOR AND MINOR STUDIES.

When registering for the Junior year each student shall declare his major study and his program of studies thereafter shall meet the approval of the head of the department in which the major study lies. He shall complete in this major study not less than 24 credit hours earned in those courses prescribed for or accepted by the department towards a major study. Such work must be of at least C quality. Courses in which the grade of D is earned are accepted as electives towards graduation but are not accepted for the major study.

A minor study of 12 credit hours shall be completed in another department and shall conform to the same standards set up for the major study except only in number of credit hours. The selection of the minor study shall receive the approval of the head of the department wherein the major study lies.

At least one-fourth of the minimum amount of credit hours required for major and minor studies must be earned in this University. No advanced standing in the major or minor studies is granted to students presenting credits from another institution until after he has been in residence at this University for at least one semester and then only after the completion of three credit hours in the major study at this University.

RESTRICTIONS IN ELECTIVES.

Not more than 50 credit hours earned in courses open to Freshmen are accepted towards a degree without a reduction in the amount of credit usually given for such courses.

MAXIMUM PROGRAM OF STUDIES.

No member of this College may enroll in courses which earn more than 16 credit hours, unless his standing for the previous semester be at least B in two-thirds of his program of studies, with no grade below C, and then only by presenting a written petition to the Committee on Admission and Student Standing, who may, in their discretion, grant permission to enroll for extra work up to maximum of 18 credit hours.

MINIMUM PROGRAM OF STUDIES.

No student shall enroll in courses earning less than 12 credit hours except by permission of the President of the University or the Dean of the College.

DEGREE.

Upon recommendation of the President and Faculty, the degree of Bachelor of Arts is conferred by the Regents upon those candidates who have completed at this institution not less than the last two semesters of a four year's curriculum in accordance with the requirements and regulations of the University. If such candidates have completed a major course in Group III, they may, upon request, receive the degree of Bachelor of Science.

PROFESSIONAL HIGH SCHOOL TEACHER'S CERTIFICATE.

Graduates of the University are awarded a professional high school teachers' certificate upon the completion of the following requirements:

General Psychology, three credit hours; Educational Psychology, three credit hours; Principles of Education, three credit hours; History of Education, six credit hours, and the completion of a major course, including methods of teaching the major subject.

The requirements in Physiology, United States History and Civics, and the History and Civics of New Mexico, to which all applicants for all grades of certificates are held, must be met by applicants for the professional high school certificate. If these subjects have not been offered for entrance they must be taken before graduation.

Graduates of the University who include in their curriculum the above prescribed subjects receive a certificate showing that they have completed this work. Upon the presentation of this certificate to the State Department of Education, a professional certificate is issued permitting the holder thereof to teach in high schools in New Mexico for a period of three years. Upon the expiration of this time and upon the presentation of evidence of successful teaching, this certificate will be renewed.

CURRICULUM PREPARATORY TO LAW.

All law schools of high rank are now requiring a certain amount of work in the College of Arts and Sciences before admission to the study of law. The student who plans to take up the study of law **should first gain a broad foundation** for his later work, and should take at least two years of English, History, Government, Economics, and Sociology, the languages and the sciences. The exact curriculum will depend on the requirements of the law school of which the student plans to become a member, but he should, in general, pursue the regular required course for the Freshman and Sophomore years, choosing his electives under the direction of the Dean of the College.

The School of Law of Northwestern University has effected an affiliation with the College of Arts and Sciences, by the terms of which the student may secure the advantages of the following seven years' program of combined liberal and professional studies. He may spend three years in residence in the College

of Arts and Sciences and then proceed to the School of Law for the remaining four years, receiving his Bachelor of Arts degree from the University of New Mexico at the end of the first four years of study, and his Bachelor of Laws degree from Northwestern University at the close of the seven years' program.

CURRICULUM PREPARATORY TO MEDICINE.

The standard of preliminary education which is required as the minimum for admission to the study of medicine is two years of college work based on a four-year high school education. This standard has now been generally adopted by the medical colleges of the United States. The minimum requirement for admission to medical schools approved by the Council on Medical Education in the United States in addition to the high school work specified above, is 60 semester credit hours, extending through two years of at least 32 weeks each, exclusive of holidays, in the College of Arts and Sciences. It is recommended that whenever possible, the student spend at least three years, i. e., six semesters, in residence in the College of Arts and Sciences before proceeding to the medical school. He should determine, before registration, what medical school he desires to attend and should arrange his curriculum, under the direction of the Professor of Biology to meet the requirements of that particular school.

The subjects included in the minimum two years of required college work or the recommended three years of desirable college work should accord with the following curriculum:

Required Courses:	Semester Hours
Chemistry	12
Physics	8
Biology	8
English Language and Rhetoric.....	6
Other non-science courses.....	18
 Courses Strongly Urged:	
French or German.....	6-12
Advanced Botany or Advanced Zoology.....	3-6
Psychology	3-6
Advanced Mathematics, including Algebra and Trigonometry..	3-6
Additional Chemistry	3-6

Suggested Elective Courses:

Additional English Language and Rhetoric or English Literature, Economics, History, Sociology, Government, Logic, Mathematics, Latin, Greek, Drawing.

Suggestions Regarding Individual Subjects.

Chemistry.—12 semester hours required, of which at least 8 must be in general inorganic chemistry, including 4 credit hours of laboratory work. Work in qualitative analysis may be counted as general inorganic chemistry. The remaining 4 hours may consist of additional work in general chemistry or of work in analytic or organic chemistry.

Physics.—8 semester hours required, of which at least 2 must be laboratory work. It is urged that this course be preceded by a course in trigonometry. This requirement may be satisfied by 4 credit hours of college physics, of which 2 must be laboratory work, if preceded by a year (one unit) of high school physics.

Biology.—8 semester hours required, of which 4 must consist of laboratory work. This requirement may be satisfied by a course of 8 semester hours in either general biology or zoology, or by courses of 4 semester hours each in zoology and botany, but not by botany alone.

English Language and Rhetoric.—The usual 6 semester hours of college composition are required.

Non-Science Courses.—Of the 60 semester hours required as the measurement of two years of college work, at least 18 including the 6 credit hours in English should be in departments other than Physics, Chemistry, and Biology.

French or German.—A reading knowledge of one of these languages is strongly urged. If the reading knowledge in one of these languages is obtained on the basis of high school work, the student is urged to take the other language in his college course. It is not considered advisable however, to spend more than 12 of the required 60 semester hours on foreign languages. In case a reading knowledge of one language is obtained by 6 semester hours of college work, another 6 semester hours may be well spent in taking the beginner's course in the other language. If this is followed up by a systematic reading of scientific prose, a reading knowledge of the second language may be readily acquired. When a student spends more than two years in college he may well spend 12 semester hours of his college work in the second language.

COLLEGE OF ENGINEERING.

FACULTY.

HILL, DAVID SPENCE, B. A., Ph. D., LL. D., President.

*COAHRAN, JESSE MYERS, B. S., Acting Dean of College of Engineering and Professor of Electrical Engineering.

CLARK, JOHN DUSTIN, B. S., M. S., Ph. D., Professor of Chemistry and Dean of Graduate School.

WEESE, ASA ORRIN, B. A., M. A., Acting Director of Department of Hygiene and Professor of Biology.

SHERWIN, PROCTOR FENN, B. A., Professor of English Language.

BARNHART, CHARLES ANTHONY, B. A., M. A., Professor of Mathematics.

ELLIS, ROBERT WALPOLE, B. S., M. A., Professor of Geology.

*LEUPOLD, ARNO KARL, B. S., Professor of Practical Mechanics.

*WEIR, HARRY EDWARD, B. S., Professor of Civil Engineering.

BARDSLEY, GEORGE ANTHONY, B. S., M. S., Associate Professor of Physics.

IBARRA Y ROJAS, HANNIBAL, B. de CC. LL., LL. B., Assistant Professor of Romance Languages.

MEYERS, RALPH EDMUND, Assistant in Chemistry.

SCHUMAKER, MARGARET, Assistant in Chemistry.

ROSENBACH, SAMUEL JOSEPH, Assistant in Physics and Electrical Engineering.

FETZER, CLAIR ALLISON, Assistant in Civil Engineering.

*Resigned.

COLLEGE OF ENGINEERING.

The College of Engineering offers courses in chemical, civil, electrical, and geological engineering, and practical mechanics; it offers, in addition, at least the first two years of four-year curricula in mechanical, mining, and sanitary engineering. The aim of each department is to make entrance requirements and requirements for graduation meet the standard of the leading engineering colleges. The curricula have been so outlined as to include both professional and cultural studies in order that the student may not only receive instruction in theory and practice but may also enlarge his mental horizon.

To this end a number of non-technical electives are required in all engineering courses.

It is the endeavor of the departments of engineering to give a thorough grounding in mathematics and theoretical subjects during the earlier years, with a reasonable amount of specialization during the later years in each curriculum. The drawing and laboratory instruction continues progressively throughout the four years in each curriculum.

INSPECTION TRIPS.

From time to time throughout the curriculum inspection tours are made, under the direction of an instructor, to engineering and industrial establishments in the City of Albuquerque, and the coal and metal mines, the mills, kilns, and smelters in this region. Through the courtesy of these establishments it is possible for the engineering students to get a much better idea of the actual processes and methods in use in up-to-date, practical plants than could possibly be gained in the shops and laboratories of an educational institution, where the equipment must of necessity be limited and more or less obsolete. In this way the observation work in connection with the discussions and practical work at the University laboratories offers excellent opportunity for the students to become familiar with practical applications.

GRADUATION REQUIREMENTS.

Candidates for the degree of Bachelor of Science in engineering curricula must complete 144 credit hours including all the prescribed courses and at least 12 credit hours earned in non-technical electives.

All electives are to be chosen with the advice and consent of the Dean and the head of the Engineering Department in which the student is a candidate for a degree.

(See also Uniform Graduation Requirements, page 40.)

CURRICULUM LEADING TO DEGREE OF B. S. IN CHEMICAL ENGINEERING.

FIRST YEAR.

First Semester.

		Lecture hours.	Laboratory hours.	Credit hours.
Chem. 1	Inorganic Chemistry	3	3	4
Math. 11	College Algebra	3	0	3
Math. 13	Trigonometry	2	0	2
P. M. 11	Engineering Drawing	0	6	3
E. E. 1	Engineering Lectures	2	0	2
English 1	Composition and Rhetoric	3	0	3
	Electives			

Second Semester.

Chem. 2	Inorganic Chemistry	3	3	4
Math. 14	Analytical Geometry	5	0	5
P. M. 1	Wood Working	0	6	2
English 2	Composition and Rhetoric	3	0	3
	Electives			

SECOND YEAR.

First Semester.

Chem. 51	Qualitative Analysis	0	10	5
Physics 51	Mechanics, Heat, and Sound.....	3	6	5
Math. 51	Calculus	5	0	5
	Electives			

Second Semester.

Chem. 52	Quantitative Analysis	0	10	5
Physics 52	Electricity and Magnetism, and Light	3	6	5
Math. 52	Calculus	3	0	3
	Electives			

THIRD YEAR.

First Semester.

Chem. 61	Organic Chemistry	3	0	3
C. E. 105	Analytical Mechanics	4	0	4
E. E. 101	Principles of Electrical Eng.....	3	0	3
E. E. 103	Heat Power Engineering.....	3	0	3
	Electives			

Second Semester.

		Lecture hours.	Laboratory hours.	Credit hours.
Chem. 62	Organic Chemistry	3	0	3
C. E. 103	Mechanics of Materials	3	0	3
E. E. 104	Heat Power Engineering.....	3	0	3
E. E. 108	Electrical Machinery	3	0	3
	Electives			

FOURTH YEAR.**First Semester.**

Chem. 101	Quantitative Analysis (Advanced).	0	10	5
Chem. 112	Industrial Chemistry	2	0	2
	Electives			

Second Semester.

Chem. 110	Physical Chemistry	5	0	5
Chem. 113	Metallurgy	2	0	2
C. E. 110	Hydraulics and Water Power Eng..	3	0	3
	Electives			

**CURRICULUM LEADING TO THE DEGREE OF BACHELOR
OF SCIENCE IN CIVIL ENGINEERING.**

FIRST YEAR.**First Semester.**

Math. 13	Trigonometry	2	0	2
Math. 11	Algebra	3	0	3
English 1	Rhetoric and Composition	3	0	3
P. M. 3	Wood Working	0	6	2
P. M. 11	Drafting	0	6	3
E. E. 1	Engineering Lectures	2	0	2
	Electives			

Second Semester.

Math. 14	Analytic Geometry	5	0	5
English 2	Rhetoric and Composition	3	0	3
P. M. 16	Descriptive Geometry	0	6	3
P. M. 6	Machine Shop	0	6	2
C. E. 43	Elementary Surveying	2	6	4
	Electives			

SECOND YEAR.**First Semester.**

Math. 51	Calculus	5	0	5
Physics 51	Mechanics, Heat, and Sound.....	3	6	5
Chem. 1	Inorganic Chemistry	3	3	4
C. E. 51	Surveying	2	3	3
	Electives			

Second Semester.

		Lecture hours.	Laboratory hours.	Credit hours.
Math. 52	Calculus	3	0	3
Physics 52	Electricity and Magnetism and Light	3	6	5
Chem. 2	Inorganic Chemistry	3	3	4
C. E. 52	Topographic Surveying	1	6	3
	Electives			

THIRD YEAR.**First Semester.**

C. E. 105	Analytical Mechans	4	0	4
C. E. 101	Railway curves	2	0	2
C. E. 103	Railroad Engineering	1	6	3
E. E. 101	Electrical Engineering Principles..	3	0	3
E. E. 103	Heat Power Engineering.....	3	0	3
	Electives			

Second Semester.

C. E. 106	Analytical Mechanics	1	3	2
C. E. 108	Mechanics of Materials	3	0	3
C. E. 110	Hydraulics and Water Power.....	3	0	3
E. E. 108	Electrical Machinery	3	0	3
E. E. 104	Heat Power Engineering.....	3	0	3
E. E. 106	Electrical Engineering Laboratory.	1	3	2
	Electives			

FOURTH YEAR.**First Semester.**

C. E. 181	Seminar	2	0	2
C. E. 151	Graphic Statics	1	6	3
	Civil Engineering Electives.			
C. E. 153	Masonry Construction	3	6	5
C. E. 161	Water Supplies	3	0	3
C. E. 163	Irrigation	2	0	2
C. E. 157	Highway Engineering	2	3	3
C. E. 155	Bridge Analysis and Design.....	1	6	3

Second Semester.

C. E. 170	Contracts and Specifications	3	0	3
C. E. 182	Seminar	2	0	2
	Civil Engineering Electives.			
C. E. 154	Reinforced Concrete	2	6	4
C. E. 164	Sewerage	3	6	5
C. E. 156	Bridge Design	1	6	3
C. E. 158	Metal Structures	2	6	4
C. E. 200	Thesis			3

**CURRICULUM LEADING TO THE DEGREE OF B. S.
IN ELECTRICAL ENGINEERING.**

FIRST YEAR.**First Semester.**

Math. 11	Algebra	3	0	3
Math. 13	Trigonometry	2	0	2

		Lecture hours.	Laboratory hours.	Credit hours.
P. M. 11	Drafting	0	6	3
P. M. 3	Wood Shop	0	6	2
E. E. 1	Engineering Lectures	2	0	2
English 1	Rhetoric and Composition	3	0	3
	Electives			

Second Semester.

Math. 14	Analytical Geometry	5	0	5
P. M. 6	Machine Shop	0	6	2
C. E. 2	Descriptive Geometry	0	6	3
C. E. 48	Elementary Surveying	2	6	4
English 2	Rhetoric and Composition.....	3	0	3
	Electives			

SECOND YEAR.**First Semester.**

Math. 51	Calculus	5	0	5
Physics 51	Mechanics, Heat and Sound	3	6	5
Chem. 1	Inorganic Chemistry	3	3	4
	Electives			

Second Semester.

Math. 52	Calculus	3	0	3
Physics 52	Electricity and Magnetism, and Light	3	6	5
Chem. 2	Inorganic Chemistry	3	3	4
	Electives			

THIRD YEAR.**First Semester.**

C. E. 105	Analytical Mechanics	4	0	4
E. E. 101	Electrical Engineering Principles..	3	0	3
E. E. 103	Heat Power Engineering	3	0	3
Physics 111	Electricity and Magnetism	2	0	2
Physics 113	Electrical Measurements	0	6	2
	Electives			

Second Semester.

E. E. 102	Alternating Currents	3	0	3
E. E. 104	Heat Power Engineering	3	0	3
E. E. 106	Electrical Engineering Laboratory.	1	6	3
E. E. 108	Electrical Machinery	3	0	3
C. E. 108	Mechanics of Materials	3	0	3
	Electives			

FOURTH YEAR.**First Semester.**

E. E. 151	Electrical Machinery	3	0	3
E. E. 161	Electrical Design	2	6	4
E. E. 171	Electrical Engineering Laboratory.	1	6	3
E. E. 181	Seminar	2	0	2
	Electives			

Second Semester.

		Lecture hours.	Laboratory hours.	Credit hours.
E. E. 152	Electrical Machinery	3	0	3
E. E. 162	Electrical Design	1	6	4
E. E. 182	Seminar	2	0	2
C. E. 110	Hydraulics and Water Power Eng.	3	0	3
	Electives			

Electives Offered by Electrical Engineering Department.

E. E. 191	Illuminating Engineering	3	0	3
E. E. 193	Electric Railways	3	0	3
E. E. 192	Power Plant Engineering	3	0	3
E. E. 194	Wireless Telegraphy and Telephone	2	0	2
E. E. 196	Transmission Line Calculations.	2	0	2
E. E. 200	Thesis			3

**CURRICULUM LEADING TO THE DEGREE OF BACHELOR
SCIENCE IN GEOLOGICAL ENGINEERING**

FIRST YEAR.**First Semester.**

Math. 11	Algebra	3	0	3
Math. 13	Trigonometry	2	0	2
English 1	Rhetoric and Composition	3	0	3
P. M. 11	Drafting	0	6	3
Biol. 1	Zoology	2	6	5
	Electives			

Second Semester.

Math. 14	Analytical Geometry	5	0	5
English 2	Rhetoric and Composition	3	0	3
P. M. 16	Descriptive Geometry	0	6	3
C. E. 48	Elementary Surveying	2	6	4
	Electives			

SECOND YEAR.**First Semester.**

Math. 51	Calculus	5	0	5
Chem. 1	Inorganic Chemistry	3	3	4
Geology 1	Physical Geology	2	3	3
C. E. 51	Surveying	2	3	3
	Electives			

Second Semester.

Math. 52	Calculus	3	0	3
Chem. 2	Inorganic Chemistry	3	3	4
Geology 2	Historical Geology	2	3	3
Geology 51	Mineralogy	1	3	2
C. E. 52	Topographic Surveying	1	6	3
	Electives			

THIRD YEAR.

First Semester.

		Lecture hours.	Laboratory hours.	Credit hours.
Physics 51	Mechanics, Heat and Sound	3	6	5
Chem. 51	Qualitative Analysis	0	10	5
C. E. 105	Analytical Mechanics	4	0	4
Geology 52	Mineralogy	0	6	2
Geology 101	Economic Geology	2	3	3
	Electives			

Second Semester.

Physics 52	Electricity and Magnetism, and Light	3	6	5
Chem. 52	Quantitative Analysis	0	10	5
Geology 102	Economic Geology	2	3	3
	Civil Engineering Electives.			
C. E. 110	Hydraulics and Water Power.....	3	0	3
C. E. 108	Mechanics of Materials	3	0	3
	Electives			

FOURTH YEAR.

First Semester.

Geol. 103	Paleontology	1	6	3
Geol. 105	Structural Geology	0	3 or 6	1 or 2
	Electives.			
C. E. 153	Masonry Construction	3	6	5
Chem. 113	Metallurgy	2	0	2
E. E. 101	Electrical Engineering Principles..	3	0	3
E. E. 103	Heat Power Engineering	3	0	3
C. E. 157	Highway Engineering	2	3	3
C. E. 163	Irrigation	2	0	2
C. E. 101	Railway Curves	2	0	2
C. E. 103	Railway Engineering	1	6	3

Second Semester.

Geol. 104	Petrology	1	6	3
Geol. 106	Geological Mapping	0	6	2
Chem. 112	Industrial Chemistry	2	0	2
C. E. 170	Contracts and Specifications.....	3	0	3
	Electives.			
C. E. 108	Electrical Machinery	3	0	3
E. E. 104	Heat Power Engineering	3	0	3
C. E. 154	Reinforced Concrete	2	6	4
C. E. 106	Analytical Mechanics	1	3	2
E. E. 106	Electrical Engineering Laboratory..	1	6	3

GRADUATE SCHOOL.

FACULTY.

DAVID SPENCE HILL, Ph. D., LL. D., President of the University.

JOHN DUSTIN CLARK, Ph. D., Dean of the Graduate School and Professor of Chemistry.

LYNN BOAL MITCHELL, Ph. D., Professor of the Latin and Greek Languages and Literature, and Dean of the College of Arts and Sciences

ASA ORRIN WEESE, A. B., M. A., Professor of Animal Biology and Botany, and Director of the Department of Hygiene.

JOSEPH SAMUEL LANDERS, A. B., M. A., Professor of Psychology and Philosophy.

CHARLES ANTHONY BARNHART, A. B., M. A., Professor of Mathematics.

ROBERT WALPOLE ELLIS, B. S., M. A., Professor of Geology.

GEORGE HENRY BARDSLEY, B. S., M. S., Associate Professor of Physics.

EDNA MOSHER, Ph. D., Acting Professor of Biology.

JOHN L. RICH, Ph. D., Non-resident Lecturer in Geology.

MYRTLE GREENFIELD, M. A., Bacteriologist in State Health Laboratory.

GRADUATE SCHOOL.

At the beginning of the 1919-20 college year, a small nucleus of a graduate school was organized at the University of New Mexico. This school offers to men and women the opportunity of extending and rendering more thorough the scholarship obtained in the undergraduate courses, and of advancing the boundaries of knowledge by specialized work and original research.

REGARDING COURSES.

The privileges of this school are extended to graduates of this University or of other institutions of equal grade. The general scope of the graduate instruction offered in any subject may be gathered from an inspection of the statements in the Courses of Instruction. The work of graduate students is expected, however, to be in a measure, independent of the regular courses of instruction. Some of the graduate courses offered may be elected in the senior year by properly prepared undergraduate students. Work done in this way, however, before the attainment of the bachelor's degree, will not be allowed to count as graduate work if the student afterward becomes a candidate for an advanced degree. Nor will any work of undergraduate grade done by a graduate student be, as a rule, credited toward an advanced degree, but certain courses primarily for seniors will be open to graduate students and may, at the discretion of the Committee on Graduate Studies, be counted toward an advanced degree.

ADMISSION OF SPECIAL STUDENTS.

Properly prepared students who have not obtained a baccalaureate degree and who are not candidates for a degree may be admitted to the Graduate School, it being understood that the work undertaken by them must be all of a higher grade than that required for the baccalaureate degree. The admission of such students will be upon sanction of the professors under whom they are to study and the Committee on Graduate Studies. The graduate work done by this class of special students shall in no case count toward the acquisition of an advanced degree.

The University of New Mexico will not confer advanced degrees on students who have not obtained a baccalaureate degree, from an institution of standard grade.

ADMISSION TO CANDIDACY.

All graduate students will be considered merely resident graduates, unless admitted to candidacy for a degree by the Dean of the Graduate School, after formal application. Applicants for advanced degrees are required to announce their proposed courses to the Dean within two weeks after the opening of the session. Applicants for advanced degrees may, at the discretion of the Committee on Graduate Studies, receive proper credit for graduate work done either in private study or at another university of standard grade, but their degrees will not be granted unless applicants have been resident graduates at this University for at least one year.

CHANGES IN REQUIREMENTS.

Candidates standing examinations for advanced degrees more than three years after the beginning of their graduate study must satisfy all requirements adopted in the interval.

MINIMUM SIZE OF GRADUATE CLASSES.

Graduate classes of fewer than three students will be formed only at the discretion of the professor concerned and with the approval of the administration.

CHOICE OF MINOR SUBJECTS.

The choice of minor subjects may be made only after consultation with the professor in charge of the major subject and the Dean of the Graduate School.

UNIT COURSES OF GRADUATE STUDY, REQUIRED MINIMUM OF COURSES.

The unit for estimating the quantity of graduate instruction is a graduate course. A unit course is one which requires ten hours of time a week through one semester, irrespective of the mode of distribution of that time in classroom, laboratory or private study. Four such courses or their equivalent, constitute a full minimum for one semester and eight such courses or their equivalent, which may include the preparation of a Mas-

ter's thesis, are expected to occupy the time for a year of a well prepared, able graduate student and constitute the minimum formal year's work required for a Master's degree.

Five and ten are the maximum for one semester and the year, respectively.

RECORDS OF GRADUATE WORK.

At the close of the academic year, each professor shall file with the Dean of the Graduate School, a record of the year's work of each graduate student, showing, first, the quantity of each student's work, stated in unit graduate courses, as defined above, and second, the quality of this work stated in terms of the same system of grades as is used in the Academic Colleges.

EXAMINATIONS.

Final examinations for all advanced degrees shall be conducted jointly by the professors in charge of the major and minor subjects and shall be written and oral, or oral in part.

THESIS.

Copies of theses for the Master's degree must be deposited with the Dean of the Graduate School not later than the first day of May in the year of which the degree is sought. The Master's thesis should demonstrate accuracy of thinking, clearness of expression, and ability to carry on independent investigation. The thesis must show literary merit. It must be submitted in prescribed typewritten form on unruled paper of good quality, 8½x11 inches in size, with a margin of one inch on the four sides of the page. The title page shall contain the words, "Submitted to the Faculty of the University of New Mexico in partial fulfillment of the requirements of the degree of——." A full list of authorities and books consulted and a short biographical sketch suitable for publication must be appended.

DEGREES.

The Master's Degree is conferred upon students who complete successfully advanced study in one major subject and in one or two minor subjects, amounting to not less than eight graduate units, who pass a final examination, and who present a satisfactory thesis within the field of their major subject. If one minor be chosen, not less than one half of the courses shall

be in the major subject. If two minors be chosen, then to these two together shall be devoted one half of the total time, and the remaining half shall be devoted to the major subject.

TIME REQUIRED TO OBTAIN MASTER'S DEGREE.

A well prepared and able graduate student may find it possible to attain his Master's Degree after one year of graduate study, provided he devotes his entire time for one year to this study and does not undertake teaching, tutoring, or any other outside work whatsoever. The amount of time and the number of unit credits are, however, not the only criteria, the satisfactory completion of the work being the final consideration.

DEPARTMENT OF HYGIENE.

FACULTY.

DAVID S. HILL, Ph. D., LL. D., President.

C. E. WALLER, M. D., State Commissioner of Health, Consultant.

ASA ORRIN WEESE, M. A., Professor and Acting Director.

*DAVID C. TWICHELL, M. D., Medical Advisor for Men.

†MORTON McCAHILL, M. D., Medical Advisor for Men.

EVELYN FRISBIE, M. D., Medical Advisor for Women.

CHARLES ELLER, D. D. S., Dental Advisor.

MYRTLE GREENFIELD, A. M., Bacteriologist in the State Public Health Laboratory.

JOHN McGOUGH, B. A., LL. B., Instructor in Charge of Physical Training for Men.

MINNIE V. WITTMAYER, Instructor in Charge of Physical Training for Women.

*Resigned April 1, 1920.

†Spring Trimester, 1920.

DEPARTMENT OF HYGIENE.

This Department is organized in cooperation with, and with the assistance of the Interdepartmental Social Hygiene Board, and exercises general supervision over the activities conducted under the heads of Physical Training, Health Supervision, etc., as well as instruction in General Hygiene, Physiology, Bacteriology, etc. The Public Health Laboratory of the University and of the State Board of Health is under the general supervision of the Director of the Department of Hygiene.

No major is at present offered in the Department. All elective courses giving academic credit may be counted toward a minor in Hygiene.

HEALTH EXAMINATIONS.

A health examination is required each semester of each student. Every reasonable provision is made for a private, personal, confidential relationship between the examiner and the student. Each student so advised must report to his health advisor within a reasonable time as directed, and the advisor is available during his regular office hours for consultation by the student on any matter concerning his health or physical welfare.

The instruction given in the regular courses of the Department is, from time to time, supplemented by lectures on public hygiene, public health, and related topics from competent members of the local, state and national health departments and organizations and from other appropriate sources.

Sanitary surveys and hygiene inspections are applied regularly to all departments and divisions of the University.

Primarily for Undergraduates.

1, 2. **The principles of hygiene.**—General, individual, group and intergroup hygiene. The human body in health, the agents that injure health, the carriers of disease, the contributory causes of poor health, the defences of health, the sources of health; the care of the body and its organs, correction, repair, preventive hygiene, constructive hygiene, hygiene of the home and the family, school hygiene, occupational hygiene, community hygiene, interfamily, intercommunity, interstate and international hygiene. Required of all Freshmen. Two hours a week.

26. **Elementary physiology.**—A general survey of the work of the human body as a whole, with the relations and activities of its individual organs. The chemistry of the body processes. Laboratory 2 hours, 4 hours a week. Prerequisite: Chemistry 1 and 2, hygiene 1 and 2.

51. **Principles of hygiene.**—A continuation of courses 1 and 2, with special emphasis on community hygiene. 2 hours a week.

91 **Bacteriology.**—Morphology, culture and physiology of micro-organisms. Microbiology of air, water and special industries. Plant and animal diseases and their control. Household and sanitary bacteriology. Laboratory 2 hours. Four hours a week.

Prerequisite: Chemistry 1 and 2.

121. **Physiological chemistry.**—Chemical constituents of the body tissues and food substances. The chemistry of metabolic processes. Qualitative and quantitative work on gastric juice, blood, urine and milk. Diagnostic methods. Hours as arranged.

Prerequisite: Chemistry 51, 52, 61, and 62.

PHYSICAL EDUCATION.

This Department is a division of the Department of Hygiene. Every student of Freshmen rank is required to spend one hour a day in physical exercise or recreation. Athletics, outdoor games and sports can be counted toward meeting this requirement, and may be substituted in some cases for the courses in gymnasium work indicated below. The following courses have two objects: to correct physical defects and weaknesses, and to be taken by students who otherwise are not taking sufficient exercise.

Courses for Men.

1, 2. **Freshman course.**—Drilling, army setting-up exercises, work on gymnasium apparatus, etc. 3 hours a week, $\frac{1}{2}$ credit hour, not counted toward a degree.

51, 52. **Sophomore course.**—Continuation of the preceding course introducing advanced work. 3 hours a week, $\frac{1}{2}$ credit hour, not counted towards a degree.

71, 72. **Principles of physical education.**—Open to Juniors and Seniors. 2 hours a week.

Courses for Women.

The aim of these courses is to give each student the opportunity of engaging in some physical activity, to create greater organic efficiency, to prepare teachers to teach the subject in secondary schools. The completion of the courses offered in the department leads to a certificate of proficiency in Physical Education.

5, 6. **Freshman course.**—Military marching, figure marching, progressive exercises in free work, drills with light apparatus, dumbbells, wands, etc. 3 hours a week, $\frac{1}{2}$ credit hour, not counted towards a degree.

21, 22. **Aesthetic dancing.**—The technique of the Chalif Normal School of Dancing is used. Aesthetic and interpretive dancing, character and pantomimic expression. 2 hours a week, $\frac{1}{2}$ credit hour.

55, 56. **Sophomore course.**—Continuation of 1 and 2, but of more advanced character. 3 hours a week, $\frac{1}{2}$ credit hour, not counted towards a degree.

71, 72. **Aesthetic dancing.**—An advanced course, open to those who have had 21, 22 or its equivalent. 2 hours a week, $\frac{1}{2}$ credit hour.

92. **Playground course.**—The course includes the psychology of play, the aims and purposes of playground activities, organization, construction, and equipment. 2 hours a week, 2 credit hours.

105. **Folk dancing.**—A selection is made of those folk dances of various nationalities which are practical for school and playground purposes. 2 hours a week, $\frac{1}{2}$ credit hour.

Prerequisite: 1, 2, 55, and 56.

141. **Kinesiology.**—Kinesiology and its application to educational and corrective gymnastics. 2 hours a week, either semester, 2 credit hours.

EXTENSION DIVISION.

The University during the past year inaugurated a movement for the purpose of extending its service to a larger constituency than was reached through the regular class room channel.

The Extension Division, though limited in its possibilities because of a lack of funds and of personnel, made a good beginning through the following activities:

COMMERCIAL SPANISH.

The growing interest in the Spanish language as a medium of communication between the United States and the Latin American countries in their rapidly developing commercial relations, prompted the University to organize in the City of Albuquerque, a course in Commercial Spanish under the direction of Assistant Professor Hannibal Ibarra.

The classes were held from 4:30 to 6 p. m. on Tuesdays and Fridays of each week at the Chamber of Commerce, and with the cooperation of that organization. The large attendance of business men and women who enrolled for this course proved that there is a demand for this work upon the part of the adult, employed public. Forty-five special students were enrolled in this class.

LECTURES ON EDUCATIONAL MEASUREMENTS.

Recent development in sane methods for determining mental ability has called for instruction along this line of the teacher's work, and a series of lectures at the Albuquerque High School on "Educational Measurements" was given during the Spring of 1920, by President David Spence Hill.

The course for teachers in active service dealt with the modern technique of educational research in connection with problems of the public schools.

The subjects of the individual lectures which are as follows were presented by means of oral lectures, demonstrations, and syllabi: Basic Principles and Facts Regarding Educational Research; Common Uses of Statistical Methods; continued; Age-Grade-Progress Analyses of School Children; Discovery, Diagnosis and Educational Treatment of Exceptional Children; Nature

and Uses of Mental Tests of Achievement in School Work; Spelling; Reading; continued; Arithmetic; Other Measurements of Achievement in School Work; Writing; Drawing, Geography, and History; Measurements of High School Work; Trade and Commercial Tests as Related to Vocational Education; Science and Art of Education as a Professional Field.

The interest in these lectures was shown by the large attendance of public school teachers and principals who enrolled to the number of seventy-five.

RURAL EDUCATION.

Activities of a specialist in rural education marked another phase of work undertaken by the Extension Division last year.

The work was put in charge of Mr. Atanasio Montoya, formerly County Superintendent of Bernalillo County Schools, who was elected to this work by the Board of Regents. The duties of his position were indicated as follows:

(1) Special effort to encourage and to persuade all qualified children to persist in school through the elementary grades, through high school and into college. This work to be done by means of personal conference and by addresses. It is recognized that the greatest elimination, or dropping out from school is from the elementary grades, where the chief efforts should be centered.

(2) Monthly reports in writing to be made to the Chairman of the Extension Division concerning the conditions of schools and communities visited. The reports to contain memoranda of names and addresses of young people who might become students of the State University of New Mexico.

(3) In visiting schools, help where possible and desired, is to be given in the way of suggestions concerning improved instruction, sanitation, etc.

(4) Use is made of lantern slides, when possible, to illustrate:

- (a) The values of education.
- (b) Improved school plants.
- (c) Health subjects.

COURSES IN THE DEPARTMENTS OF INSTRUCTION.

Courses numbered 1-50 are open to Freshmen, 51-100 to none below Sophomore rank, 101-150 to none below Junior rank, 151-200 to none below Senior rank, 201 and above to graduates only.

Courses bearing odd numbers are generally offered the first semester; courses bearing even numbers are generally offered the second semester.

DEPARTMENT OF BIOLOGY.

ASA ORRIN WEESE, Professor.

EDNA MOSHER, Professor.

ANNIE LEE DUNCAN, Fellow.

Major study.—To obtain recognition for a major study in this department, the student must present credits in courses 1, 8 or 14, and 191; but credits obtained in courses 1, 8, and 14 shall not be counted towards fulfilling the requirement as to number of hours to be taken in the major study.

Minor study.—Courses 1, 8, and 14 shall not be counted toward the fulfillment of the requirement of a minor study, but either 1 or 14 must be taken in order to obtain recognition for a minor in this department.

Equipment.—The Department of Animal Biology is temporarily located in quarters in the new Chemistry Building, the rooms including a large general laboratory 24 by 60 feet, a lecture room 24 by 50 feet, office, stock room, etc. The general laboratory is so equipped that different sections of the room may be used at the same time by various classes. The laboratory is well equipped for the courses offered, the apparatus including an adequate supply of microscopes, with such accessories as mechanical stages, micrometers, camera lucida, ultra-microscopic attachments, large collection of illustrative models and charts for use in the laboratory and the lecture room.

Primarily for Undergraduates.

1. Zoology.—A comparative study of the principles of structure, physiology, ecology, and development of animals. The laboratory work consists essentially of a detailed examination of one or more types in each phylum and a more superficial study of closely related organisms. A study of typical metazoan tissues is included. In the field, a beginning of the study of typical animal communities is made. Laboratory and field work, 3 hours, total 5 hours. (MOSHER, DUNCAN).

8. Vertebrate morphology.—Dissections of types of the common groups of vertebrates, with conferences and discussions. Prerequisite 1. Laboratory work 4 hours, total 5 hours. (MOSHER).

14. Botany.—A study of the evolution of the plant kingdom and the underlying principles of plant life. Type studies of representatives of the principal plant groups. The life processes in the individual plant. Laboratory work, 3 hours, total 5 hours. (MOSHER).

16. Plant identification.—A laboratory and field course in the identification and recognition of common flowering plants of New Mexico. While this is not a formal course in taxonomy, the general principles of plant classification will be considered. The manuals of Wooten and Standley, Coulter and Nelson, and Clements will be used. Laboratory and field work, 2 hours, total 2 hours. (Not offered in 1920-21.)

51. Histology.—The minute structure of the animal as an organism, built up of tissues combined into organs. Practice in general methods of micro-technique and the use of apparatus. Prerequisites: 1 and 8 or their equivalent. Laboratory work, 3 hours, total 5 hours. (Not offered 1920-21.)

53. Histological technique.—Practical work in the preparation of histological and embryological material. May be taken in connection with course 51. 2 hours. (Not offered 1920-21.)

55. General embryology.—The development of the individual treated from its broadly biological standpoint. The main facts of development are considered in the laboratory. Prerequisites: 1 and 8 or their equivalent. Laboratory work, 3 hours, total 5 hours. (Not offered 1920-21.)

56. Vertebrate embryology.—A continuation of course 55 in which special attention is given to the embryology of the chick. Practical work in the preparation of material for study. Reconstruction methods, etc. Laboratory work, 3 hours, total 5 hours. (Not offered 1920-21.)

58. Comparative anatomy.—A comparative study of the types dissected in course 8 with additional studies on brain and skeleton. Prerequisites 1 and 8. Laboratory work, 3 hours, total 5 hours. (MOSHER)

61. Heredity and Evolution.—Heredity, variation, elements of biometry, proofs of organic evolution, probable factors involved. Prerequisite 1. Laboratory work 2 hours, total 4 hours. (WEESE)

71. Entomology.—The structure, physiology, development, and economic relations of insects. A discussion of the principles of taxonomy and their application to the classification of insects. Prerequisites 1 and 2, or their equivalent. Laboratory work, 2 hours, total 4 hours. (MOSHER)

72. Medical entomology.—A study of insects and closely related invertebrates in relation to the transmission of disease. Prerequisite 71, or its equivalent. Laboratory work, 1 hour, total 3 hours. (MOSHER)

82. Field zoology.—The field study, collection, and identification of local fauna, including migratory birds. Prerequisite 1. 71 is desirable. Laboratory and field work, 2 hours, total 3 hours. (MOSHER, WEESE)

85. Ecology.—A study of the factors which make up the home of the organism. Response of the organism to its environment. Regional relations of animal life. Prerequisites: 1 and 2, or their equivalent. 71 is desirable as a prerequisite. Laboratory and field work, 2 hours, total 4 hours. (Not offered 1920-21.)

For Advanced Undergraduates and Graduates.

101. General physiology.—The physical, structural, and functional features of living substance; the cell; present conditions and expressions of life; and the theories of the origin of life. The organism as a whole

in relation to its surroundings. Prerequisites: 1 and two other courses in the department. 3 hours. (Not offered 1920-21.)

104. **Animal behavior.**—The tropisms, instincts, and intelligence of animals and the evolution of the animal mind. Laboratory work, 1 or 2 hours, total 3 hours. (Not offered 1920-21.)

111. **Experimental ecology and geography.**—The physiology of environmental relations: analysis of behavior. World and regional aspects of behavior and ecology; animal distribution as related to climate and vegetation. 2 or 4 hours. Prerequisite. one year of zoology and Junior standing. (WEESE)

126. **Experimental zoology.**—Genetics, regeneration, experimental embryology. Laboratory, 2 hours, total 4 hours. Prerequisite: One year of zoology. (WEESE)

160. **Organic Evolution.**—The history of the evolution idea, modern theories, experimental evolution, practical aspects, problems in genetics. Lectures and assigned reading. Much attention will be paid to the reading and discussion of current literature pertaining to the subject matter of the course. Prerequisites: three courses in the department. 2 hours. (Not offered 1920-21.)

191, 192. **Advanced work** along the lines indicated by the above introductory courses may be elected by students having proper preparation. Problems. Semi-independent work. Seminar. Details must be arranged in consultation with the professor in charge. (WEESE, MOSHER)

DEPARTMENT OF CHEMISTRY.

JOHN D. CLARK, Professor.

RALPH E. MEYERS, Student Assistant.

MARGARET E. SCHUMAKER, Student Assistant.

Major course.—For a major course in this department the student must present credits in courses 1, 2, 51, and 52 or their equivalent, but courses 1, 2, and 51 shall not be counted towards fulfilling the requirements as to the number of hours taken in the major subject, except that, in the discretion of the professor in charge of the department, credits in excess of eight hours gained in these courses may be so counted.

Minor study.—For a minor the student must present credits in courses 1, 2, 51, and 52.

Equipment.—The department of Chemistry is housed in the new Chemistry Building which was completed in 1918. The building is thoroughly fireproof and strictly modern. It is equipped for accommodating two hundred students. A large freshman laboratory, a laboratory for qualitative analysis, and a quantitative and organic laboratory occupy the larger portion of the building. A small special laboratory, a chemistry library, a balance room, offices, stock rooms, lavatories, locker rooms, and an apparatus room, together with a large lecture hall, make up the total space devoted to chemistry within the building. Within the patio of the building are to be found work benches equipped with gas and water, so that

students may do much of the ill-smelling laboratory work in the open air. Modern, fan-ventilated hoods serve to keep the indoor laboratories free from disagreeable odors. The laboratories are well equipped with the usual apparatus needed in the study of chemistry in its various branches. Apparatus for research is added as needed.

Primarily for Undergraduates.

1. **Inorganic chemistry.**—Lectures and recitations on general and theoretical chemistry, illustrated by demonstrations, charts, lantern slides, specimens, etc. Solution of chemical problems is required. Laboratory, 1 period a week. 4 hours.

2. **Inorganic chemistry.**—Course 2 is a continuation of 1, but the time will be spent mainly on the metallic elements, their metallurgy, salts, etc. Prerequisite: 1. Laboratory, 1 period a week. 4 hours.

51. **Qualitative analysis.**—Laboratory practice with occasional lectures. The student is expected to become proficient in the separation and detection of the common acids and bases, and to keep a full set of notes. Frequent quizzes are given. These dwell upon the theory of the work. Prerequisites: 1 and 2. 5 hours.

52. **Quantitative analysis.**—This course gives practice in the greatest variety of manipulation. Types of the important methods are taken up. Analyses of ores, metals, slags, alloys, fuels, soils, fertilizers, dairy products, food stuffs, waters, urine, poisons, drugs, gases, and oils are taken. The needs of the individual student will be considered in the work. Prerequisite: 51. Laboratory, 5h. 5 hours.

101-102. **Quantitative analysis.**—Continuation of 52. Laboratory 5h. 5 hours, each semester.

61. **Organic chemistry.**—Lectures and recitations. A study of the chemistry of the carbon compounds. Laboratory work taken in Course 62. Prerequisites: 1, 2, and 51. (Given in alternate years.) 3 hours.

62. **Organic chemical laboratory.**—This course consists mainly of laboratory practice in preparing and purifying organic compounds and a study of qualitative organic reactions and analyses. Prerequisite: 61. Laboratory work, 3h. (Given in alternate years.) 3 hours.

112. **Industrial chemistry.**—This course consists of lectures on chemical manufactures such as sugar, sodium carbonate, fertilizers, sulfuric acid, glass, matches, paints, dyes, illuminating gases, petroleum, etc. The lectures will be illustrated by lantern slides and charts. Prerequisites: 1, 2, and 51. (Given in alternate years.) 2 hours.

113. **Metallurgy.**—This course consists of lectures describing the processes employed in the smelting of iron, lead, copper, zinc, silver, gold, etc. Prerequisite: 1, 2 and 51. (Given in alternate years.) 2 hours.

For Advanced Undergraduates and Graduates.

111. **Physical chemistry.**—This work consists of advanced study of chemistry theory. As far as possible, lectures cover the whole field of physical chemistry. Students are required to do a great deal of supplementary reading in works of the best authors in the different branches of the science. Prerequisite: 1, 2, 51 and 52. (Given in alternate years.) 5 hours.

131. Geological chemistry.—This course is intended primarily for major students of geology. The work of the course covers the main features of the chemistry of the atmosphere, hydrosphere, and lithosphere, and especially those processes involved in the formation, alteration, and decay of minerals and rocks. Prerequisites: Geology 1, 2, 3, and 4 and Chemistry 111. (Given in alternate years.) 2 hours.

DEPARTMENT OF CIVIL ENGINEERING:

HARRY E. WEIR, Professor.

CLAIRE I. FETZER, Assistant.

48. Elementary surveying.—Theory, use and adjustment of instruments. Field work. Determination of distances with chain and tape, the determination of areas with the transit and compass, profile and differential leveling, city and farm surveying; practical problems. Prerequisite: Drawing and Trigonometry. 4 credit hours, second semester.

51. Higher surveying.—Determination of latitude, meridian use of plane table and other instruments, mine surveying, photographic surveying and drawing room experience in mapping, etc. Prerequisite: C. E. 48. 3 credit hours, first semester.

52. Topographic surveying.—Plotting field notes for a complete topographic map, plane table work in field, principles employed by the U. S. G. S. Military methods of sketching. Prerequisite: C. E. 48 and 51. 3 credit hours, second semester.

101. R. R. curves.—Study of railroad curves, location work. Theory and use of the spiral, study of frogs, switches, turnouts. Prerequisite: C. E. 48 and 51. 2 credit hours, second semester.

103. Railroad Engineering and surveying.—The principles of economic location and the construction of railways. Field and office work. Preparation of valuation maps. Prerequisite: C. E. 48, 51, 52, 54. 3 credit hours, first semester.

157. Highway engineering.—Lectures on construction of earth, gravel, concrete and asphalt roads, cost, durability and methods of financing. Economic location, drainage, culverts, simple bridge design. (It is advisable for the student to have had Engineering Geology.) Prerequisite: C. E. 51, 52, 54. 3 credit hours, first semester.

105. Analytical mechanics.—The mechanics of engineering problems. Statics, kinematics, work, energy, impulse, etc. Prerequisite: Trigonometry, Calculus. 4 credit hours, first semester.

106. Analytical mechanics.—Graphical solution of problems, roof trusses, and simple bridges. Prerequisite: C. E. 105. 2 credit hours, second semester.

108. Mechanics of materials.—The course includes problems in engineering construction, theory of beams, columns, and shafts, requirements for structural materials. Prerequisite: C. E. 105. 3 credit hours, second semester.

110. Hydraulics.—Principles and theory of mechanics of fluid pressure and flow of water through orifices, channels, weirs, turbines, and water wheels and water power development. Prerequisite: C. E. 105. 3 credit hours, second semester.

151. **Graphic statics.**—Determination of stresses in bridge and roof trusses and solution of practical problems. Prerequisite: C. E. 105, 106. 3 credit hours, first semester.

153. **Masonry construction.**—Study of stone, brick, etc. Theory of masonry structures, sea walls, river and harbor protection, culverts, retaining walls, and arches. Prerequisites: C. E. 105, 106, and 108.

154. **Reinforced concrete.**—Principles of reinforced concrete beams, slabs, columns, bridges, etc. Design of structures. Prerequisites: C. E. 153, 105, 106, 108. 4 credit hours, second semester.

155. **Bridge analysis and design.**—Computation of stresses in various forms of bridges. Investigation of a bridge from a detailed shop drawing, standard details, estimate of cost. 3 credit hours, first semester, elective.

156. **Bridge design.**—Design of a plate girder bridge, a continuation of 155. 3 credit hours, second semester, elective.

158. **Metal Structures.**—The design and calculation of stresses in mill and steel skeleton buildings, standard details. Complete design of a mill building. 3 credit hours, second semester, elective.

161. **Water supply.**—Sources of supply, hydraulics of wells, stream flow, water treating, pipe lines, water supply systems. Prerequisite: C. E. 110. 3 credit hours, first semester.

163. **Irrigation.**—A study of the subject especially for the development of the State of New Mexico. Prerequisite: C. E. 110. 3 credit hours, second semester.

164. **Sewerage.**—Design, methods, construction of sewerage systems, making of diagrams, etc. Construction and explosives. Sewage treatment by up to date methods. Disinfecting plants. Prerequisite: C. E. 110. 5 credit hours, second semester.

170. **Contracts and specifications.**—Forms of contracts, standard specifications, and preparation of reports on engineering subjects. 3 credit hours, second semester.

181, 182. **Seminar.**—Readings and discussions of engineering topics. 2 credit hours, each semester.

200. **Thesis.**—The analysis and solution of a satisfactory problem in Civil Engineering. Subject to be chosen during the first semester. 3 credit hours.

DEPARTMENT OF ECONOMICS AND BUSINESS ADMINISTRATION.

RUSSELL M. HOWARD, Professor.

Major course.—A major in this department consists of a minimum of 24 hours other than Courses 1 and 2.

Minor study.—A minor study in this department consists of 12 or more hours other than Courses 1 and 2.

Primarily for Undergraduates.

1-2. **Principles of accounting.**—Fundamental principles of accounting; theory of debit and credit; statements, accounts, and books of original entry. Credit not given for either semester separately. 3 hours each semester.

51-52. Advanced principles of accounting.—Corporation accounts; depreciation; goodwill; reserves; and sinking funds; special financial statements; reading balance sheets; illustrative problems. Prerequisites: 1 and 2. 4 hours each semester.

61-62. Principles of economics.—A general introduction to the study of economics, preparing the student for advanced courses, and giving the student who can take but one course in economics a general survey of the field. 3 hours each semester.

For Advanced Undergraduates and Graduates.

111. Money and banking.—The principles of money and the instruments of credit; banks and their function; banking principles. Prerequisites: 61 and 62. 3 hours. (Given in alternate years. Not given in 1919-20.)

122. Foreign trade and exchange.—Foreign exchange; national trade policies; methods of locating and developing foreign markets. Prerequisites: 61, 62, and 111. 3 hours. (Given in alternate years. Not given in 1919-20.)

131-132. Business law.—Contracts, negotiable instruments; agency; partnerships; business corporations; sales of personal property; bailments and carriers, guaranty and suretyship; insurance; real property; landlord and tenant. 3 hours each semester. (Given in alternate years. Not given in 1919-20.)

161. Transportation.—A study of railway construction; finance; operation; rate making; and valuation. Special attention given to the problem of government control and regulation. Prerequisites: 61 and 62. 3 hours. (Given in alternate years. Not given in 1920-21.)

172. Labor problems.—Historical development of wage earning class; women and child labor; sweating; immigration; trade unions; preventing and settling disputes between capital and labor. Prerequisites: 61 and 62. 3 hours. (Given in alternate years. Not given in 1920-21.)

181. Corporation finance.—Corporate organization of modern business; classification of instruments of finance; promoting; underwriting; capitalization, receiverships, and reorganization. 3 hours. (Given in alternate years. Not given in 1920-21.)

191. Business organization and management.—Individual proprietorship, partnership, and corporation; organizing a business; organization and efficiency; divisions and departments; departmental responsibility and authority, routine, and discipline; scientific management. 3 hours. (Given in alternate years. Not given in 1920-21.)

DEPARTMENT OF EDUCATION.

CHARLES E. HODGIN, Professor.

Major course.—The department does not offer a major course in Education at the present time.

Minor study.—A student electing Education as a minor will be expected to complete 12 hours from the courses offered.

Professional high school teacher's certificate.—Courses 1, 2, and 51 are intended to meet the requirement in Education for the professional high school teacher's certificate.

1. **History of education.**—Relation of education to civilization. Survey of education in the Orient. Development of educational ideals in the ancient classical nations, and in Europe from the beginning of Christian education to the present. Comparison of present educational systems of leading European countries. Study of educational theorists and leaders. 5 hours.

2. **Education in America.**—European influences which shaped early educational practices in the Colonies. Comparison of industrial and social conditions of different colonies in determining the differences in the development of their educational systems. Education during revolutionary and reorganization periods. Development and influence of academies and high schools. Study of leading American educators, and educational institutions. 5 hours.

15. **New Mexico school law.**—Early educational conditions and school laws in New Mexico as a territory. The change of education with statehood. The present school laws. The modern school system: its organization, the county unit, rural schools and high schools, city graded schools and high schools, state educational institutions. 1 hour.

21. **Educational classics.**—A study of some of the best educational classics chosen from the writings of great philosophers and educators of ancient and modern times. 1 hour.

51. **Principles of education.**—Emphasis upon secondary education and its place in the school system. Distinction of elementary and secondary education. Consideration of education as physiological, sociological, and psychological adjustment. Nature and educational possibilities of human beings, as compared with sub-human or animal life. Educational aims, values, and general methods. Adjustment of individual to institutional life. Aspect of social and athletic activities in secondary schools. Discipline through group control. Some special high school problems. Vocational and industrial education. 4 hours.

64. **Current educational problems.**—Designed to acquaint students with current educational thought as appearing in leading journals, periodicals, bulletins, surveys, and reports. Discussion of modern ideas and tendencies in education, and current problems. The changed conception of the function of the school. Recent tendencies in correlation of home work with that of the school. The closer relation of high schools with business concerns. Socializing school centers. Visual education. The modern playground movement. Rural school development. Open air schools. Medical inspection and modern hygienic instruction. Vocational education and guidance. Work of the United States Bureau of Education. Mental measurements: 1 hour.

65. **School administration and management.**—The fundamental laws that underlie the organization of the school. The different factors to be held in unity. American ideals back of school systems. Adapting courses of study to social needs. The school as a community center. Changed conceptions of the function of the school and reforms in its organization and administration. Health supervision and medical inspection. Management of social activities. Causes of retardation and elimination. 3 hours.

DEPARTMENT OF ELECTRICAL ENGINEERING.

JESSE MYERS COAHRAN, Professor.

SAMUEL ROSENBAACH, Assistant.

1. **Engineering lectures.**—A course designed to give the student an adequate conception of the general field of engineering and of the duties and requirements of the professional engineer. 2 hours, first semester.

101. **Electrical engineering principles.**—A study of the principles upon which electrical engineering is based, together with the solution of problems and the application of these principles to electrical machinery. Prerequisite: Physics 52. 3 hours, first semester.

102. **Alternating currents.**—A study of theory and principles necessary for an understanding of the construction and operation of alternating current machinery. Prerequisite: 101. 3 hours, second semester.

103, 104. **Heat power engineering.**—General theory of heat engines. Application to steam engines and turbines, and internal combustion engines. Types of engines, governors, condensers, and boilers. Prerequisite: Physics 51 and 52. Three lecture hours throughout the year.

106. **Electrical engineering laboratory.**—A study of the care, use, construction, and calibration of electric meters. Protective devices and auxiliary apparatus. Simple tests of electrical machinery for operation, characteristics, and efficiency. Prerequisite: 101, and must be taken with or preceded by 108. 1 lecture and 6 laboratory hours, second semester for electrical engineers; 1 lecture and 3 laboratory hours for civil engineers.

108. **Electrical machinery.**—Fundamental principles, construction, characteristics, efficiency, care and operation of electrical machinery and auxiliary apparatus. Prerequisite: 101. 3 hours, second semester.

151, 152. **Electrical machinery.**—Theory of electrical machinery. Analytical study and calculation of direct and alternating current machinery performance and characteristics. Prerequisites: 102 and 108.

161, 162. **Design of electrical machinery.**—Study of materials of construction of electrical machinery and of fundamental principles and computations necessary to design. Complete original designs of direct and alternating current machinery, including calculations and drawings. Predeterminations of characteristics, temperature rise and efficiency of machine designed. Prerequisites: 102, 106, and 108, and must be taken with or preceded by 151. 2 lecture and 6 design room hours throughout the year.

171. **Advanced electrical engineering laboratory.**—An experimental study of characteristics, regulation, efficiency and operation of transformers, synchronous motors, synchronous converters and induction motors. Studies of series and parallel single phase and polyphase circuits. Prerequisites: 102, 106, 108, and must be taken with or preceded by 151. One lecture and 6 laboratory hours, first semester.

181, 182. **Electrical engineering seminar.**—Assigned readings and reports. Study and discussion of current technical literature. Prerequisites: 102, 106, 104, and 108. 2 hours throughout the year.

191. Illuminating engineering.—A study of the art and science of illumination. Hygienic, psychological, artistic, engineering and economic principles involved. Illuminants and auxiliary devices. Prerequisites: Physics 51 and 52. 3 lecture hours.

192. Power plant engineering.—A detailed study of standard electric generating and substation equipment, arrangement, and location. Prerequisite: 151. 3 lecture hours.

193. Electric railways.—Dynamics of electric train movements and predetermination of curves necessary to selection of proper car and power equipment to make required schedules. Hand, automatic, and multiple unit control systems. Alternating current railways, electric locomotives, and electrification of steam roads. Prerequisites: 102, 106, 108. 3 lecture hours.

194. Wireless telegraphy and telephony.—A study of transient and sustained oscillatory current phenomena in open and closed circuits. Production and propagation of electro-magnetic waves. Wireless sending and receiving apparatus, its operation and adjustment. Prerequisite: 102. 2 lecture hours.

196. Transmission line calculations.—Exact and approximate solutions of transmission problems. Design of transmission lines. Surges and oscillations, standing and traveling waves. Corona. Transmission line protection and construction. Prerequisites: 102, 108, and must be taken with or preceded by 151. 2 lecture hours.

200. Electrical engineering thesis.—The analysis and solution of a satisfactory problem in Electrical Engineering. Subject to be chosen during first semester. 3 credit hours.

DEPARTMENT OF ENGLISH.

ETHEL A. HICKEY, Professor of English Literature.

PROCTOR FENN SHERWIN, Professor of English Language and Rhetoric.

Group requirements.—All candidates for first degrees must complete courses 1 and 2, which are to be taken in the first year. Students in the College of Arts and Sciences must also elect in the first two years 6 additional hours from courses open to them in the department.

Major study.—Twenty-four credit hours are required to complete a major study in this Department. The courses which may be counted towards the fulfillment of these requirements may be selected from those which bear numbers above fifty.

Minor study.—The requirements to complete a minor study in this Department are the same as for the completion of a major study except that the number of credit hours required is twelve.

Restrictions.—Courses 1 and 2 are prerequisite to any composition course 54-68.

Speaking and writing for other departments and for student organizations.—The courses in composition are intended to be sufficiently flexible to permit the giving of credit for a satisfactory amount and quality of work done for other departments or for student organizations. Such work must be done under the supervision of the department or, in case of other departments, under the joint supervision of the departments concerned.

Primarily for Undergraduates.

- 1, 2. **Rhetoric and English composition, oral and written.**—The required Freshman course. 3 hours. (MR. SHERWIN)
43. **Appreciation of literature.**—A course intended to touch only the main currents in the world's literature, by means of lectures, readings, and discussions. 3 hours. (MISS HICKEY)
- 51, 52. **Vocal expression and interpretation.**—(Not given in 1920-1921).
- 55, 56. **Expository and occasional speaking.**—(Not given in 1920-1921).
- 57, 58. **Argumentative speaking, informal and formal.**—(Debating), 2 or 3 hours. (MR. SHERWIN)
- 61, 62. **Expository writing.**—(Not given in 1920-1921).
63. **News writing.**—2 or 3 hours. (MR. SHERWIN)
- Business writing.**—2 or 3 hours. (MR. SHERWIN)
- 67, 68. **Descriptive and narrative writing.**—(Not given in 1920-1921).

For Advanced Undergraduates and Graduates.

71. **English literature, 1557-1599.**—3 hours. (MISS HICKEY)
72. **English literature, 1599-1660.**—3 hours. (MISS HICKEY)
73. **English literature, 1660-1781.**—(Not given in 1920-1921).
74. **English literature, 1782-1832.**—(Not given in 1920-1921).
75. **English literature, 1833-1910 (poetry).**—3 hours. (MISS HICKEY)
76. **English literature, 1782-1910 (prose).**—3 hours. (MISS HICKEY)
82. **American literature.**—3 hours. (Not given in 1920-1921).
- 95-96. **Masterpieces of Greek literature in English translation.**—2 hours. (MR. MITCHELL)
- 101, 102. **Principles and practice of literary criticism.**—(Not given in 1920-1921).
121. **Drama, 1551-1870.**—History and study of the English drama from the opening of the modern period to Ibsen. 3 hours. (MISS HICKEY)
122. **Drama, 1870-1918.**—Study of European and American drama from Ibsen to the present day. 3 hours. (MISS HICKEY)
127. **Novel, 1579-1800.**—The historical development of the English novel from Lyly's Euphues to Jane Austen. (Not given in 1920-1921).
128. **Novel, 1800 to present day.**—Continuation of the above to Stevenson and Kipling. (Not given in 1920-1921).
129. **Comparative study of modern novel.**—The modern novels of Russia, Germany, France, Italy, Spain, and Scandinavia. (Not given in 1920-1921).
131. **History of the literary essay.**—3 hours. (MR. SHERWIN)
138. **History of the short story.**—3 hours. (MR. SHERWIN)
141. **Shakespeare.**—3 hours. (MISS HICKEY)
144. **Tennyson and Browning.**—3 hours. (MISS HICKEY)
147. **Tendencies in modern literature.**—(Not given in 1920-1921).
150. **History of the English language.**—3 hours. (MR. SHERWIN)
151. **Elementary Old English.**—3 hours. (MR. SHERWIN)
153. **Chaucer.**—3 hours. (MR. SHERWIN)

159 or 160. **Medieval English literature.**—3 hours, either semester, to be arranged. (MR. SHERWIN)

162. **General survey of English literature.**—This course is intended to cover the whole field of English literature and to relate the periods and phases offered in the preceding courses. 3 hours. (Not given in 1920-1921).

DEPARTMENT OF GEOLOGY.

ROBERT W. ELLIS, Professor.

Major study.—Courses 1, 2, 3, 4, 51, 52, or their equivalent, must be taken by major students in this department; but credits in 1, 2, 3, and 4 may not be counted towards fulfilling requirements as to the number of hours to be taken in the major study, except that, at the discretion of the professor in charge of the department, credits in excess of 6 hours may be so counted.

Minor study.—Courses 1 and 2 must be, and courses 51 and 52 should be, included in the offerings towards a minor study in this department..

Primarily for Undergraduates.

1. **Physical geology.**—Elementary chemistry and physics are prerequisites, or should be taken simultaneously. 3 hours.

2. **Historical geology.**—Prerequisite: Geology 1. 3 hours.

3. **Meteorology.**—2 hours. (Not given in 1920-1921).

4. **Geography of North America.**—Geology 1 is a desirable prerequisite. 2 hours. (Not given in 1920-1921).

51, 52. **Mineralogy.**—Prerequisite, elementary chemistry. 2 or 3 hours.

For Advanced Undergraduates and Graduates.

101, 102. **Economic geology.**—Building stones, coal, ores, oil, etc. Prerequisites: Geology 1, 2, 51, 52. 3 hours.

106. **Geologic mapping.**—Prerequisites: Geology 1 and 2 and Civil Engineering 53. 2 hours.

105. **Structural geology.**—Prerequisites: Geology 1 and 2. 1 or 2 hours.

103. **Paleontology.**—Prerequisites: Geology 1 and 2. 3 hours.

104. **Petrology.**—Prerequisites: Geology 51 and 52. 3 hours. (Not given in 1920-1921).

151. **Advanced geology.**—Reading and research in special problems. 2 to 5 hours, either semester.

201. **Research course.**—Credit will be given according to amount of work accomplished.

DEPARTMENT OF GREEK AND LATIN.

LYNN BOAL MITCHELL, Professor.

GREEK.

Group requirements.—Courses 95 and 96 are not accepted towards the requirement in Group I-B.

Major and Minor studies.—Not offered at present time.

Miscellaneous.—Courses numbered above 90 receive credit in the Department of English. Classes will not be organized for small number of applicants.

Primarily for Undergraduates.

1. **Elementary Greek.**—The common forms, idioms, constructions, and grammatical principles of Attic Greek are studied. 4 hours.

2. **Elementary reading course.**—Xenophon: *Anabasis*, Books I-III, or the equivalent. 3 hours.

12. **Composition and grammar.**—Intended to accompany 2. 1 hour.

16. **Scientific Greek.**—Intended to assist students in mastering scientific terminology. Emphasis is placed on etymology and formation of words. 2 hours. (Not given in 1920-1921).

95. **Greek literature in English translation: poetry.**—Epic, lyric, and dramatic poetry. No previous knowledge of Greek is required for admission to the course, the only prerequisite being one course in English literature. 2 hours.

96. **Greek literature in English translation: prose.**—The rise and development among the Greeks of the writing of history, oratory, philosophy, romance, and literary criticism. Same prerequisite as for 95. 2 hours.

LATIN.

Group requirements.—Courses up to and including 106 may be counted towards fulfilling requirement of Group I-B.

Major study.—A major study consists of 24 credit-hours earned in courses exclusive of 1 and 2.

Minor study.—A minor study consists of 12 credit hours earned in courses exclusive of 1 and 2.

Primarily for Undergraduates.

1. **Beginning Latin.**—This course is for students who have not previously studied Latin, and covers approximately the work completed in one year in high school. 5 hours.

2. **Caesar and composition.**—Selections from Caesar to the amount of four books or their equivalent. Further study of grammar and syntax, but the chief aim of the course is to acquire speed and facility of translation. 5 hours.

21. **Freshman Latin: literature.**—Cicero: *de Senectute* and Sallust. 3 hours.

22. **Freshman Latin; literature.**—Livy and Horace: *Odes* and *Epodes*. 3 hours.

31, 32. **Freshman Latin: composition and grammar.**—Intended to accompany 21 and 22. 1 hour.

51. **Sophomore Latin: literature.**—Selections from Catullus and Pliny the Younger or Tacitus. 3 hours.

52. **Sophomore Latin: literature.**—Two comedies of Plautus and one of Terence. 3 hours.

For Advanced Undergraduates and Graduates.

101, 102, 105, 106. **Advanced Latin.**—Courses in Tacitus, Apuleius, Petronius, Latin hymns, Roman philosophy, and satire, by arrangement, each 3 hours.

137, 138. Roman political institutions.—The Roman constitution, contributions of Romans to modern government in such matters as the initiative, referendum, recall, conservation of resources, government of cities and provinces, imperialism, balance of power, etc. Prerequisites: History 1 and 2 or their equivalent. 2 hours.

DEPARTMENT OF HISTORY AND POLITICAL SCIENCE.

*ROSCOE R. HILL, Professor.

HISTORY.

Group requirements.—Courses in History are accepted toward fulfillment of the requirement in Group III.

Major course.—Students taking a major course under the direction of the department of history will take a group of courses in the department amounting to not less than 24 credit hours, so arranged as to give a knowledge of the general field of history with special reference to one chosen field. In addition, 12 credit hours, not including the Freshman requirement, must be taken in some other department which shall be determined in consultation with the head of the department of History. History 1-2 will not be counted toward the fulfillment of the above requirement. All students taking a major course under this department will be required to take courses 149-150 before graduation.

Minor study.—A minor in this department consists of 12 credit hours, subject to the approval of the head of the department, and exclusive of courses 1-2.

Restrictions.—While it is advisable that courses continuing throughout the year be taken in both semesters, permission may be secured from the head of the department to pursue the work of either semester. Courses 1-2 or their equivalent in courses numbered less than 50 are prerequisite to all other courses in the department.

Primarily for Undergraduates.

1-2. Modern European history.—A study of the progress and development of the European Nations from the Age of Discovery to the present time. Special attention will be given to historical method. 3 hours, each semester.

61-62. English history.—A general survey of the history of Greater Britain from the earliest times to the present, giving attention to the political, constitutional, economic, and social phases. 3 hours, each semester. (Not given in 1920-21).

73-74. United States history, 1789-1920.—A study of the various phases of United States history from the formation of the Constitution to the present. 3 hours, each semester.

97-98. Current history.—A study of contemporary events and problems, based on periodicals, newspapers, and recent publications. Lectures and discussions. 2 hours each semester. (Not given in 1920-1921).

For Advanced Undergraduates and Graduates.

106. Ancient history: Rome.—Identical with Latin 137. 2 hours, each semester: (MITCHELL)

*Resigned.

149-150. Bibliography, methods and problems in history: a pro-seminar.—This course is designed to acquaint students with the various bibliographical aids and methods used in testing historical sources and in writing history. The general subject to be considered will vary from year to year. Problems will be assigned to each student for investigation. Required of all students doing major work in History and may be taken by others who have completed Courses 1-2 and six other credit hours in this department. 2 hours, each semester. (Not given in 1920-1921).

151-152. Problems in American history: a pro-seminar.—Similar to courses 149-150 and given in alternate years. 2 hours, each semester.

136. History of New Mexico.—This course will make a study of the native races of New Mexico, the establishment of Spanish rule, the colonial period, the Mexican regime, the acquisition by the United States, struggle for statehood and the progress of the State. 2 hours. (Not given in 1920-1921).

179-180. History of Spain.—A consideration of the rise and development of the Spanish nation, with special reference to the relations with American history. This course is given entirely in Spanish and students who enroll in it must have a speaking knowledge of this language. 2 hours each semester. (Not given in 1920-21).

181. Latin America: colonial period.—An account of the European background of American history, the Age of Discovery, and the establishment and development of the Spanish and Portuguese colonial systems. Lectures and readings. 2 hours. (Not given in 1920-1921).

182. Latin America: the republics.—A study of the struggle for independence, the establishment and progress of the several Latin American states, and their present political condition. 2 hours. (Not given in 1920-1921).

185. The Spaniards in the United States.—This course will deal with the work of Spanish colonization within the present area of the United States, with the exception of New Mexico. 2 hours.

187-188. Relations of Latin America and the United States.—2 hours, each semester. (Not given in 1920-1921).

POLITICAL SCIENCE.

Group requirement.—Courses in Political Science are accepted toward fulfillment of the requirements in Group II.

Major course and Minor study.—At present no offering of a major course or minor study is made by this department.

1. American government.—A study of the origin and development, of American governmental institutions. 3 hours. (Not given in 1920-1921).

71. Introduction to political science.—An introductory survey of the origin and nature of the state, and the principles of government. 3 hours.

72. Governments of Europe.—A study of the systems of government of the European states, with a view of determining the best method of government and the principles underlying the various systems. 3 hours.

74. Political parties and politics.—This course treats of the organization and development of political parties, with attention to party machinery, platforms, methods, functions, and abuses. 3 hours. (Not given in 1920-1921).

DEPARTMENT OF HOME ECONOMICS.

MRS. WALTER SIMPSON, Associate Professor.

*SHIRLEY WARREN, Instructor.

EDNA ROY, Assistant.

Major study.—To complete a major study in Home Economics, students must present credits in courses 51, 52, 61, 62, 102, 127, 132, 135, 181, and 194.

Minor study.—To complete a minor study in Home Economics, students must present credits to the total of 12 hours in courses bearing numbers above 50.

Primarily for Undergraduates.

1. Foods and cookery.—Food study in relation to source, composition, nutritive value, cost, and proper combinations. Practical work in beverages, cereals, vegetables, candy, egg, cheese, milk, and meat. Chemistry must be taken previously or concurrently. One lecture and two laboratory periods a week. 3 hours.

11. Elementary handwork and sewing.—A study is made of primitive forms of industrial work as weaving, crocheting, knitting, and basketry. As a foundation for later courses, all stitches and processes commonly used in sewing are studied and used in making simple articles. Commercial patterns are introduced. Two laboratory periods. 2 hours.

2. Continuation of 1.—Practice includes flour mixtures, fats, salads, desserts, preparation and serving of breakfast, luncheon, and dinner. Attention is given to nutritive value, cost, artistic arrangement of table and food. Prerequisite: course 1 and chemistry 1. One lecture and two laboratory periods a week, 3 hours.

12.—Drafting, and pattern making.—Patterns are drafted to personal measurements, fitted, and used in making undergarments. Prerequisite: course 11. Two laboratory periods a week. 2 hours.

51. Foods.—Food preservation, food laws, canning, and advanced cookery.—One lecture and two laboratory periods a week. Prerequisites: 1, 2, and inorganic chemistry. 3 hours.

61. Elementary dressmaking.—Study of materials as to cost, suitability, durability. Drafting, designing, and making silk waist, tailored skirt, and wool dress. Prerequisites: 11 and 12. Two laboratory periods a week. 2 hours.

52. Foods.—Review of former courses, special study of the hundred caloric portion, the demonstration lecture; its purpose and results, method of presentation, equipment necessary. Prerequisite: 51. One lecture and two laboratory periods a week. 3 hours.

62. Advanced dressmaking.—The history of costume. A plain silk dress and a thin dress are cut and made, to cost complete less than a certain amount. Prerequisite: 61. Two laboratory periods a week. 2 hours.

*Resigned.

For Advanced Undergraduates.

102. **Hygiene and home nursing.**—Personal and domestic hygiene, the sick room, care of patient, contagion, disinfection, bandaging. 3 hours.

127. **Dietetics.**—Dietary standards, relation of food to health, food requirements dependent on age, occupation, and health. Prerequisite: 52. 4 hours.

132. **House management and sanitation.**—Care of the house, household accounts, ventilation, water supply, heating, lighting, site and surroundings, the home as a social center. Prerequisite: 52, 3 hours. (Not given in 1920-1921).

135. **Textile.**—Primitive and present day methods of manufacturing various kinds of cloth, the hygiene of clothing, planning of wardrobe for different members of family, special attention to layette. Prerequisite: 62. 3 hours. (Not given in 1920-1921).

181. **Serving of meals.**—Actual experience in selecting and purchasing food not to exceed a certain sum. Cooking and serving of daily meals and meals for special occasions. Prerequisites: 52 and 127. Six practice hours a week. 3 hours.

185. **Embroidery.**—Forms of decoration of clothing and articles of the home, knitting, crocheting, tatting, French embroidery, Swedish darning, weaving. Prerequisite: 62. Two laboratory periods. 2 hours.

194. **Teachers' course.**—Principles underlying curricula, methods of presentation, planning and equipping laboratories. Prerequisites: 52 and 62. 4 hours. (Not given in 1920-1921).

HYGIENE.

(For courses given in Hygiene see page 68.)

DEPARTMENT OF MATHEMATICS.

CHARLES ANTHONY BARNHART, Professor.

Major study.—A major in mathematics consists of a minimum of courses 14, 51, 52, 54, 131, 132, 141, 142.

Minor study.—A minor in mathematics consists of a minimum of one course of number above 100 in addition to courses 14, 51, 52, 54.

Primarily for Undergraduates.

1. **Algebra.**—(For students presenting only one unit of entrance algebra.) The more advanced topics of elementary algebra in addition to the work of college algebra. Mathematics 13, I; 5 hours a week. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

Note: Students with a condition of $\frac{1}{2}$ unit in secondary algebra will take this course and receive three hours credit.

2. **Solid geometry II.**—2 hours a week. Prerequisite: Entrance Algebra, 1 unit; plane geometry, 1 unit.

11. **Plane trigonometry I or II.**—2 hours a week. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

12. **Spherical trigonometry.**—This course will be offered upon the request of 5 or more students. II; 1 hour a week. Prerequisite: Mathematics II.

13. **College algebra I or II.**—3 hours a week. Prerequisite: Entrance algebra, $1\frac{1}{2}$ units; plane geometry, 1 unit.

14. **Analytic geometry.**—Plane and solid analytic geometry II; 5 hours a week. Prerequisite: Mathematics 2, 11, 13.

51-52. **Differential and integral calculus I.**—4 hours a week; II; 4 hours a week. Prerequisite: Mathematics 14.

54. **Determinants. II.**—2 hours a week. Prerequisite: Mathematics 51.

Courses for Advanced Undergraduates and Graduates.

131-132. **Differential equations and advanced calculus.**—Ordinary and partial differential equations; special topics in calculus I, II; 3 hours a week. (Not given 1921-1922). Prerequisite: Mathematics 52.

133. **Method of least squares.**—Law of probability and error, adjustment of observations, precision of observation, independent and conditional observations. I; 2 hours a week. (Not given 1921-1922). Prerequisite: Mathematics 52.

134. **Averages and mathematics of investment.**—Meaning, use and abuse of averages; probability; annuities, insurance, and branches of science; loans, and investments; evaluation of investment securities. II; 3 hours a week. (Not given in 1921-1922). Prerequisite: Mathematics 13; junior standing.

141. **Theory of equations.**—Properties of an algebraic equation in one unknown; systems of simultaneous equations; a system of linear equations. I—3 hours a week. (Not given in 1920-1921). Prerequisite: Mathematics 52.

142. **Solid analytic geometry.**—Equations of the plane and right line in space; surfaces of the second degree; quadrics; surfaces. II—3 hours a week. (Not given in 1920-1921). Prerequisite: Mathematics 141.

143. **History of mathematics.**—The elementary subjects; rise and growth of the higher mathematics, chiefly in the nineteenth century; biography. Lectures; reports on assigned reading. I—2 hours a week. (Not given in 1920-1921). Prerequisite: Mathematics 52.

144. **Teachers' course.**—Secondary algebra and geometry; educational value; position in course; methods of teaching; correlation; American and foreign methods; order and importance of topics; textbooks; literature. Lectures; discussions; reports. I—2 hours a week. (Not given in 1920-1921). Prerequisite: Mathematics 52.

DEPARTMENT OF MUSIC.

JOHN LUKKEN, Acting Professor of Voice and Theory.

MRS. D. W. FAW, Instructor in Piano.

LOUISE M. NICHOLS, Instructor in Piano.

Major course.—A major course includes one course in each of the following: History of Music, Appreciation of Music, Theory of Music.

Miscellaneous.—Students of Voice or Piano are required to take simultaneously Chorus, Orchestra, or Ensemble Singing to the amount of one credit hour. Each student of Voice or Piano is required to give two successful performances in recital each academic year.

Fee.—Additional fees are charged for instruction in Piano. No fees, beyond what are charged all regular students, are charged for in-

struction in History of Music, Appreciation of Music, Theory of Music, Chorus, Ensemble Singing, and Orchestra. A limited number of regular students enrolled in Chorus or Ensemble Singing will be given private instruction in Voice without additional charge. This privilege is not extended to special students.

PIANO.

Prerequisites.—Requirements for entering course 1 are the ability to play correctly, with proper style and phrasing, major scales in all keys in octaves and Mozart: First Sonata; or Loeschorn: Op. 52; or the equivalent.

1, 2. **Freshman course.**—Exercises for independence of fingers; scales in thirds and sixths, parallel and contrary motion; arpeggios; chord playing; octaves begun. 12 studies from Loeschorn: Op. 66; Heller: Op. 46 and 47; Czerny: Op. 636 and 299; and 12 pieces by standard classic and modern composers. 1 and 2 lessons a week, earning 2 or 4 credit hours, both semesters.

51, 52. **Sophomore course.**—Octaves continued; scales in double thirds; special technical exercises suited to the student. 10 studies selected from Cramer: Etudes; Kullak: Octave School; Bach: Easy Preludes and Fugues; 10 sonatas and pieces by Beethoven, Mozart, Mendelssohn, Grieg, and others. 1 or 2 lessons a week, earning 2 or 4 credit hours, both semesters.

101, 102. **Junior course.**—Advanced technical work, greater velocity, in scales and arpeggios. 8 studies from Clementi: Gradus ad Parnasum; Bach: Two and Three Part Inventions; Phillip: School of Double Notes. 8 sonatas and pieces by Beethoven, Weber, Henselt, Moszkowski, and modern composers. 1 or 2 lesson a week, earning 2 or 4 credit hours, both semesters.

151, 152. **Senior course.**—Special technical exercises. 6 studies from Bach: Well Tempered Clavichord; Chopin: Etudes; Philipp: School of Octaves. 6 sonatas and concert pieces by Beethoven, Schumann, Chopin, Litz, MacDowell, and others. 1 or 2 lessons a week, earning 2 or 4 credit hours, both semesters.

PIPE ORGAN.

MRS. D. W. FAW, Instructor.

Prerequisites.—Elementary knowledge of Piano and the completion of course in Theory of Music are required for admission to courses in Pipe Organ.

VOICE.

JOHN LUKKEN, Acting Professor.

1, 2. **Freshman course.**—Tone production, exercises for the psychological influences on tone making and breathing, characteristic ear work and exercises to meet the individual needs of the student. One or two lessons a week, earning 2 or 4 credit hours, both semesters.

51, 52. **Sophomore course.**—Continuation of work of preceding course, exercises and songs for the development of facile tone production and general musicianship. Lutgen: No. 1; Concone, Spicker. One or two lessons a week, earning 2 or 4 credit hours, both semesters.

101, 102. Junior course.—Exercises and songs for style. Lutgen: Operatic Exercises, No. II; Concione: Exercises. Recital and ensemble work. One or two lessons a week, earning 2 or 4 credit hours, both semesters.

151, 152. Senior course.—Advanced exercises, intended to perfect a more free and instrumental style. Artistic interpretation of songs of superior quality. Recital and ensemble work. One or two lessons a week, earning 2 or 4 credit hours, both semesters.

CHORUS AND ENSEMBLE MUSIC.

JOHN LUKKEN, Acting Professor.

The following choruses are organized each year: Men's, Women's, and Mixed Chorus. Credit is allowed at the rate of one-half credit hour for one rehearsal a week. An orchestra is organized every year, when possible. Credit is allowed on the same basis as for chorus.

DEPARTMENT OF PHILOSOPHY AND PSYCHOLOGY.

J. S. LANDERS, Professor.

PHILOSOPHY.

Major study.—No major study is offered in this subject at present.

Minor study.—Any course in the department will be accepted as requirements of a minor study.

61. Outline of philosophy.—A preliminary survey of the essential philosophical problems, and of the principal theories arising out of the endeavor to gain a unified view of the world. The relation of philosophy to the sciences, to art, to morality, to religion, to society, to the state. 3 hours.

101, 102. Ethics.—The place of the individual conscience in moral life, and the ideals and principles of conduct. A study of the facts and theories of morality appearing in the individual and in society, from the point of view of their development, and their practical application to the affairs of private life and to the duties of citizenship in a democracy. 2 hours.

111, 112. History of philosophy.—A systematic study of the stages of reflective thinking upon the questions of the world-order and human life, beginning with the most naive primitive conceptions, through Greek speculation and the succeeding periods to the rise of the modern doctrine of evolution and its effect upon present-day thinking. 3 hours.

161, 162. Introduction to philosophy.—A critical and constructive study of the principal types of philosophic thought, noting the application of the leading hypotheses to science, religion, ethics, government. An examination of the merits of the different schools of thought. 3 hours. (Not given in 1920-1921).

PSYCHOLOGY.

Major and minor studies.—Any course in the department will be accepted towards requirements of major or minor study.

51, 52. General psychology.—An introductory course designed as an outline study of the subject, including the elements of descriptive, physio-

logical, comparative, and genetic psychology; and dealing with the physical accompaniments of mental life and the fundamental facts of normal adult human consciousness and behavior. 3 hours.

61, 62. Experimental psychology.—A laboratory course in which the student carries on a series of essential psychological experiments, giving training in the methods of introspection and leading to a first-hand knowledge of the facts of conscious mental life. 2 hours.

For Advanced Undergraduates and Graduates.

81. Comparative psychology.—The genesis and evolution of consciousness through the animal realm, including the evolution of animal intelligence and results of experimentation and research upon animal behavior; and the tracing of the psychic evolution of the race and the individual. 3 hours.

82. The psychology of advertising and the principles of scientific management.—A study of the psychological principles applicable to advertising and commercial life, involving a consideration of economic, physical and artistic factors that enter into the construction of an advertisement. The principles fundamental to the harmonization of the chief agencies in industry: Capital, Labor, the Consumer. 3 hours.

101. Social psychology.—The social nature of the individual and the essential effects of the interaction of individuals and the group. The social consciousness as displayed in various economic, political and social groups, considered from the genetic standpoint, and analyzed and compared with individualistic tendencies. 3 hours.

102. Educational psychology.—The principles of psychology applied to the process of development and education. A practical study of conscious states, attention, interest, habit, fatigue, play, and the various fundamentals of the learning process. 3 hours.

151. Advanced psychology.—A systematic study of the most essential problems of psychic life, involving their metaphysical bearings and modern interpretations. 2 hours.

152. Modern psychology problems.—A seminar for advanced students. Typical subjects: Intellectual measurements, vocational abilities, employment psychology, etc. 2 hours.

PHYSICAL TRAINING.

(For courses given in Physical Training, see pages 69-70.)

PHYSICS.

GEO. H. BARDSLEY, Associate Professor.
SAMUEL ROSENBACH, Assistant.

Major course.—A major course in Physics shall consist of Physics 51 and 52 plus 14 hours of courses numbered from 100 to 200.

Minor course.—A minor course in Physics shall consist of Physics 51 and 52 plus 2 hours of courses numbered from 100 to 200.

Equipment.—The Physical Laboratories are at present equipped to give adequate instruction in the laboratory work of the courses in General Physics, Physics 51 and 52, and Electrical Measurements.

It is the plan of the department to equip laboratories for the more advanced work in Heat, Light, and Electricity and Magnetism as students present themselves for these courses, and as funds become available.

1. **General physics.**—(First course). An elementary presentation of the subjects of Mechanics and simple machines, and heat. Lecture and problems, 3 hours; Laboratory, 2 periods, per week. First semester, each year. 5 hours.

2. **General physics.**—(First course). A continuation of Physics 1. The subjects presented will be Sound, Light, Electricity and Magnetism. Lecture and problems, 3 hours; Laboratory, 2 periods per week. Prerequisite: Physics 1. Second semester, each year. 5 hours.

51. **General physics.**—(Second course). A presentation of the subjects of Mechanics, Heat, and Sound in a manner more advanced than in Physics 1. Lecture and problems, 3 hours; Laboratory, 2 periods per week. Prerequisite: Trigonometry. First semester, each year. 5 hours.

52. **General physics.**—(Second course). A continuation of Physics 51. A presentation of the subjects of Electricity and Magnetism, and Light. Prerequisites: Trigonometry and Physics 51. Lecture and problems, 3 hours; Laboratory, 2 periods per week. Second semester, each year. 5 hours.

Note.—Physics 51 and 52 satisfy in full the requirements of all students in engineering and medical courses for a course in general physics.

111. **Electricity and magnetism.**—Advanced course. An intensive treatment of the laws of electricity and magnetism, together with the interrelations of the two. Prerequisites: Physics 51 and 52 and Calculus. Two hours per week, first semester. 2 hours.

112. **Undergraduate physical laboratory.**—Laboratory work upon subjects desired by student and assigned by instructor in charge. Time and credit to be arranged by conference with instructor. Prerequisites: Physics 51 and 52. Second semester.

113. **Electrical measurements.**—A laboratory course to accompany Physics 111. The work will consist in advanced experimental work in electrical and magnetic measurements. Two laboratory periods, first semester. 2 hours.

131. **Precision of measurements.**—A mathematical discussion of the nature of errors, the theory of errors, methods of elimination thereof, together with the most approved methods of computation of the accuracy of experimental results. Prerequisites: Calculus and Physics 51 and 52. Two hours, first semester. 2 hours.

132. **Theory of wave motion.**—Mathematical presentation of the propagation of wave motions with applications of Fourier's Series. Methods of harmonic composition and analysis. Prerequisites: Physics 52 and 53 and Calculus. Second semester. 2 hours.

151. **Light.**—Advanced work in the theory of optical instruments, spectroscopy and diffraction. Prerequisites: Physics 51 and 52, Calculus. Lecture and problems. 3 hours per week. First semester. 3 hours. (Not given in 1920-1921).

152. **Heat.**—Advanced work in the theory of heat, including the laws of thermodynamics, and the outcomes thereof. Lecture and problem. 3 hours per week. Second semester. (Not given in 1920-1921).

153. **Light.**—Laboratory work in optical instruments, spectroscopy and diffraction to accompany Physics 151. Laboratory. 1 period per week. 1 hour. (Not given in 1920-1921).

154. **Heat.**—An advanced laboratory course in heat and high temperature measurements to accompany Physics 152. Laboratory. 1 period per week. Second semester. 1 hour. (Not given in 1920-1921).

155, 156. **Undergraduate seminar.**—A study of the modern advances in the line of Physics, with weekly reports from current literature of Physics by the students. Open to those majoring in Physics, and such others as obtain the consent of the instructor in charge.

DEPARTMENT OF PRACTICAL MECHANICS.

ARNO K. LEUPOLD, Professor.

Group requirements.—Courses in this department are open to all students. Courses 1 or 3, 11, and 16 are required in the Curricula in Chemical, Civil, Electrical, and Mechanical Engineering; and courses 11 and 16 in the Curriculum in Geological Engineering.

Equipment.—Shop equipment consists of twenty-four woodworking benches with complete sets of tools; five 12-inch woodturning lathes with full equipment; one circular saw table with attachments; one 6-inch engine lathe, four 13-inch engine lathes, one 14-inch engine lathe, and one 15-inch engine lathe; milling and key-seating attachment for lathe; Dumore grinder for lathe; one 9-inch sensitive drill press; one 20-inch backgeared drill press; two machine shop benches with sets of hand tools. Drawing room equipment consists of twenty-four drawing desks and three cabinets for keeping work on file. Students furnish their own instruments, T-square, triangles, etc.

Primarily for Undergraduates.

1. **Elementary shop work.**—Bench and lathe work in wood. Practice in the interpretation of working drawings. 2 hours each.

3. **Advanced wood work.**—A continuation of course 1, including pattern making and the principles of cabinet work. Prerequisite: 1, or its equivalent. This course may be taken by students who have had the equivalent of course 1 in their preparatory work. 2 hours each.

6. **Machine shop.**—Lathe work in metals; turning, boring, and thread cutting in cast iron, steel, brass, etc. 2 hours.

11. **General engineering drawing.**—Freehand lettering, mechanical lettering, and making of name plates and titles for mechanical drawings. Orthographic projection, working and detail drawings. Isometric, oblique, and perspective drawing. 3 hours each.

16. **Descriptive geometry.**—The point, line, and plane; the properties of surfaces; intersections and developments. Practical problems. Prerequisite: solid geometry. 4 hours.

20. **Lettering.**—This course may be taken by any college student and consists of exercises in freehand and mechanical lettering. Methods of construction and spacing for mechanical lettering. Proper proportions for titles and name plates. Methods of securing prominence. 2 hours.

DEPARTMENT OF ROMANCE LANGUAGES AND LITERATURES.

HANNIBAL IBARRA Y ROJAS, Assistant Professor.

*EDNA BEE OAKLEY, Instructor.

Entrance requirements.—French 1, 2, 51, and 52, or Spanish 1, 2, 51, and 52 may be used to fulfill the general college requirements for entrance. Students who enter with two units of French or Spanish may enroll in French 51 or Spanish 51, and students who enter with four units may enroll in French 101 or Spanish 101.

Major course.—To complete a major course in Romance Languages and Literatures, it is necessary for the student to earn at least 24 credit hours in one language and literature (French or Spanish) above courses 1 and 2, which may not be counted towards his major course.

Minor study.—A minor study in Romance Languages and Literatures consists of a minimum of 12 credit hours in one language and literature (French or Spanish), not counting courses 1 and 2.

FRENCH.

Primarily for Undergraduates.

1. **Elementary French.**—Pronunciation, grammar, conversation, reading, phonetics, and composition. 5 hours a week, earning 4 credit hours.

2. **Elementary French.**—Continuation of French 1. (OAKLEY)

51. **Intermediate French.**—Reading from modern French prose, from such authors as Labiche, Daudet, Dumas, de Maupassant, Bazin, France, Balzac, Musset, Flaubert. Composition based upon assigned topics. Conversation. 4 hours a week. (IBARRA)

52. **Intermediate French.**—Continuation of French 51. (IBARRA)

For Advanced Undergraduates and Graduates.

101. **Seventeenth century classics.**—Lectures, readings and reports on such authors as Corneille, Racine, La Fontaine, La Bruyere and others.—3 hours a week. (IBARRA)

102. **Romantic novel.**—Reading, composition, and reports upon assigned topics on authors as Chateaubriand, Sand, Merimee, Flaubert, and Daudet. 3 hours a week. (IBARRA)

103. **Eighteenth century thought.**—Montesquieu, Voltaire, Rousseau, and Diderot. 3 hours a week. (IBARRA). Omitted in 1920-1921.

104. **Nineteenth century poetry.**—Lectures, readings and reports on Hugo, Musset, Vigny, Leconte de Lisle, Prudhomme, Verlaine. Short biographies in French by members of the class. 3 hours a week. (IBARRA). Omitted in 1920-1921.

151. **General study of the works of Balzac and Hugo.**—Readings and reports. 2 hours a week. (IBARRA)

*Resigned.

152. **History of French literature.**—2 hours a week. (IBARRA)

153. **Moliere.**—His life and dramatic works. Class reading of several plays. 2 hours a week. (IBARRA)

154. **The Sixteenth century in France.**—The French literary renaissance. The influence of John Calvin's Institution Chretienne upon Christian theology. The philosophy presented by Rabelais. Montaigne's Essays. 2 hours a week. (IBARRA)

SPANISH.

Primarily for Undergraduates.

1. **Elementary Spanish.**—Pronunciation, grammar, conversation, reading, and composition. 5 hours a week, earning 4 credit hours. (OAKLEY)

2. **Elementary Spanish.**—Continuation of Spanish I. (OAKLEY)

51. **Intermediate Spanish.**—Reading, lectures, and composition from European authors. Valdes, Alarcon, Valera, Pereda, Ibañez, Galdos. 4 hours a week. (OAKLEY)

52. **Intermediate Spanish.**—Reading, lectures, and composition from Latin-American authors. Isaacs, Marmol, Dario, Nervo, Chocano, and Ugarte. 4 hours a week. (OAKLEY)

80. **Commercial Spanish.**—Reading from Spanish commercial texts, letter writing, drawing of invoices and other commercial documents. Commercial correspondence. 3 hours a week. (IBARRA)

101. **Nineteenth century drama.**—Reading, composition, and reports. Larra, Echegaray, Tamayo, and Baus. 3 hours a week. (IBARRA)

102. **Survey of Spanish literature.**—Lectures, readings, and reports. 2 hours a week. (IBARRA)

103. **Spanish poetry of the Nineteenth century.**—A survey of Spanish and Spanish-American poets, since the middle of the Fifteenth century. Manrique, Garcilaso de la Vega, Luis de Leon, Luis de Granada, Gongora, Lope, Espronceda, Campoamor, Becquer, Dario, Chocano, Arguello, and Flores. 3 hours a week. (IBARRA)

104. **Contemporary drama.**—Benavente, Sierra, Nuñez de Arce, Lopez de Ayala, Echegaray, los Quintero. 3 hours a week. (IBARRA) Omitted 1920-1921).

151. **The Picaresque novel.**—Reading, lectures, and reports. The Lazarillo de Tormes, the Buscon, and the Don Quijote. 2 hours a week. (IBARRA)

152. **The classical drama.**—Readings, lectures, and reports. Lope de Vega, Tirso de Molina, and Calderon. 3 hours a week. (Omitted in 1920-1921). (IBARRA)

153. **Spanish balladry.**—Readings, lectures, and reports. 2 hours a week. (Omitted in 1920-1921). (IBARRA)

154. **Teachers' training course.**—Phonetics, survey of textbooks, bibliography, the psychology of language, practice teaching. 3 hours a week. (IBARRA)

GRADUATES, 1919.

BACHELOR OF ARTS.

Eleanor G. Anderman.....	Major: Mathematics
Regina Martha Greenlee.....	Major: English Literature
Vera Kiech.....	Major: English Literature
Helen M. Vincent.....	Major: Psychology
Roberta V. Wood.....	Major: Economics

BACHELOR OF SCIENCE.

Bachelor of Science in Home Economics.

ALLIE M. ATKINSON.

CANDIDATES FOR DEGREES 1920.

COLLEGE OF ARTS AND SCIENCES.

CANDIDATES FOR DEGREE OF BACHELOR OF ARTS.

Elizabeth Arnot.....	Major: Chemistry
Chester Charles Boldt.....	Major: Economics
Mary Catherine Brorein.....	Major: Modern Languages
Helen B. Brown.....	Major: Spanish
Flora Ella Chess.....	Major: Biology
Anne Gillespy Cristy.....	Major: Spanish
Edward James Cristy.....	Major: Psychology
William Ernest Hammond.....	Major: Chemistry
Katherine E. Keleher.....	Major: Psychology
Eunice Latamore.....	Major: Latin
Clyde Young Morris.....	Majors: English Literature History
Mary O'Loughlin.....	Major: History
Helen G. Thacker.....	Major: Music

Samuel E. Beahm..... Major: Economics
As of the class of 1919.

Clarence Edward Heald..... Major: Romance Languages
As of the class of 1910.

CANDIDATES FOR DEGREE OF BACHELOR OF SCIENCE.

Vernice Blanche Powers.....	Major: Home Economics
Margaret Schumaker.....	Major: Home Economics

COLLEGE OF ENGINEERING.

CANDIDATES FOR DEGREE OF BACHELOR OF SCIENCE.

Ralph Edmund Meyers.....	Major: Chemical Engineering
Clifford G. Wolking.....	Major: Electrical Engineering

DIRECTORY OF STUDENTS.

JANUARY 1st, 1919 TO DECEMBER 31st, 1919.

Explanation of symbols.—After each name is given the College, School or Division in which student has registered. APS—College of Arts, Philosophy, and Sciences; FA—College of Fine Arts; Eng—College of Engineering; Grad—Graduate School; Prep—Preparatory Division; Spl—Special; Uncl—Unclassified. The figures indicate the number of credit hours earned by the close of the autumn quarter of 1919, but when followed by * they indicate units toward college entrance.

Name and Address	Division	Credit Hours
Albers, Robert J., Bendina, Kans.....	Eng	78.5
Alderman, Helen, Albuquerque.....	APS	6
Allen, Leslie B., San Antonio, Tex.....	Eng	14.8
Alwert, Edwin G., Denver, Colo.....	Eng	73.5
Anderman, Eleanor, Albuquerque.....	APS	179.5
Angle, Katherine, Albuquerque.....	APS	123
Arnot, Elizabeth, Albuquerque.....	APS	179.5
Arnot, George, Albuquerque.....	Spl	5
Atherton, Grace, Albuquerque.....	APS	20
Atkinson, Allie, Roswell.....	APS	183.6
Aydelotte, Carl, Roswell.....	APS	84.1
Bacon, Wm. T., Albuquerque.....	APS	8.2
Baldrige, Viola (Mrs.), Albuquerque.....	FA	2
Ball, Mabel, Albuquerque.....	FA	
Barton, Belle, Albuquerque.....	APS	15
Bates, Modene, Roswell.....	APS	48
Beahm, Samuel E., Santa Fe.....	APS	173
Beals, Carolyn, Silver City.....	Grad	32
Bear, Frances, Roswell.....	APS	89.4
Bell, Louise, Albuquerque.....	APS	131.6
Berger, Walter, Albuquerque.....	APS	25
Bigelow, Margaret F., Albuquerque.....	Spl	
Black, Beatrix, Wapanucka, Okla.....	APS	110
Blackwell, Jerry, Texico.....	APS	31
Boldt, Chester, Albuquerque.....	APS	153
Booker, Herald, Dewey, Okla.....	Eng	48
Borgerding, Martha, Melrose, Minn.....	APS	68.2
Bower, Chalmers, Alamogordo.....	Eng	140
Boyd, Frank, Whitley, Kans.....	Eng	29
Bramlett, Forrest T., Portales.....	Eng	8
Branson, Fay, Des Moines.....	APS	16
Breeden, Beulah, Lenora, Kans.....	APS	83
Brenneman, Otis, Roswell.....	APS	11.9
Brooks, Margaret, Cimarron.....	APS	12.8
Brooks, Ralph, Taos.....	APS	44.2
Brorein, Mary, Albuquerque.....	APS	176

Name and Address	Division	Credit Hours
Browder, Elmer P., Albuquerque.....	Eng	14.6
Brown, Arthur, Raton.....	Eng	13.9
Brown, Dorothy E., Albuquerque.....	APS	72.8
Brown, Helen, Santa Fe.....	APS	168.5
Brown, Harry, Pueblo, Colo.....	Corres	15
Brown, Russel, Troy, Tenn.....	APS	102.5
Bruce, Richard, Albuquerque.....	APS	31.7
Bryan, George S., Albuquerque.....	APS	27
Bunn, Thos., Albuquerque.....	APS	41
Burney, W. E., Albuquerque.....	Spl	7
Bursum, Claire, Socorro.....	APS	101.6
Burt, Edwin, El Paso, Tex.....	Eng	36
Burton, Lorena, Albuquerque.....	APS	12
Burwell, E. M., Albuquerque.....	Spl	97.5
Butts, Linnie V., Bodfer, Ia.....	APS	14
Caldwell, Chas., Albuquerque.....	APS	58.3
Calkins, Thos., Albuquerque.....	APS	51.6
Cameron, Eleanor, Albuquerque.....	APS	67
Cameron, Dorothy, Albuquerque.....	APS	5.9
Candelaria, Jose, Albuquerque.....	APS	59
Carpenter, Chas., Barrie, Ont.....	APS	10
Cartwright, Robert, Cimarron.....	APS	12
Chao, Chih Hui, Soochow, China.....	Grad	37
Chess, Flora, E., Albuquerque.....	APS	150.3
Chess, James, Albuquerque.....	APS	36.7
Clark, Mrs. C. F., Amherst, Mass.....	Grad	32
Clark, C. Louise, Amherst, Mass.....	APS	92
Clark, E. C.....	Eng	74.4
Cleve, Dorothy, Elk.....	APS	126.5
Cobb, Daphne, Albuquerque.....	APS	39
Coffin, Elosia, Indianola, Ia.....	APS	8.8
Cohen, Isidor, New York City.....	FA	
Collins, William, Phoenix, Ariz.....	APS	11.6
Colwell, Dallas E., TExico.....	APS	17
Connor, Geo. W., Albuquerque.....	Spl	4.3
Cooper, Hugh, Albuquerque.....	APS	88
Covert, Fred, Albuquerque.....	Eng	
Craig, Reginald, Santa Rosa.....	Eng	124.8
Cristy, Anne, Albuquerque.....	APS	169
Cristy, E. J., Albuquerque.....	APS	153.5
Cudabac, Hiram, Albuquerque.....	APS	
Culpepper, Chas., Carlsbad.....	APS	26.8
Darrow, Helen, Trinidad, Colo.....	APS	130.5
Davenport, Milton, Woodbury, Tenn.....	APS	12
Davis, Irene, Albuquerque.....	APS	110
Davis, Pauline, Albuquerque.....	APS	11
Davis, Robert, Toadlóna.....	Eng	40.5
Dawson, Dorothy, Albuquerque.....	APS	25.6
Dean, Wilson, Richfield, Kans.....	APS	22

Name and Address	Division	Credit Hours
Dearing, Katherine, Albuquerque.....	APS	5
Dixon, Wenonah, Albuquerque.....	APS	104
Doran, Myron, Chicago, Ill.....	APS	55
Doran, Julie, Chicago, Ill.....	APS	31.9
Duncan, Annie Lee, West Point, Miss.....	Grad	8
Eaves, Bessie, Lovington.....	APS	
Eldodt, Jos. M., Chamita.....	Eng	145.4
Embery, Agnes, Albuquerque.....	APS	10
Erie, Catherine, Denton, Mont.....	APS	57.5
Espinosa, Jos., Albuquerque.....	APS	
Fallis, Helen, Gaston, Ind.....	APS	11
Faw, Howell, Albuquerque.....	APS	12
Fee, Irene, Albuquerque.....	APS	9.9
Fernström, John, Topeka, Kans.....	APS	
Fetzer, Clair, Alamogordo.....	Eng	137.5
Floersheim, Lester, Roy.....	Prep	11.5*
Foraker, Burch, Albuquerque.....	Eng	77.8
Frasier, Pearl, Alamogordo.....	APS	19.4
Gallagher, Thos. C., Texico.....	APS	86.2
Gass, Kenneth, Albuquerque.....	Eng	31
Gentry, G. V., Luna.....	APS	43.5
Georges, Frank, Albuquerque.....	Eng	36.3
Gerhardt, Earl, Tucumcari.....	APS	106.7
Gerpheide, Louis J., Albuquerque.....	APS	27.6
Gibbs, Dorothy, Albuquerque.....	APS	84.5
Goetz, Helen, Albuquerque.....	APS	115
Goodart, Grace, Roswell.....	APS	16
Goodell, Mame, Albuquerque.....	Spl	
Goss, Mabel, Albuquerque.....	APS	44.3
Gott, Margaret, Henrietta, Mo.....	APS	11.8
Gould, Alice, Albuquerque.....	APS	11
Gould, Ralf, Albuquerque.....	APS	58
Graham, Hugh, Albuquerque.....	APS	10
Grantham, E. M., Carlsbad.....	APS	2.5
Gray, Fred, Hot Springs.....	Eng	62.5
Greenleaf, Frank, Albuquerque.....	Eng	67.9
Greenlee, Martha, Sidney, Neb.....	APS	184
Gregory, J. B., Mexico, Mo.....	APS	
Grigsby, Gwyndolyn, Albuquerque.....	APS	13
Grunsfeld, Clarence, Albuquerque.....	APS	2
Guley, Blanche, Colorado Springs, Colo.....	APS	58
Hackett, Gladys, Albuquerque.....	FA	
Hamm, Adlai, Albuquerque.....	APS	23
Hamm, Atha, Albuquerque.....	APS	16
Hammond, W. E., Albuquerque.....	APS	167.8
Hardeman, Margaret, Albuquerque.....	APS	8.9
Harden, Gladys, Colorado Springs, Colo.....	APS	
Harris, Anne, White Mountain.....	APS	146
Harris, Estelle, White Mountain.....	APS	88

Name and Address	Division	Credit Hours
Harris, Jackson, Albuquerque.....	Spl	4
Hart, Mayme, Lovington.....	APS	117.5
Hayden, Gladys, Albuquerque.....	APS	138.4
Hayerford, Pearl, Belen.....	APS	83.3
Hayes, John Pope, Roswell.....	APS	10
Heald, Josiah E., Albuquerque.....	Spl	
Hendry, Harvey, Elida.....	APS	23
Henson, Geo. W., Villa Grove, Ill.....	APS	
Herby, Ethel, Albuquerque.....	APS	69
Hernandez, Ralph, Albuquerque.....	APS	59.7
Herrick, Sarah, Socorro.....	APS	13
Hext, Howard, Portales.....	APS	29
Hickey, Herbert, Albuquerque.....	Eng	97.8
Higgins, John M., Albuquerque.....	Prep	9.5
Hines, F. P., Mesilla.....	Eng	37.5
Hite, George, E. Las Vegas.....	APS	5
Hittson, Chas., Tucumcari.....	APS	35.5
Hopewell, Robert, Albuquerque.....	APS	41
Hopewell, Samuel, Albuquerque.....	APS	47.4
Howard, Adeline, Silver City.....	Spl	18
Howard, Archie, Silver City.....	Grad	14
Howard, Lela (Mrs.), Albuquerque.....	Spl	
Howden, Douglas, Albuquerque.....	APS	80.1
Howze, Mable, Dalhart, Tex.....	APS	
Hubbard, Jewel, Carlsbad.....	APS	7
Hudiburgh, Chas., Carlsbad.....	APS	28
Huffine, Clarence, Raton.....	APS	67
Hunt, Evelyn, Raton.....	APS	30.1
Hunter, Carl, Piggott, Ark.....	APS	30
Huntsman, Mrs. Rupert, Scottville, Ky.....	Grad	
I, Pao Chin, Hong Chow.....	Grad	
Jacobson, Annette, Artesia.....	APS	88.3
Jahn, Violet, Albuquerque.....	APS	38.9
Johnson, C. A., Albuquerque.....	FA	
Johnson, Leonora, Lovington.....	APS	97
Jones, Katherine, Albuquerque.....	APS	14
Jones, Pauline, Albuquerque.....	APS	53.9
Jordan, Joseph, Albuquerque.....	APS	52
Joyner, Mildred, Roswell.....	APS	8
Keinath, Harold, Artesia.....	APS	91.1
Keleher, Katherine, Albuquerque.....	APS	140.9
Kellam, Lloyd, Albuquerque.....	APS	86.4
Kenamore, Hester, Elida.....	APS	105
Kidd, Ruth, Sedalia, Mo.....	APS	148.2
Kiech, Vera, Albuquerque.....	APS	184.3
Kinsinger, Evelyn, Roswell.....	APS	7.5
Kiss, G. J., San Bernardino, Cal.....	APS	68.5
Lafamore, Eunice, Raton.....	APS	171.4
Lee, Margaret, Albuquerque.....	APS	53

Name and Address	Division	Credit Hours
Lighton, Edward, Albuquerque.....	Eng	65.5
Little, Clinton, Albuquerque.....	APS	46.6
Long, Callie, Albuquerque.....	APS	
Longino, Lucille, Moriarty.....	APS	30
Luttrell, James, Albuquerque.....	APS	
Maharam, Edward, Albuquerque.....	APS	23.5
Maharam, Rose, Albuquerque.....	APS	101.5
Makin, Lucile, Roswell.....	APS	50.4
Maleolm, Florence, Oakland, Cal.....	Spl	20.8
Mann, Claud S., Albuquerque.....	Eng	26
Mann, Grant, Albuquerque.....	APS	
Marshall, Flora, Albuquerque.....	APS	31
Martin, George, Gallup.....	APS	20.5
Masten, Alfred, Springer.....	APS	126
Masten, Julia, Springer.....	APS	8
Merrick, Amy, Amherst, Mass.....	APS	42
Meyers, John, Albuquerque.....	Eng	43.6
Meyers, Ralph, Albuquerque.....	Eng	154
Miller, Edna, Hagerman.....	APS	2
Miller, Floyd, Albuquerque.....	Eng	20
Miller, Victor, Hagerman.....	Eng	48.1
Mills, Mayme, Albuquerque.....	APS	33
Mitchell, Wm. A., Albuquerque.....	APS	96
Moore, Carl, Clovis.....	APS	82.6
Moore, Herbert, Colorado Springs, Colo.....	APS	
Moots, Eugene, Lake Arthur.....	APS	24.5
Morgan, Edward, Clovis.....	APS	16
Morris, Byron, Albuquerque.....	APS	3
Morris, Clyde, Farmington.....	APS	167
Morris, Daisy (Mrs.), Albuquerque.....	Spl	49.5
Morris, Cola, Albuquerque.....	Eng	11
Murphy, Thos., Raton.....	APS	11
MacArthur, A. S., Albuquerque.....	APS	10
MacArthur, Helen, Albuquerque.....	APS	13
McClure, Dwight, Albuquerque.....	Eng	35.2
McDowell, Katherine, Albuquerque.....	APS	59
McGinnis, Sara M., Tarkio, Mo.....	Grad	12
McKean, C. B., Albuquerque.....	Grad	4
McIlvain, Helen, Carlsbad.....	APS	12
McIntosh, Cecil, Raton.....	APS	12
McMillen, Katherine, Albuquerque.....	APS	
Neher, Frank, Albuquerque.....	APS	56.4
Nelson, Helen, E. Las Vegas.....	APS	10.7
Newcomer, Albert, Albuquerque.....	Eng	50.4
Ogg, Frank, Raton.....	APS	62
O'Hara, Elizabeth, Clovis.....	APS	105
O'Hara, Florence, Clovis.....	APS	14
Ohmart, Dorothy, Helena, Ark.....	APS	57
O'Loughlin, Mary, Albuquerque.....	APS	154.1

Name and Address	Division	Credit Hours
Olds, Earl, Albuquerque.....	APS	66.3
Orange, W. B., Chillicothe, Mo.....	Eng	104
Osuna, Anita, Albuquerque.....	APS	122.7
Osuna, Aurelia, Albuquerque.....	APS	56.6
Overstreet, Frank, Ft. Sumner.....	Eng	128.4
Papen, Allen, E. Las Vegas.....	APS	36.1
Parker, Frances, Los Angeles, Cal.....	APS	43.9
Pate, Ted H., Carlsbad.....	APS	2
Patton, Lillian, Clovis.....	APS	10
Patton, Perkins, Clovis.....	APS	78
P'aulsen, Herbert, E. Las Vegas.....	APS	115.7
Payton, Ralph, Albuquerque.....	APS	7.5
Pearce, Cullen, Dawson.....	Eng	19
Pendergrass, Thos., Clovis.....	APS	7
Perez, Tonchita, Las Cruces.....	APS	58.7
Perry, Evangeline, Albuquerque.....	APS	122.4
Peters, William, Capitan.....	APS	
Plumlee, W. C., Roy.....	APS	47.9
Powers, Vernie, Kensington, Kans.....	APS	172.8
Quale, Robert, Kenosha, Wis.....	FA	
Rasmus, Norma, Roswell.....	APS	13
Reagan, Maurine, Clovis.....	APS	25.8
Reynolds, Dovie, Lake Arthur.....	APS	148.5
Reynolds, Elmore, Albuquerque.....	Spl	
Richardson, Donovan, Roswell.....	APS	148.7
Riggan, Katherine, Cimarron.....	APS	13.8
de Rivera, Joseph, Albuquerque.....	Spl	
Roberts, Dora, Albuquerque.....	APS	
Robertson, E. C., Albuquerque.....	Spl	10.3
Robertson, Lucille, Albuquerque.....	FA	
Robison, Ralph, Albuquerque.....	APS	6
Rodney, Maud, Roswell.....	APS	65
Rogers, Mabelle, Portales.....	APS	52
Rogers, Glenn, Portales.....	Eng	33
Rogers, Melville, Portales.....	Eng	9.4
Romero, Samuel, San Marcial.....	APS	10
Rosenbach, Samuel, Albuquerque.....	Eng	135.8
Roy, Edna, Albuquerque.....	APS	150
Roy, Wm., Albuquerque.....	APS	7
Russel, Dora, Artesia.....	APS	16
Russell, Helen, Roy.....	Prep	4.5*
Sampson, George, Winslow, Ariz.....	APS	92
Sands, Mary K., E. Las Vegas.....	APS	48.7
Santo, Felix, Hope.....	APS	2
Schumaker, Margaret, Albuquerque.....	APS	169
Scruggs, John, Albuquerque.....	Eng	114.8
Sedillo, John, Albuquerque.....	APS	13
Sganzini, James, Albuquerque.....	APS	9.9
Sharp, Jonathan, Albuquerque.....	Eng	100

Name and Address	Division	Credit Hours
Sheldon, Arthur, Wingate.....	APS	13.5
Shepard, Jean Key (Mrs.), Albuquerque.....	Grad	5
Sherwood, Leona, Dawson.....	APS	7
Shipley, Guy, Tohachi.....	APS	
Short, Fletcher, Albuquerque.....	Eng	114.2
Shotwell, Katherine, Albuquerque.....	APS	118.7
Skeel, George, Cleveland, Ohio.....	APS	30
Skelton, Arlene, Shiprock.....	APS	10
Skipwith, Rebekah, Roswell.....	APS	134.1
Smith, Nettie, Carlsbad.....	APS	14
Smithson, Helena R., Mancos, Colo.....	Grad	
Snyder, Wilma, Albuquerque.....	APS	92
Spear, Wm. P., Albuquerque.....	Eng	
Spicer, Marion, Albuquerque.....	APS	181.6
Spickard, Lillian, Albuquerque.....	APS	60.3
Spruce, Joy, Dilley, Tex.....	APS	47
Stacher, Herbert, Crown Point.....	APS	5.9
Steed, Frank, Deming.....	APS	74.4
Steed, Horace, Deming.....	APS	34
Stephenson, Dorothy, Alamogordo.....	APS	56.7
Stinnett, Marion, Portales.....	APS	7
Stofer, Willard, Gallup.....	Eng	16
Stortz, Grace, Albuquerque.....	APS	53
Stroud, Thomas, Clovis.....	APS	2
Sublette, Donald, Raton.....	APS	16
Swedes, Gustave, Bethelhem, Pa.....	APS	12.5
Swinney, Jas. B., Gallup.....	Eng	6
Thacker, Helen, Raton.....	APS	137.7
Thomas, Luther B., Roswell.....	APS	37
Tipton, Opal, Alamogordo.....	APS	16
Trenchard, Leonard, Hardin, Mo.....	APS	66.9
Trotter, Evelyn, Albuquerque.....	APS	27.9
Ussery, Oscar, Carlsbad.....	Eng	14
Vaughay, Alexandria, Albuquerque.....	APS	45
Vaughan, Boone, Fruitland.....	Prep	8.5*
Vincent, Helen, Albuquerque.....	APS	181
von Nyvenheim, Mary, Santa Fe.....	APS	12.8
Walker, Henry C., Kennett, Mo.....	APS	4.8
Walker, Raymond F., Albuquerque.....	APS	63.3
Walraven, Louise, Albuquerque.....	APS	62.7
Ward, Sterling, Artesia.....	APS	13
Ward, Walter, Albuquerque.....	Eng	13
Waring, Lelia, Cimarron.....	APS	6
Weisenbach, Estelle, Albuquerque.....	APS	92
Wells, Alfred, Oakland, Cal.....	APS	
Wells, Samuel, Oakland, Cal.....	APS	48.35
Wentworth, Bertha, Albuquerque.....	Grad	28
Whittier, John, Santa Fe.....	APS	16
Wharton, Lucille, Tucumcari.....	APS	12

Name and Address	Division	Credit Hours
Wicklund, Irene, Roswell.....	APS	56.8
Wilfley, Walter, Roswell.....	APS	6
Wilkerson, Nina, Springfield, Mo.....	APS	75.5
Wilkinson, Kenneth, Ft. Sumner.....	Eng	37.9
Williams, Allen, Albuquerque.....	APS	98
Williams, Merle, Albuquerque.....	APS	15
Wilmunder, Hazel, Gallup.....	APS	11.9
Wilson, Berniece, Rancho de Atrisco.....	FA	4
Wilson, Byron, Atrisco.....	APS	11.8
Wilson, Clyda, Albuquerque.....	APS	47
Wilson, Mrs. Cora, Albuquerque.....	FA	
Wilson, Wm. M., Albuquerque.....	Eng	3.4
Winfrey, Grace, Albuquerque.....	APS	6
Witten, Oliver B., Deming.....	Eng	36.5
Working, Clifford, Albuquerque.....	Eng	165
Wolverton, Ethel T., Lafayette, Ind.....	APS	201
Wood, Roberta, Lawrence, Kans.....	APS	182
Woodworth, Harold, Albuquerque.....	APS	3
Zweifel, Albert F., Ft. Sumner.....	APS	13

SUMMARIES.

SUMMARY OF STUDENTS BY COLLEGES, SCHOOLS, AND DIVISIONS.

JANUARY 1, 1919—DECEMBER 31, 1919.

Graduate School of Arts, Philosophy, and Sciences.....	12
College of Arts, Philosophy, and Sciences.....	258
College of Fine Arts.....	9
College of Engineering.....	50
Special.....	15
Correspondence.....	1
Preparatory Division (Spring Quarter, 1918-19).....	4
Total.....	349

This catalogue issued late in the Spring of 1920, does not include 119 students registered in the Extension courses of the University,—Educational Measurements, and Commercial Spanish.

SUMMARY OF STUDENTS BY COUNTIES IN NEW MEXICO AND BY STATES.

BERNALILLO.....	154	Otero.....	5
Chaves.....	20	Quay.....	3
Colfax.....	17	Rio Arriba.....	1
Curry.....	12	Roosevelt.....	8
de Baca.....	2	San Juan.....	3
Dona Ana.....	2	San Miguel.....	5
Eddy.....	13	Santa Fe.....	4
Grant.....	4	Sierra.....	1
Lea.....	2	Socorro.....	4
Lincoln.....	3	Taos.....	1
Luna.....	2	Torrance.....	1
McKinley.....	7	Union.....	1
Mora.....	4	Valencia.....	1
Total New Mexico.....			280
Arizona.....	2	Missouri.....	9
Arkansas.....	2	Michigan.....	1
California.....	7	Mississippi.....	1
Canada.....	1	Montana.....	1
China.....	2	Nevada.....	1
Colorado.....	7	Ohio.....	1
Illinois.....	4	Oklahoma.....	2
Indiana.....	2	Pennsylvania.....	1
Iowa.....	2	Rhode Island.....	1
Kansas.....	7	Tennessee.....	3

Kentucky	2	Texas	4
Massachusetts	3	Wisconsin	1
Minnesota	1		
Total other states.....			69
Total			349

SUMMARY OF SECONDARY SCHOOLS REPRESENTED, 1919.

The following list shows the high schools or private schools in which students now enrolled in the University received their college preparatory work. A numeral indicates the number of students from each school.

NEW MEXICO HIGH SCHOOLS.

Alamogordo	4	Gallup	4
Albuquerque	77	Hagerman	3
Artesia	2	Hope	1
Capitan	1	Lake Arthur	1
Carlsbad	7	Lovington	1
Cimarron	5	Pecos	1
Clovis	6	Pleasant Hill	2
Dawson	3	Portales	3
Deming	4	Raton	8
Des Moines	1	Roy	1
East Las Vegas	6	Roswell	15
Elida	1	Santa Fe	2
Farmington	1	Socorro	2
Fort Sumner	2	Tucumcari	3
			167

STATE EDUCATIONAL INSTITUTIONS (PREP. DEPT.)

New Mexico Agricultural College	2
New Mexico Military Institute	5
New Mexico Normal School	5
New Mexico Normal University	1
University of New Mexico	20
	33

PRIVATE SCHOOLS IN NEW MEXICO.

Albuquerque Business College	1
Loretto Academy (Santa Fe)	1
Menaul School (Albuquerque)	1
St. Vincent's Academy (Albuquerque)	2
	5

Students prepared in New Mexico 205

HIGH SCHOOLS IN OTHER STATES.

Amherst, Mass	1	Kennett, Mo.	1
Boise, Idaho	2	La Junta, Colo.	1
Chicago, Ill.	1	Lincoln, Neb.	1
Colorado Springs, Colo.	1	Livermore, Ky.	1
Crystal City, Tex.	1	Los Angeles, Cal.	1
Dalhart, Tex.	1	Martin, Tenn.	1
Dewey, Okla.	1	Oak Park, Ill.	1
Elgin, Tex.	1	Palatine, Ill.	1
El Paso, Tex.	3	Piggott, Ark.	1
Farragut, Tenn.	1	Riverside, Cal.	1
Fordyce, Ark.	1	Seattle, Wash.	1
Garden City, Kans.	1	Sedalia, Mo.	1
Gaston, Ind.	1	Tampa, Fla.	1
Greenville, Ill.	1	Topeka, Kans.	1
Hardin, Mo.	1	Ventura, Cal.	1
Harrison, Ark.	1	Villa Grove, Ill.	1
Jefferson City, Mo.	1	Virginia Polytechnic	1
Total			37

PRIVATE SCHOOLS IN OTHER STATES.

Barrie Collegiate Institute	1	Lowell High School	1
Bethlehem Preparatory School	1	Manual Arts	1
Branham & Hughes School	1	Montezuma School	1
Byars Hall High School	1	Mt. Angel College	1
Fairmount College	1	St. Albans, Washington, D. C.	1
Frozier Business College	1	St. Peters Parochial	1
Girls' Collegiate School	2	Trinity School	1
Holbrook School	2		
Huffs Business College	1		18
Students prepared in other states			55

SUMMARY OF STUDENTS BY HIGHER INSTITUTIONS REPRESENTED.

Explanatory note.—Students who have entered the University with advanced standing above the Freshman Class by presenting credits earned elsewhere. The names of institutions attended by such students before matriculation at the University of New Mexico and the number of students from each institution are given in the appended table:

Alexandria College	1	Phillips University	1
Baker University	1	Peru State Normal	1
Baylor University	2	Peabody College	1
Cal. Normal School	1	Polytechnic College	1
Carnegie Institute of Tech.	1	Radcliffe College	1
Carroll College	1	San Jose Normal	1
Chicago Normal School	1	Sheffield Scientific School	1
Christian College	1	Simpson College	1
Colorado College	4	Smith College	2

Cornell College	1	Soochow University	1
Dickson Normal	1	St. Benedict's College	1
East Central Normal (Okla)..	1	Stevens College	1
Galloway College	1	Tarkio College	1
George Washington University.	1	Tsing Hua College	1
Georgetown College	1	University of Alabama	1
Hiram College	1	University of Arizona	3
Hoge Military Academy	1	University of California	2
Hollywood Junior College	1	University of Chicago	1
Iowa State College	2	University of Colorado	1
Iowa State Teachers College..	1	University of Illinois	2
James Milliken University ...	1	University of Kansas	3
Kansas Agricultural College ..	1	University of Mississippi	1
Kidd Key College	2	University of North Dakota ..	1
Louisiana State Normal	1	University of Oklahoma	1
Midland College	2	University of Southern Cal. ..	2
Missouri Military Academy ...	1	University of Tennessee	1
Missouri Normal	2	University of Wisconsin	1
Northwestern University	3	Ward-Belmont	1
Omaha Theological Seminary ..	1	Washington State College	1
Oregon Agricultural College ...	1		
Total			73

SUMMARY OF STUDENTS FROM VARIOUS SECONDARY SCHOOLS AND HIGHER INSTITUTIONS.

January 1, 1919—December 31, 1919.

From Secondary Schools of New Mexico	205
From Secondary Schools of other States	55
From all Higher Institutions	73
Previous work not indicated, (Special and irregular students)	16
Total	349*

SUMMARY OF SECONDARY SCHOOLS AND HIGHER INSTITUTIONS REPRESENTED BY STUDENTS IN ATTENDANCE DURING 1919.

Secondary Schools of New Mexico represented	37
Secondary Schools of other states represented	50
Higher Institutions represented	59

*This total does not include 119 students registered in the Extension Courses of the University,—Educational Measurements, and Commercial Spanish, Winter Trimester, 1920.

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