The University of New Mexico

Bulletin

947-48 Catalog Issue

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For further information on the University program, address inquiries as follows:

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CORRESPONDENCE AND EXTENSION COURSES .................. Extension Division

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FIELD SESSIONS:
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Art ................................................................. Head of the Department of Art

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Director, Pre-Occupational Therapy Program, Art Department

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BULLETIN

Fifty-Sixth Catalog Issue
1947-1948
### 1947

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CALENDAR OF THE UNIVERSITY

SUMMER SESSION, 1947
New Students, Tests and Instructions .................. June 9, Monday, 1:00 p. m.
Registration ................................................. June 10, Tuesday
Instruction Begins; Late Registration Fee Applies .......... June 11, Wednesday
Last Day for Change in Program of Studies Without Charge .... June 14, Saturday
Registration Closes; Last Day for Additions to Programs of Study .................. June 21, Saturday
Holiday ......................................................... July 4, Friday
Session Ends .................................................. August 6, Wednesday

FIELD SESSIONS, 1947
Anthropology:
  General Field Session, Chaco Canyon .................. June 16-July 26,
  Annual Chaco Conference of Southwestern Anthropologists .................. July 28-30
  Advanced Field Session, Southern Chihuahua .................. August 3-30,
Art:
  Taos Art Session ............................................ June 17-August 12,
Engineering:
  Field School at Jemez Springs, N. M. .................. September 4-17
  Field School at Jemez Springs, N. M. .................. September 15-17.
Semester I, 1947-1948
New Students, Tests and Instructions .................. September 15-17.
Registration .................................................. September 18-20
Instruction Begins; Late Registration Fee Applies .......... September 22, Monday
Registration Closes; Last Day for Additions to Programs of Study; Change of Program Fee Applies .... October 4, Saturday
Mid-semester .................................................. November 15, Saturday
Homecoming, Holiday ........................................... November 22, Saturday
Thanksgiving Recess Begins .................................. November 26, Wednesday, 10:00 p. m.
Classes Resume .................................................. December 1, Monday, 7:00 a. m.
End of Twelfth Week; Last Day for Removal of Incomplete Grades .................. December 13, Saturday
Christmas Recess Begins ...................................... December 20, Saturday, 10:00 p. m.
Classes Resume .................................................. January 5, Monday, 7:00 a. m.
Pre-examination Week ........................................... January 19-26, Monday-Monday
Semester Final Examinations .................................. January 26-31, Monday-Saturday
Semester Ends .................................................. January 31, Saturday, 10:00 p. m.

SEMESTER II, 1947-48
New Students, Tests and Instructions .................. February 3-4, Tuesday-Wednesday
Registration .................................................. February 5-7, Thursday-Saturday
Instruction Begins; Late Registration Fee Applies .......... February 9, Monday
Registration Closes; Last Day for Additions to Programs of Study; Change of Program Fee Applies .......... February 21, Saturday
Easter Recess Begins ........................................... March 24, Wednesday, 10:00 p. m.
Classes Resume

March 29, Monday, 7:00 a.m.

Mid-semester

April 3, Saturday

End of Twelfth Week; Last Day for Removal of Incomplete Grades

May 1, Saturday

Pre-examination Week

May 24-31, Monday-Monday

Semester Final Examinations

May 31-June 5, Monday-Saturday

Semester Ends

June 5, Saturday, 10:00 p.m.

Baccalaureate Service

June 6, Sunday

Commencement Exercises

June 7, Monday

SUMMER SESSION, 1948

New Students, Tests and Instructions

June 11, Friday

Registration

June 11-12, Friday-Saturday

Instruction Begins; Late Registration Fee Applies

June 14, Monday

Registration Closes; Last Day for Additions to Programs of Study;

Change of Program Fee Applies

June 19, Saturday

Session Ends

August 7, Saturday, 10:00 p.m.
1. Administration
2. Aeronautical Laboratory
3. Bandelier Hall
4. Biology (Parsons Hall)
5. Carlisle Gymnasium
6. Chemistry
7. City Reservoir
8. Dining Hall
9. Faculty Homes, Sorority and Fraternity Houses
10. Fine Arts
11. Golf Course
12. Hadley Hall
13. Heating Plant
14. Hodgin Hall
15. Hokona and Marro
16. Infirmary
17. Inter-American Affairs
18. Library
19. Lecture Hall
20. Maintenance Shop
UY OF NEW MEXICO

22. Mechanical Engineering 29. Stadium
23. Public Health Laboratory 30. Student Union
24. President's Home 31. Swimming Pool
25. Rodey Hall 32. Tennis Courts
27. Music Building 34. Yatoka Hall

Photo by Cutter-Car Flying Service
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JOHN F. SUTTLE, Ph.D., Western Reserve. Visiting Instructor in Chemistry.
JOHN TATSCHL, Studied in Vienna. Visiting Instructor in Sculpture.
JOHN THEOBALD, Ph.D., University of Iowa. Visiting Instructor in English.
MARY WATSON, State Department of Education. Visiting Instructor in Education.

SPECIAL AND NON-RESIDENT
EXTENSION INSTRUCTORS

MARY M. BARRETT, Potlovskay Vtoroclasnay Teachers College, State of Saratov,
USSR. Instructor in Russian by Extension.
J. K. REID, B.A., M.A., University of New Mexico. Head of Science Department,
Carrlsbad High School. Instructor in Education by Extension.
IVAH M. SHALLENBERGER, B.A., New Mexico College of Agriculture and Mechanic
Arts; M.A., University of New Mexico. Instructor in Spanish by Extension.
R. P. Sweeney, B.A., Columbia College; M.A., University of New Mexico.
Instructor in Education by Extension.

TEACHING ASSISTANTS

GERALD BOWEN, Teaching Assistant in Physics Department.
GEORGE R. CANTRELL, Teaching Assistant in Psychology Department.
MRS. C. A. DOOLEY, Teaching Assistant in Equitation.
ATHA EZELL, Teaching Assistant in English Department.
PHILIP J. GRANATO, Teaching Assistant in Modern Languages Department.
MILDRED HILL, Teaching Assistant in Biology Department.
HARRIET JOHNS, Teaching Assistant in English Department.
CHARLES LANGE, Teaching Assistant in Modern Languages Department.
KENNETH LASH, Teaching Assistant in English Department.
ENRIQUE MONTENEGRO, Teaching Assistant in Art Department.
WILLIAM D. STEVENSON, Teaching Assistant in English Department.
DEE STURGES, Teaching Assistant in Economics and Business Administration
Department.
JAMES W. WALKER, Teaching Assistant in Mathematics Department.
ARTHUR WEBER, Teaching Assistant in English Department.
RICHARD WIDNER, Teaching Assistant in Biology Department.

GRADUATE FELLOWS

JOHN J. ADAIR, Ph.B., University of Wisconsin. Department of Anthropology.
FRANK G. ANDERSON, A.B., Cornell University. Department of Anthropology.
DAVID T. BENEDETTI, B.A., University of New Mexico. Department of Psychology.
BARBARA ANN BROOKS, B.S., Nazareth College. Department of Spanish.
ROBERT BURLINGAME, B.A., University of New Mexico. Department of English.
ROY E. BURRIS, B.S., University of New Mexico. Department of Mechanical
Engineering.

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FACULTY

CARROLL BURROUGHS, B.A., University of New Mexico. Department of Anthropology.

JENNIFER CHATFIELD, B.A., University of New Mexico. Department of Anthropology.

ROSS CLINCHY, B.A., Swarthmore College. Department of Government.

JEAN M. COHEN, A.B., University of Miami. Department of Inter-American Affairs.

CARL Cramer, B.S., University of New Mexico. Department of Biology.

ELAINE H. Dorrington, B.A., Hiram College; B.S., in Ed., Youngstown College; M.A., Western Reserve University. Department of Anthropology.

ROBERT W. DUKE, B.A., University of New Mexico. Department of History.

ROSE MARY EVANS, B.F.A., University of New Mexico. Department of Art.

ORVILE C. Fuqua, B.A., University of New Mexico. Department of Economics.

LEONARDO GUTIERREZ, B.S., University of New Mexico. Department of Electrical Engineering.


JESSIE M. HEADEN, B.S., University of Nebraska. Department of Psychology.

GEORGE HEMENWAY, B.S., University of New Mexico. Department of Geology.

ANNE L. Hoffman, B.A., Henderson State Teachers College. Department of Sociology.

ROSS B. JOHNSON, B.S., University of New Mexico. Department of Geology.

PAT E. KILBURN, B.A., University of New Mexico. Department of English.

JANEANN LINDSAY, B.A., Ohio Wesleyan University. Department of Government.

FREDERICK H. MARTENS, B.S., University of Chicago. Department of Physics.

MILTON V. MITCHELL, B.S., Wheaton College. Department of Biology.

WILLIAM C. Nolan, A.B., New Mexico State Teachers College. Department of Government.

V. MICHAEL REXROAD, A.B., Glenville State College. Department of Government.

GERRY RICHARDS, B.A., University of New Mexico. Department of English.

FLORA SARINOPoulos, B.S., Birmingham-Southern College. Department of Spanish.

BETSY L. Scone, B.A., University of New Mexico. Department of Spanish.


EUGENE L. THOMSON, B.A., University of New Mexico. Department of Primary and Secondary Education.

MARY ELIZABETH VAN WART, B.A., Antioch College. Department of Art.

CLARENCE E. WALTER, B.A., University of New Mexico. Department of Education Administration.

HELENE WARREN, B.S., University of New Mexico. Department of Geology.

VICTOR W. WESTPHALL, B.S., Milwaukee State Teachers College. Department of History.

LIBRARY STAFF


HELEN HEFLING, B.S., Kansas State Teachers College; B.S., in L.S., University of Illinois. Associate Librarian.

RUTH RUSSELL. Assistant Librarian.

VIRGINIA ARBUCKLE, B.A., Vassar; B.S., Columbia University. Cataloger.
FACULTY

THERESA GILLET, A.B., Rockford College; B.S. in L.S., A.M. in L.S., University of Illinois. Cataloger.

FLORENCE MORGAN, B.S., University of Colorado; B.S. in L.S., University of Illinois; M.S., Columbia University. Cataloger.

GENEVIEVE PORTERFIELD, Diploma, Carnegie Library School; Ph.B., University of Chicago; M.S., Columbia University. Reference Librarian.

GENERAL INFORMATION

THE PURPOSE of higher education and of the University of New Mexico is the preparation of youth in body and mind for useful, intelligent, and noble living in a world which seeks as its ultimate goal the dignity and freedom of mankind. Through the media of instruction, research, and original investigation, the University endeavors to place the resources of higher education of the state at the disposal of its citizens.

ACCREDITING

The University has been a member of the North Central Association of Colleges and Secondary Schools since 1922. Approval of the Association of American Universities was given to the University in 1933, and the American Association of University Women recognized the University in the same year. In 1937 the College of Engineering was approved by the Engineering Council for Professional Development.

SITUATION

The University is situated in Albuquerque, a metropolitan area of 81,000 inhabitants. The elevation of the campus is over 5,000 feet above sea level. The climate is mild throughout the year. Albuquerque is noted for its dry and sunny weather.

The city is on the main line of the A. T. & S. F. Railway and is served by transcontinental bus and air lines. U. S. Highways 66 (the Will Rogers Highway) and 85 intersect at Albuquerque.

Historic Santa Fe is approximately sixty miles to the north, and the picturesque Indian pueblos of Taos, Jemez, Isleta, and Acoma are within easy driving distance.

HISTORY

The University of New Mexico was created by an act of the Territorial Legislature in 1889, opened as a summer normal school on June 15, 1892, and began full-term instruction on September 21 of the same year. Its development in the fifty-seven years since its inception has been extraordinary. The 20 acres allotted by Territorial Legislature for a campus have become more than 400; buildings have increased from a single structure to thirty. Enrollment has grown from one college enrollee in 1895-96 to 3662 registered in the fall of 1946.
The development of new colleges and divisions has kept pace with the physical growth of the institution. The College Department became the College of Literature and Arts in 1898, later changing to its present title of College of Arts and Sciences. The College of Engineering opened in 1906, and the Graduate School and Extension Division, in 1919. In 1928, the College of Education was created; in 1935, the General College; and in 1936, the College of Fine Arts. A unit of the United States Naval Reserve Officers Training Corps was established May 20, 1941. The School of Inter-American Affairs was instituted during the same year. In 1945, the following new divisions became an active part of the University program: the College of Pharmacy, the Division of Governmental Research, and the Bureau of Business Research. In 1946, the Division of Research and Development and the Institute of Meteoritics were added to the University’s research program. The College of Business Administration will begin operation in 1947.

University administrators have for many years realized that the situation of the University of New Mexico provides it with a wealth of source material in the historical and archaeological background of the nation, and that its proximity to the Indian, Spanish, and Mexican cultures makes it a natural place for the study and appreciation of those cultures. They have, therefore, encouraged the development of Southwestern and Latin American studies and research. Some tangible evidences of this interest are found in the uniform architectural style (a modification of the Indian pueblo), which has been described as “The outstanding example of the effective use of regional architecture in the United States,” the incorporation of the School of Inter-American Affairs, the maintenance of the Chaco Canyon site for anthropological research, the presence on the faculty of outstanding Latin American artists and scholars, the awarding of honorary degrees to a group of distinguished Mexican educators, and the various examples of Indian, Mexican, and Spanish-American painting, carving, and weaving to be found throughout the campus buildings.

GOVERNMENT AND SUPPORT

The government of the University is vested in the Regents and the Faculty. Five Regents are appointed by the Governor of the state for a term of four years; the Governor and the Superintendent of Public Instruction are ex-officio members of the Regents.

The University is supported chiefly by appropriations made by the State Legislature, by income from the rental of lands granted
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to it by the Federal Government, by the income from royalties on
the oil taken from these lands, and by student fees.

CAMPUS AND BUILDINGS

The campus of the University is in the eastern environs of the
city of Albuquerque, and within ten miles of the Sandia Mountains.
The University's architectural style, a modification of the Indian
Pueblo, was adopted in 1905. The campus buildings include:
Hodgin Hall, housing the College of Education; Yatoka Hall; the
maintenance shop; residential halls: Hokona, Marron Hall, Bande-
lier, and Mesa Vista; Rodey Hall (the campus theater); Music
Building; Chemistry Building; Hadley Hall (the engineering build-
ing); Sara Raynolds Hall (home economics building); Press
building; Fine Arts Building; Parsons Hall (biology building);
Lecture Hall; Carlisle Gymnasium; President's Residence; Dining
Hall; Stadium Building; Administration Building; State Public
Health Laboratory; Student Union Building; Mechanical Engineer-
ing Building; Central Heating Plant; the Library; Inter-American
Affairs Building; Aeronautical Laboratory; and the Infirmary.

THE LIBRARY

Building. The University Library offers excellent facilities for
students. It is housed in a pueblo style building, completed in
1938, which has an ultimate book capacity of 225,000 volumes, and
can provide reading and study facilities for 700 persons, in five large
reading rooms, smaller special rooms, and individual study units.
Also included in the building are seminar rooms, faculty offices,
special collection rooms, a well-equipped photographic laboratory,
and a vault for rare materials.

Resources. Library collections include 115,000 cataloged and
accessioned volumes, several thousand other cataloged serials and
pamphlets, 2,000 filing boxes of manuscripts, documents and other
archival material, 24,600 feet of microfilm, 6,500 maps, several
thousand pamphlets and pictures, and 146 sound recordings. These
resources provide adequate study and research facilities for under-
graduate needs and for the special fields in which graduate work
is offered.

Special Collections. The Coronado Library is an extensive
collection of books and other materials concerning the history and
culture of the Southwest in general and New Mexico in particular.
It contains state publications, books about New Mexico and by
New Mexico authors, several hundred bound volumes of photostats
of the archives of Spain, Mexico, and New Mexico, letters, manuscripts, documents, and the state archival materials assembled by the U. S. Historical Records Survey.

The Van de Velde Collection of Mexican materials consisting of 8,686 bound volumes, 93 maps, and fifty linear feet of pamphlets was purchased in 1939 by a special appropriation of the State Legislature. It contains much rare and valuable material dealing with history, archaeology, ethnology, geology, folklore, literature, and art of Mexico.

The Catron Collection, of 9,574 volumes, is an extensive and valuable library begun by Thomas B. Catron and deposited with the University Library by his sons, C. C. Catron, T. B. Catron, F. A. Catron, and J. W. Catron. Outstanding items are several hundred Spanish and Mexican publications of the Sixteenth to Nineteenth centuries, and 375 filing cases and books of letters and documents dealing with territorial New Mexico events, particularly the land grant system of the state.

The Otero Collection, given by former Governor and Mrs. Miguel A. Otero in 1939, contains 465 volumes on the Southwest and general fields, as well as a valuable manuscript and museum collection.

The Field Collection of old Spanish and Mexican art, which includes 96 pieces of silver and 69 other art objects, was given by the estate of Will B. and Mary Lester Field in 1939.

USE OF THE LIBRARY. The Library is open to all students in all departments of the University. In addition to serving the students and faculty, and subject to their needs, the Library is available for use by citizens of the state, by permission.

Books withdrawn for home use may be kept two weeks, with the privilege of renewal. Reserved books may be used only according to rules posted at the Reserve Desk; reference books may not be taken from the Reference Room. Fines are charged for the late return of books.

Hours. The Library is open from 8:00 a. m. to 6:00 p. m. and 7:00 to 10:00 p. m., Mondays through Fridays; from 8:00 a. m. to 5:00 p. m. Saturdays; and Sundays, from 1:30 to 5:30 p. m.

MUSEUMS AND EXHIBITIONS

ANTHROPOLOGY MUSEUM

(Administration Building) A museum hall, in connection with the Department of Anthropology, houses varied material of anthropologic interest. The prehistoric cultures of the American Southwest, Mexico, and Peru are well represented. Study collec-
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In the ethnologic field, type exhibits portray the material cultures of the Eskimo, North Pacific Coast, Plains, and Southwestern areas. Recent additions to the Museum collections include material from the Pueblo of Pecos, New Mexico, and the Schweitzer Collection of Navajo Blankets.

GEOLOGY MUSEUM

(Administration Building) The Geology Museum has a double purpose: it is designed to serve the general public and to supplement the instructional program. Exhibits include a systematic series of minerals, a stratigraphic series of fossil animals and plants, a palontologic series of fossil and modern invertebrates, and systematic series of igneous and sedimentary rocks. Other notable features are a type collection of New Mexico meteorites, an exhibit illustrating how fossils are preserved, displays of strategic minerals and of polished ores, and an unusually fine fluorescence-phosphorescence exhibit.

FINE ARTS GALLERY

A continuous exhibition program throughout the school year in the Gallery of the Fine Arts Building is made possible by the joint sponsorship of the Department of Art and the Art League of New Mexico. Three annual exhibitions are scheduled regularly: Albuquerque Artists, the Student Exhibition, and the Faculty Exhibition. Besides these there are numerous group and individual shows. New Mexico stands among the first of the states in the number of recognized artists resident within its borders. Their presence makes it possible for the University to maintain a high standard of excellence in its exhibitions.

Four important murals may be seen on the campus: several panels each by Raymond Jonson and the late Willard Nash, on view in the Fine Arts Building; four panels in the University Library by Kenneth M. Adams, A.N.A.; and a large fresco in the Administration Building by Jesus Guerrero Galván, recently Latin-American Artist in Residence.

RESEARCH ACTIVITIES

THE BUREAU OF BUSINESS RESEARCH

Ralph L. Edgel, Assistant Professor of Economics and Business Administration, Director; Robert G. Conway, Instructor in Economics, Research Assistant.

The Bureau of Business Research was established July, 1945, in the Department of Economics and Business Administration. Its
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purpose is to promote the economic welfare of the state through investigation and study of economic and business problems and the dissemination of information. More specifically its objectives are to promote the development and intelligent utilization of the State's resources and full employment for its people; to assist businessmen in dealing with their problems of marketing, internal operations, and planning for the future, to encourage the pursuit of business and economic research on the part of students and faculty, and to provide a medium through which the skills and talents of the Department of Economics and Business Administration and the University as a whole may be made of assistance to the community.

The basic activities of the Bureau consist of gathering, analyzing, and interpreting data concerning the economic life of the state—its population, natural resources, employment opportunities, income, business activities, and markets. Studies are initiated by the Bureau or are undertaken for business concerns or other interested organizations. In order that the results of these studies may be utilized, information is disseminated through Bureau publications, the press, and over the radio. In addition to its special studies, the Bureau attempts to keep in touch with the current business situation, both locally and nationally. So that businessmen and others in the state may have access to this information, a monthly Review of New Mexico Business is published which carries indexes of business activity and short articles concerning current business conditions. The Bureau also acts in the capacity of consultant to those who want to avail themselves of its services, and sponsors conferences at which businessmen, civic leaders, and scholars may meet for the purpose of exchanging information and pooling their resources toward the solution of common problems.

THE DIVISION OF RESEARCH AND DEVELOPMENT

Members of the Board of the Division of Research and Development: Sherman E. Smith, Professor of Chemistry, Chairman; Tom L. Popejoy, Comptroller, Secretary; Vincent Kelley, Professor of Geology, George M. Peterson, Professor of Psychology, and W. C. Wagner, Professor of Civil Engineering.

The Division of Research and Development was chartered by the Regents of the University in April of 1946. The purpose of the Division, as set forth in its charter, is "to promote scientific, social, humanistic and industrial research, to make available the results of such research and to acquaint the public with the facilities of the University, in the interest of a fuller development of the human and natural resources of the State."
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Control of the Division is vested in a Board composed of five faculty members appointed annually by the President, to serve from October 1 to the following September 30. The Division is the University's agent in the negotiation of contracts for research or development with non-University agencies or individuals. It seeks also to provide financial support for worthy projects arising within the University and to coordinate research activities involving more than one department when such coordination is necessary. It is thus a facilitating, rather than a directing agency.

THE DIVISION OF RESEARCH OF THE DEPARTMENT OF GOVERNMENT

Thomas C. Donnelly, Professor of Government, Director; Paul Beckett, Assistant Professor of Government and Citizenship, Assistant Director.

The Division of Research of the Department of Government, which was created by the University in July 1945, has as its purpose the study of federal, state, and local problems of government in New Mexico.

The Division selects for study contemporary subjects of importance to the people of the state, publishes the completed studies, and makes them available to interested citizens and officials in New Mexico and elsewhere.

The personnel of the Division is composed of the members of the Government Department, but whenever possible members of other departments of the University and outside specialists are utilized as consultants and to make studies.

Care is taken in each study to gather pertinent facts with fullness and accuracy and to draw conclusions with impartiality. No conclusions concerning University policies or views are to be drawn from published studies. Opinions expressed in studies are those of the authors, who accept responsibility for them.

From the time of its inception until November of 1946 the Division completed and published studies on the following subjects:

- The State Educational System
- The Soil Conservation Problem in New Mexico
- The New Mexico State Budget System
- New Mexico's Tax Structure
- New Mexico: Yesterday and Today
- School Attendance and School Costs in New Mexico

Studies scheduled for publication for the year ending July 30, 1947, include the following:

- The New Mexico Primary Law
- The Public Land Problem in New Mexico
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The Problem of Assessments in New Mexico
The Functions of School Boards
Trends in State Government
The People of New Mexico

Other functions of the Division include the giving of training in research to graduate students of the Department of Government, the providing of speakers to state and local organizations, advisory and consultant work, and the sponsoring of conferences on governmental problems.

ENGINEERING EXPERIMENT STATION

The Engineering Experiment Station was established for the purpose of studying engineering problems that will aid in the development, use, and conservation of the natural resources of New Mexico. It is also the purpose of the Station to cooperate with the industries and government agencies within the state in the study of projects that will improve the engineering work done by these organizations.

The results of studies or investigations undertaken by the station are published as bulletins and circulars of the Engineering Experiment Station for the benefit of the people of the state.

THE INSTITUTE OF METEORITICS OF THE UNIVERSITY OF NEW MEXICO

Resident Staff:
Lincoln LaPaz, Professor of Mathematics and Astronomy, Director;
Walter Haas, Instructor in Mathematics and Astronomy, Astronomer.

Research Associates:
Dr. Frederick C. Leonard, Professor of Astronomy, University of California, Los Angeles.
Dr. Helmut E. Landsberg, Department of Meteorology, University of Chicago, Chicago, Illinois.
Dr. C. C. Wylie, Professor of Astronomy, State University of Iowa, Iowa City.
Dr. Charles E. Fenner, Director of Education, University of Adelaide, Adelaide, Australia.
Dr. Henry Dunlap, Research Division, Atlantic Refining Co., Dallas, Texas.
Dr. Fletcher Watson, Harvard College Observatory, Cambridge, Massachusetts.

The Institute of Meteoritics of the University of New Mexico apparently the first institute in the world devoted primarily to meteoritical research, has the following objectives: to promote the
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recognition and recovery of meteorites not only by systematic surveys with meteorite detectors but also by stimulating the general public to watch for and report these bodies; to carry on intensive scientific study of meteorites and of terrestrial materials metamorphosed by meteoritic impact; to advance not only such related pure sciences as meteorics but also to apply the results of meteoritical research in such practical fields as those of high altitude ballistics, ore-detection and the metallurgy of stainless steels.

The Institute is ideally located for field work in meteoritics since the University of New Mexico is situated almost in the center of that subregion of the United States in which the climate is most favorable for the long continued existence of fallen meteorites in recognizable form; in which the conditions of terrain and rainfall are most favorable for the instrumental detection of buried meteorites; and in which, as a matter of fact, most of the meteorites and all of the meteorite craters thus far found in the United States have been located.

In addition to conducting research in meteoritics and cooperating with such military agencies as Air Technical Service Command and the Optical Trajectory Section at White Sands Proving Ground, the staff of the Institute is testing and installing instrumental equipment for use in teaching observational astronomy and is collaborating with the Department of Mathematics and Astronomy in the development of new courses in astronomy and meteoritics. Furthermore, the Institute sponsors a new series of meteoritical monographs, the University of New Mexico Publications in Meteoritics.

MILITARY TRAINING

A Naval Reserve Officers' Training Corps, established by the Navy Department, is in operation at the University of New Mexico. The NROTC offers the opportunity for NROTC students to qualify for a commission in the U. S. Navy and Marine Corps and U. S. Naval Reserve and Marine Corps Reserve upon completion of the baccalaureate degree requirements.

Applicants for enrollment in the NROTC must first be accepted for enrollment by the University and then must pass the required physical examination. Entering freshmen may apply for enrollment as either Regular or Contract NROTC students. Regular students receive fifty dollars per month from the Navy, and have their tuition and books paid for by the Navy. Contract students receive only a commuted ration allowance of approximately twenty-one dollars per month during their junior and senior years.
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Regular NROTC students are commissioned in the Regular Navy or Marine Corps while contract students are commissioned in the Naval or Marine Corps Reserve.

RECREATIONAL FACILITIES

Outdoor recreational facilities on the campus include an eighteen hole golf course, baseball diamond, swimming pool, tennis courts, and riding stables. The U. S. Forest Service maintains a recreational area for popular winter sports in the nearby Sandia Mountains.
ADMISSION

APPLICATION AND CREDENTIALS

All communications regarding entrance should be addressed to the Director of Admissions. The University requires that each new student file an application for admission (blank to be found in the back of this catalog or obtained from the Admissions office). In addition, he must have his credentials sent directly to the Director of Admissions from the high school or college previously attended; transcripts in the possession of students are not acceptable for entrance purposes. In order to be assured of admission, the student must have his credentials on file in the Admissions office at least one month in advance of the beginning date for the session in which he plans to enroll. No student is assured of entrance until he has received an official notice of admission from the Director of Admissions.

FRESHMEN

Each freshman is required to present an application for admission (see above) and to have a transcript of his high school record sent to the Director of Admissions by the principal or superintendent. If the high school does not have a form for transmitting the high school record, forms may be obtained by addressing the Admissions office.

Each freshman is also required to take a series of tests which are administered just prior to registration (see the Calendar). These tests sometimes reveal information which is used in recommending the college which the freshman should enter, the courses which he should undertake, and the amount of work which it appears advisable for him to attempt. If the tests reveal a marked weakness in preparation, the University authorities may require that the student take up a special program of work in the General College (See p. 211) before he may enter upon a degree course in one of the regular colleges, or he may be required to take certain non-credit courses designed to correct such weaknesses.

The University recommends that freshmen be at least 16 years of age.

ADMISSION BY CERTIFICATE

High schools accredited by regional accrediting associations, state departments of education, or state universities are accredited by the University of New Mexico.
Graduates of accredited high schools may be admitted to the University upon presentation of transcripts showing graduation from a four-year high school with 15 units (or graduation from a senior high school with 11 units); such units to be distributed as outlined in the following paragraphs. The term “unit” means the completion of a course of study consisting of recitation periods of at least 40 minutes each, held 5 times a week during 36 weeks.

Section I. Basic Requirements—7 units:

   English—3 units
   Social Studies—1 unit (must include credit in U. S. History)
   Laboratory Science—1 unit (only Chemistry, Biology, Physics, are accepted as laboratory sciences)
   Mathematics—2 units (Algebra must be one of the units offered). Students expecting to enter the College of Engineering must offer 3 units of Mathematics including second year Algebra and Plane Geometry. Solid Geometry and Trigonometry are recommended. Students expecting to enter the College of Pharmacy or majoring in Mathematics, Physics, Chemistry, Geology, Premedic or Predental courses must present 2½ units of mathematics which must include 1½ units of Algebra and 1 unit of Plane Geometry.

Section II. Restricted Electives—4 units must be elected from the groups A-E below with no more than 2 units accepted from Group F:

   Group A.—English, Public Speaking, Journalism, Speech
   Group B.—French, Spanish, Latin, German, and other foreign languages
   Group C.—Algebra, Plane Geometry, Solid Geometry, Trigonometry, General Mathematics
   Group D.—General Science, Biology, Chemistry, Physics, Physiology, Geology
   Group E.—History, Geography, Sociology, Economics, Government
   Group F.—Home Economics, Agriculture

Section III. Free Electives—4 units:

Any units accepted towards graduation from accredited high schools may be used as free electives.

NOTE: In the admission of graduates of senior high schools, no attention will be paid to the work done in the junior high school except as that work is related to the requirements of Section I and Section II.
ADMISSION

The case of any student applying for admission with less than a C average in his previous academic work will be subject to review by the Committee on Entrance and Credits.

If the applicant is not a high school graduate, but has completed the 15 required units in an accredited high school, he may be admitted to the University upon the written recommendation of his principal or superintendent.

ADMISSION WITH ENTRANCE DEFICIENCIES

If a student has been graduated from an accredited high school but does not meet all the entrance requirements as outlined above, he may be admitted to the University on trial by the Committee on Entrance and Credits. Such students may enroll in any college (subject to results of the freshman entrance tests), and they will be allowed twelve months from the date of their first enrollment to make up entrance deficiencies.

Graduates of unaccredited or partially accredited high schools are expected, prior to registration, to take examinations to validate, or earn credit in, that portion of their work which is unaccredited or incomplete.

REMOVAL OF ENTRANCE DEFICIENCIES

Students may make up deficiencies in entrance requirements: (1) by establishing high school credits in the courses concerned; (2) by special examinations established by the Committee on Entrance and Credits; (3) by counting part of the work done during their first year in college towards entrance requirements. Five semester hours count as one unit. Course credit counted towards entrance requirements is not accepted toward a degree in the University.

Special consideration will be given to any applicant whose high school work has been interrupted.

TRANSFERRING STUDENTS

The new student who has attended other colleges or universities should request the authorities at each institution attended to send an official transcript of his record to the Director of Admissions of the University. The student is also required to submit an application for admission (blank found at the back of this catalog). When the preparatory credits have not been accepted, or have not been reported on the college transcript, a transcript of the high school work will also be required. An evaluation fee of $5.00 is payable when the application is submitted. This fee is not charged to veterans and, in the case of civilians, is used as the matriculation fee when the student registers in the University.
ADMISSION

After the application, transcripts, and evaluation fee have been received, an evaluation is made and a copy sent to the student. This copy should be retained for use at registration. It is not possible to give any information in regard to standing until the required credentials are on file.

Every new student is required to take the psychological examination prior to registration (see the Calendar).

Students from fully accredited institutions ordinarily will be given full credit for work transferred, insofar as the courses taken are the same as, or equivalent to courses offered in the college in which the student enrolls in this institution.

Only an approximate evaluation can be made prior to registration, and all credit is tentative until the student has completed at least one semester of satisfactory work in residence.

Credits transferred from an accredited junior college will be accepted up to a maximum of 64 semester hours plus 4 semesters of physical education. In accepting junior college credits, no courses will be considered as above sophomore level.

Credit earned in unaccredited institutions is usually accepted on the same basis as by the state university of the state in which the institution is situated. Where it seems proper, examinations for the validation of credit may be required. No evaluation of credit from an unaccredited institution is made until the student has completed at least 12 hours in residence at this University.

Correspondence and extension credit from institutions which are not members of the National University Extension Association must be established by examination at this institution.

The case of any student applying for admission with less than a C average in his previous academic work will be subject to review by the Committee on Entrance and Credits. A student under suspension from any other college or university will not be considered for admission during the period of his disqualification.

SPECIAL STUDENTS

Persons over twenty-one years of age who cannot meet the regular entrance requirements may be admitted as special students, provided they secure the permission of the instructors whose work they desire to take and the approval of the Dean of the college concerned. Students over 21 who do not wish to work toward degrees at the University of New Mexico may also be admitted as special students under the same conditions, provided they have not attended any college or university during the semester immediately preceding their enrollment here. Applicants coming direct from
ADMISSION

high school will not be permitted to enter as special students. By virtue of his classification, the special student is not eligible for any degree, but may become a candidate ultimately by clearing his admission status to the satisfaction of the Committee on Entrance and Credits. (See Removal of Entrance Deficiencies.)

The student entering as a special should make application on the form provided at the back of the catalog. If he intends to establish regular status here, he should present official transcripts of any high school or college credit which he may have earned previously. He may retain the classification of special student until he has accumulated 30 semester hours, after which he must declare himself, in writing, as a degree candidate, or a continuing special student. In the first case, he must attain regular status prior to his next registration; in the second, he will be allowed to register in courses as an auditor only, receiving no credit.

UNCLASSIFIED STUDENTS

Students transferring from unaccredited or partially accredited institutions are unclassified until they have validated credit in accordance with the University regulations. Students who are temporarily absent from other institutions are also registered as unclassified. In such cases statements of honorable dismissal, including scholastic status and classification, are required from the last institutions attended.

AUDITORS

Mature students may attend classes as auditors, without credit, with the permission of the instructors concerned and of the Dean of the college in which most of the audited courses lie. Auditors are required to pay fees at the same rate as if enrolled for credit. They must, upon registration, declare themselves as auditors and may not change to a credit basis after the first four weeks of the semester. A student enrolled for credit in a course may not change to an auditing basis in the same course after the first four weeks of the semester.

VETERANS

Special consideration is given to veterans. Credit for service training and experience is granted on the basis of measured educational achievement, in conformity with the procedures recommended by the North Central Association of Colleges and Secondary Schools and the American Council on Education. A maximum of 8 semester hours elective credit is allowed for basic or recruit training. Credit earned in specialized army and navy programs
conducted by college and university staffs is allowed in accordance with the recommendations of the administering institution. Credit for work done in formal training programs is allowed in accordance with the recommendations of the American Council on Education or on the basis of examinations here. U. S. Armed Forces Institute correspondence courses may be established by examination in this University. The veteran has the opportunity to demonstrate his competence in any University subject, and to establish credit in that subject, by passing an examination as required by the Committee on Entrance and Credits. Military credits (other than those earned in accredited colleges or universities under military auspices) will not be entered on the student's record here until he has completed in residence one semester of a minimum of 15 hours' work.

In accordance with the desire of the University to assist veterans in furthering their education, a regulation has been adopted which permits the admission as special students, at the discretion of the Dean of the college concerned, of persons at least 19 years of age who have been in military service and who cannot meet the regular entrance requirements. Such students are subject to all other regulations governing the status of special student. Veterans who are not high school graduates or are graduates of non-accredited high schools may gain regular entrance to the University by taking the General Educational Development Tests (high school level) at this institution, and, in most cases, are required to follow this procedure before admittance.

**GRADUATE STUDENTS**

Refer to "Other Divisions of the University."

**REGISTRATION**

**TIME OF REGISTRATION**

Students are urged to register on the days set aside for registration (see University Calendar). The late registration fee is charged to each student who does not complete his registration on the specified days. Registration contemplates completing the entire procedure, including payment of fees. Prompt registration is at all times encouraged. No student may enroll late in any course unless he has the permission of the instructor concerned. A student may not be admitted to the University more than two weeks after the opening of a semester.

**MATERIALS NEEDED**

Each student should bring his copy of the general catalog to registration. The freshman should have in his possession the notice
ADMISSION

of admission. The transferring student should have a copy of his evaluation of transferred work.

REGISTRATION PROCEDURE

Details of the registration procedure are contained in a special notice issued by the Admissions office, and distributed to students on the days of registration.

COMPLETION OF REGISTRATION

When the student has followed the prescribed registration procedure, and has paid his fees, his registration is complete. The University will hold the student responsible for completion of the courses for which he has been enrolled, unless he obtains approval for a change in his registration.

CHANGE IN REGISTRATION

See "General Academic Regulations."

MEDICAL EXAMINATIONS

A medical examination, including a Wasserman test and a tuberculin skin test, is required of each new student following registration. These tests are given without charge by the University Physician, but students who, without valid reason, fail to keep their examination appointments may have their registration cancelled. Students will be re-examined annually by the University Physician when such examinations are indicated. Health-seeking students are accepted at the University if, in the judgment of the University Physician, their work does not endanger themselves or their associates. The University may refuse registration to, or cancel the registration of, any student who is physically unfit to carry on class work, or whose physical condition might be a menace to the health of other students.
ERRATUM

The Student Activities Fee was increased after the catalog went to press to $10.86.

<table>
<thead>
<tr>
<th></th>
<th>Total Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident students</td>
<td>$ 78.86</td>
</tr>
<tr>
<td>Non-resident students</td>
<td>$178.86</td>
</tr>
</tbody>
</table>
STUDENT EXPENSES

TUITION AND FEES

All fees are due at the time of registration. A fee of $2.00 will be assessed if registration is not completed on the days specified.

In addition to the matriculation fee of $5.00, which is paid once by each student upon his first registration in the University, other fees are charged according to the number of semester hours in the student’s course. Auditors pay fees at the same rate as if enrolled for credit.

REGISTRATION FEES, UNDERGRADUATE STUDENTS, PER SEMESTER

<table>
<thead>
<tr>
<th></th>
<th>More than six hours</th>
<th>Three to six hours</th>
<th>Three hours or less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition*</td>
<td>$40.00</td>
<td>$20.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Health Fee</td>
<td>3.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Activities Fee†</td>
<td>9.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Bond Fee</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Building Fee</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Breakage Deposit‡</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Library Fee</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>$77.36</td>
<td>$45.00</td>
<td>$40.00</td>
</tr>
</tbody>
</table>

*If a non-resident, add tuition...

100.00

$177.36

†Includes $.86 Federal Tax

REGISTRATION FEES, GRADUATE STUDENTS, PER SEMESTER

<table>
<thead>
<tr>
<th></th>
<th>More than six hours</th>
<th>Three to six hours</th>
<th>Three hours or less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition*</td>
<td>$40.00</td>
<td>$20.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>Health Fee</td>
<td>3.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Bond Fee</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Building Fee</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Breakage Deposit‡</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Library Fee</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>$68.00</td>
<td>$45.00</td>
<td>$40.00</td>
</tr>
</tbody>
</table>

*If a non-resident, add tuition...

100.00

$168.00

Note: Graduate students enrolled for thesis only pay a $15.00 tuition fee, and breakage deposit.

‡ Paid once yearly and refundable, less charges.
STUDENT EXPENSES

OTHER FEES FOR SPECIAL SERVICES

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in program after end of second week, except upon written request of the instructor</td>
<td>$1.00</td>
</tr>
<tr>
<td>Late registration fee</td>
<td>2.00</td>
</tr>
<tr>
<td>Late physical examination fee</td>
<td>1.00</td>
</tr>
<tr>
<td>Fee for removal of Incomplete grade</td>
<td>2.00</td>
</tr>
<tr>
<td>Examination for validation of credit, per course</td>
<td>2.00</td>
</tr>
<tr>
<td>Other special examinations</td>
<td>2.00</td>
</tr>
<tr>
<td>Examination for advanced standing, per credit hour</td>
<td>2.50</td>
</tr>
<tr>
<td>Transcript of credits (extra copies 25c each)</td>
<td>1.00</td>
</tr>
<tr>
<td>Penalty for dishonored checks</td>
<td>1.00</td>
</tr>
<tr>
<td>Diploma fee, bachelor’s or master’s degree</td>
<td>10.00</td>
</tr>
<tr>
<td>Binding master’s thesis, per copy</td>
<td>1.50</td>
</tr>
<tr>
<td>Graduate Record Examination (Graduate students only)</td>
<td>3.00</td>
</tr>
<tr>
<td>Evaluation of Transcript (adv. standing)</td>
<td>5.00</td>
</tr>
</tbody>
</table>

ADDITIONAL FEES

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual music instruction (except vocal coaching), per credit hour</td>
<td>$11.25</td>
</tr>
<tr>
<td>*Vocal coaching, per credit hour</td>
<td>22.50</td>
</tr>
<tr>
<td>*Accompanying, per credit hour</td>
<td>22.50</td>
</tr>
<tr>
<td>Piano Ensemble: one half-hour lesson per week (1 credit hour)</td>
<td></td>
</tr>
<tr>
<td>In group of two students, per student</td>
<td>11.25</td>
</tr>
<tr>
<td>In group of three or more, per student</td>
<td>7.50</td>
</tr>
<tr>
<td>Equitation, per semester</td>
<td>20.00</td>
</tr>
<tr>
<td>Ski Lessons, per semester</td>
<td>10.00</td>
</tr>
<tr>
<td>Organ rental, per semester</td>
<td>12.00</td>
</tr>
<tr>
<td>Use of practice rooms (other than pipe organ):</td>
<td></td>
</tr>
<tr>
<td>1 hour per day, per semester</td>
<td>4.00</td>
</tr>
<tr>
<td>2 hours per day, per semester</td>
<td>6.00</td>
</tr>
<tr>
<td>3 hours per day, per semester</td>
<td>8.00</td>
</tr>
<tr>
<td>4 hours per day, per semester</td>
<td>10.00</td>
</tr>
</tbody>
</table>

For Master Classes in piano and other instruments (or private instruction by visiting instructors) the University reserves the privilege of charging special fees for instruction and practice rooms.

NON-RESIDENT TUITION FEES. A non-resident student shall be charged not less than Two Hundred and Eighty Dollars ($280.00) per year tuition, based on a nine month school year; providing that any student having graduated from a non-resident high school shall

* Any student taking vocal coaching may arrange with a student taking accompanying to take their lessons at the same hour (and vice versa), in which case the fee payable by each student will be reduced to $11.25 per credit hour.
STUDENT EXPENSES

be considered a non-resident unless he or she shall have spent not less than twelve (12) months in residence in the state of New Mexico after becoming twenty-one (21) years of age while not attending school, or whose parents are legal residents of the state.

Upon request of the University authorities, students must furnish proof of their residence in the state of New Mexico. If a person other than the parent is named as guardian, the student will be required to furnish evidence of court appointment.

HEALTH FEE. The University maintains a full-time physician with offices in the Infirmary. All students enrolled for seven or more semester hours are eligible to consult him in case of illness or injury. The physician's office is reasonably well equipped with instruments and medicines, and any work which can be done in the office is financed by the semi-annual health fee. Major and minor surgery and critical illness will be referred to local physicians at the student's expense.

STUDENT ACTIVITIES FEE. The assessment of this fee is a voluntary action of the student body, through its organization, the Associated Students of the University of New Mexico. At registration, the University collects this fee as an accommodation to the Associated Students. The activities fee is distributed to the student organizations as shown in the Constitution of the Associated Students. Copies of the Constitution may be obtained from the Personnel office.

STUDENT ACCOUNTS. Students are required to pay all accounts due the University during one semester before registering for a new semester.

WITHDRAWALS AND REFUNDS. All fees, except the matriculation fee, will be refunded to students voluntarily withdrawing from the University before the end of the second week of the session. Students voluntarily withdrawing later than the second week, but before the end of the eighth week of the semester will be entitled to a refund of one-half of the tuition, and the breakage deposit. Students withdrawing after the eighth week and students withdrawing at any time under discipline or because of academic deficiencies, will be entitled to a refund of the breakage deposit only.

ESTIMATE OF TOTAL EXPENSE. The minimum amount necessary for expenses while attending the University of New Mexico for a semester is estimated as follows:
STUDENT EXPENSES

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees</td>
<td>$89.00</td>
</tr>
<tr>
<td>Books and supplies</td>
<td>25.00</td>
</tr>
<tr>
<td>Board and room</td>
<td>225.00</td>
</tr>
<tr>
<td>Laundry (sent off campus)</td>
<td>30.00</td>
</tr>
</tbody>
</table>

Non-resident students should add $100.00 to the tuition costs. Women students in residential halls are charged a recreational and social fee of $1.50 per semester.

These estimates are based upon current rates; all charges are subject to change without notice.

DINING AND RESIDENTIAL HALLS

For regulations governing residence in University halls, see p. 46.

NEW STUDENTS

The Director of Admissions will study each student's application for admission and his high school or college transcript. When these are found to be in order, and it has been determined that housing facilities are available, the procedure will be as follows:

1. The student will be informed of his acceptance and will be requested to forward a check or money order to cover room and board charges for one month in advance. This remittance should be made to the Director of Admissions, University of New Mexico.

2. When the student's remittance is received at the University, the Personnel office will advise the student regarding a definite residential hall assignment and will provide a list of furnishings needed. When the student has received this assignment information, any further correspondence regarding living quarters should be sent directly to the Personnel office. Men students should address their correspondence to the Dean of Men, women students to the Dean of Women. Upon arrival at the University the new student should report directly to the Head Resident of the residential hall to which he has been assigned. The student should plan his time of arrival between 8:00 a.m. and 10:00 p.m. Receipts for advance room and board should be presented to the Head Resident and to the Collection Manager for Dining and Residential Halls.

STUDENTS REQUESTING READMISSION

A student who has previously attended the University, but who is not presently enrolled and is requesting readmission, should follow the procedure outlined above for new students. The student
requesting readmission should correspond with the Director of Admissions. The student will be informed that his admission records have been verified, and that housing facilities are available, and he will be requested to make remittance to cover board and room for one month in advance. A residential hall assignment will be made when the student's remittance is received.

STUDENTS CONTINUING ATTENDANCE

Students in attendance are required to make housing reservations for the following term not less than three weeks before the ending of the term in which they are enrolled. Requests for such reservations should be made through the Personnel office. Student occupancy in residential halls, including the Kirtland Housing Project, is on a semester basis. Unless advance notice of intention to remain for the following semester is made in writing to the Personnel office, living quarters may be assigned to another student. Specific information regarding exact dates and amount of advance room and board payments will be announced in time for the student to make necessary arrangements.

CHANGES IN STUDENT'S PLANS

Should an applicant for admission or readmission to the University find it impossible to keep an advance reservation, he should notify the Personnel office not later than one week before the first day of registration. In such cases advance room and board payments will be refunded.

MEALS FOR STUDENTS LIVING IN RESIDENTIAL HALLS

All students occupying rooms in residential halls, including Kirtland Field, are required to take their meals at the University dining halls. Room and board are therefore considered as one charge, the amount varying slightly depending upon the type of residential assignment for each student. Room and board charges are payable in advance and are due before the first day of each month.

STUDENT CONTRACTS

All students residing in residential halls are required to sign a contract form covering rules and regulations of the University.

RATES—ROOM AND BOARD

The following current rates for campus room and board are subject to change whenever necessary to defray operating costs:

WOMEN’S RESIDENTIAL HALLS. Charges for room and board per calendar month:
STUDENT EXPENSES

Hokona-Marron
Single rooms ................................................. $55.00
Double Rooms, per person ................................. 53.00
Three or more, per person .................................. 50.00

Bandelier
All rooms, per person ........................................ 52.50

Mesa Vista
All rooms, per person ........................................ 52.00
Recreational and social fee per semester .............. 1.50

Whenever a room is occupied for more than one-half month, the full rate for the month will be charged. Occupancy of a half month or less is charged at the minimum rate of one-half month.

Men's Residential Halls. The University maintains a housing project for single men students at Kirtland Field. A dining hall is operated for students residing at Kirtland Field. Charges per calendar month per person:

Single room and board .................................... $50.00
Double room and board .................................. 47.50

Family Units. A number of family dwelling units are maintained at Kirtland Field and on the campus for married veterans. Available units are now assigned, and many applications are on file for possible vacancies during the 1947-48 school year. Rates for family dwelling units:

1 bedroom (unfurnished) .................................. $31.50
2 bedroom (unfurnished) .................................. 34.50

Rates—Dining Hall

When facilities permit, students living off campus are permitted to eat at the dining hall.

Board only per calendar month for non-residents of the dormitories ........................................... $40.00

Single Meals (Cash)
Breakfast ...................................................... $0.30
Luncheon ..................................................... .55
Dinner ......................................................... .75
Dinner (Noon Sunday and Holidays) ..................... 1.00

Guests. With the consent of the Head Resident or Chaperon, students may entertain guests overnight at the residential halls. The guest will be charged fifty cents (50¢) per night.
STUDENT EXPENSES

guest is to have meals at the dining hall, the clerk should be notified in advance, and the guest's meals must be paid for at that time.

REFUNDS. No refund is made on room rent, except when paid for more than a month in advance, or under conditions outlined on page 41. Refunds for board are made only for authorized absences of seven or more consecutive days. These absences must be authorized in writing by the Dean of Men or the Dean of Women, and in cases of illness with the approval of the University Physician.
STUDENT PERSONNEL SERVICES

ORIENTATION

At the opening of each semester a "Freshman Program" is conducted. (See the Calendar.) The purpose of this program is to acquaint the freshman with some of his fellows, to help him to feel more at home in new surroundings, to permit him to meet advisers and counselors, and to familiarize him somewhat with University methods and life. In addition to the preliminary registration and the various tests, numerous recreational and educational events are held.

Attendance of all freshmen with less than 10 semester hours credit is required during the entire Freshman Program period, but transferring students who have less than 60 hours of college credit are advised to attend all meetings except the tests. All new students are required to take the psychological test.

In order to make a comparison of the ability, training, and background of the different members of the freshman class, the University administers a series of intelligence, placement, and achievement tests. A medical examination is also required for each student. Deans and advisers consider these tests quite helpful to the consultation and guidance relationships with the new student. The tests are designed principally to reveal the student's aptitude for college work, and to assist in placing the student in courses of the proper level.

Every student registered in freshman English is examined as to his ability to use clear, correct, idiomatic English. No student can pass this test or continue in English I who shows serious weakness in spelling, punctuation, grammar, diction, or sentence structure. Students who do not pass the test are enrolled in English A.

The Personnel office issues a Freshman Handbook which contains information on student organizations, library rules, campus regulations, suggestions for effective study, etc.

During his first registration, each new student is assigned to a faculty adviser who assists him in planning his academic program. The adviser keeps a permanent file on each of his advisees and is available for consultation at any time. Some colleges require, during the first semester of the freshman year, an orientation course pertinent to their respective programs.
STUDENT PERSONNEL SERVICES

COUNSELING

The University of New Mexico has established Counseling and Testing Services which provide guidance services to any students who wish them. Counseling is available regarding such problems as choosing an occupation, selecting "majors" and "minors," improving reading and study skills, dealing with personal, social, or emotional adjustment problems, and any other matter in which professional psychological assistance may be of use. The Services utilize standardized tests of occupational and scholastic aptitudes, interests, and achievement, in addition to reading and study skills tests, personality and personal adjustment inventories, and other tests. These services are available to any University student free of charge. Non-veterans may arrange for counseling and testing by contacting the Head of the University Counseling and Testing Services, Yatoka Hall. Veterans should receive approval from the Veterans Administration Guidance Center in Yatoka Hall before arranging for occupational counseling by the University Services but do not need such approval in order to receive assistance from the University Counseling Services regarding other problems.

In addition to providing individual guidance, the University Counseling and Testing Services supervise the administration, scoring, and interpretation of such testing programs as the entrance and placement examinations, sophomore proficiency tests, the Graduate Record Examination for graduate students and seniors, the state-wide testing of high school seniors, the General Educational Development Tests for veterans who did not complete high school, special placement tests for colleges in the University, and others.

HEALTH SERVICE

The University Health Service, with a staff of two physicians and five graduate nurses, operates a Dispensary and Infirmary. Each freshman on admission receives a routine physical examination, including a blood test and a skin test for tuberculosis. The health status of the student is determined, and advice and curative measures are offered to permit him to receive the greatest possible benefit during his college years. Re-examinations of students are made when the staff feels that such re-examinations are indicated. The college physicians may exclude from dormitories and classrooms students suffering from contagious or communicable diseases.

Students are encouraged to avail themselves of the services of the University Physician who maintains morning and afternoon office hours at the dispensary. Although the Medical Service is primarily for ambulatory students with minor ailments or injuries,
STUDENT PERSONNEL SERVICES

the University Physician makes calls on campus residents who are ill, when requested by the matrons of the various dormitories. The Infirmary is open twenty-four hours a day. All students have the benefit of professional diagnosis of any illness. If needed, hospitalization and treatment for acute illnesses of relatively short duration may be provided. Students with chronic illnesses or those requiring major surgery are referred to the local city hospitals.

The Health Service maintains a constant supervision over sanitary conditions in dormitories and classrooms, in the swimming pool, and in the food handling departments. There is also a constant supervision over water and milk supplies.

RESIDENTIAL HALLS—REGULATIONS

Living quarters in residential halls are available to undergraduate men and women students (see pp. 40-42). Occasionally, rooms are available to students in private homes in the city, but men and women students are not permitted to room at the same residence.

All undergraduate women whose homes are not in Albuquerque are required to live in the University residential halls or sorority houses. Freshmen women whose homes are not in Albuquerque are required to live in University residential halls for one calendar year regardless of social affiliations.

Exceptions to this regulation include: special adult students; regularly enrolled students who are over twenty-one years of age, and registered for 6 hours or less; women students who are working for board and room in approved homes.

No woman student may change her place of residence without the consent of the Dean of Women. The University reserves the right to determine where a student may reside.

All occupants of residential halls must vacate their rooms by 5:00 p.m. on the last day of the semester unless they expect to return for the following semester.

Both men and women students residing in housing facilities provided or controlled by the University are subject to University rules and regulations pertaining to those facilities.

STUDENT ORGANIZATIONS

ASSOCIATED STUDENTS. The students of the University constitute a general student body organization which is called "The Associated Students of the University of New Mexico," and which controls the other organizations of general interest.

ASSOCIATED STUDENTS COUNCIL. The Associated Students Council is the administrative agent of the Associated Students of the
University. Representatives of the Council are elected from the student body.

**Student Senate.** The Student Senate is the other governing board of the student body. It is composed of a representative from each organization on the campus.

**Associated Women Students.** The Associated Women Students is composed of all regularly enrolled women students of the University. The purpose of the organization is to secure uniform and broad social interests among University women. It is governed by a council, the members of which are representatives of all women’s organizations on the campus.

**Professional and Honor Societies.**

- **Alpha Kappa Delta**—national honorary sociology fraternity
- **American Institute of Electrical Engineering (Student Chapter)**—for students in the Department of Electrical Engineering
- **American Society of Civil Engineers (Student Chapter)**—for students of the junior and senior classes in the Department of Civil Engineering
- **American Society of Mechanical Engineers (Student Chapter)**—for students in the Department of Mechanical Engineering
- **Apothecaries**—for students in the College of Pharmacy
- **Art League of New Mexico**—Membership open to faculty, students, and townspeople interested in art
- **Catalyst Club**—for students of chemistry
- **Delta Phi Delta**—national honorary art fraternity
- **Engineering Society**—for all students enrolled in the College of Engineering
- **Kappa Mu Epsilon**—national honorary mathematics fraternity
- **Kappa Omicron Phi**—national professional fraternity for students of home economics
- **Khatali**—senior honorary society for men
- **Mortar Board**—national honorary organization for senior women
- **Phi Alpha Theta**—national honorary fraternity for students of history
- **Phi Kappa Phi**—national honorary scholastic society
- **Phi Sigma**—national organization for the promotion of interest in research in biological sciences
- **Pi Gamma Mu**—national honorary fraternity for students of the social sciences
STUDENT PERSONNEL SERVICES

Pi Lambda Theta—national organization for women in College of Education
Pi Sigma Alpha—national honorary fraternity for students of political science
Psi Kappa—local professional organization for students in the College of Pharmacy
Sigma Alpha Iota—national professional organization for the recognition of merit of students in the music department
Sigma Tau—national honorary fraternity for students in the College of Engineering
Sophomore Vigilantes—honorary organization for sophomore men
Spurs—national honorary organization for sophomore women
Tau Kappa Alpha—national honorary debating society
Theta Alpha Phi—national honorary dramatic organization for University students and alumni
Theta Chi Delta—national honorary fraternity for chemistry students

For information in regard to other student organizations and activities, see the Freshman Handbook.

SOCIAL GROUPS.
Fraternities: Kappa Alpha, Kappa Sigma, Phi Delta Theta, Pi Kappa Alpha, Sigma Chi, Sigma Phi Epsilon, Sigma Alpha Epsilon
Sororities: Alpha Chi Omega, Alpha Delta Pi, Chi Omega, Kappa Kappa Gamma, Pi Beta Phi
Other social groups: Independent Men, Phrateres, Town Club, Veteran's Association, and American Veteran's Committee.

Fraternity and sorority relations are controlled by the Interfraternity Council and the Panhellenic Council respectively. These organizations also take prominent places in student activities.

RELIGIOUS ACTIVITIES
Practically all religious denominations are represented in the city of Albuquerque. The churches all welcome the University students and invite them to share in their religious life and services. The University maintains a policy of non-sectarianism, but encourages its students to affiliate with the religious organizations of their choice and to attend services regularly.

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STUDENT PERSONNEL SERVICES

The World Student Christian Fellowship group is an interdenominational organization of Protestant students in the University campus, meeting weekly in the Student Union Building. Plans are underway for the establishment of a full-time office of Director of Religious Work among the Protestant student groups of all denominations on the campus. This effort is being sponsored and largely supported by nine of the leading churches in the city.

The Newman Club on the campus serves all Catholic students in their religious life in the University.

ATHLETICS

All athletic activities are under the direction of the Athletic Council, and are subject to the approval of the faculty and the President of the University. The University also sponsors an intramural program, designed to supplement the prescribed courses in physical education.

Intercollegiate athletics are governed by regulations of the Border Intercollegiate Athletic Conference, of which the University is a member.

Varsity sports include football, basketball, track and field, baseball, tennis, golf, and swimming; the intramural program includes swimming, tennis, handball, golf, cross-country, track and field, volleyball, touch football, bowling, baseball, LaCrosse and softball.

STUDENT PUBLICATIONS

The New Mexico Lobo, the campus newspaper, is published twice each week, and The Mirage is the campus year book issued at the end of the spring semester each year.

The Thunderbird is a literary magazine issued twice during each semester and carries literary contributions submitted by the students on the campus.

All of the above publications are edited and managed by students under the supervision of the Student Publications Board comprising both student and faculty members, the majority of the Board, however, being student members.

The student editors and managers of these publications are elected by the Publications Board for a period of two semesters.

OTHER EXTRACURRICULAR ACTIVITIES

Albuquerque Little Theatre  University Band
Dramatic Club  Men's A Capella Chorus
Speakers' Club  Women's Chorus
STUDENT PERSONNEL SERVICES

Albuquerque Civic Symphony  Boots and Saddles Club
University Concert Series  University Ski Club

ALUMNI ASSOCIATION

The Association is maintained through the coöperative efforts of the University and the alumni and is governed primarily by an executive committee elected annually by alumni. All graduates and all former students with ten hours or more of credit are eligible for membership in the Association.

The Alumnus, official organ of the Association, is published monthly except during July and August and is edited by the Managing Director of the Association and his staff. The magazine is distributed to 2500 alumni monthly.

All graduates, upon payment of diploma fees, are entitled to a three year membership in the Association.

The Alumni Association Managing Director also coördinates Homecoming plans and organizes alumni chapters throughout the country. Complete alumni records and military service files are maintained by the Association staff.

The Association's offices are located in rooms 6 and 7, Student Union Building patio.

STUDENT AID

EMPLOYMENT

The University student employment office is maintained to aid those students who find it necessary to earn a part of their expenses while attending the University. Any student requiring part-time employment is requested to file an application with the Personnel office. Applications for campus employment must be renewed each year.

The following principles are the basis of selection of candidates through the student employment office: (1) the establishment of the actual need of the student; (2) scholarship; (3) re-employment to be based on satisfactory service and scholarship.

LOAN FUNDS

The University administers, under the direction of the Student Loan Committee, its own Student and Alumni Loan Fund and coöperates in the administration of several others.

The maximum amounts available from this fund respectively for sophomores, juniors, and seniors are $50, $75, and $100, with the provision that the succeeding amount shall be loaned each year upon repayment by the student of at least half the sum previously
borrowed. The fund is not set up to handle loans for amounts smaller than those mentioned in this paragraph.

The general rules applying to these loans are as follows:

1. The student must have been in residence at the University for at least one year.

2. He must be receiving grades of C or better in subjects which he is carrying; preference will be given to worthy students with the higher ratings in scholarship.

3. Students receiving loans will be required to give notes with endorsers as prescribed by the Comptroller’s office.

Other loan funds available to students at the University are: The American Association of University Women's Loan Fund; Revolving Loan Fund of the Ancient, Free, and Accepted Masons of New Mexico; Educational Loan Fund of the Grand Commandery of Knights Templar of New Mexico; The McGaffey Memorial Loan Fund of the Albuquerque Rotary Club; The Women's Club Loan Fund; The Altrusa Club Loan Fund; The Phratres Loan Fund; and The Mortar Board Loan Fund.

AWARDS

Announcements of awards for scholarships, prizes, and medals, are made by the President of the University after recommendations have been made to him by the Committee on Awards.

SCHOLARSHIPS

In the spring of each year the University sponsors a state-wide academic achievement test for senior students among a majority of the high schools of the state of New Mexico.

The students ranking within the top ten percent of the entire group in the state who took the test will be eligible to request tuition scholarships. These scholarships are equal to the amount normally charged for tuition to resident students of New Mexico. The awarding of these tuition scholarships is based on the actual need of the student for such aid.

In cases of extreme need, the recipients of these tuition scholarships will in addition be given preference for part-time employment and other scholarships, prizes, or awards on the University campus.

Those students ranking in the top ten percent in the state-wide tests will be notified of the fact immediately after the tests have been graded and will be asked to return a brief questionnaire to the Personnel office indicating their plans regarding enrollment at the
STUDENT PERSONNEL SERVICES

University of New Mexico and their need of financial assistance. Since the number of New Mexico students needing financial aid is so great, those students who do not actually need such aid are asked to refrain from requesting it through either the tuition scholarships or through part-time employment.

The Regents of the University have made available a number of additional partial tuition scholarships, the total of all scholarships given not to exceed two per cent of the University enrollment of the previous year. These scholarships are allotted to New Mexico students who show promise of high academic achievement, good character, and whose need for financial aid can be demonstrated.

Resident students in this category shall, in all cases, be required to pay a minimum tuition fee of $10.00. In cases of extreme need, students may apply for part-time employment in addition to the assistance received from the partial tuition scholarships.

The Regents have also approved a plan for the granting of tuition aid to a small number of non-resident students whose good character, academic ability, and need for financial assistance can be demonstrated. Non-resident students granted such tuition aid shall, in all cases, be required to pay a minimum tuition fee of $25.00.

In order to continue to receive the benefits of any of the types of tuition scholarships at the University the student is required to have attained at least a "C" average by the end of the first term of the first year, a "C +" or 1.5 average by the end of the second term of the first year and in all subsequent terms.

All students receiving aid through any type of scholarships or part-time jobs will be required to maintain a satisfactory scholastic average.

Application for these scholarships and for work assistance can be made through the Personnel office.

Scholarships and Fellowships for graduate students are also available. Application for these may be made to the Dean of the Graduate School.

Scholarships of more than one hundred dollars are paid in two installments: one at the beginning of the first semester, and the other at the beginning of the second semester.

THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN SCHOLARSHIP. A scholarship of $50 is granted by the Albuquerque branch of the A. A. U. W. to promote advanced college training for women. It is given to a student who has earned at least 90 semester hours in this institution and who will enroll for a regular course the following year as a senior or as a graduate student. Selection is
made on the basis of scholarship, of financial need, and of general ability as indicated by recommendations from professors.

The Philo S. Bennett Scholarship. The income from a trust fund of $1,200 is awarded annually to a woman student, at the beginning of the second semester of her freshman year, who is most worthy, who has resided in New Mexico for at least the preceding four years, and who will continue as a resident student in the University.

The Clarence Milton Botts, Jr., Memorial Scholarship. The income from a trust fund of $5,000, given by Dr. W. R. Lovelace as a memorial to Lieutenant Colonel C. M. Botts, Jr., who was killed in action near Manila, Philippine Islands, May 15, 1945, is awarded each year to a premedical student of junior or senior rank who is outstanding in scholarship and who gives promise of being a good medical student.

The James M. Doolittle Scholarship. The interest from a trust fund of $1,000 established by Mrs. J. M. Doolittle in memory of her husband, Mr. James M. Doolittle, is awarded each year to a student who has made a high scholastic average in a New Mexico high school, who enters the University of New Mexico as a freshman, and who is in need of financial assistance.

The Faculty Women’s Club Scholarship. Fifty dollars is awarded to a senior or junior woman on the basis of need and scholarship. This award is given the second semester of each academic year.

The Alfred Grunsfeld Memorial Scholarships. The income from a trust fund of $5,000 provides two scholarships for men. These are awarded at the same time as the Miriam N. Grunsfeld Scholarships and are governed by the same general conditions.

The Miriam N. Grunsfeld Scholarships. The income from a $5,000 trust fund provides two scholarships for women. The conditions governing the Grunsfeld scholarships are as follows: (1) Students must be residents of the state of New Mexico; during the academic year immediately preceding the award, they shall have been in actual attendance at the University as full-time students; they shall not be above the rank of junior; and three of the recipients shall have been enrolled in the Department of History or the Department of Government and Citizenship (the fourth may be enrolled in any department of the University). (2) In selecting the students to receive the awards, consideration is given to their general scholarship, and to their financial need.
STUDENT PERSONNEL SERVICES

THEIVES MEMORIAL SCHOLARSHIPS. These scholarships were established in memory of Julia Louise Ives and Helen Andre Ives. The income from a $15,000 fund provides three scholarships for women students. Candidates must be residents of New Mexico, preferably living in Albuquerque, in good health, of good moral character, of high scholastic standing, and they must intend to teach. The scholarships are awarded annually by the President of the University in July of each year.

FREDERICK HERBERT KENT AND CHRISTINA KENT SCHOLARSHIPS. Three scholarships are awarded annually to the high school students, residents of the state, who are deemed most worthy by the superintendent of the Albuquerque city high school, and by the University. They will be paid in two installments upon registration in each of the two terms of the freshman year, contingent upon enrollment for a full course of study and successful scholastic work.

NEWMAN CLUB SCHOLARSHIP. An annual scholarship of $50 established in the memory of Eva Boegen is awarded to a regularly enrolled student who renders outstanding service to the Newman Club of the University of New Mexico during the academic year.

THE PHRATERES CLUB TUITION SCHOLARSHIP. Twenty dollars is given to a sophomore member of Phrateres by the Phrateres Mothers' Club on the basis of the highest scholastic average for the first one-half year of course work. She must have carried a minimum schedule of 15 hours of study.

THE RHODES SCHOLARSHIPS. The trustees of the will of Cecil Rhodes have modified the manner of selection of the Rhodes scholars to provide for a maximum of thirty-two scholars each year, each scholar to receive an honorarium of $2,000 per year and to study two or three years in Oxford University, England.

Early in the fall semester, a committee of the faculty of the University nominates candidates to the state committee for selection. This committee selects two men to represent the state of New Mexico before the district committee, which, in turn selects no more than four scholars to represent the six states which compose a district.

SPUR SOPHOMORE SCHOLARSHIP. Fifty dollars provided by Spur, Sophomore women's honorary organization, is given to a woman student upon completion of her freshman year (two consecutive semesters). Selection is made on the basis of scholarship, leadership, and participation in campus activities and the award is made at the beginning of Semester I.
THE THOMAS M. WILKerson MEMORIAL SCHOLARSHIP. The income from a trust fund of $5,000, established by Dr. W. R. Lovelace in honor of Thomas M. Wilkerson, who was killed January 29, 1946, while in the service of his country, is awarded each year to a junior or senior premedical student who is outstanding in scholarship and who gives promise of being a good medical student.

PRIZES

The Alpha Delta Pi Prize. Twenty-five dollars is given by the Albuquerque Alumnae Club of Alpha Delta Pi to a sophomore woman, majoring in art, on the basis of need and ability.

The Dove Asch Prize. Ten dollars is given to an upperclasswoman, with a major or minor in physical education, on the basis of general excellence among the students in that Department.

The George E. Breece Prize in Engineering. A cash prize consisting of the income from a $600 trust fund is awarded to a graduating senior in engineering, who is enrolled for a full time course of instruction, upon the basis of character, general ability, and excellence of scholastic record as shown during the last two consecutive years of residence in the University.

The Chi Omega Prize in Economics. Fifteen dollars is awarded each year to the regularly enrolled woman student (Chi Omega members excepted) who has done the best work in economics during the academic year. Selection is made on the basis of scholarship.

The Charles Florus Coan Prize. The income from a trust fund donated by faculty and friends as a memorial to Charles Florus Coan, Ph.D., Professor of History and Political Science, is awarded annually, for excellence in scholarship, to a worthy student whose major field of study is history.

The Marian Coons Prize. A memorial prize consisting of the interest from a $750 trust fund is given each year to the regularly enrolled senior in the Department of Home Economics who is voted the most kind by her classmates and teachers in that Department.

The Harry L. Dougherty Memorial Prize in Engineering. A cash prize consisting of the income from a trust fund contributed by colleagues, students, and friends, as a memorial to Mr. Harry L. Dougherty, Assistant Professor of Civil Engineering, is awarded each year to the student in the College of Engineering who has made the highest scholastic average in residence during his freshman and sophomore years while carrying a normal course of study.
STUDENT PERSONNEL SERVICES

THE CHARLES LEROY GIBSON PRIZE. The interest from a trust fund created by students and colleagues of Charles LeRoy Gibson, Ph.D., Associate Professor of Chemistry, 1943-44, is given to the senior student, major or minor in chemistry, who is judged most outstanding by the faculty of that Department.

THE H. J. HAGERMAN PRIZE. An annual $50 cash prize was established by the New Mexico Taxpayers Association in 1938. This is awarded to the regularly enrolled undergraduate student who presents the best original study in the field of taxation and public finance in New Mexico. The study should be submitted by December 1st to the faculty of the Department of Economics and Business Administration.

THE TELFAIR HENDON, JR., MEMORIAL PRIZE. The interest from a trust fund of $500 established by John F. Hendon in memory of his brother, Telfair Hendon, Jr., Fellow and Instructor in English, 1930-33, is given to the graduating senior who has achieved the highest scholastic record as a major in the Department of English.

THE WILLIAM A. MCCARTHY PRIZE. Twenty dollars is given for the best research paper on the history of New Mexico. This award is made on the recommendation of the Department of History.

THE MARCELLA REIDY MULCAHY MEMORIAL PRIZE. The Kappa Kappa Gamma Alumnae Association grants $10.00 to the student who, in the opinion of a special committee appointed by the Head of the English Department, has excelled in the composition of poetry.

THE NEW MEXICO SECTION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS AWARD. A certificate of merit with entrance dues paid for junior membership in the American Society of Civil Engineers, together with a membership badge, is given to a graduating student in civil engineering who excels in scholarship, holds membership in the student section of the engineering society, is active in student engineering organizations, and who, in the opinion of his professors, shows promise of becoming a successful engineer.

THE PHI KAPPA PHI PRIZES. Two cash prizes of $10.00 are awarded to the man and woman who, while carrying a full time course of study, rank highest in general scholarship for the freshman year.

THE PHI KAPPA PHI SENIOR PRIZE. Twenty dollars is given each year by the local chapter of Phi Kappa Phi to the graduating
senior of any of the five colleges of the University who makes the highest scholastic record of his class.

**The Rose Rudin Roosa Prize.** The income from a $1,000 trust fund is awarded each year to the upperclassman or graduate student in the Department of Government and Citizenship who has indicated, in the opinion of his professors, the most positive interest in the development of good citizenship. A paper is required.

**The George St. Clair Memorial Prize.** The interest from a trust fund established by colleagues, students, and friends of George St. Clair, Professor of English, 1923-43, Department Head and Dean of the College of Fine Arts, is granted to the student who has made the greatest contribution in acting, stage design, lighting, or production in the Department of Dramatic Art.

**The Katherine Mather Simms Memorial Prize.** A cash prize consisting of the income from a $250 trust fund is awarded each year to a regularly enrolled undergraduate, who has been in residence at least one term preceding the time of the contest, on the basis of excellence in prose composition and on the quality of a competitive essay. The decision is made by the faculty of the English department and the Dean of the College of Arts and Sciences.

**The Lenna M. Todd Memorial Prize.** The interest from a trust fund of approximately $2,000 is available annually to be awarded to the student or students doing the best work in creative writing in the Department of English. This endowment was created by the will of Dana Paul Todd, as a memorial to his mother, Lenna M. Todd. Dana Todd, Class of '33, served in the United States Army in the Philippines and died in a Japanese prison camp at Osaka, on or about August 15, 1943.

**MEDALS**

**The C. T. French Medal.** The medal is awarded to a graduating senior of the College of Arts and Sciences who has obtained, during his last two years of continuous residence, the highest general average for scholarship in a program of not less than fourteen credit hours a semester.

**The Phi Sigma Medal in Biology.** This medal is awarded each year by the National Society of Phi Sigma to a regularly enrolled student in the University of New Mexico for excellence in biology and promise of future achievement.
GENERAL ACADEMIC REGULATIONS

CLASS HOURS AND CREDIT HOURS

A class hour consists of fifty minutes. One class hour a week of recitation or lecture, throughout a semester, earns a maximum of one credit hour. One class hour a week of laboratory, orchestra, chorus, or physical training, throughout a semester, earns from one-third to one-half credit hour. One half-hour individual lesson a week in applied music, throughout a semester, earns two credit hours.

GRADES

The grades awarded in all courses are indicative of the quality of work done. Their significance is as follows:

A, Excellent. 3 grade points per credit hour.
B, Good. 2 grade points per credit hour.
C, Average. 1 grade point per credit hour.
D, Barely Passed. No grade points.
F, Failed. F is also given in any course which the student drops after the fourth week of a semester or second week of a summer session, while doing failing work.
I, Incomplete. The grade of I is given only when circumstances beyond the student’s control have prevented his completing the work of a course within the official dates of a session. (See grade of PR.) The I automatically becomes an F if not removed (1) within the first twelve weeks of the next semester of residence, (2) within the next four semesters, if the student does not re-enroll in residence. The student may change the I to a passing grade by satisfactorily performing the work prescribed by the instructor. The student obtains from the office of his Dean a permit to remove the I, pays the $2.00 fee, and takes the card to the instructor, who completes it and returns it to the office of the Dean. The Dean forwards this permit to the Admissions office where official entry on the student’s record is made.

W, Dropped Without Discredit. W is given in any course which the student drops after the fourth week of the semester or second week of the summer session, while doing passing work.

CR, Credit. CR is used to report satisfactory completion of Master’s thesis.
NC, No Credit. NC is used to report unsatisfactory completion of Master's thesis.

PR, Progress. This grade is used to indicate that master's thesis, or a graduate problem, is in progress but not complete. When the problem is complete, a regular grade is reported. When the thesis is complete, CR or NC is reported.

The mark of NR, No Report, is used only in official grade reports to students and parents, to indicate that the instructor has not reported a grade.

Change in Grade. No grade except I can be raised by a special examination. A grade of I can be changed to a passing grade in a manner to be determined in each case by the instructor concerned, with the approval of the Dean of the college. (See I above.)

Any other change in grade, after the grade is on record in the Admissions office, may be made only after reasons for such change have been submitted in writing by the instructor concerned, and approved by the Committee on Entrance and Credits.

Scholarship Index
A student's academic standing is referred to in terms of a scholarship index obtained by dividing his total number of grade points by the total number of hours attempted. All honors and prizes depending upon scholarship are determined by ranking students according to this index.

Grade Reports
At the end of the eighth week of the semester (mid-semester), and at the end of the semester, grades are reported, for all courses, to the Admissions office.

Copies of semester grades are mailed to parents of undergraduate students, with the exception of married students and students over 21 years of age.

Transcripts of Credits
Each time a student completes work in the University, he is entitled to one complete transcript of record without charge. For each additional copy a charge of one dollar is made, except that when several copies are to be made at the same time, all copies in addition to the first will be charged for at the rate of twenty-five cents each. Transcripts of credits cannot be issued until all accounts with the University are settled.

*Exclusive of hours in non-theoretical physical education and ensemble music.
GENERAL ACADEMIC REGULATIONS

If the student requires special statements to be made concerning his record, or if special forms are to be filled out, the transcript fee of $1.00 will be charged for such service.

Scholastic Status. An undergraduate student has the status: "in good standing," "on probation," "General College," or "under suspension." The student "under suspension" may re-enroll on probation at the expiration of the suspension period. Students under suspension from the General College may re-enter the University only through the General College. The status "General College" means that the student is not eligible for enrollment in a regular college without release from the General College by the Dean.

Honorable Dismissal. The status "in good standing," "on probation," or "General College," entitles the student to honorable dismissal, and on transcripts no separate statement of honorable dismissal is necessary. Whether he completes a semester, or withdraws with permission before the end of the semester a student is entitled to honorable dismissal provided that he has the necessary scholastic status, and is in good standing regarding conduct and financial obligations. Honorable dismissal implies that the University will permit the student to re-register in the next session.

Withdrawal from the University

When an undergraduate student wishes to cancel his registration and withdraw from the University during the semester, he should secure a withdrawal card from the Personnel office; the graduate student should secure the withdrawal card from the Dean of the Graduate School. Grades of W or F are shown on the student's record if he withdraws from the University after the first four weeks of the semester or first two weeks of a summer session. When a student leaves the University during a semester and does not carry out his withdrawal according to this regulation, he renders himself liable for a grade of F in all of his classes, even though he is passing his courses up to the time of leaving.

Changes in Registration

Change in Program of Studies. The student who desires to add a course to, or drop a course from, his program of studies, should obtain from his Dean a petition for change of program of studies. The student obtains signatures called for on this form, and returns it to the office of his Dean. The Dean sends the form to the Admissions office where official entry is made on the student's record.
A student who drops a course at any time without permission will receive a grade of F in the course. A fee of $1.00 is charged for any change made in the student's program of studies after the end of the second week of the semester, or after the end of the first week of the summer session.

**Change in Major or Minor.** By the middle of the sophomore year, each student should declare his major and minor study, and make his application for a degree. A form for this purpose may be obtained from the Dean's office, and after completion of the form, it should be returned to that office. If the student later wishes to apply for a different degree, change his major or minor, or change his college, he should complete a new application for degree, and return it to the Dean's office.

**Change in College.** A student who desires to change his registration from one college to another shall petition the Dean of his college. This petition requires approval of the Deans of both colleges and is then filed in the Admissions office.

**Change in Address.** Each student is expected to keep the University authorities informed as to his address. Any change in address should be immediately reported to the Admissions, Deans', and Personnel offices.

**Addition of Correspondence or Extension Courses to Program.** A resident student may enroll for correspondence and extension courses only when the addition of such course does not cause the student's program to be in excess of the maximum load allowed, and only after permission has been given by the Dean of his college.

**Scholarship Regulations**

The standing of all students with respect to scholarship is checked at the end of each semester and summer session. At such times, all students who are deficient in scholarship are placed on probation, or suspended, in accordance with the following regulations. A student placed on probation at any time will remain on probation until the next final examination period.

**Probation.** A student is placed on probation at the end of any semester or summer session when the total number of points earned drops below the total number of hours (in General College, two-thirds) which he has attempted. Hours given a mark of W will be excluded in this computation, but hours of F will be counted.

*Exclusive of hours in non-theoretical physical education and ensemble music.*
GENERAL ACADEMIC REGULATIONS

Suspension. A student is suspended for a period of one calendar year at the end of any semester or summer session when he has been placed on probation for the second successive time. A student suspended from a four-year college may enter the General College on probation only in case the total number of his grade points equals or exceeds two-thirds the total number of hours attempted.*

A student who is suspended for poor scholarship, or who, after having been placed on probation at the end of the semester, fails to re-register for the following semester, or who withdraws from the University while on probation, shall be considered as on probation upon his return to the University, and the scholarship rules shall apply as though he had not been away.

A dean may require a student who is on probation at the time of registration to enroll for the minimum number of hours, and he may at any time require a student on probation to drop as many hours as seem to be in excess of the student's ability.

Suspension by Scholarship Committees or Deans. Regulations on probation and suspension as described above apply only at the end of a semester or summer session. However, during the progress of any semester or summer session the Dean of a college may refer the case of a delinquent student to a college committee on scholarship; and such committee may recommend to the Dean probation or suspension from the University for such student.

Attention is called also to the possibility of suspension as a result of excessive absence. See attendance regulation, p. 64.

Additional College Regulations. College of Education: It is the opinion of the faculty of the College of Education that candidates for the teaching profession should maintain at least an average scholarship record. Therefore, beginning with the junior year, a student will be recommended for suspension from the College of Education at the end of any semester or summer session when the total number of points earned in university work drops below the total number of hours for which the student has been registered.* Hours given a mark of W will be excluded from this computation.

General College: A student with not more than 60 credit hours of academic work, suspended from one of the four-year colleges on the basis of scholarship, is permitted to enter the General College on probation, provided he has earned at least two-thirds as many points as the total number of hours he has attempted.*

* Exclusive of hours of non-theoretical physical education and ensemble music.
A student in the General College is placed on probation at the end of each semester or summer session when the total number of points earned drops below two-thirds of the total number of hours for which he has been registered. Hours given a mark of W will be excluded in this computation, but hours of F will be counted.

A student in the General College is recommended for suspension at the end of any semester or summer session when he is placed on probation for the second successive time. Students suspended from the General College may re-enter the University only through the General College.

**EXAMINATIONS**

**Regular Examinations.** Examinations in each course are held at the close of each semester, and at intervals during the semester at the discretion of the instructor. All students, including graduating seniors, are required to take semester final examinations, which are held according to a notice issued by the Schedule Committee.

**Graduate Record Examination.** See p. 66.

**National Teachers Examination.** See p. 67.

**Special Examinations.** A special examination is one taken at a time other than regularly with the class. Classified as special examinations are: examinations given to make up missed regular course examinations, examinations to validate or to establish credit, examinations to remove a grade of I, examinations for the removal of entrance deficiencies.

Entrance examinations for students deficient in entrance units, or for graduates of unaccredited or partially accredited high schools who must validate their unaccredited work, are given at the beginning of each semester to each student who desires to take them. These entrance examinations in the various high school subjects are not to be confused with the entrance tests which are required of all freshmen.

A fee is charged for all special examinations except the entrance examination. For a list of the special examination fees, see section of the catalog entitled "Student Expenses."

Before the student is admitted to a special examination, he must present to the instructor a permit signed by the Dean of his college. The Director of Admissions issues permits for entrance examinations. For those examinations where a fee is required, the permit must show the Comptroller's receipt of the fee.

*Exclusive of hours in non-theoretical physical education and ensemble music.*

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GENERAL ACADEMIC REGULATIONS

EXAMINATION FOR ADVANCED STANDING. A student in residence in an undergraduate college shall have the privilege of passing a course in the University by special examination without attendance upon the course, and receive undergraduate credit therefrom, such privilege to be subject to the following restrictions:

1. He shall not have been previously registered in the course in any division of any college or university.

2. The applicant shall have a scholarship index of two or more in a normal program of studies completed during the last semester (or last two summer sessions) in residence, and he shall be doing superior work at the time of taking the examination.

3. The examination shall have the approval of the Dean of the college, the Head of the department, and the instructor concerned.

4. The applicant shall obtain from the Dean of his college a permit for the examination, and shall pay in advance the required fee of $2.50 per credit hour.

5. The student shall obtain in the examination a grade not lower than C, and shall show a mastery of the course acceptable to an examining committee of three, appointed by the Dean, including the instructor and the Head of the department concerned.

6. Credits earned through advanced standing examinations do not apply to residence requirements.

DISHONESTY IN EXAMINATIONS. A student found guilty of dishonest practices in a quiz, test, examination, or other work will be subjected to disciplinary measures. Dismissal from the University will result in cases where the offense is flagrant.

ATTENDANCE

Students are expected to attend all meetings of the classes in which they are enrolled. No extensions of the vacation periods are given to any students, regardless of the location of their homes. Non-attendance at classes due to late registration is considered the same as absence incurred after registration.

Instructors will keep a record of class attendance, and will report all absences to the Dean of the college concerned. A student with excessive absences may be dropped from a course with the grade of F, by the Dean of the college, upon recommendation of the instructor. The Dean may suspend a student from the University, on the grounds of neglected duty, when he has thus been dropped from two courses.
GENERAL ACADEMIC REGULATIONS

Absences due to illness, field trips, athletic trips, etc., are to be reported by the student to the instructor and to the Personnel office. Such report does not relieve the student of responsibility for lost work. It is the duty of the student to take the initiative in arranging with his instructors to make up work missed.

Students who are absent and unexcused from final examinations, or other closing exercises of the classes in which they are enrolled shall be given the grade of F. A grade of I may be given when there is valid reason for absence from the examination.

UNIVERSITY ASSEMBLIES

University assemblies may be called by the President of the University or requested by the Student Council at any time when the occasion demands.

Owing to the lack of adequate space for all-student-body assemblies, the effort to have regular assemblies has been discontinued. For the same reason, it has also been necessary to discontinue the practice of requiring attendance of all students at assemblies.

Until it is found possible and practicable to erect an auditorium of suitable size for student assemblies, it will be necessary to make attendance at all assemblies on an entirely optional basis.

DEGREE REQUIREMENTS

For information concerning the various degrees offered, and for course and scholastic requirements leading to these degrees, students should refer to those sections of the catalog devoted to the colleges.

Two undergraduate degrees may not be granted a student until he has earned the equivalent of five years' college work (as represented by a minimum of 30 semester hours above the requirements for the first degree), and has fulfilled all requirements for both degrees. A transferring graduate should notify the Director of Admissions when applying for admission if he plans to work for a second undergraduate degree.

NOTICE OF INTENTION TO COMPLETE DEGREE REQUIREMENTS. At the middle of the sophomore year, all candidates for degrees are required to file in the Deans' offices applications for degrees. Necessary forms may be secured from those offices.

SPECIFIC COURSES REQUIRED. Four semester hours of required physical education (or equivalent N.R.O.T.C. credits) shall be completed by all students in the University. Veterans and students over thirty years of age are exempted from the physical education requirement.
GENERAL ACADEMIC REGULATIONS

For specific requirements leading to degrees in the various curricula, students should refer to the courses of study outlined in the listings of the different colleges.

DIVIDENDS AND PENALTIES. For every 15 semester hours of A, or for every 30 semester hours of B, the hours required for graduation are reduced by one. The maximum of such dividends allowed is four. For every 15 semester hours of D, the hours required for graduation are increased by one. No dividends or penalties are given in the College of Engineering. Dividends and penalties are assessed only on work done in residence at the University of New Mexico.

SENIOR RESIDENCE REQUIREMENTS. Residence credit is defined as credit earned by attendance in regular classes on the University of New Mexico campus or in one of its field sessions. Credits earned through the Extension Division or by examination are not counted toward the residence requirement.

Students who have done less than 60 semester hours in residence previous to senior status (see “Classification of Students”) shall earn 30 semester hours in residence in the senior year.

Students who have done 60 semester hours, but less than 90, in residence previous to senior status, shall earn 24 semester hours in residence in the senior year.

Students who have done 90 or more semester hours in residence previous to senior status shall earn 18 semester hours in residence in the senior year.

In no case is the number of hours specified to be earned in the senior year to be interpreted as necessarily the last hours.

Students may fulfill part or the whole of this residence requirement by summer session attendance.

RESIDENCE REQUIREMENTS IN MAJOR AND MINOR. At least one half of the minimum number of credit hours required for major study and one-fourth of the minimum number of credit hours required for minor study must be class or laboratory work earned in residence in the University. When a senior transfer student plans to complete a major by presenting credit hours earned in residence at another institution, the departmental adviser may modify this ruling, not, however, below the minimum residence requirement for the minor.

GRADUATE RECORD EXAMINATION. All seniors (except those enrolled in the College of Education) are required to take the Graduate Record Examination during the last term of residence.
NATIONAL TEACHERS EXAMINATION. All seniors enrolled in the College of Education are required to take this examination during the last term of residence.

EXTENSION AND CORRESPONDENCE HOURS ALLOWED TOWARD DEGREE. As many as 40 semester hours in University extension and correspondence courses will be allowed toward the bachelor's degree provided that at least 10 of the 40 have been earned in extension courses taught by regular resident instructors of the University.

Credit will be allowed for extension and correspondence courses completed in institutions which are on the approved list of the National University Extension Association, of which the University is a member. Credit for extension and correspondence courses completed in institutions which are not on the approved list of the N. U. E. A., will not be allowed until the student has successfully passed a validating examination covering each course.

COMMENCEMENT

Normally, commencement exercises are held at the end of Semester II. Students who complete their requirements in an off-session receive their diplomas at the next regular commencement.

Students must participate in the commencement exercises at the time of receiving diplomas, unless excused by the Dean of the college concerned.

GRADUATION WITH HONORS

THE DEGREE WITH DISTINCTION. All senior students having scholarship indexes which rank them in the upper 5 per cent of the graduating class of the University will be graduated "With Distinction." Ranking will be based upon all work taken at the University of New Mexico. Transferred students must present a minimum of 45 credit hours earned at this institution to obtain these honors.

THE DEGREE WITH HONORS (HONORS WORK). The University faculty has created a Division of Honors Work under which the baccalaureate degree with honors may be earned. For details of the plan see "Division of Honors Work."

DIVISION OF HONORS WORK

The purpose of the Division of Honors is to afford abler and more ambitious students opportunity to pursue with a certain degree of independence a program of studies which will extend and intensify their knowledge of the field of their major or minor studies, develop their initiative and self-guidance, and their critical
GENERAL ACADEMIC REGULATIONS

and creative ability. This program may lead to the baccalaureate degree with honors.

ELIGIBILITY. Students in all undergraduate colleges will be permitted to undertake and to continue Honors work, when, upon the basis of their previous records, entrance tests, and university records, they show, in the judgment of the Committee on Honors Work, promise of fine scholarly achievement. There must be other promise than that indicated by an average of B or better.

TYPES OF HONORS PROJECTS. (A) Projects which will extend Honors students' knowledge of their major or minor field, especially by filling up the interstices between their regular courses. Each semester's work should be terminated with an examination covering such work.

(B) Projects of the nature of intensive study designed to develop critical and creative ability, or in other words, an undergraduate grade of research, extending through one semester or a whole academic year, and terminating in a thesis.

PROCEDURE. Sophomores and juniors should preferably undertake honors work projects of type A, and seniors should preferably undertake honors projects of type B. Projects should be organized to earn, normally, 1 to 3 credit hours per semester.

PRIVILEGES. (1) Honor students will receive consideration if they find it necessary to make application to University agencies for financial aid.

(2) All students carrying Honors work are eligible for auditing privileges and may obtain Honors Audit Cards from the Dean's office.

(3) Juniors and seniors carrying Honors work are eligible for stack privileges at the Library.

(4) The best senior theses each year will be recommended to the Committee on Publications as a University bulletin or for deposit in the library.

For further information on regulations and requirements for Degrees with Honors, consult the Chairman of the Committee on Honors Work.
College of

ARTS AND SCIENCES
The College of Arts and Sciences attempts to supply the cultural training which should underlie the more specialized work of the graduate, professional, or vocational school. The materials for this training are provided by the interests and achievements of man as they appear in his cultural records, his social institutions, and his investigation of natural laws.

DEGREES

Upon the recommendation of the faculty and the President of the University, the degree of Bachelor of Arts is conferred by the Regents upon those candidates who have completed all specified requirements. Candidates who complete the requirements with majors in dietetics, mathematics, or the sciences will receive the degree of Bachelor of Science, unless special request is made for the Bachelor of Arts degree. Similarly, those who complete the specified requirements will receive the degree of Bachelor of Business Administration. For requirements leading to the degree of Bachelor of Business Administration, see “Department of Economics and Business Administration.” For information on the degree of Bachelor of Science in Naval Science, consult the Dean of the College.

RELATION TO PROFESSIONAL AND VOCATIONAL COURSES

The Bachelor of Arts and the Bachelor of Science degrees of the College of Arts and Sciences are based upon cultural, rather than professional or vocational courses. The courses preparatory to law, medicine, and the other professions are planned and taught as cultural subjects and do not infringe upon the work of the professional school. No vocational courses offered in the General College are accepted. Concerning the limited acceptance of work in education, engineering, law, medicine, and fine arts, see Electives and Special Curricula.

GRADUATION REQUIREMENTS

Candidates for the degree of Bachelor of Arts or Bachelor of Science are required to complete a total of 124 semester hours in academic subjects, and 4 semester hours in physical education (or equivalent N.R.O.T.C. credits). In the first two years, or Lower Division, the student is expected to acquire certain basic essentials and to explore several different fields to determine where his
ARTS AND SCIENCES

interests lie. In the last two years, or Upper Division, the student devotes himself to his major and minor, and to such other subjects as he may wish to take.

LOWER DIVISION REQUIREMENTS

1. At least 60 semester hours in courses acceptable toward graduation, in addition to 4 semester hours in physical education (or equivalent N.R.O.T.C. credits).

2. A one-point index for the total number of hours which the student has attempted.*

3. The completion of Orientation 9, physical education, and group requirements as described below.

4. Successful conclusion of a proficiency examination in English.

5. In all subjects except foreign language, students in the Lower Division are restricted to courses numbered below 101 with the provision that a student may be admitted to Upper Division courses at the discretion of the Dean of the College: (1) if he has completed within 7 hours of the group requirements, of which not more than one hour shall be in physical education, nor more than 6 hours in foreign language; (2) if he has completed not less than 45 credit hours, exclusive of physical education, earning at least a one-point index for all hours which he has attempted; and (3) if the remaining requirements appear upon his program.

6. Students in the Lower Division may not carry more than 8 hours in one department during one semester. (Exceptions may be made in the case of premedical students.)

7. Not more than 50 hours in courses open to freshmen may be taken without a penalty of 1 hour for every 3 excessive hours.

8. Exceptions to any of these rules may be made only upon recommendation of the Dean.

UPPER DIVISION REQUIREMENTS

1. Completion of at least 40 hours in courses numbered above 100 with at least a one-point average in all such hours carried.

2. Completion of at least one major and one minor, or two majors.

3. Grade-points equal to the total number of hours which the student has attempted.*

* Exclusive of hours of non-theoretical physical education and ensemble music.
GROUP REQUIREMENTS

In keeping with the exploratory aim of the Lower Division, the student distributes part of the work of his first two years among the four following groups of subjects. The acceptability of transferred work toward fulfilling the group requirements lies in the judgment of the Director of Admissions and the Dean of the College.

I. ENGLISH. Six semester hours must be earned in English 1, 2, and 3 additional credit hours must be earned in a course in literature numbered above 50. Failure to pass the sophomore English proficiency test at first trial will result in an additional requirement of three hours of sophomore composition.

II. FOREIGN LANGUAGE. A student who has been admitted with no credit in a foreign language, or who begins a language in which he has done no work in high school is required to complete four semesters or twelve credit hours in one foreign language.

Other students continuing a language begun in high school will be tested and assigned to courses according to ability shown. Such students will then complete the remainder of the twelve hours required.

III. SOCIAL SCIENCES. Nine semester hours (not more than 6 from one department) must be completed in approved courses in the departments of Anthropology, Economics and Business Administration, History, Government and Citizenship, Philosophy, or Sociology. A student admitted with less than 1 unit in social science is required to complete 12 hours in this group.

IV. MATHEMATICS AND SCIENCES. Eleven semester hours (not more than 8 from one department, and including 2 semesters in courses that require laboratory work) must be completed in approved courses in the Departments of Biology, Chemistry, Geology, Home Economics, Mathematics, Physics, or Psychology. A student admitted with high school deficiencies in both mathematics and science is required to complete a total of 17 hours in this group.

MAJOR AND MINOR STUDIES

A student admitted to the Upper Division shall declare his major subject, and his program of studies thereafter shall meet with the approval of the head of the major department. A major regularly consists of not less than 24 hours in approved courses. The student must also complete, in another department, a minor of not less than 12 semester hours. The selection of the minor is subject to the approval of the head of the student's major department.

† For approved courses, see Departments of Instruction.
ARTS AND SCIENCES

Only work of at least C quality is accepted toward the major and the minor; courses in which grades of D are earned may be accepted as electives toward graduation.

ELECTIVES

A student who has fulfilled all other requirements for graduation may use electives to complete his total of 124 hours for graduation, subject to the following restrictions:

A maximum of 24 hours in any combination, earned in courses offered in the Colleges of Engineering, Education, Fine Arts, and Pharmacy, or in Naval Science, is acceptable as electives in the College of Arts and Sciences, with the following exceptions:

(1) All theory and method courses in physical education.
(2) All courses in education in methods, supervision, and practice teaching.
(3) In excess of 4 hours in ensemble music.
(4) In excess of 3 hours of shop work.

A major in dietetics leading to the degree of Bachelor of Science may be given in special cases upon approval of the College.

The normal program for a student intending to graduate in four years is 16 hours a semester. Seventeen hours, plus one semester hour of physical education (or military drill in the case of N.R.O.T.C. students), is the maximum, except by petition to the Committee on Scholarship, which may, at its discretion, grant up to 19 hours (including non-credit courses). Ordinarily, a petition for excessive hours will not be considered unless the student has in the preceding semester made a grade of B in more than half of his hours, and no grade below C.

NORMAL FRESHMAN PROGRAM

Following is the standard freshman program; necessary deviations from it should be made only after consultation with the faculty adviser.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>*English 1</td>
<td>*English 2</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>Foreign Language</td>
</tr>
<tr>
<td>Social Science</td>
<td>Social Science</td>
</tr>
<tr>
<td>Natural Science or Mathematics</td>
<td>Natural Science or Mathematics</td>
</tr>
<tr>
<td>Orientation</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Additional group requirements</td>
</tr>
<tr>
<td>Additional group requirements</td>
<td>*Naval Science</td>
</tr>
<tr>
<td>*Naval Science</td>
<td></td>
</tr>
</tbody>
</table>

*If the student fails to pass the placement test, English A is taken in addition to English 1.
*Naval Science may be substituted for physical education and one other subject as prescribed by the Dean.
Students are cautioned against assuming that four-year college courses always prepare for professional work. At least one year of specialized graduate work is advisable, even if not actually required.

**Combined Curriculum in Engineering and Arts and Sciences.** Degrees in both the College of Arts and Sciences and the College of Engineering may be obtained by following a five-year curriculum, to be outlined in each case, jointly, by the Deans of the two colleges. Any student interested in this curriculum should confer with the Deans before the end of the sophomore year. For students interested in careers in countries to the south of the United States, attention is called to a major in Inter-American Affairs along with engineering.

**Senior Year in Medicine or Law.** A candidate for the bachelor's degree may offer, in lieu of the last thirty hours at the University of New Mexico, the full first year's work (satisfactorily passed and properly certified) in an approved school of law or medicine requiring three years for entrance, provided: (1) that written notice of this intention be submitted to the Dean before the end of the junior year; (2) that the first three years of work (94 semester hours and 4 P. E.) shall have been taken in residence at the University of New Mexico; (3) that, before entrance into the professional school, the candidate shall have completed all specific and group requirements, and major and minor requirements, in accordance with University regulations; (4) that at least 75 per cent of the hours completed before entrance into the professional school shall have been of C grade or better, and that the total of grade-points shall at least equal the total number of hours which the student has attempted.

**Curriculum Preparatory to Forestry.** Openings in the field of forestry have been greatly diminished in recent years. Only students with special talents and high scholastic average should undertake such preparation. Information regarding it may be obtained from the Department of Biology.

**For Curricula Relating to Inter-American Affairs see p. 76.**

**Curriculum Preparatory to Journalism.** The journalist needs great breadth of preparation. In addition to courses giving actual instruction and practice in writing, he should include in his curriculum, preferably, more than one foreign language and studies dealing with both history and the current aspects of all major social movements. It should be kept in mind, however, that
ARTS AND SCIENCES

the sciences, all the other professions, and business offer abundant opportunity for writing as an avocation (not a vocation), and it is only the person of rare talent who can make a profession solely of writing. The prejournalism student should consult members of the Department of English for advice on his courses.

Curriculum Preparatory to Law. The law touches life at so many points that the student preparing for it should seek broad preparation in English composition and speech, history, economics, government, politics, philosophy, language and literature, logic, and mathematics. The pre-law student should consult members of the Department of Government for advice on his subjects.

Curriculum Preparatory to Medical Technology. Besides regular requirements and prerequisites, a three-year curriculum has been arranged which includes: Biology 93L, 152L, 143L, 144L; Chemistry 55L, 101L, 102L; Physics 11L, 12L. Candidates are urged to complete a major in either biology or chemistry, and adjustments in courses named above may be made by the Department Head. A year's work in more technical subjects and a year of practical hospital experience are also required for the professional degree.

Curriculum Preparatory to Medicine. The minimum of college hours required for admission to medical schools approved by the Association of American Medical Colleges and by the Council on Education of the American Medical Association, is 60 semester hours in a college of arts and sciences. Since the admission requirements vary, the premedical student should familiarize himself with the requirements of the particular school he wishes to attend.

At the University of New Mexico the curriculum for the first two years for these students is as follows:

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1, 2</td>
<td>English, and Psychology 51</td>
</tr>
<tr>
<td>French or German</td>
<td>French or German</td>
</tr>
<tr>
<td>Chemistry 1L, 2L</td>
<td>Chemistry 55L</td>
</tr>
<tr>
<td>Biology 1L, 2L</td>
<td>Biology 71L and 121L</td>
</tr>
<tr>
<td>Social Science, and Math. 15</td>
<td>Physics 11L, 12L</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
</tbody>
</table>

Curriculum Preparatory to Nurses' Training. A special freshman curriculum has been arranged for students entering nurses' training. Following successful completion of this course of study, students may enter the Regina School of Nursing at the St. Joseph Hospital, Albuquerque, where they may obtain the clinical experience and other training necessary to graduation as registered nurses.
nurses. The course thus outlined will require approximately four years.

During the freshman year at the University, students will pursue the following curriculum:

<table>
<thead>
<tr>
<th>Course</th>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3-3</td>
<td>3-3</td>
</tr>
<tr>
<td>Microbiology</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Human Anatomy and Physiology</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5-5</td>
<td></td>
</tr>
</tbody>
</table>

N.R.O.T.C. CURRICULUM.

<table>
<thead>
<tr>
<th>Course</th>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3-3</td>
<td>3-3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3-3</td>
<td>4-4</td>
</tr>
<tr>
<td>Social Science</td>
<td>3-3</td>
<td>3-3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3-3</td>
<td>3-3</td>
</tr>
<tr>
<td>Orientation</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Naval Science</td>
<td>3-3</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education*</td>
<td>3-3</td>
<td>1-1</td>
</tr>
</tbody>
</table>

*Drill periods at 11 o'clock Tuesday and Thursday must also be reserved on student's schedule.

SOCIAL WORK TRAINING PROGRAM

The undergraduate program in social work at the University of New Mexico is planned to meet two needs: (1) to recruit personnel which could be immediately useful to a social work agency after a planned undergraduate curriculum; (2) to provide a reservoir of potentially able students who will enroll in graduate schools of social work as a progression from their undergraduate curriculum or as students returning later from practice to complete their professional training.

REQUIREMENTS FOR DEGREE

Candidates for the Bachelor of Arts degree must fulfill lower division requirements of the College of Arts and Sciences. The basic curriculum is designed to provide a broad background in the social, economic, and governmental fields. The student should consult the Director of the Program in order that his individual needs may be met. Those who plan to work in New Mexico, for example, should have Spanish as a foreign language. In the natural sciences, biology has a special contribution to make to the field.

In addition to Introduction to Social Science, the combined major and minor includes the following:

1. Social Work:
   - Government 170
   - Sociology 151, 152
   - Sociology 197
   - Social Welfare: Org. and Adm. (3)
   - Introduction to Social Work (3-3)
   - Field Observation and Participation (3)
II. **24 Hours** Elected from Sociology and one or more additional fields with preference for the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>American Government</td>
<td>(3,5)</td>
</tr>
<tr>
<td>121</td>
<td>Public Administration</td>
<td>(3)</td>
</tr>
<tr>
<td>105</td>
<td>Principles of Economics</td>
<td>(3)</td>
</tr>
<tr>
<td>140</td>
<td>Economic Security</td>
<td>(3)</td>
</tr>
<tr>
<td>141</td>
<td>Labor Problems</td>
<td>(3)</td>
</tr>
<tr>
<td>51</td>
<td>General Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>101</td>
<td>Social Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>131</td>
<td>Psychological and Educational Tests</td>
<td>(3)</td>
</tr>
<tr>
<td>or 61</td>
<td>Abnormal Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>187</td>
<td>Child Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>or 190L</td>
<td>Clinical Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>51</td>
<td>The Family</td>
<td>(3)</td>
</tr>
<tr>
<td>72</td>
<td>Social Pathology</td>
<td>(3)</td>
</tr>
<tr>
<td>81</td>
<td>Rural Sociology</td>
<td>(3)</td>
</tr>
<tr>
<td>110</td>
<td>Juvenile Delinquency</td>
<td>(2)</td>
</tr>
<tr>
<td>154</td>
<td>Race and Culture Relations</td>
<td>(3)</td>
</tr>
<tr>
<td>195</td>
<td>Population Problems</td>
<td>(3)</td>
</tr>
</tbody>
</table>

III. **Electives**: Electives may be chosen to round out a student's interest. Courses in English, history, anthropology, child development or foods courses in home economics, statistics or accounting are recommended.

**COLLEGE OF ARTS AND SCIENCES**

**SCHOOL OF INTER-AMERICAN AFFAIRS**

An ever-growing number of people are realizing that a better understanding of, and closer and more satisfactory relationships with, the other nations of the Hemisphere are among the most vital needs of the United States today.

All over the country interest in the study of Spanish and Portuguese and of the history, literature, arts, and present social, economic, and political problems of our Latin-American neighbors is increasing. In many cases, however, high schools and colleges find it difficult to secure sufficiently trained teachers for presenting these subjects. There is also a growing demand on the part of business firms and official and private agencies engaged in inter-American work for persons with a sound knowledge of the "other Americas."

The University of New Mexico enjoys an exceptionally favorable position for the study of inter-American and regional economic and cultural problems. Nowhere else does one find the three chief ethnic elements of the Americas—Indian, Hispanic, and Anglo-Saxon—living together in large numbers with a common national allegiance, and maintaining their traditional cultures. About half the population of the state speak Spanish as a native language, and

*An Orientation Lecture on Inter-American Affairs adequately explaining the nature and scope of this field of study, its importance, and the opportunities opened to its graduates, etc., will be sent free of charge upon request to the Director of the School.*
a good many of the problems presented by our Southwestern region
are closely integrated with those of inter-American relations. Be­
cause of geographic proximity and common human and scientific
interests, New Mexico has maintained close bonds with our good
neighbor, Mexico, who has provided us with a solid introduction
to Latin America.

For these reasons, the University of New Mexico has, for a
number of years, devoted particular attention to Latin-American
and Southwestern studies. A special appropriation of the State
Legislature made possible the expansion of this work and the
establishment of the School of Inter-American Affairs in the fall of
1941.

The School is a coördinating administrative unit operating
under the College of Arts and Sciences and the Graduate School.
The offerings in the field of Inter-American Affairs have been
coördinated and developed into several interdepartmental curricula:

I. B.A. in Inter-American Affairs, with specialization in four
directions: Historical and Cultural; Business Administration;
Social, Economic, and Political Affairs; and Regional (The His­
panic Southwest.)

II. A two-year course for Secretary-Interpreters Specializing in
Inter-American Relations.

III. A one-year post-graduate course in Inter-American Rela­
tions for majors in science departments and graduates of technical
schools.

Though Portuguese is not made a required study in the various
curricula in Inter-American Affairs, the School urges its students to
elect it and to equip themselves with at least a reading knowledge
of the language. The School also strongly recommends that stu­
dents aiming at a preparation for a business career intensify their
studies in Economics and Business Administration.

To help in the placement of students, the School maintains con­
tact with business concerns, state and federal agencies, and other
organizations interested in the field. A directory is being organized
with as much data as possible on the opportunities open to the
graduates of the School. Plans are underway for the establishment
of a general University placement bureau.

SCHOLARSHIPS

ALL-UNIVERSITY LATIN-AMERICAN SCHOLARSHIPS. In the aca­
demic year 1947-1948, the University of New Mexico is offering two
scholarships covering tuition and room and board and four cover­
ing tuition only to qualified graduate and undergraduate students
from any Latin-American countries who are planning to pursue studies in any of the departments of the University. These scholarships have been established by the Regents and are administered jointly by the University and the Institute of International Education. Information may be obtained from the Director of the School of Inter-American Affairs.

Scholarships in Inter-American Affairs. The School of Inter-American Affairs is offering in the academic year 1947-1948 six tuition scholarships in the general course leading to a B.A. in Inter-American Affairs and in the Secretary-Interpreters Course. These scholarships are open to well-qualified graduates of high schools of the state of New Mexico who deserve financial assistance and who are planning to enter the University as freshmen. It also offers three tuition scholarships to undergraduates other than freshmen or graduate students from New Mexico or outside the state. For application forms and further information address the Director of the School.

General Curriculum in Inter-American Affairs

The curriculum leading to a B.A. with a major field of concentration in Inter-American Affairs has been designed to provide a general basic training in fundamental subjects and at the same time a wide choice of supplementary courses to meet individual needs and preferences.

The emphasis of this major field of concentration is on language study and on the social sciences with particular attention to the Hispanic countries. Proficiency in Spanish will be a basic requirement since students are expected to use the language as a tool in the various courses of Hispanic content given in other departments.

Attention is also called to the fact that this is not a departmental major, but a major regional field of concentration, integrating the studies of Hispanic content and allied subjects offered by the various departments. Even granting the regional character of the major, the program of studies devised is sound academically, presenting as it does a wide and representative training in the liberal arts.

Because of its comprehensive and integrated concentration in the field of Inter-American Affairs, this major permits no minors in the departmental sense, nor can a minor be taken in Inter-American Affairs. However, credits equivalent to minors and even majors can be earned through electives in instructional departments. For this purpose students may choose in their sophomore year fields of interest. Thus, besides the general preparation in Inter-American
ARTS AND SCIENCES

Affairs, they may obtain added proficiency in other lines of study. A close examination of the subjects required as Gateway and Basic Courses and of the wide range of electives allowed will show the variety of content and flexibility of the major. As a matter of fact, this curriculum would admirably serve for those students not necessarily interested in utilitarian pursuits in the field, but wanting to get, within the scheme of a well-rounded college education, a solid acquaintance with Latin-American problems for the general purpose of developing an enlightened inter-American consciousness in whatever occupation they may enter.

**GATEWAY COURSES** (Prerequisite to the Basic Upper Division Courses, and to be taken in the freshman and sophomore years.)

*Anthropology 1, 2. General Anthropology .................. 6

*History 1, 2. Western Civilization ......................... 6

*History 11, 12. History of the Americas .................. 6

*Social Science 1, 2. Introduction to Social Science (Economics, Government or Sociology 1, 2) ......................... 6

†Introduction to Latin America (Anthropology, Economics, Government or Sociology 73) ......................... 3

**Total credits** .................................................. 27

**BASIC UPPER DIVISION COURSES** (To be taken by juniors and seniors.)

**ANTHROPOLOGY**

106 The American Indian: South America .................. 3

119 Races and Cultures of Europe ........................... 3

184 Archaeology of Mexico, Central America, and the West Indies ........................... 3

186 American Archaeology: South America .................. 3

**ART**

141 History of Modern Art: Western Hemisphere ........... 2

192 Contemporary Mexican Painters .......................... 2

* For fuller description of the courses see departments of instruction.

† The land and the people: geographic background and cultural landscape. An intensive survey of the social, political and economic institutions of the Latin American States. An understanding of the differences between Latin and Anglo-Saxon America and a basis for a satisfactory relationship are sought through the study of the principal factors which contribute to the development of Latin America's social, economic, and political life and of the basic issues of today, such as land distribution, public health, popular education, formation of the middle class, economic nationalism, standard of living, labor conditions, the chances of democracy, and the problems of foreign influences. Emphasis will be given to the relations between the United States and Latin America. Bibliography and sources of information.
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**BIOLOGY**
- 105 Ethnobiology of the New World ........................................ 3

**ECONOMICS**
- 119 Current Problems of Foreign Trade ....................................... 3
- 121, 122 Economics and Trade of Latin America .............................. 4

**GOVERNMENT**
- 141 International Relations or .................................................. 3
- 151 American Diplomacy .............................................................. 3
- 155 The Governments of Latin America ......................................... 3

**HISTORY**
- 161, 162 History of Latin America ................................................ 6
- 163 The A.B.C. Powers in Recent Times ......................................... 3
- 164 History of the Pacific States of South America .......................... 3
- 165, 166 History of Spain .............................................................. 4
- 167 History and Civilization of Portugal and Brazil .......................... 2
- 168 Mexico and the Caribbean ....................................................... 3

**PHILOSOPHY**
- 123 Hispanic Thought ................................................................. 2

**SOCIOMETRY**
- 107, 108 Man and Society in Latin America or ................................ 4
- 111, 112 Social Problems of Latin America .................................... 4
- 154 Race and Culture Relations .................................................... 3

Required of all students in this major: Economics 121, 122, and Biology 105 ................................................................. 7

To be chosen from among the courses listed in Anthropology, Art, Economics, Government, History, Philosophy, and Sociology with a maximum of departments to be represented (Courses listed above when not included in this count are acceptable as electives) ............................................................ 17-18

Total credits .......................................................................................... 24-25

**COMPUTATION OF CREDITS.** Required for the B.A. degree: 124 credits (plus 4 semester hours in Physical Education) to be met as follows:

**Group I. English Requirement:** English 1, 2; and 3 credits in a course in literature numbered above 50 ............................................. 9

*The prerequisite of 4 hours of Biology is waived for majors in Inter-American Affairs. This course can be applied toward the Group IV requirement in Mathematics and Science. (See p. 71.)
Group IV. Mathematics and Science Requirements: The requirement for all students in Mathematics and Science is 11 credits. Biology 105 (a basic required course in this major) counts 3 credits. Remainder 8

Gateway Courses: (Will meet Group III, Social Science Requirement) 27

Basic Upper Division Courses 24-25

Elective and Spanish Courses. The number of electives available to the student will depend on the amount of work in Spanish he has done in high school. Besides the elections from courses listed under "Basic Upper Division" a minimum of 23 free elective credits will be available for those students who begin the study of Spanish in their freshman year. The required third and fourth year Spanish courses are 91, 92 (6 cr.); 93, 94 or 95, 96 (4 cr.); 131, 132, or 145, 146 (4 cr.); and 157, 158, or 163, 164 (4 cr.) (Will meet Group II, Foreign Language Requirement). Note: Students may be absolved from the Spanish requirement by passing reading knowledge or proficiency examinations, corresponding to the attainment of two and four years college Spanish, respectively 56-57

Total credits 124-126

Degree and Specialization Groups. The degree granted will be a B.A. in Inter-American Affairs. Students, however, should consult the Director of the School and apply their electives for further specialization in any of these aspects of the major field.

I. Historical and Cultural.
II. Business Administration.
III. Social, Economic, and Political Affairs.
IV. Regional (The Hispanic Southwest).

Supplementary Courses (Elective). Listed below by numbers are the courses recommended as electives. For full description see the sections of the various departments. For their application to the specialization groups, consult the Director of the School.

Many of these courses have certain departmental admission requirements which the student must meet. In order to facilitate

* Because of the great usefulness of scientific preparation in the Latin-American field, students with ability for science study are urged to devote as many electives as possible to science. On consultation with the Director of the School, other science courses not listed as electives will be allowed as such. Biology 5 and 6, Introduction to the Physical and Biological Sciences, respectively, are strongly recommended.
ARTS AND SCIENCES

the enrollment of majors in Inter-American Affairs, however, certain
departments have found it possible, without detriment to their
standards of work, to waive all or part of their prerequisites for
admission to some of the courses listed as electives.

Note that by faculty regulation, a maximum of 24 credits in
colleges other than Arts and Sciences (i.e., Education, Fine Arts,
Engineering, and Pharmacy), with certain exceptions, may be
applied toward a B.A. degree in that College.

Anthropology 8, 71, 75F, 99, 101, 102, 105, 109, 138, 140, 142, 147,
150, 155, 156, 157, 158, 175F, 185, 193, 198, 199F
Art (Painting and Design) 1, 2, 21, 31, 52, 57, 132, 152, 157, 161
*Biology 5, 6, 41, 48, 163L, 171L
Dramatic Art 1, 2, 10, 11
Economics and Business Administration. Economics: 51, 52, 63,
105, 111, 140, 141, 143, 154, 160; Business Administration: 5, 6,
Education 101, 102, 105, 106, 107, 109, 112, 149
Engineering 111L, 156, 171
English 51, 52, 55, 57, 58, 63, 64, 68, 75, 76, 77, 80, 82, 84, 85, 121,
122, 132, 147, 149, 164, 165, 166
*Geology 51, 54, 61, 105
Government and Citizenship 51, 52, 101, 103, 105, 121, 143, 167,
169, 170, 175
History 31, 51, 52, 71, 72, 107, 121, 122, 123, 133, 135, 142, 145, 146,
171, 178, 179, 181, 191, 192
Library Science 21
*Mathematics 14, 15, 42, 87, 131, 132
Modern Languages and Literatures: French, German, and Italian.
Portuguese 1, 2, 51, 52, 101, 102, 151, 157
Music 35, 36, 39, 40, 93, 171, 172, 180
Philosophy 1, 2, 45, 53, 56, 64, 72, 102, 141, 142, 176, 191, 195
*Physics 121, 125L, 126L
*Psychology 54, 58, 101, 183, 198
Sociology 66, 71, 81, 82, 102, 107, 122, 163, 166, 195
Spanish 95, 96, 105, 106, 107, 108, 115, 121, 122, 131, 132, 145, 146,
151, 152, 153, 157, 158, 161, 162, 163, 164, 165, 166, 171
†Speech A, 1, 2, 4L, 5, 7, 55, 57, 60, 70, 80, 90, 92, 107, 110, 120, 180
* Can be applied toward the Group IV requirement in Mathematics and
Science. (See p. 71.)
†The attention of our students is called to the useful training in speech
for business and professions, public discussion, radio techniques, etc.

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OTHER ADVANCED COURSES. Attention is called to honors work, senior seminars, problems, or advanced reading courses in the Departments of Anthropology, Art, Biology, Dramatic Art, Economics and Business Administration, English, Government and Citizenship, History, Philosophy, Sociology, and Spanish, where well-qualified students may pursue studies in the Southwestern or Latin-American field under supervision of some member of the departmental staff.

SUMMER SESSION. For other courses which may be credited to the Gateway, Basic, or Supplementary Groups in this major, and which are offered occasionally in the summer, please consult the Summer Session Bulletin under the section "School of Inter-American Affairs."

For advanced standing admission to this major, sample program of electives, Spanish in relation to electives, and other information, consult the Director of the School.

MASTER'S DEGREE IN INTER-AMERICAN AFFAIRS

Facilities for graduate work in the field of Inter-American Affairs leading to the degree of Master of Arts have been provided through inter-departmental committees within the Graduate School which will approve and supervise programs of study correlating the various subjects offered by the departments. The individual needs of students and preferences for certain lines of specialization will be taken into consideration.

Students will be admitted to graduate study in Inter-American Affairs with (a) the degree of Bachelor of Arts with a major in Inter-American Affairs from the University of New Mexico, or its equivalent from another institution; or (b) the degree of Bachelor of Arts with a minimum of fifteen hours in Latin-American studies. A reading knowledge of Spanish must be accredited before receiving the degree.

For further information see the Graduate School Bulletin.

A TWO-YEAR COURSE FOR SECRETARY-INTERPRETERS WITH SPECIALIZATION IN INTER-AMERICAN RELATIONS

New Mexico occupies a very advantageous position for training of this type. Over half the population of the state is of Spanish speech and descent, and a large proportion of the graduates of high schools have received an intensive training in the Spanish language. It should be possible therefore to develop adequately in the space of two years the student's proficiency in this five-angled field:

(a) English practice and expression and their relation to Spanish.
ARTS AND SCIENCES

(b) Spanish practice and expression and their relation to English.

(c) A reading knowledge of Portuguese.

(d) A general knowledge of Latin-American countries and of sources of information.

(e) Secretarial technique, including typing and shorthand, both in English and Spanish.

Inasmuch as Spanish is a living tongue in New Mexico, graduates of this vocational course, whether of Spanish or Anglo-Saxon descent, after they have perfected their knowledge of spoken and written English and Spanish, should be expected to be able to act not only as secretaries but as interpreters as well. The demand for bilingual young men and women thus equipped is very great at present not only in the governmental, business, and cultural circles of this country, but also in those of the Latin-American countries.

The curriculum for this course aims to balance the training in secretarial technique and practice with academic studies which will increase the intellectual outlook and competence of the student and qualify him for positions of responsibility.

This course is articulated with the General Business Course given in the General College and the B.A. in Business Administration and will be under the direction of a Committee on Secretarial Training composed of the Head of the Department of Economics and Business Administration (Chairman) and representatives from the College of Education and the School of Inter-American Affairs. The College of Education offers a teachers' course in commercial subjects.

ADMISSION. Students will be admitted from accredited high schools. They must present at least 4 units of high school Spanish, or two years of college Spanish or its equivalent, or pass a reading knowledge test in the language.

CURRICULUM.  

FIRST YEAR

<table>
<thead>
<tr>
<th>First Half</th>
<th>Second Half</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1. English Composition</td>
<td>English 2. English Composition</td>
</tr>
<tr>
<td>*Spanish 95. Spanish-Business</td>
<td>*Spanish 96. Com'l and Industrial Lang. Practice in Hispanic Countries (3rd Yr.)</td>
</tr>
<tr>
<td>Letter Writing (3rd Yr.)</td>
<td></td>
</tr>
<tr>
<td>*Portuguese 1. Elementary Portuguese</td>
<td>*Portuguese 2. Elementary Portuguese</td>
</tr>
<tr>
<td>Orientation 9. Health</td>
<td></td>
</tr>
<tr>
<td>Total credits</td>
<td>Total credits</td>
</tr>
<tr>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>

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### ARTS AND SCIENCES

**SECOND YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 181. Advanced Comp. and Conv.</td>
<td>2</td>
</tr>
<tr>
<td>Portuguese 51. Intermediate Portuguese</td>
<td>3</td>
</tr>
<tr>
<td>Bus. Adm. 55. Advanced Typing in Spanish</td>
<td>2</td>
</tr>
<tr>
<td>Bus. Adm. 57. Spanish Shorthand Theory and Dictation</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>English 55. Vocabulary Building</td>
<td>3</td>
</tr>
<tr>
<td>Spanish 182. Advanced Comp. and Conv.</td>
<td>2</td>
</tr>
<tr>
<td>Portuguese 52. Intermediate Portuguese</td>
<td>3</td>
</tr>
<tr>
<td>Anthrop., Econ., Govt., Socio. 73. Introduction to Latin America</td>
<td>3</td>
</tr>
<tr>
<td>Bus. Adm. 58. Spanish Shorthand Theory and Dictation</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

The above program is devised for students not having had any previous business training. It will be adjusted according to the preparation of the student. For instance, in the cases of students with a knowledge of general typing and shorthand or advanced proficiency in Spanish, the corresponding credits will be earned in other courses recommended by the Director of the School in consultation with the Committee on Secretarial Training of the School. It should also be possible to speed up the training in typing and shorthand through competence tests, thus releasing some of the credits for electives.

This Course will in all likelihood be pursued by college graduates who now enter business schools to gain secretarial training. Such students will already have credits for English Composition, and may, therefore, use the equivalent hours for electives. In general, students will be permitted to take examinations in any of the courses listed, and if they pass them, the credits involved will be released for electives.

The following courses are generally recommended:

- **Business 1, 2. Bookkeeping** ........................................... 6
- **Business 4. Introduction to Business** .............................. 3
- **Business 6. Salesmanship** ............................................. 2
- **Business 7. Machine and Office Training** ........................... 3
- **Business 9. Business Legal Practice** .................................. 3
- **Bus. Administration 5, 6. Principles of Accounting** ........... 6
- **Business Administration 157. Office Procedure** .................... 3

Whenever possible, classes will be scheduled in late afternoon and evening in order to facilitate the attendance of persons holding daytime jobs.

* The Spanish and Portuguese courses have the aid of a Phonetics Laboratory, operated jointly by the Speech Division of the Department of English and the Department of Modern Languages. Students report to the Laboratory for exercises in the pronunciation of foreign languages. The Laboratory functions also as a clinic in English pronunciation. The Speech Workshop aids students whose imperfect diction is the result of a non-English background.
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Registration fees will be apportioned on a credit basis that will permit the enrollment of part-time students.

CERTIFICATE. The School of Inter-American Affairs will grant a Certificate of Secretary-Interpreter with Specialization in Inter-American Relations upon the fulfillment of the following requirements:

I. The successful completion of the program of studies, with a grade-point average of at least one in the total number of hours in which the student has registered.

II. The passing of a final comprehensive examination patterned after the standard forms of civil service examinations for secretarial positions, and including test questions on Latin-America, Spanish language proficiency, and a reading knowledge of Portuguese. A numerical rating will be given closely corresponding to that given in civil service examinations. This examination will be administered by a committee of three, representing a federal agency, a state agency, and the School of Inter-American Affairs.

A ONE-YEAR POST-GRADUATE COURSE IN INTER-AMERICAN RELATIONS FOR MAJORS IN SCIENCE DEPARTMENTS AND GRADUATES OF TECHNICAL SCHOOLS

The School of Inter-American Affairs is attempting to equip technicians with a reasonable background knowledge of Latin America. To this end it has organized an intensive one-year postgraduate course in inter-American relations for graduates of schools of engineering, agriculture, medicine, library science, business, commerce, and social work, as well as for graduates of colleges of arts and sciences who have majored in exact or natural sciences, economics, or business administration, and in general for students in the various techniques who because of intensive specialization have not had an opportunity to acquire an adequate training in Latin-American affairs during the regular period of study.

This post-graduate course aims at furnishing the information and guidance deemed indispensable for truly effective work in Latin America or with Latin Americans. Students completing this course should be able to utilize more fully their professional training, here in our country as well as in Latin America, for the promotion of social and economic relations between the United States and its hemisphere neighbors. The vital importance of such efforts for the duration of the war was obvious; and they are equally important in the post-war period if we are to consolidate and preserve the gains which we have made and contribute to the shaping of a permanent system of international peace and security.
The course is planned to provide:

I. Intensive laboratory-type training in written and spoken Spanish.

II. An introduction to the land and people of Latin America and to their social, economic, and political life.

III. A foundation knowledge of Portuguese or training in certain business skills.

IV. Continuation of science studies.

This course is administered by a committee composed of the Dean of the College of Engineering (Chairman), the Dean of the Graduate School, and representatives of the science departments in the College of Arts and Sciences and the School of Inter-American Affairs.

Contacts are being established and will be maintained with companies and organizations doing business or field work in Latin America for the placement of our students and also to ascertain their particular needs in the training we are offering.

ADMISSION. Students must offer for admission two years of college Spanish or its equivalent, or pass a reading knowledge examination in the language.

CURRICULUM.

<table>
<thead>
<tr>
<th>First Half</th>
<th>Second Half</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 93. Interm. Comp. &amp; Conv. 2</td>
<td>Spanish 94. Interm. Comp. &amp; Conv. 2</td>
</tr>
<tr>
<td>Sociology 78. Intro. to Latin America 3</td>
<td>Portuguese or Electives (Accounting, Marketing, Spanish shorthand, etc.) 3</td>
</tr>
<tr>
<td>Portuguese or Electives (Accounting, Marketing, Spanish shorthand, etc.) 3</td>
<td>Continuation of science studies or other electives deemed advisable in Spanish, Business and Latin-American subjects (cases will be considered individually) 9-10</td>
</tr>
<tr>
<td>Continuation of science studies or other electives deemed advisable in Spanish, Business, and Latin-American subjects (cases will be considered individually) 6-7</td>
<td>Total credits 16-17</td>
</tr>
</tbody>
</table>

Inasmuch as undergraduate students in the College of Engineering can elect 24 credits in other colleges, it is strongly recommended that those intending to follow this postgraduate course take while they are undergraduates as many of the courses listed here as possible. If the student does this and has a good preparation in Spanish both in high school and in college, it may be possible for
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him to take practically all subjects in courses numbered 100 or above and thus obtain more credits toward the Master's degree.

A certificate attesting the successful completion of the course will be given to regularly enrolled students after they have passed all the examinations with a grade of C or above in each of the courses taken. Credits earned in courses numbered 100 or above may be later applied toward the Master's degree.

COMBINED CURRICULUM IN ENGINEERING AND ARTS AND SCIENCES

Degrees in both the College of Arts and Sciences and the College of Engineering may be obtained by following a five-year curriculum, to be outlined in each case, jointly, by the Deans of the two colleges.

Attention is called to a combined curriculum in Engineering and Inter-American Affairs. Students interested should confer with the Deans, preferably upon entering the University or during their freshman year, and not later than the beginning of their sophomore year.

EXTRA-CURRICULAR ACTIVITIES OF THE SCHOOL

The School operates a Research Bureau on Latin America and Cultural Relations in the Southwest in cooperation with the Department of Sociology; organizes a series of weekly public lectures on Hispanic Affairs in which members of the faculty and outside speakers participate; sponsors conferences and exhibits; maintains close relationship with the Spanish-speaking groups in the state; cooperates in various projects with other University units and organizations outside the University; furnishes an audio-visual service to public schools and civic groups; directs a program of publications under the title Inter-Americana Series; and has been conducting since its foundation a state-wide Community Program, including community organization and projects, institutes for training rural community leaders, etc. For further information on any of these activities, please address the Director.

COLLEGE OF ARTS AND SCIENCES

DEPARTMENTS OF INSTRUCTION

Courses numbering: from 1-49, lower division, normally open to freshmen; from 50-99, lower division, normally open to sophomores; from 100-199, upper division, normally open to juniors, seniors, and graduates; 200-400, open to graduates only. Graduate credit for courses listed is allowed at the discretion of the Graduate Committee.
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Symbols used in course descriptions: L—part of the course is laboratory work; F—course is given during field session; SS—course offered in eight weeks' summer session only; Yr—courses offered throughout two semesters and credit for a single semester's work is suspended until the entire course is completed; *—course open to General College students; †—course offered for General College credit only; ( )—Semester hours' credit; credit hours separated by a dash (1-3) indicates variable credit in the course; []—former course number or title.

A schedule of course offerings, including hours of meeting, is issued at the opening of each session. The University reserves the right to cancel any listed course or to make a substitution in instructors when necessary.

ORIENTATION

All freshmen, with less than 20 hours of college credit, enrolled in the College of Arts and Sciences, are required to complete Orientation 9.

*2. ORIENTATION. (1-2) Reading and study laboratory. Exercises designed to correct deficiencies among beginning students.

*9. HEALTH. (1) Dr. Harris

ANTHROPOLOGY

Professors Brand (Head), Hill, Spier; Associate Professor Hibben; Assistant Professors Hawley, Reiter; Graduate Fellows Adair, Amoss, Anderson, Burroughs, Chatfield, Dorrington.

GROUP REQUIREMENTS

Courses in this Department count toward Social Sciences (Group III).

MAJOR STUDY

Anthropology 1, 2, 193 and 28 more hours in courses numbered from 100 through 199 within the Department. Recommended preparatory courses: Biology 1L and 2L, History 1 and 2, Geology 1 and 2, Psychology 1L and 2L. Anthropology courses offered are divided into four major divisions: archaeology, ethnology, topical and technical. A student specializing in either one of the first two must take a minimum of 12 hours in that division and a minimum of 6 hours in each of the other three major divisions. Upper division courses from other departments, chosen with the approval of the Head of the Department, are acceptable as electives toward a major in anthropology.
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MINOR STUDY

14 hours in addition to Anthropology 1 and 2.

*1. [1a] GENERAL ANTHROPOLOGY: ORIGIN AND ANTIQUITY OF MAN. (3) Hibben, Reiter

*2. [1b] GENERAL ANTHROPOLOGY: ORIGINS OF SOCIETY. (3) Hill, Reiter

*8. [7] SURVEY OF SOUTHWESTERN ANTHROPOLOGY. (3) A non-technical course not credited toward the major or minor in anthropology. Hawley

59L. [60L] MUSEUM METHODS. (2) The study and treatment of museum and field material. 1 lecture, 3 hrs. lab. Hibben

60L. [59L] MUSEUMS AND THEIR WORK. (2) Museum administration, exhibition, and curatorial work. 1 lecture, 3 hrs. lab. Hibben

66L. ARCHAEOLOGIC FIELD TECHNIQUE. (2) Methods and materials involved in excavations; field surveying and recording; care of archaeologic material in the field. Reiter

*71. [70] SURVEY OF ANTHROPOLOGY. (2) The sub-divisions of anthropology. A non-technical course not credited toward the major or minor. Reiter

73. [73ab] INTRODUCTION TO LATIN AMERICA. (3) (Same as Economics 73, Government 73, and Sociology 73). For description, see p. 79. Jorrin

*75F. GENERAL FIELD SESSION. (2-6) Introductory summer field course in archaeology or ethnology. Staff

*76F. SECONDARY FIELD COURSE. (2-6) Field course in archaeology or ethnology. Prerequisite: 75F. Staff

*97. INTRODUCTION TO CLASSICAL ARCHAEOLOGY. (3) The cultural beginnings of Greece and Rome with special reference to the importance of classical backgrounds in modern culture. Hibben

*99. COMPARATIVE SOCIAL STRUCTURE. (3) Hill

General prerequisite (except for 102): Anthropology 1 and 2 or equivalent. The divisional classification of each course is indicated after the credit value, viz., Arch. is archaeology, Eth. is Ethnology, Top. is Topical, and Tech. is Technical.

101. THE INDIVIDUAL IN HIS SOCIETY. (3) Top. A comparative study of cultures (form and process) and their relationship to the individual culture carrier. The possibility of application of anthropological principles to problems of foreign peoples, minority groups, and primitive tribes. Hawley

102. PERSPECTIVES OF ANTHROPOLOGY. (3) Top. Essential concepts of the nature of culture and of racial relationship, with
reference to contemporary situations and problems. No prerequisites.

103L. [104L] DENDROCHRONOLOGY. (3) Tech. The science of tree ring studies applied to archaeologic problems. Prerequisite: permission of instructor. 1 lecture, 4 hrs. lab. Hawley

105. [105a] THE AMERICAN INDIAN: NORTH AMERICA. (3) Eth. Spier

105b] THE AMERICAN INDIAN: SOUTH AMERICA. (3) Eth. Hill


109. [110] SOUTHWESTERN POTTERY. (2) "Tech. Prehistoric development of ceramic art. Prerequisite: 155 or 156 Hawley

112. [111] EUROPEAN PREHISTORY. (3) Arch. Early European cultures. Human development as shown in physical and cultural remains. Hibben

119. RACES AND CULTURES OF EUROPE AND ASIA. [Cultures and Races of Europe] (3) Eth. Reiter

136. [139] ETHNOGRAPHY OF AFRICA. (3) Eth. Spier

158. NORTHWEST AMERICA AND NORTHEAST ASIA. (3) Eth. Hill

140. [141a] ANALYSIS OF CULTURE AREAS: WESTERN NORTH AMERICA. (3) Eth. Restricted to the California, Basin and Plateau culture areas. Normally alternates with 142, and is given in even years, e.g., 1948. Spier

142. [141b] ANALYSIS OF CULTURE AREAS: PLAINS. (3) Eth. Spier

144L. [144] MATERIAL CULTURE ANALYSIS. (3) Tech. Methods of analyzing archaeologic, non-ceramic material traits, and the systematic presentation of excavated materials. 1 lecture, 4 hrs. lab. Reiter

147. [148] OCEANIA. (3) Eth. Hill

150. METHODS IN CULTURAL ANTHROPOLOGY. (3) Top. Methods used in the collection and ordering of anthropological data for historical, scientific and administrative problems: trait lists, questionnaires, participant-observer technique, interviews, personality and intelligence tests, life histories, etc. Hawley

155. [180a] SOUTHWESTERN ARCHAEOLOGY: MOCOLLON AND HOHOKAM. (3) Arch. Hawley

156. [180b] SOUTHWESTERN ARCHAEOLOGY: PUEBLO AREA. (3) Arch. Hawley

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158. [181b] SOUTHWESTERN ETHNOLOGY: PUEBLO PEOPLES. [Ethnography of the Southwest] (3) Eth. Hawley

162. ARCHAEOLOGY OF THE OLD WORLD. (3) Arch. Prehistory of Africa, Asia, Oceania. Hibben

174L. PROBLEMS IN ADVANCED DENDROCHRONOLOGY. [Advanced Dendrochronology] (2) Tech. Prerequisite: 103L. Hawley

175F. ADVANCED SUMMER FIELD SESSION. (2-6) Advanced work for upper division and graduate students. Prerequisite: 75F or equivalent. Staff

184. ARCHAEOLOGY OF MEXICO, CENTRAL AMERICA, AND THE WEST INDIES. Arch. (3) Hibben

185. [182a] AMERICAN ARCHAEOLOGY: NORTH AMERICA. (3) Arch. This course excludes the Southwest and Mexico from consideration. Hibben

186. [182b] AMERICAN ARCHAEOLOGY: SOUTH AMERICA. (3) Arch. Reiter

193. HISTORY OF ANTHROPOLOGY. (2) Top. Hill, Reiter

194. [194ab] ANTHROPOLOGICAL METHODS. (2) Top. A consultation course, which may be repeated for credit. Prerequisite: Permission of instructor. Spier

198. PRIMITIVE RELIGION. (3) Top. Hill

199F. FIELD RESEARCH. (2-6) Field course. Prerequisites: 75F and 175F or equivalents. Staff

205. PRO-SEMINAR: INTRODUCTION TO RESEARCH. (2) Required of all graduate students. Recommended: a reading knowledge of Spanish, French, or German. Hill

206. SURVEY OF CURRENT ANTHROPOLOGY. (2) Spier

209. PRESENTATION OF FIELD RESEARCH. (2) The organization, analysis and interpretation of archaeological and ethnological field research. Reiter

212. SEMINAR: ETHNOLOGY. (2) Hill

213, 252 [251ab] PROBLEMS. (2, 2) No more than 6 hours may be taken towards the M.A., nor more than 12 hours towards the Ph.D. degree. Graduate Staff

257. SEMINAR: EARLY MAN IN THE NEW WORLD (2) Hibben

282. SEMINAR: AMERICAN ARCHAEOLOGY (2) Reiter

294. SEMINAR: SOUTHWESTERN ARCHAEOLOGY AND ETHNOLOGY. (2) Hawley

300. THESIS. (4-6) Graduate Staff

375F. FIELD RESEARCH. (6-12) Primarily to cover field work of Ph.D. candidate. Graduate Staff

400. DISSERTATION (0) Graduate Staff

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ARTS AND SCIENCES

BIOLOGY

Professor Castetter (Head); Associate Professor Koster; Assistant Professors Dittmer, Fleck, Lindsey; Teaching Assistants Hill, Widner; Graduate Fellows Mitchell, Thompson, Vick.

GROUP REQUIREMENTS

Courses in this Department count toward Science and Mathematics (Group IV).

MAJOR STUDY

Biology 1L, 2L, 71L, 72L, 109, 143L or 144L, and 9 additional hours, 5 of which must be in courses numbered above 100. Courses 33L, 36, 39L, 41, and 48 are not accepted toward a major. One year of chemistry is required of biology majors.

MINOR STUDY

Biology 1L and 2L, and 12 additional hours.

NOTE

Credit will not be allowed for both 36-39L and 144L; or for both 48 and 109.

CURRICULA PREPARATOR TO FORESTRY, MEDICAL TECHNOLOGY, OR MEDICINE

See "College of Arts and Sciences."

1L. GENERAL BIOLOGY. (4) Yr. An introduction to the fundamental structures, functions, and principles of higher plants and animals with emphasis on the unity, rather than the diversity, of phenomena. Credit suspended until 2L is completed. 3 lectures, 3 hrs. lab. Castetter, Koster, Dittmer

2L. GENERAL BIOLOGY. (4) A continuation of 1L. Survey of the plant and animal kingdoms; heredity, environmental relations, and evolution. Prerequisite: 1L. 3 lectures, 3 hrs. lab. Castetter, Koster, Dittmer

5. INTRODUCTION TO THE PHYSICAL SCIENCES. (3) An elementary survey of the non-living world. Includes brief studies of descriptive astronomy, physics, chemistry, and geology. Emphasis on the application of the principles of these sciences to man and society. Fleck

6. INTRODUCTION TO THE BIOLOGICAL SCIENCES. (3) An elementary survey of the world of living things. Includes brief studies of both plant and animal life, digestion, respiration, circulation, excretion, reproduction, communicable and functional diseases, heredity, and evolution. Emphasis on the human body. Fleck

33L. MICROBIOLOGY. (3) An elementary survey of those forms of microscopic life of importance in nursing. Practical exercises
on the procedures involved in aseptic technique. 2 lectures, 2 hrs. lab. (For prenursing students only.) Lindsey

*36. Human Physiology. (3) The functions of the human body. May be taken with, or independently of, 39L. Dittmer

*39L. Human Anatomy and Physiology Laboratory. (2) Laboratory work in elementary anatomy and physiology. Cannot be taken independently of Biology 36. Dittmer

*41. Survey of New Mexico Plant Life. (2) SS Lectures, demonstrations, and field trips. Lindsey

*48. Heredity. (2) A cultural survey of the field of inheritance. Dittmer

71L. Invertebrate Zoology. (4) A comparative study of the structure, habits, and classification of the invertebrates exclusive of insects. Prerequisites: 1L and 2L. 2 lectures, 4 hrs. lab. Koster

72L. Comparative Plant Morphology. (4) A comparative study of the four great groups of the plant kingdom. Prerequisites: 1L and 2L. 2 lectures, 4 hrs. lab. Dittmer

93L. General Bacteriology. (4) Bacteria and related forms. Morphology, physiology, classification, cultivation, and medical and economic importance. Prerequisites: 1L and 2L, Chemistry 1L and 2L. 2 lectures, 4 hrs. lab. Dittmer

96L. Ornithology. (4) Identification and habits of birds. Early morning field trips required. 2 lectures, 4 hrs. lab. (Offered 1947-48 and in alternate years with Biology 185L). Koster

105. Ethnobiology of the New World. (3) The aboriginal picture of the utilization of plants and animals of the New World. Emphasis on the Southwest. Prerequisite: 4 hrs. of Biology. Koster

109. Genetics. (3) The scientific, cultural, and philosophical aspects of inheritance. Prerequisites: 1L and 2L. Castetter


112L. Comparative Embryology of the Vertebrates. (4) Prerequisites: 1L, 2L, and 71L. 2 lectures, 6 hrs. lab. Koster

114L. General Entomology. (4) SS Structures, habits, and classification of the insects. Prerequisites: 1L and 2L. 2 lectures, 4 hrs. lab. Koster

121L. Comparative Vertebrate Anatomy. (5) Prerequisites: 1L, 2L, and 71L. 2 lectures, 6 hrs. lab. Koster and Assistant

143L. General Physiology. (4) Cell physiology, absorption, photosynthesis, digestion, translocation, circulation, and respir-
ation. Prerequisites: 12 hrs. of Biology, and Chemistry 1L and 2L. Organic chemistry is strongly recommended. 2 lectures, 4 hrs. lab. Fleck and Assistant

144L. General Physiology. (4) Metabolism, excretion, transpiration, muscle action, nerve and sense organs, growth and correlation, and reproduction. Prerequisites: 12 hrs. of Biology, and Chemistry 1L and 2L. 2 lectures, 4 hrs. lab. Fleck and Assistant

152L [152L]. Advanced Bacteriology. (4) Principles of the life activities, growth, and morphology of bacteria; emphasis on pathogenic forms. Prerequisites: 93L, and 143L or 144L. Organic chemistry is strongly recommended. 2 lectures, 4 hrs. lab. Fleck

163L. Flora of New Mexico. (4) Prerequisites: 1L and 2L. 2 lectures, 4 hrs. lab. Dittmer

171L. General Ecology. (4) Animals and plants in relation to their various natural environments. Applications to soil conservation, forestry, and wildlife management. Frequent field trips. Prerequisites: 1L and 2L. 3 lectures, 2 hrs. lab. Lindsey

174L. Plant Anatomy. (4) Structure of vascular plants. Prerequisites: 1L, 2L, and 72L. 2 lectures, 4 hrs. lab. Lindsey

184L. Mycology and Plant Pathology. (4) A comparative study of the fungi with some consideration of bacteria and causative factors in plant diseases. Prerequisites: 1L, 2L, and 72L. 2 lectures, 4 hrs. lab. (Offered in alternate years with Biology 174L) Dittmer

185L. General Vertebrate Zoology. (4) Natural history, classification, behavior, ecology, and speciation of the vertebrates exclusive of the birds. Prerequisites: 1L and 2L. 2 lectures, 4 hrs. lab. (Offered in alternate years with Biology 96L) Koster

201. Seminar. (2) Topic for study will be selected at beginning of each semester. Graduate Staff

225. Fundamental Concepts of Biology. (3) Trend of scientific thought and method from earliest times to the present. Origin and history of important biological principles. Castetter

251. Problems. (2-3) Graduate Staff

252. Phylogeny of the Plant Kingdom. (2) Evolutionary trends with emphasis on the vascular plants. Dittmer


300. Thesis. (4-6) Graduate Staff
ARTS AND SCIENCES

BUSINESS ADMINISTRATION

See Economics and Business Administration.

CHEMISTRY

Professors Smith (Head); Riebsomer; Assistant Professors Castle, Martin; Instructors Benham, Dustin, Gibson, McDaniel, Searcy.

GROUP REQUIREMENTS

Courses in this Department count toward Science and Mathematics (Group IV).

MAJOR STUDY

For the Cultural Major: Chemistry 1L, 2L, 53L, 101L, 102L, and at least 8 additional hours selected from courses numbered above 100.

For the Professional Major: Chemistry 1L, 4L, 53L, 54L, 103L, 104L, 111L, 112L, 181, 182, and at least 6 additional hours selected from courses numbered above 100. The program must also include 12 hours of German.

MINOR STUDY

21 hours in Chemistry, including Chemistry 1L, 2L, 53L, 101L, and 102L. Chemistry 41L and 42L do not count toward the minor.

1L. GENERAL CHEMISTRY. (4) Yr. Introduction to the chemical and physical behavior of matter. Atomic and molecular structure. Descriptive chemistry of the common elements. Credit suspended until 2L or 4L is completed. 3 lectures, 3 hrs. lab. Staff

2L. GENERAL CHEMISTRY. (4) Continuation of 1L and including some qualitative analysis. 3 lectures, 3 hrs. lab. Staff

4L. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. (5) Continuation of 1L, with special emphasis on qualitative analysis. For professional majors in chemistry and chemical engineering. 3 lectures, 6 hrs. lab. Staff

41L, 42L. [40abL] FUNDAMENTALS OF CHEMISTRY—GENERAL INORGANIC AND ORGANIC. (5, 5) A one-year course designed for students in home economics, nursing, and physical education. Not acceptable as prerequisite to subsequent courses in Chemistry. 3 lectures, 6 hrs. lab. The lectures of this course may be elected separately by those wishing a restricted course in chemistry. Riebsomer

53L. [55abL and 57abL] QUANTITATIVE ANALYSIS. (5) Theory and techniques of volumetric and gravimetric analysis. Pre-
requirements: 1L and either 2L or 4L. 2 lectures, 9 hrs. lab.

Martin

54L. Special Methods in Quantitative Analysis. (4) Theory and practice in electrolytic, electrometric and colorimetric analytical methods. Prerequisite: 53L. 2 lectures, 6 hrs. lab.

Martin

101L, 102L. [101labL] Organic Chemistry. (4, 4) The chemistry of the compounds of carbon. For cultural majors, minors, and students of pharmacy. Prerequisites: 1L and either 2L or 4L. 3 lectures, 9 hrs. lab.

Martin

103L, 104L. [103labL] Organic Chemistry. (5, 5) A more extensive course than the above, for professional majors in chemistry and chemical engineering. Prerequisites: 1L and either 2L or 4L. 3 lectures, 6 hrs. lab.

Riebsomer

105L. Qualitative Organic Analysis. (3) Identification of carbon compounds through the characteristic reactions of functional groups. Prerequisite: 102L or 104L. One lecture, 6 hrs. lab.

Riebsomer


Smith

115. Structure of Matter. (3) Molecular structure and the fine structure of solids. The nature of chemical bonding. Chemical consequences of structure. Prerequisites: 53L and 102L or 104L.

Smith

131. Inorganic Chemistry. (3) A systematic survey of the chemical behaviors of the elements and their inorganic compounds. Prerequisite: 102L or 104L.

Staff

154L. [142L] Instrumental Analysis. (3) Application of instrumental methods to chemical analysis. Prerequisites: 53L, 111L and 112L. 1 lecture, 6 hrs. lab.

Martin

181, 182. Seminar. (1, 1) Exposition and discussion of current topics in chemistry. Required of senior professional majors and graduate students.

Staff

197, 198. Undergraduate Problems. (2-5 each semester). Staff

208. [108] Advanced Topics in Organic Chemistry. (3) Prerequisites: 102L or 104L.

Riebsomer

232. Advanced Topics in Inorganic Chemistry. (3) Prerequisites: 111L and 131.

Staff

251, 252. [25labL] Graduate Problems. (2-5 each semester).

Graduate Staff

300. Thesis. (4-6)

Graduate Staff
ARTS AND SCIENCES

CLASSICS
Not a department.

MAJOR STUDY
Not offered.

MINOR STUDY
A minor may be worked out if sufficient demand arises.

1, 2 [lab] ELEMENTARY GREEK. (3, 3) Yr. Credit suspended for 1 until 2 is completed. (Offered only upon sufficient demand.) Staff

51, 52. [53ab]. INTERMEDIATE LATIN. (3, 3) Yr. Credit suspended for 51 until 52 is completed. Accepted in fulfillment of lower division foreign language requirement. (Offered only upon sufficient demand.) Staff

ECONOMICS AND BUSINESS ADMINISTRATION

Professor Sorrell (Head); Associate Professors Popejoy, Plank, Russell; Assistant Professors Edgel, Parish; Instructors Christoffers, Conway, Israel, Patterson, Saeger, Williams; Teaching Assistant Sturges; Graduate Fellow Fuqua.

GROUP REQUIREMENTS
Courses in this Department count toward Social Science (Group III) with the exception of Business Administration 5, 6, and 65. Students majoring in Business Administration, or seeking the Bachelor of Business Administration degree, are required to take Mathematics 42, which will also count toward Mathematics and Science (Group IV).

Students may elect courses offered by this Department leading (1) toward the Bachelor of Arts degree with a major in Economics, (2) toward the Bachelor of Arts degree with a major in Business Administration, or (3) courses leading to the professional degree, Bachelor of Business Administration.

ECONOMICS

MAJOR STUDY
(Leading to Bachelor of Arts degree.) 30 hours including Economics 51, 52, 111, Business Administration 5, and 12 hours in Economics including 154 and 160. The remainder may be in Business Administration.
MINOR STUDY

18 hours, including Economics 51, 52, of which 12 must be in Economics. The remainder may be in Business Administration.

1. [lab] INTRODUCTION TO SOCIAL SCIENCE. (3,3) Yr. (Same as Government 1, 2 and Sociology 1, 2.) A study of current social, economic, and political problems, with particular reference to the United States. Credit suspended until both semesters are completed.

2. [lab] INTRODUCTION TO ECONOMICS. (3,3) Yr. A prerequisite to all advanced courses in the department unless otherwise indicated. Prerequisite: sophomore standing. Credit for 51 suspended until 52 is completed.

51, 52. [51ab] INTRODUCTION TO ECONOMICS. (3,3) Yr. A prerequisite to all advanced courses in the department unless otherwise indicated. Prerequisite: sophomore standing.

Plank, Saeger, Conway

63. ECONOMIC RESOURCES. (3) A general survey of the basic economic resources of the world.

Sorrell

73. [73ab] INTRODUCTION TO LATIN AMERICA. (3) (Same as Anthropology 73, Government 73, and Sociology 73.) For description, see p. 79.

Jorrín

General prerequisite: Economics 51, 52, or 105, unless otherwise stated.

105. PRINCIPLES OF ECONOMICS. (3) Primarily for students who are not majors in the department. Prerequisite: upper division standing, except for sophomore engineers.

Plank

111. MONEY AND BANKING. (3)

Sorrell

119. CURRENT PROBLEMS OF FOREIGN TRADE. (3)

Staff

121, 122 [121ab] ECONOMICS AND TRADE OF LATIN AMERICA. (2,2) Survey of economic life; trade relations, investments, economic planning. Prerequisite: Economics 73.

Jorrín

140. ECONOMIC SECURITY. (3) The meaning and extent of poverty and insecurity, and methods of dealing with these problems.

Walter

141: LABOR PROBLEMS. (3) The position of the laborer in modern society.

Plank

143. TRANSPORTATION. (3) Inland transportation with special attention to railroads.

Staff

152. PUBLIC FINANCE. (3) The theory and practice of taxation, governmental borrowing, financial administration and public expenditures.

Plank

154. COMPARATIVE ECONOMIC SYSTEMS. (3) A critical analysis of the proposed major reforms of the existing economic system.

Sorrell

160. ECONOMIC THEORY. (3)

Sorrell
165. **Public Utilities. (3)** A study of the principles and problems in the utilities field. Plank

178. **Recent History of the United States. (3)** (Same as History 178.) Accepted toward the major only.

198, 199. [198ab] **Seminar. (2-3 each semester)** Staff

251, 252. [251ab] **Problems. (2-4 each semester)** Graduate Staff

300. **Thesis. (4-6)**

**ARTS AND SCIENCES**

**BUSINESS ADMINISTRATION**

**THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION**

The degree of Bachelor of Business Administration (B.B.A.) is awarded upon the completion of (1) regular minimum requirements for the bachelor's degree in the College of Arts and Sciences, (2) 48 hours in Economics and Business Administration courses numbered above 50, including Economics 51, 52, Business Administration 5, 6, 65, 106, 107, 108, 109, 110; Economics 111, (3) at least 40 percent of the hours presented for graduation must be in fields other than Economics and Business Administration. A minor is not required.

**MAJOR STUDY**

(Leading to the Bachelor of Arts Degree.) Economics 51, 52, Business Administration 5, 6, 106, 107, 109, Economics 111, and 6 additional hours in Business Administration or Economics.

**MINOR STUDY**

Economics 51, 52, Business Administration 5, 6, and 6 additional hours in Business Administration.

**CURRICULUM FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION.** This is a normal program for the B.B.A. degree. There may be numerous variations from it in any particular student's program.

**FRESHMAN YEAR**

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<th>First Semester</th>
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<tr>
<td>English 1</td>
<td>English 2</td>
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<tr>
<td>Math 42</td>
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<td>Science</td>
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<td>Econ 1 (or Other Social Science)</td>
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<td>P. E.</td>
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<td>Orientation 9</td>
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<th>First Semester</th>
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<tr>
<td>English 2</td>
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<tr>
<td>Foreign Language</td>
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<td>Science</td>
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<td>Econ. 2 (or Other Social Science)</td>
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### SOPHOMORE YEAR

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<td>Literature</td>
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<td>Econ. 52</td>
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<tr>
<td>B. A. 6</td>
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<tr>
<td>B. A. 65</td>
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<td>P. E.</td>
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### JUNIOR YEAR

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<td>B. A. 64</td>
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<td>B. A. 109</td>
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### SENIOR YEAR

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<td>Econ. 141</td>
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<td><strong>Total</strong></td>
<td><strong>15-16</strong></td>
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5, 6. [53ab] **PRINCIPLES OF ACCOUNTING.** (3, 3) Introductory accounting. Both semesters are required for a major in Business Administration. Credit for 5 is required of Economics majors; and the course is elective for engineering, pharmacy, home economics, and other students. Credit can be obtained in 5 without continuing in 6.

*11, 12. [11ab] **BEGINNING TYPWRITING.** (2, 2) Not counted toward major or minor. 3 one-hour periods per week. Israel

*13, 14. [12ab] **SHORTHAND THEORY AND BEGINNING DICTATION.** (3, 3) Theory; dictation. Not counted toward major or minor. 4 one-hour periods per week. Israel

*51, 52. [51ab] **ADVANCED TYPWRITING.** (2, 2) Not counted toward major or minor. 3 one-hour periods per week. Israel

*53, 54. [52ab] **DICTATION AND TRANSCRIPTION.** (3, 3) Not counted toward major or minor. 4 one-hour periods per week. Israel

55. **ADVANCED TYPWRITING IN SPANISH.** (2) Prerequisite: B.A. 11, 12 or equivalent. Christoffers

57, 58. [56ab] **SPANISH SHORTHAND THEORY; SPANISH SHORTHAND DICTATION.** (3, 3) Theory; dictation. Prerequisite: B.A. 13, 14, adequate knowledge of Spanish; consult instructor. 4 one-hour periods per week. Christoffers

59. [57] **ADVANCED SPANISH SHORTHAND, DICTATION, AND TRANSCRIPTION.** (3) Christoffers

* 2 No credit toward a degree in College of Arts and Sciences.
* 1 General elective credit in College of Arts and Sciences.

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ARTS AND SCIENCES

63, 64. [103ab] Intermediate Accounting. (3, 3) Prerequisite: B.A. 5, 6. Patterson, Russell

65. Business-Letter Writing. (3) A study of the art of business correspondence, including form material, letterheads, structure, content, etc. Christoffers

87. Mathematics of Finance. (3) (Same as Mathematics 87.) Accepted toward the major only. Larsen

General prerequisite: Economics 51, 52, or 105, unless otherwise stated.

101. Analysis of Financial Statements. (3) Staff

102. Governmental Accounting. (2) Accounting problems and procedures for governmental agencies and political subdivisions; accounts, budgets, statements. Prerequisite: B.A. 5, 6. Russell

104. Cost Accounting. (3) Special emphasis on job order and process cost systems. Prerequisite: B.A. 5, 6. Russell

106, 107. [107ab] Business Law. (3, 3) Prerequisite: upper division standing. Säeger

108. Marketing. (3) Methods and institutions. Edgel

109. Business Statistics. (3) Collection, arrangement, and interpretation of statistical material relating to business operations. Prerequisite: Mathematics 42. Edgel

110. Corporation Finance. (3) Financial organization and policies of the modern corporation. Plank

112. Auditing. (3) Prerequisites: B.A. 5, 6 and 63. Russell

113. Credits and Collections. (2) Principles and practices of credit management. Taught primarily from the point of view of the credit man. Staff

115. Investments. (3) An analysis of corporation, municipal, and other securities. Staff

118. Income Tax Accounting. (3) Russell

123. Insurance Principles and Practices. (3) Staff

157. Office Procedure. (3) Office equipment and procedure; taking and transcribing dictation; filing; financial statements; behavior on the job; work experience. Prerequisites: B.A. 51, 52 and 53, 54. Israel

251, 252. [251ab] Problems. (2-4 each semester) Graduate Staff

300. Thesis. (4-6) Graduate Staff

BUSINESS COURSES FOR GENERAL COLLEGE ONLY

†1, 2. [3abL] Bookkeeping. (3, 3) An introduction to the principles and practices of bookkeeping, including debit and credit procedure, the use of controlling accounts, special journals,
and the preparation of profit and loss and balance sheet statements.

†4. INTRODUCTION TO BUSINESS. (3) Up-to-date procedure, methods, and problems of modern business enterprise. Staff

†5. BUSINESS CORRESPONDENCE FOR SECRETARIES. (3) A study of correct sentence structure, the writing of sales, collection, and application letters, reports, etc. Staff

†6. SALESMAINSHP. (2) The approach and appeal necessary to the consummation of a sale; selling methods which have proved successful. Students are required to engage in actual selling work.

†7. MACHINE AND OFFICE TRAINING. (3) Practice in the use of duplicating, transcription, and calculating machines; filing. Israel

†8, 9. [Sab] BUSINESS LEGAL PRACTICE. (3, 3) The theory and practical problems involved in business contracts. Staff

ENGLISH

Professors Pearce (Head), Arms, Mitchell, Wynn; Associate Professors Smith, Wicker; Assistant Professors Albrecht, Buck, Jacobs. Keleher, Rafferty, Simons; Instructors Adams, Campbell, Fleming, Kuntz, Kytle, Law, Moore, Murray, Tedlock, Winecoff; Teaching Assistants Johns, Lash, R. Smith, Stevenson, Weber; Graduate Fellows Burlingame, Haight, Kilburn, Richards.

GROUP REQUIREMENTS

English 1 is a required course for all students except those who are exempted upon the basis of a placement test. English 2 is required of all students, except transfers who may offer an equivalent course toward the satisfaction of the group requirements. Students in the low percentiles of the Placement Test will take English A (non-credit) in addition to English 1. Additional group requirements are as follows:

College of Arts and Sciences: 3 credit hours in a course in literature numbered above 50.

College of Engineering: English 64.

College of Education: 6 credit hours in courses numbered above 50. (In the Elementary Curriculum, these additional hours must be in literature.)

ELECTIVES WITHOUT PREREQUISITES

The following courses in the lower division are recommended for students selecting hours for the group requirements or for general reading: 56, 57, 58, 75, 76, 80, 82, 84, 95; not accepted as litera-
ARTS AND SCIENCES

ture are 51, 52, 55, 91. In the upper division, courses without prerequisites are 141, 147, 149, 164, 165, 185, and 186.

MAJOR STUDY

English 1 (unless exempted), 2, 53, 54, and 24 additional hours in courses numbered above 50. The courses taken must include 3 hours in American literature; 91; 141; 151 or 154; two courses chosen from 132, 143, 146, 148, 157, 177, 178, 181; and 198. Twelve hours must be taken in courses numbered above 100. It is strongly recommended that English majors take History of England, 71, 72—if possible concurrently with English 53, 54. Students with special interest in the theater may elect Drama 89, 90 toward a major study in English. Education 120, Children’s Literature, will be accepted toward a major in English for those who are taking the Elementary Curriculum in the College of Education. Majors and minors who are planning to teach English should enroll in Education 155c, The Teaching of English in High School. A comprehensive examination in English literature and language (see English 198) is required of majors.

MINOR STUDY

College of Arts and Sciences: English 1 (unless exempted), 2, and 15 hours in courses numbered above 50. A maximum of 6 hours may be selected from the Division of Speech. College of Education and College of Fine Arts: English 1 (unless exempted), 2 and 18 hours in courses numbered above 50.

*A. REVIEW ENGLISH. (0) Fundamentals of English grammar and rhetoric Staff

1. [1a] INTRODUCTION TO RHETORIC. [English Composition] (3) Forms of discourse, expository planning, paragraph methods, the investigative paper, reading reports. Staff

2. [1b] INTRODUCTION TO LITERATURE. [English Composition] (3) The types of literature with readings and reports. Staff

50. JOURNALISM. (3) SS Elementary journalism, with practice in newswriting in connection with the summer Lobo, student weekly newspaper. Some attention is given to theories of teaching newswriting and the supervision of elementary and high school publications. Rafferty

51. [51a] NEWS WRITING AND REPORTING. (3) Spot news and opportunities for free-lance reporting and writing. Credit for elective but not acceptable for group requirements. Rafferty

52. [51b] FEATURE WRITING. [News Writing and Reporting] (3) The writing of newspaper feature stories in class and on assignment. Credit for elective, but not acceptable for group requirements. Rafferty

104
53. [53a] Survey of Early English Literature. (3) From the Old English writings through Neo-classicism. Keleher, Kuntz
54. [53b] Survey of Later English Literature. (3) From pre-Romanticism to the contemporary period. Wicker, Wynn
*55. [54] Vocabulary Building. (3) Study of basic word roots and drill designed to increase vocabulary. Kuntz, Tedlock
*56. Utopias in English Literature. (1) Literature emphasizing social progress, including the works of Plato, More, Bacon, Butler, and Bellamy.
57. [52a] Survey of Modern Fiction and Drama. [Introduction to Modern Literature] (3) Readings in British and American writers from 1890 to the present. Simons, Tedlock, Albrecht
58. [52b] Survey of Modern Poetry and Non-fictional Prose. [Introduction to Modern Literature] (3) Readings in British and American writers from 1890 to the present. Arms, Buck, Jacobs
63. Creative Writing. (3) Keleher
64. [64a] Informative Writing. (3) Professional expository composition and the preparation of elementary reports. Albrecht, Fleming
68. Advanced Composition. (3) Reading and writing of non-fictional prose. Wicker
75. [75a] World Literature from Homer to Dante. (3) Masterpieces of European and Asiatic literature, including the Bible. Jacobs, Smith
76. [75b] World Literature from Rabelais to Ibsen. (3) Masterpieces of European literature, including the great Russian writers. Jacobs, Smith
77. Southwestern Literature. (2) Myth, legend, and song of the Indians; literary values in the Spanish colonial narratives; literature of the Santa Fe trail and the cattle country; contemporary writing. Pearce
80. The Democratic Traditions in American Literature. (3) Political economic and social concepts of democracy as revealed in American literature, from the earliest to contemporary times. Staff
82. American Literature. (3) A general survey to 1900, with more extensive study of the great writers of the Nineteenth century. Smith, Arms
84. Major Poets in American Literature. (3) An intensive study of the major poets from Freneau to Robinson. Arms
85. Newspaper Desk Work. (3) Copy reading, headlining, newspaper makeup. Prerequisite: 51, 52, or semester experience on the Lobo editorial staff. Rafferty
ARTS AND SCIENCES

88. MYTHS AND EPICS. (2) Great myths of Greece and Rome and their application in English literature together with examination of the major folk epics. Jacobs

91. HISTORY OF THE ENGLISH LANGUAGE. (2) The etymology, morphology, phonetics, and semantics of English; the relation between linguistic and cultural change. Pearce, Smith

95. CLASSICAL DRAMA IN TRANSLATION. (2) Lectures in development of Greek and Roman drama and extensive reading of classical plays. Mitchell

121. ADVANCED CREATIVE WRITING. [Advanced Composition] (3) A study of modern literary forms and expression with practice in writing prose and verse. Staff

122. GENERAL MAGAZINE WRITING. (2) A course in the writing of fiction, articles, and verse for American periodicals. Staff

132. CONTEMPORARY POETRY. (3) A study of leading figures in contemporary poetry with analysis of style and critical theory. Prerequisite: English 53 or 54. (Offered alternately with English 181.) Staff

141. SHAKESPEARE. (3) A detailed study of selected plays. Wynn, Simons

143. DRAMA OF THE RESTORATION AND EIGHTEENTH CENTURY. (3) The best plays from D'Avenant to Sheridan. Prerequisite: 53. Smith

146. AGE OF MILTON. (3) Non-dramatic poetry and prose from 1600 to 1674, with special emphasis on the masterpieces of Milton. Prerequisite: 53. Smith

147. STUDIES IN WORLD DRAMA. (3) Smith, Jacobs

148. ELIZABETHAN DRAMA EXCLUSIVE OF SHAKESPEARE. (3) Special attention to the plays of Marlowe and Jonson. Prerequisite: 53. Pearce or Simons

149. CONTEMPORARY DRAMA. (2) Staff

151. CHAUCER. (3) A reading of Chaucer's chief literary works with an examination of his philosophy. Prerequisite: 53. 

154. MIDDLE ENGLISH. (3) A general survey of the types of Thirteenth and Fourteenth century literature. Prerequisite: 53. Pearce, Albrecht

157. ELIZABETHAN NON-DRAMATIC LITERATURE. (3) Development of humanism, new poetry, literature of courtesy. Prerequisite: 53. Pearce

164. CLASSIC AMERICAN WRITERS. (3) Prose masterpieces by Franklin, Emerson, Hawthorne, Thoreau, Whitman, and Clemens. Smith
165. AMERICAN NOVEL. (3) Significant novels and novelists from 1789 to 1920. 
Arms

166. LITERARY CRITICISM. [American Literary Criticism] (3) Major critical attitudes toward literature. Prerequisite: 6 hours of courses in literature. 
Arms

177. THE CLASSICAL PERIOD IN ENGLISH LITERATURE. (3) The chief writers in England from the Restoration to the decline of Neo-classicism. Prerequisite: 53. 
Smith

178. THE ROMANTIC PERIOD. (3) The major poets, and the prose of the Nineteenth century. Prerequisite: 54. 
Wynn, Wicker

181. VICTORIAN POETS. (3) The representative poets from 1830 to 1890. Prerequisite: 54. 
Wynn, Jacobs

185. EARLY ENGLISH NOVEL. (3) From the beginnings through Dickens. (Offered alternately with English 186). Wicker, Arms

186. LATER ENGLISH NOVEL. (3) From Thackeray to the present. (Offered alternately with English 185.) 
Wicker, Arms

197. UNDERGRADUATE PROBLEMS. (1-3) Students with approved qualifications may register for special studies in literature. Staff

198. REVIEW SEMINAR. (1) Senior English majors are advised to take this course in preparation for the comprehensive examination. 
Staff

205. PROBLEMS SEMINAR IN THE HISTORY OF LITERARY CRITICISM. (1-3) The Classical and Renaissance tradition in literary criticism with special consideration of the works of English and American critics. 
Smith

Pearce, Arms, Smith

210. [229b] STUDIES IN AMERICAN LITERATURE AND CULTURE, TO 1914. [Studies in American Literary Culture] (3) The frontier; western local color and mid-western realism; Whitman, Lowell, Clemens, Bierce, Howells, James, and others. 
Arms, Smith, Pearce

211. TRANSCENDENTALISM IN AMERICAN LITERATURE, (3) Emerson and Thoreau; and their contemporaries, Hawthorne, Melville, and Poe. 
Arms

212. REALISM IN AMERICAN LITERATURE. (3) Howells, Clemens, Henry James; and their contemporaries, Whitman and Henry Adams. 
Arms

219. CARLYLE AND HIS CIRCLE. (3) Wicker, Jacobs

247. STUDIES IN SHAKESPEARE. (3) Wynn
ARTS AND SCIENCES

248. MARLOWE AND JONSON. (3) Seminar in romantic and realistic plot, characterization, and stagings. Pearce

249. OLD ENGLISH. (3) Readings in Old English prose and poetry, exclusive of Beowulf. (Offered alternately with English 250.) Pearce

250. BEOWULF. (3) Readings of the Old English epic, Beowulf. (Offered alternately with English 249.) Albrecht, Pearce

251, 252. [251ab] SEMINAR PROBLEMS FOR THE MASTER'S DEGREE. [Problems] (1-3 each semester). Studies in literature and philology. Graduate Staff

300. THESIS. (4-6) Graduate Staff

351, 352. SEMINAR PROBLEMS FOR THE DOCTOR'S DEGREE. (1-3 each semester) Graduate Staff

400. DISSERTATION. (0) Graduate Staff

ENGLISH

DIVISION OF SPEECH
Assistant Professors Allen (Director), Kelcher, Ried; Instructors Hoffman, Law; Teaching Assistant Ezell.

GROUP REQUIREMENTS
Speech 1 and 2 and English 91 are required of all Speech minors. All speech students must take a speech placement test and must make a speech and voice recording. Students who have either speech and/or voice defects must take Speech 4L, and possibly further work, without credit, in the Speech Workshop.

SPEECH WORKSHOP
Every freshman and transfer student entering the University is expected to make a speech and voice recording in the Speech Workshop. If these tests show a significant defect or defects, the student may be required to take Speech 4L, and possibly other work in the Speech Workshop. In cases of severe stuttering, stammering, lisping, speech blockage, lack of speech rhythm, and so on, the student may be required to do individual work, in the Speech Workshop, under faculty direction. Students who speak with a foreign accent may be required to take Speech 5.

MINOR STUDY
18 hours completed in the Division of Speech, including Speech 1 and 2, and 120; and English 91. Nine hours must be in Speech courses numbered above 50.

†Speech A. ORAL COMMUNICATIONS. (3) Emphasis upon individual problems in basic communications and adjustment to
speech situations in the effective use of speech as a tool of human relationships. The analysis of types of speech, with practice in conversations, reports, organization of speech materials, and the underlying techniques. Voice, posture, and speech personality are considered.

Staff

Speech 1, 2. Fundamentals of Speech and Reading. (3, 3) (Same as Dramatic Art 1, 2) The preparation and delivery of original and practical extempore speeches, including a study of rhetorical principles, audience psychology, methods of presentation, and the basic principles of the physiology of speech and voice.

Staff

Speech 4. Speech Education (Correction). (3) Emphasis upon the more common types of speech disorders and their causes, and the various theories of treatment. 2 lectures, 2 hrs. lab.

Speech 5. Speech for Foreign Language Students. (3) A course designed for the student who speaks English with a foreign accent or who lacks English speech patterns and rhythms. Considerable work will be given in the International Phonetics.

Speech 7. Forum and Debate. (3) A course for students interested in debate, panels, forums, and general forensic activities. Prerequisite: consent of instructor.

Speech 55. Speech for Business and Professions. (3) Speech for the business conference and the professions will be stressed. (Not open to students with credit for Speech 1 and/or 2.)

Speech 57. Techniques of Public Discussion. (3) Methods and practice in organizing and directing socially integrated speech programs in the community. Book reports, symposiums, forums, and panels will be considered. Prerequisites: Speech 1, 2.

Speech 60. Interpretative Reading (Non-dramatic) and Choral Speaking. (3) The interpretation of the written page and the spoken interpretation of verse and music will be considered. Each student will be required to do extra work in the speaking choir.

Speech 70. Problems in Reading. (3) A course in remedial reading and the problems of the slow reader. Reading tests will be given and suitable remedial exercises will be required.

Speech 80. Introduction to Phonetics. (3) A beginning course in the phonetics of the English language. Training in
the International Phonetic Alphabet and a consideration of English accents and dialects. Duncan and Allen

Speech 90. Radio Production. (3) A beginning course in the nature and production of radio speech, techniques, direction, and production (excluding radio drama). Allen

Speech 92. Radio Writing. (3) A beginning course in radio composition, including the special techniques peculiar to radio scripts. Allen

Speech 107. Advanced Argumentation and Debate. (3-6) An advanced course for students interested in debate and intercollegiate forensics. Prerequisite: 7 and consent of instructor. Ried

Speech 120. Speech Science and Pathology. (3) An advanced course in the physiological and phonological science of speech and the voice. Speech pathology will be given consideration. Hoffman

GEOLOGY

Professors Northrop (Head), Kelley; Assistant Professor Beck; Graduate Fellows Hemenway, Johnson, Warren.

GROUP REQUIREMENTS

Courses in this Department count toward Science and Mathematics (Group IV).

MAJOR STUDY

For the degree of Bachelor of Arts: Geology 1, 2, 5L, 6L, 73L, 74L, and 22 additional upper division hours. Chemistry 1L and 2L are required.

For the degree of Bachelor of Science: Geology 1, 2, 5L, 6L, 73L, 74L, 81L, 106L, 108L; 109L, 110L or 111L, 112L; and 6 additional upper division hours. Chemistry 1L, 2L, and Civil Engineering 4L are required; Mathematics 15 and 16 are strongly recommended. The candidate must minor in chemistry, biology, physics, mathematics, or engineering. Minor in engineering: 20 hours, as approved by the Geology department, from among the following: Engineering 1L, 2L; Civil Engineering 4L, 54L, 55L, 60, 102L, 110L, 112L, 157F, 167L, 184; Mechanical Engineering 53, 105, 181, 182. Observe prerequisites.

MINOR STUDY

Geology 1, 2, 5L, 6L, and 12 additional hours.

1. Physical Geology. (3) Materials composing the earth, and work of agencies, both external and internal, modifying its surface. Kelley, Beck
2. **HISTORICAL GEOLOGY.** (3) History of the earth; rise and succession of the various forms of life. Prerequisite: 1. Northrop

4. **ENGINEERING GEOLOGY.** (3) Introductory geology with emphasis on engineering aspects. (Open to engineers only.)

5L. **PHYSICAL GEOLOGY LABORATORY.** (1) Minerals, rocks, and topographic maps. Credit suspended when credit in Geology 1 is not earned. Co-requisite: 1. 2 hrs. lab. Staff

6L. **HISTORICAL GEOLOGY LABORATORY.** (1) Fossils and paleogeographic maps; emphasis on the historical geology of New Mexico. Credit suspended when credit in Geology 2 is not earned. Co-requisite: 2. 2 hrs. lab. Staff

51. **INTRODUCTORY OCEANOGRAPHY.** (2) A brief survey, covering shape of the ocean basins, tides, currents, sea ice, salinity and temperature variations, marine life zones, and bottom deposits. Staff

54. **GEOGRAPHY OF NORTH AMERICA.** (2) (Normally offered in Summer Session only.) Staff

6L. **PRINCIPLES OF GEOGRAPHY.** (2) (Normally offered in Summer Session only.) Staff

73L, 74L. [71labL] **MINERALOGY.** (4, 4) Crystallography; chemical, physical, and descriptive mineralogy; geologic occurrences, associations, and uses. Prerequisite: Geology 1; prerequisite or co-requisite: Chemistry 1L, 2L. Course 73L may be taken separately, but 73L is prerequisite to 74L. 2 lectures, 6 hrs. lab. Beck

81L. [72L] **PETROLOGY.** (3) Classification, occurrence, origin, and hand-specimen recognition of common rocks. Prerequisites: 2, 73L, and 74L. 2 lectures, 3 hrs. lab. Kelley

101. **NONMETALLIFEROUS DEPOSITS.** (3) Origin, properties, utilization, and classification of industrial minerals, rocks, and coal. Prerequisites: 6L, 73L, and 74L. Kelley

102. **ORE DEPOSITS.** (3) Metalliferous deposits with respect to their origin, distribution, structure, and alteration; mining and utilization problems. Prerequisites: 6L, 73L, 74L, and 81L. Kelley

105. **NEW MEXICO GEOLOGY.** (2) Prerequisite: 6L, 73L, 74L, 81L, and 108L are strongly recommended. Northrop

106L. **FIELD GEOLOGY.** (2) Geologic mapping; principles and techniques; preparation of a report. Prerequisites: Geology 6L and C. E. 4L; prerequisite or co-requisite: Geology 81L. 1 full day in field each week. Kelley

108L. **STRUCTURAL GEOLOGY.** (3) Rock structures and their origins; problems. Prerequisite: 6L; mechanical drawing or
ARTS AND SCIENCES

descriptive geometry or both are strongly recommended. 2 lectures, 3 hrs. lab.  
Kelley

109L, 110L [109abL] Stratigraphy. (4, 4) Yr. Principles, followed by a survey of the stratified rocks of North America, their correlation, stratigraphic relations, and guide fossils. Prerequisite: 6L; some biology is strongly recommended. Credit suspended for 109L until 110L is completed. 2 lectures, 6 hrs. lab.  
Kelley

111L, 112L [111abL] Paleontology. (4, 4) Yr. Fossil plants, invertebrates, and vertebrates, with emphasis on the invertebrates; structure, classification, life habits, evolution, and geologic history. Prerequisite: 6L; some biology is strongly recommended. Credit suspended for 111L until 112L is completed. 2 lectures, 6 hrs. lab.  
Northrop

121L, 122L [107abL] Optical Mineralogy and Petrography. (4, 3) Optical mineralogy; the polarizing microscope; systematic study of rocks with respect to their mineralogy, texture, and genesis. Prerequisites: 73L and 74L. Course 121L may be taken separately, but 121L is prerequisite to 122L. 121L: 2 lectures, 6 hrs. lab.; 122L: 1 lecture, 6 hrs. lab.  
Beck, Kelley

131. Pleistocene Geology. (2) Prerequisite: 6L. (Offered only occasionally.)  
Northrop

141L [116L] Sedimentology. (3) The sedimentary cycle and its products; rock-weathering and soils; transport; depositional environments; sedimentary petrology. Prerequisites: 81L and 108L. 2 lectures, 3 hrs. lab.  
Staff

142L [115L] Petroleum Geology. (3) An inductive approach to the principles of oil origin and accumulation, based on structural and stratigraphic study of oil-producing regions and districts. Prerequisite: 141L. 2 lectures, 3 hrs. lab.  
Staff

151, 152. [151ab] Problems. (2, 2)  
Staff

161. Ground Water. (2) Occurrence and development of ground water with special emphasis on Southwestern conditions. Prerequisite: 141L.  
Staff

181L. Geomorphology. (3) Origin, development, and classification of land forms, with detailed consideration of gradational processes. Prerequisite: 108L. 2 lectures, 3 hrs. lab.  
Staff

182L. Geomorphology of the United States. (3) Detailed study of the physiographic provinces and sections of the United States; emphasis on western United States. Prerequisite: 181L. 2 lectures, 3 hrs. lab.  
Staff

251, 252. [251ab] Problems. (2-3 each semester)  
Graduate Staff

300. Thesis. (4-6)  
Graduate Staff
GOVERNMENT AND CITIZENSHIP

Professors Donnelly (Head), Kleven; Associate Professor Jorrin; Assistant Professor Beckett; Instructors Cline, Holmes; Graduate Fellows Clinchy, Lindsay, Nolan, Rexroad.

GROUP REQUIREMENTS

Courses in this Department count toward Social Science (Group III).

MAJOR STUDY

In addition to Government 1 and 2, 27 hours including 51, 52, 121, 141, 175, 197 or 198.

MINOR STUDY

In addition to Government 1 and 2, 15 hours including 51, 52, 121, 141, 175.

CURRICULUM PREPARATORY TO LAW

See p. 74.

*1, 2. [1ab] INTRODUCTION TO SOCIAL SCIENCE. (3, 3) Yr. (Same as Economics 1, 2 and Sociology 1, 2). A study of current social, economic, and political problems, with particular reference to the United States. Credit suspended until both semesters are completed.

Staff

*51, 52. [51ab] AMERICAN GOVERNMENT AND POLITICS. (3) National government; state, county and city government.

Beckett, Holmes

73. [73ab] INTRODUCTION TO LATIN AMERICA. (3) (Same as Anthropology 73, Economics 73, and Sociology 73). For description see p. 79.

Jorrin

101. LOCAL GOVERNMENT. (2). Special consideration of the organization, administration, and problems of counties, municipalities, metropolitan areas, and administrative districts.

Beckett

103. PROBLEMS OF DEMOCRACY. (3) Government problems of special contemporary importance.

Staff

105. PUBLIC OPINION AND PROPAGANDA. (3) Public opinion as it affects party alignments and governmental programs. The methods used by special interests in influencing public opinion. Prerequisites: 1, 2.

Donnelly

106. POLITICAL PARTIES. (3) The American party system, national, state, and local. Prerequisites: 1, 2.

Donnelly

121. PUBLIC ADMINISTRATION. (3) Introduction to the general problems of public administration in the modern state; evolution of administrative organization; tendency toward
centralization and integration; controls which are exercised over administration by the courts and legislatures; personnel and fiscal management; reorganization of administration. Prerequisites: 51, 52.

141. INTERNATIONAL RELATIONS. (3) The origin and nature of the problems involved in international relations. Recommended: 51, 52.

Kleven

143. INTERNATIONAL LAW. (3) The origin, nature, and application of the rules of international law. Prerequisites: 1, 2 and 51, 52.

Kleven

151. AMERICAN DIPLOMACY. (3) (Same as History 151.)

155. THE GOVERNMENTS OF LATIN AMERICA. (3) A consideration of the governments of a number of Latin-American states including a study of their domestic problems and diplomatic policies. Prerequisites: 51, 52 or 1, 2 and 73.

Jorrín

167. POLITICAL THEORY. (3) Political thought from the Greek period through modern times. Prerequisites: 51, 52. Jorrín

169. COMPARATIVE GOVERNMENT. [Comparative Economic and Political Systems] (3) A survey and comparison of the leading governments of Europe. Prerequisites: 51, 52.

Kleven, Jorrín

170. ORGANIZATION AND ADMINISTRATION OF SOCIAL WELFARE. (3) The special application of the principles of public administration to the fields of social welfare. Historical development; agency boards; fiscal policy; personnel practices and problems. Prerequisite: 121.

Ellis

175. CONSTITUTIONAL LAW. (3) The Constitution of the United States as it has been interpreted by the courts. Prerequisites: 51, 52.

Kleven

197, 198. [197ab] SEMINAR. (2, 2) Open to advanced students with approved qualifications.

Staff

201, 202. [201ab] ADMINISTRATIVE PROBLEMS. (2, 2)

Graduate Staff

205, 206. [205ab] POLITICAL PROBLEMS. (1-3 each semester)

Graduate Staff

251, 252. [251ab] PROBLEMS. (1-3 each semester)

Graduate Staff

300. THESIS. (4-6)

Graduate Staff

HISTORY

Professors Russell (Acting Head), Dargan, Scholes; Associate Professors Reeve, Sacks, Woodward; Instructor Snellgrove; Graduate Fellows Armstrong, Duke, Westphall.
GROUP REQUIREMENTS

Courses in this Department count toward Social Science (Group III).

MAJOR STUDY

30 hours in History including 12 hours from courses 1, 2 and 11, 12 or 51, 52, and at least 18 hours numbered above 100. All students who intend to take upper division courses in history are urged to acquire a reading knowledge of at least one foreign language, preferably Spanish, before reaching the junior year.

MINOR STUDY

18 hours in History including 1, 2, or 11, 12, and not less than 6 hours numbered above 100.

*1, 2. [lab] Western Civilization. (3, 3) European developments from the decline of the Roman Empire to the present. Sacks, Russian, Snellgrove


*31. History of New Mexico. (2) Woodward

*51, 52. [51ab] History of the United States. (3, 3) Dargan, Reeve

71, 72. [71ab] History of England. (3, 3) Russell

81, 82. [81ab] History and Political Institutions of Greece and Rome. (3, 3) Dargan

107. Modern and Contemporary Far East. (3) The relation of western civilization with the Orient since 1850. (Not offered in 1947-48.) Dargan

121. [122] The Middle Ages. (3) Russell

132. The Renaissance and the Reformation. (3) Dargan

133. England since the Industrial Revolution. (3) Sacks

135. The British Empire. (3) (Not offered in 1947-48.) Sacks

141. International Relations. (3) (Same as Government 141.) Donnelly, Kleven

142. [141a] Modern Europe, 1648-1815. (3) Sacks

145. [141b] Modern Europe, 1815-1914. (3) Sacks

146. Dictatorship and Democracy in Europe since 1914. (3) Sacks

151. American Diplomacy. (3) Dargan

161, 162. [161ab] History of Latin America. (3, 3) Scholes, Woodward

163. The A. B. C. Powers in Recent Times. (3) Woodward
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164. History of the Pacific States of South America. (3) (Not offered in 1947-48.) Woodward
165, 166. History of Spain. (2, 2) Russell, Woodward
167. History and Civilization of Portugal and Brazil. (2) Woodward
168. Mexico and the Caribbean. (3) (Not offered in 1947-48.) Woodward
171. The American Colonies. (3) Dargan
173, 174. [173ab] American Biography. (2, 2) The great persons who have influenced American history. Dargan
175. The South in American History, 1763-1865. (3) Dargan
178. Recent History of the United States. (3) (Not offered in 1947-48.) Reeve
179. [179ab]. Constitutional History of the United States. (3) Reeve
181. [181a] History of the American Frontier. (3) Dargan
191, 192. [191ab] History of the Southwest. (3, 3) Scholes, Reeve
202. [102] Introduction to Historical Research. (3) Woodward
251, 252. Problems. (1-3 each semester.) Graduate Staff
256, 257. Seminar in European History. (1-3 each semester.) Russell, Sacks
261, 262. [261ab]- Research in Southwest History. (1-3 each semester.) Graduate Staff
266, 267. Seminar. in Latin American History. (1-3 each semester.) Scholes, Woodward
271, 272. [271ab] Seminar in American History. (1-3 each semester.) Dargan, Reeve
300. Thesis. (4-6)

LIBRARY SCIENCE
Professor Shelton (Head).

MAJOR STUDY
Not offered.

MINOR STUDY
Library Science 21, 22 or 24, 23, and 25.


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22. Public Library Administration. (3) The place of the library in the community; its organization, financing, and administration. Shelton

23. Classification and Cataloging. (3) Principles of classification and the techniques of cataloging for libraries. Shelton

24. School Library Administration. (3) Practical study of the management of the school library, including the organization of the book collection, housing, equipment and maintenance. Shelton

25. Book Selection for Young People. (3) A survey course covering tools and principles of selection of books for young people. Shelton

MATHEMATICS AND ASTRONOMY

Professors LaPaz (Head), Larsen; Associate Professors Hendrickson, Rosenthal; Instructors Child, Haas, Lane, Morris, Scrivner; Teaching Assistant Walker.

GROUP REQUIREMENTS

Courses in this Department count toward Science and Mathematics (Group IV).

MAJOR STUDY

College of Arts and Sciences and College of Education: 24 hours in Mathematics in courses numbered above 50. (Majors in Education are required to take Education 155e. A list of recommended teachers is selected each year by vote of the mathematics faculty from those who complete the major.) Among the courses recommended for students specializing in mathematics are Mechanical Engineering 105 or Physics 103, 104; Business Administration 5, 6; Engineering 1L, 2L and 4; Civil Engineering 53L, 54L, and 55L; Philosophy 56; and Physics 51L, 52L, 101, and 102.

MINOR STUDY

11 hours in Mathematics courses numbered above 52.

NOTE TO BEGINNING STUDENTS

Students electing Mathematics 15 will take a placement test in mathematics. Those who do not demonstrate adequate preparation will be transferred to Mathematics 14.

1. College Arithmetic. (2) The logical and historical background of arithmetic desirable in the training of teachers. Includes drill on fundamental operations. (No credit allowed in the Colleges of Engineering and Pharmacy.) Larsen

11. Solid Mensuration. (3) Designed to satisfy the Navy requirement in solid geometry. Recommended for all students
in the College of Engineering who do not present solid geometry for entrance. Includes some drill work on the slide rule. Prerequisites: high school algebra, 1 unit; plane geometry, 1 unit. (Not offered in 1947-48.) (No credit allowed in the Colleges of Engineering and Pharmacy.)

Larsen

14. AN INTRODUCTION TO MATHEMATICS. (3) Stress is placed on fundamental mathematical concepts rather than on manipulative drill. Recommended for students who do not expect to do extensive work in mathematics. Prerequisite: high school algebra, 1 unit. (No credit allowed in the Colleges of Engineering and Pharmacy.)

Morris, Haas

15. COLLEGE ALGEBRA. (3) Prerequisites: high school algebra, 1 unit; plane geometry, 1 unit.

Staff

16. PLANE TRIGONOMETRY. (3) Prerequisite: 15 or concurrent registration.

Staff

22. ANALYTIC GEOMETRY. (3) Prerequisites: 15 and 16; Mathematics 16 may be taken concurrently.

Staff

42. INTRODUCTION TO STATISTICAL METHODS. (3) A basic course especially for students specializing in the social sciences. Some laboratory work required. Not recommended for mathematics majors. Prerequisite: high school algebra, 1 unit.

Larsen

52. DESCRIPTIVE ASTRONOMY AND METEORITICS. (3) An introductory course not requiring extensive knowledge of science or mathematics. Prerequisites: high school algebra, 1 unit; plane geometry, 1 unit.

LaPaz

53, 54. [53ab] AN INTRODUCTION TO THE CALCULUS. (4, 4) The elements of the calculus correlated with courses in physics, chemistry, mechanics, and engineering. Prerequisites: 15, 16, and 22.

Staff

61, 62. [61ab] SPHERICAL TRIGONOMETRY AND PRACTICAL ASTRONOMY. (3, 3) Especially concerned with the mathematical foundation of navigation and related subjects. Prerequisite: 15, 16, and 22, or equivalent.

Staff

87. MATHEMATICS OF FINANCE. (3) Accepted for major credit by the Department of Economics and Business Administration. Prerequisite: 15 or equivalent.

Larsen

The courses which follow are open only to students who have completed Mathematics 54, or who have the instructor's permission.

107. THEORY OF NUMBERS. (3) (Not offered in 1947-48.) LaPaz

115. THEORY OF EQUATIONS. (3) Larsen

131, 132. [131ab] MATHEMATICS OF STATISTICS. (3, 3) Some laboratory work required. (Not offered in 1947-48.) Larsen
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141. Differential Equations. (3) Ordinary and partial differential equations. Hendrickson

142. Applied Mathematical Methods. (3) Nomography, numerical solution of equations, interpolation, method of least squares, curve fitting, etc. Larsen

143. Vector Analysis. (3) Rosenthal

151. Advanced Calculus. (3) (Not offered in 1947-48.) Staff

161. History of Mathematics. (3) (Not offered in 1947-48.) Staff


175. Foundations of Mathematics. (3) A critical study of the construction of a mathematical system. (Not offered in 1947-48.) Staff

181. Theory of Functions of a Real Variable. (3) (Not offered in 1947-48.) LaPaz

182. Theory of Functions of a Complex Variable. (3) Rosenthal

184. Calculus of Variations. (3) Formulation of variation problems; derivation of necessary conditions and of sets of sufficient conditions; development of the Hamilton-Jacobi Theory; applications of the calculus of variations in dynamics, physics, and celestial mechanics. LaPaz

The seminars which follow are open only to qualified students and permission to register requires the consent of the Department Head.

194, 196, 197, 198. [194abcd] Pro-Seminar. (2 hrs. each semester.) Advanced reading and beginning research. Staff

204, 206, 207, 208. [204abcd] Seminar. (2 hrs. each semester.) Advanced reading and research. Graduate Staff

300. Thesis. (4-6) Graduate Staff

MODERN LANGUAGES AND LITERATURES

Professors Kercheville, (Head), Ortega; Associate Professors DeJongh, Duncan, Lopes; Assistant Professors, Koch, Portuondo; Instructors Adams, Adamson, Biondi, Campbell, Sra. Cobos, Sr. Cobos, Pooler; Teaching Assistants Granato, Lange; Graduate Fellows Brooks, Sarinopoulos, Scone.

GROUP REQUIREMENTS

Courses in this Department count toward Foreign Language (Group II) with the exception of Spanish 145, 146 and courses in the Folklore Division.
ARTS AND SCIENCES

PHONETICS LABORATORY

The Department operates a Phonetics Laboratory where students in conversation and composition classes go for weekly exercises in pronunciation. Any student having special difficulties may be assigned work in the Laboratory. No extra credit is allowed for this work which is done only in connection with regular courses.

The Laboratory functions also as a clinic in English pronunciation for students whose imperfect diction is the result of a non-English background. This phase of the work is carried on in cooperation with the Speech Division of the English department.

NOTE TO FRESHMEN:

Students presenting high school language credits and wishing to enter courses above the elementary level should consult the head of the Department. Spanish-speaking students should enroll in Spanish 55.

FRENCH

MAJOR STUDY

24 hours in French in courses numbered above 50. All French majors are urged to take a minor in Spanish or another modern language, or Latin.

MINOR STUDY

12 hours in French in courses numbered above 50.

*1, 2. [1ab] ELEMENTARY FRENCH. (3, 3) Yr. Credit for 1 is suspended until 2 (or more advanced course) is completed.

DeJongh and Staff

*51, 52. [51ab] INTERMEDIATE FRENCH. (3, 3) Grammar, reading, and translation. Prerequisites: 1, 2, or the equivalent.

DeJongh and Staff

General prerequisites for the following courses: French 51, 52 or the equivalent.

101, 102. [101ab] ADVANCED COMPOSITION AND CONVERSATION. (2, 2) Composition based on a thorough review of French grammar and conversation based on modern French plays. (Offered in 1948-49.)

DeJongh

105, 106. [105ab] FRENCH LITERATURE OF THE NINETEENTH CENTURY. (2, 2) Representative works in poetry, drama, and fiction.

DeJongh

121, 122. [121ab] THE COMEDY OF MOLIERE. (2, 2)

DeJongh

151, 152. [151ab] SURVEY OF FRENCH LITERATURE FROM THE ELEVENTH CENTURY TO THE REVOLUTION. (3, 3) (Offered in 1948-49.)

DeJongh
GERMAN

MAJOR STUDY
Not offered.

MINOR STUDY
12 hours in German in courses numbered above 50.

*1, 2. [1ab] ELEMENTARY GERMAN. (3, 3) Yr. Credit for 1 suspended until 2 (or more advanced course) is completed. Koch and Staff

*51, 52. [51ab] INTERMEDIATE GERMAN. (3, 3) Prerequisites: 1, 2 or the equivalent. Koch

61. CONTEMPORARY GERMAN LITERATURE. [Post-war Literature] (3) Koch

62. SCIENTIFIC GERMAN. (3) Readings in psychology, chemistry, mathematics, biology, and anthropology. Koch

151, 152. [151ab] SURVEY OF GERMAN LITERATURE. (3, 3) (Offered in 1948-49.) Koch

ITALIAN

No major or minor study offered.

75, 76. [75ab] ELEMENTARY ITALIAN. (3, 3) Although this is an elementary course, the work is done under heavier pressure and more is achieved in reading and conversation than in the elementary language courses numbered 1, 2. It is open only to students who possess a good knowledge of the grammar of another Romance language and to graduate students, or to those who otherwise satisfy the instructor of their fitness to do the work. (Offered in 1948-49.) DeJongh

PORTUGUESE

MAJOR STUDY
Not offered.

MINOR STUDY
12 hours in Portuguese in courses numbered above 50.

*1, 2. [1ab] ELEMENTARY PORTUGUESE. (3, 3) Yr. Credit for 1 suspended until 2 (or more advanced course) is completed. Lopes and Staff

*51, 52. [51ab] INTERMEDIATE PORTUGUESE. (3, 3) Prerequisites: 1 and 2 or equivalent. Lopes and Staff
ARTS AND SCIENCES

101, 102. Advanced Composition and Conversation. (3, 3) (Offered in 1948-49.) Lopes
151. Survey of Portuguese Literature. (3) (Offered in 1948-49.) Lopes
157. Survey of Brazilian Literature. (3) Lopes
251, 252. Graduate Problems. (2, 2) Lopes

SPANISH

MAJOR STUDY

24 hours in Spanish in courses numbered above 50, including Spanish 93, 94, 151, 152, and 153; and two years of college work in another modern language or Latin.

MINOR STUDY

15 hours in Spanish in courses numbered above 50.

*1, 2. [1ab] Elementary Spanish. (3, 3) Yr. Credit suspended for 1 until 2 (or more advanced course) is completed. Staff

*41, 42. [41ab] Intermediate Spanish. (3, 3) 41 and 42 offered every semester. Staff

*43, 44. [43ab] Elementary Spanish Conversation. (2, 2) This is a course of conversation designed primarily to give qualified students of 41, 42 extra practice in the oral use of the language. Enrollment limited to 15 students of A or B standing. Staff

*55, 56. [55ab] Primer Curso Para Estudiantes De Habla Española. (3, 3) All students who speak Spanish natively should enroll in this course. (Those in doubt about their proficiency should consult the Department Head.) The work consists of exercises in grammar, speech correction, and vocabulary building. Staff

*91, 92. [91ab] Introduction to Spanish Literature. (3, 3) Prerequisites: 41, 42 or the equivalent. Assignments of advanced reading material and discussion of principal Spanish literary figures and movements. Kercheville

*93, 94. [93ab] Intermediate Conversation and Composition. (2, 2) Required of all majors. Prerequisite: two years of college Spanish or equivalent. Sr. Cobos

*95. Spanish Business Letter Writing. (2) Prerequisite: two years of college Spanish or equivalent. Staff

*96. Commercial and Industrial Language Practice in Hispanic Countries. (2) Prerequisite: two years of college Spanish or equivalent. Staff
Spanish 91, 92 or the equivalent are prerequisite for all literature courses listed below.

105, 106. [105ab] CONTEMPORARY SPANISH LITERATURE. (2, 2) (Offered in 1948-49.) Staff

107, 108. [107ab] SPANISH NOVEL. (2, 2) (Offered in 1948-49.) Kercheville

121, 122. [121ab] MODERN SPANISH DRAMA. (2, 2) Offered in 1948-49.) Staff

131, 132. [131ab] ADVANCED COMPOSITION AND CONVERSATION. (2, 2) Prerequisite: three years of college Spanish or equivalent. Ortega

145, 146. [145ab] IBERO-AMERICAN CIVILIZATION. (2, 2) Conducted in Spanish. Portuondo

151, 152. [151ab] SURVEY OF SPANISH LITERATURE. (3, 3) Required of Spanish majors. Kercheville

153. PHONETICS. (2) Required of all majors. Prerequisite: three years of college Spanish or equivalent. (Offered in 1948-49.) Duncan

157, 158. [157ab] SURVEY OF SPANISH-AMERICAN LITERATURE. (2, 2) Either this course or 163, 164 is required of candidates for a graduate degree. Portuondo

163, 164. [163ab] CONTEMPORARY SPANISH-AMERICAN LITERATURE. (2, 2) Open only to graduate students and especially qualified undergraduates. Either this course or 157, 158 is required of candidates for a graduate degree. (Offered in 1948-49) Portuondo

165, 166. [165ab] CERVANTES AND THE SPANISH GOLDEN AGE. (3, 3) Life and works of Cervantes; sources; historical developments in Sixteenth and Seventeenth century Spain relating to literature; influence of Cervantes in other literatures. Ortega

171. LYRIC POETRY. (3) Required of candidates for a graduate degree. (Offered in 1948-49) Staff

197, 198. UNDERGRADUATE PROBLEMS. (2, 2) Staff

201, 202. [201ab] HISTORY OF THE SPANISH LANGUAGE. (2, 2) Evolution of Spanish from Latin; reading from medieval texts. Required of all candidates for a graduate degree. Duncan

205. RESEARCH METHODS. (2) Required of candidates for a graduate degree. (Offered in 1948-49) Duncan

251, 252. [251ab] GRADUATE PROBLEMS. [Problems in Spanish Language and Literature] (2, 2) For candidates for Master of Arts degree. Graduate Staff

281, 282. [280ab] SEMINAR: REALISM IN SPANISH LITERATURE. (2, 2) (Offered in 1948-49) Ortega
ARTS AND SCIENCES

300. THESIS. (4-6) Graduate Staff
351, 352. GRADUATE PROBLEMS. (2, 2) For candidates for the degree of Doctor of Philosophy. Graduate Staff
400. DISSERTATION. (0) Graduate Staff

FOLKLORE

115. SOUTHWESTERN FOLKLORE. (2) Special stress on New Mexico. Staff
161. FOLKTALES. (2) In Europe and Spanish America. Staff
162. FOLK BALLADS AND SONGS. (2) Spanish balladry in the New World, particularly in New Mexico. Staff

PHILOSOPHY

Professor Knodle (Head); Associate Professor Alexander.

GROUP REQUIREMENTS
Courses in this Department count toward Social Science (Group III).

MAJOR STUDY
Philosophy 1, 45, 56, 141, 142, and 16 additional hours of which at least 4 must be numbered above 100.

MINOR STUDY
Philosophy 1, 45, 141, 142, and 4 additional hours.

NOTE: Students planning to complete a major or a minor in philosophy are urged to take many broad fundamental courses, and should consult members of the Department as early as possible concerning their selection.

*1. [40] INTRODUCTION TO PHILOSOPHY. (2) Preliminary acquaintance with examples of philosophical literature, and with the major types, problems, and terminology of philosophy. Knodle, Alexander

*2. PHILOSOPHY, SCIENCE, AND RELIGION. (3) A philosophically oriented consideration of the universe of science and its relation to man and to the basic concepts of religion. Staff

*45. [55] THOUGHT AND EXPRESSION. (3) The elements of logical thought as expressed in language. Alexander

*53. ETHICS. (3) The problems of human values and of current social philosophies in the light of a study of religious and philosophical moral developments of major world civilizations. Alexander
56. Logic. (3) Rules and fallacies of deductive and inductive reasoning. Prerequisite: 45 or equivalent. Alexander

64. Philosophy and Religion. (2) Their relationships as exemplified in Christianity and Western philosophy. Knodle

72. American Thought. (3) Philosophical, religious, and educational ideologies in America, with special reference to conflicts. Knodle

102. Aesthetics. (3) An introduction to the philosophy of art and beauty. Alexander

123. Hispanic Thought. (2) Major philosophical influences in Spanish culture. Alexander

141, 142. History of Ideas. [Survey of Philosophy]. (3,3) Introduction to the history of Western philosophy. 141: Ancient and medieval philosophy; 142: Renaissance and modern philosophy. Alexander

167. Political Theory. (3) (Same as Government 167). Jorrin

176. Contemporary Philosophy. (3) Present-day philosophic thought with special reference to the works of Whitehead and Dewey. Prerequisite: I or equivalent. Knodle

191. Philosophy of Language. (2) Introduction to the study of linguistic morphology and to theories of semantics and symbolism. Alexander

195. Philosophy of Science. (2) The problems of epistemology and an analysis of fundamental concepts of science. Prerequisite: I or equivalent. Alexander

241, 242, 243, 244. Periods of Special Philosophical Significance. (2 hrs. each semester) Plato, Aristotle; Descartes, Spinoza, Leibniz; Locke, Berkeley, Hume; Kant; Fichte, Hegel; or others to be chosen by the group. Prerequisite: 141, 142. Alexander

251, 252. Problems. (2-3 each semester) Graduate Staff

300. Thesis. (4-6) Graduate Staff

PHYSICS
Consulting Professor Froman; Associate Professor Regener (Acting Head); Assistant Professors Breiland, Nereson; Instructors Grenchik, Runge; Teaching Assistant Bowen; Graduate Fellow Martens.

GROUP REQUIREMENTS
Courses in this Department count toward Science and Mathematics (Group IV).
ARTS AND SCIENCES

MAJOR STUDY

Physics 101, 102, 103, 104, 105, 106, three of the laboratory courses Physics 101L, 102L, 106L, 107L; Chemistry 1L and 4L; Engineering Drawing IL, Engineering Shops 10L and 20L; six additional hours above 100 in Physics or Chemistry. Physics 125L, 126L, 127, 128 do not count toward the major. Recommended courses: Mathematics 142; Chemistry 53L, 103L, 104L, 111L, 112L. A reading knowledge of German or of another language approved by the Department Head is required.

MINOR STUDY

Physics 101, 102, 103, 105, and one of the laboratory courses numbered above 100.

MINOR STUDY IN METEOROLOGY

Physics 121 and nine additional hours taken from Physics 125L, 126L, 127, 128, 131.

PREREQUISITES

For all Physics courses numbered above 100: Physics 52 and Mathematics 54, or approval of instructor. See also special pre- or co-requisites stated under course listings.

11L. [1aL] GENERAL PHYSICS. (4) Mechanics, heat, sound. Not required of science and engineering majors. Prerequisites: algebra and plane geometry. 3 lectures, 3 hrs. lab. Staff

12L. [1bL] GENERAL PHYSICS. (4) Optics, electricity and magnetism. Not required of science and engineering majors. Pre- or co-requisite: 11L. 3 lectures, 3 hrs. lab. Staff

51L. GENERAL PHYSICS. (4) Mechanics, heat, sound. Required of science and engineering majors. Pre- or co-requisite: Mathematics 53. 3 lectures, 3 hrs. lab. Regener

52L. GENERAL PHYSICS. (4) Optics, electricity and magnetism. Required of science and engineering majors. Prerequisite: 51L and Mathematics 53. Pre- or co-requisite: Mathematics 54. 3 lectures, 3 hrs. lab. Regener

101. HEAT AND THERMODYNAMICS. [Heat and Radiation] (3) (Offered alternately with 102) Staff

101L. HEAT LABORATORY. (2) One lecture, 3 hrs. lab. (Offered alternately with 107L) Staff

102. PHYSICAL OPTICS. [Optics] (3) (Offered in 1948-49 and alternate years.) Nereson

102L. OPTICS LABORATORY. (2) One lecture, 3 hrs. lab. (Offered alternately with 106L) Staff
ARTS AND SCIENCES

103, 104. **Analytical Mechanics.** (3,3) Pre-or co-requisites: Mathematics 141, 143, or approval of instructor. (Offered in 1948-49 and alternate years) Runge

105, 106. **[111ab] Electricity and Magnetism.** (3,3) Pre-or co-requisites: Mathematics 141, 143, or approval of instructor. (Offered alternately with 103, 104) Staff

106L. **[111L] Electricity Laboratory.** (2) (Offered in 1948-49 and alternate years.) One lecture, 3 hrs. lab. Nereson

107L. **Electronics Laboratory.** (2) (Offered in 1948-49 and alternate years.) One lecture, 3 hrs. lab. Nereson

121. **General Meteorology.** (3) Breiland

125L, 126L. **[117abL] Synoptic Meteorology.** (3,3) (Offered in 1948-49 and alternate years.) Pre- or co-requisite: 121. Two lectures, three hrs. lab. Breiland

127, 128. **[116ab] Dynamic Meteorology.** (3,3) Pre-or co-requisites: 101, 121. (Offered alternately with 125L, 126L) Breiland

131. **[151a] Atmospheric Physics.** (3) Regener

161, 162, 163, 164. **Experimental Research Methods.** (2 hrs. each semester) Advanced laboratory work. Prerequisite: Approval of instructor. Nereson, Regener

190. **Introduction to Contemporary Physics.** (3) Usually offered during the summer session. Regener

191. **Contemporary Physics.** (3) Special Relativity and Quantum Mechanics. Regener

192. **Contemporary Physics.** (3) Nuclear Physics and Cosmic Rays. Regener

200. **Seminar.** (2 each semester) Staff

251. **Problems.** (2-4 each semester) Graduate Staff

300. **Thesis.** (4-6) Graduate Staff

**PSYCHOLOGY**

Professor Peterson (Acting Head); Assistant Professors Shaklee and Welch; Teaching Assistant Cantrell; Graduate Fellows Benedetti and Headon.

**GROUP REQUIREMENTS**

Courses in this Department count toward Science and Mathematics (Group IV).

**MAJOR STUDY**

For the degree of Bachelor of Arts: 24 hours in Psychology in courses numbered above 51.

For the degree of Bachelor of Science: 24 hours in Psychology
ARTS AND SCIENCES

in courses numbered above 51, including Psychology 180, 193, and 196. The minor must be selected from one of the following departments: Biology, Chemistry, Mathematics, or Physics.

MINOR STUDY

12 hours in Psychology in courses numbered above 51.

*1L, 2L. [labL] GENERAL PSYCHOLOGY. (3, 3) Yr. Credit suspended for 1L until 2L is completed. 1L is prerequisite to 2L. 2 lectures, 2 hrs. lab. Peterson, Shaklee

*51. GENERAL PSYCHOLOGY. (3) An introductory course. Not open to those who have credit for Psychology 2L. Peterson, Shaklee

*54. EDUCATIONAL PSYCHOLOGY. (3) An introductory course, primarily for sophomores. Prerequisite: 2L or 51. Welch

*58. INDUSTRIAL PSYCHOLOGY. (3) Applications of psychology to industry and business. Prerequisite: 2L or 51. Welch

*61. [103] ABNORMAL PSYCHOLOGY. (3) Prerequisite: 2L or 51. Welch

101. SOCIAL PSYCHOLOGY. (3) The behavior of individuals as influenced by other human beings. Prerequisite: 2L or 51. Welch

131. PSYCHOLOGICAL AND EDUCATIONAL TESTS. (3) Prerequisite: 2L or 51. Credit not allowed to those who have credit for 185. Shaklee

180. ADVANCED STATISTICAL METHODS IN PSYCHOLOGY. (3) Prerequisite: 2L or 51 and Mathematics 42. Shaklee

183. EDUCATIONAL PSYCHOLOGY. (3) Advanced course. Not open to those who have credit for 54. Prerequisite: 2L or 51. Welch

187. CHILD PSYCHOLOGY. (3) The principles of human behavior in infancy, childhood, and adolescence. Prerequisite: 2L or 51. Shaklee

190L. CLINICAL PSYCHOLOGY. (3) Clinical practice in the administration of psychological tests. Prerequisites: 2L or 51. 1 lecture, 4 hrs. lab. Shaklee

193. ANIMAL PSYCHOLOGY. (3) A comparative study of heredity, maturation, learning, and the higher mental processes as revealed in various animals. Prerequisite: 2L or 51. Peterson

193L. ANIMAL PSYCHOLOGY LABORATORY. (2) 5 hrs. lab. Peterson

196. PHYSIOLOGICAL PSYCHOLOGY. (3) Correlation of behavior
ARTS AND SCIENCES

and structure, with emphasis on the nervous system. Prerequisite: 2L or 51. Peterson

196L. PHYSIOLOGICAL PSYCHOLOGY LABORATORY. (2) 5 hrs. lab. Peterson

198. HISTORY OF PSYCHOLOGY. (3) Prerequisite: 2L or 51. Peterson

251, 252. [251] PROBLEMS. (2-3 each semester) Graduate Staff

300. THESIS. (4-6) Graduate Staff

SOCIOCY

Professor Walter (Head); Associate Professor Miller; Assistant Professor Ellis; Assistant Professor Saunders; Graduate Fellow Hoffman.

GROUP REQUIREMENTS

Courses in this Department count toward Social Science (Group III).

MAJOR STUDY

Sociology: 24 hours in Sociology in courses numbered above 50, including 18 numbered above 100.

Social Work: Combined major and minor, see Social Work Curriculum.

MINOR STUDY

12 hours in Sociology in courses numbered above 100.

*1, 2 [1ab] INTRODUCTION TO SOCIAL SCIENCE. (3, 3) Yr. (Same as Economics 1, 2 and Government 1, 2.) Prerequisite to most advanced courses in Sociology. Credit suspended until both semesters are completed. Staff

51. THE FAMILY. (3) Ellis

66. CULTURE GROWTH. (3) Origin and diffusion of cultures. Prerequisites: 1, 2, or equivalent. Miller

71. SOCIAL CONTROL. (3) Agencies and processes by which group regulate their members: Prerequisites: 1, 2, or equivalent. Miller

72. SOCIAL PATHOLOGY. (3) Prerequisites: 1, 2, or equivalent. Miller

73. [73ab] INTRODUCTION TO LATIN AMERICA. (3) (Same as Anthropology 73, Economics 73, and Government 73). For description, see p. 79. Does not give credit toward Sociology major or minor. Jorrin

81. [105] RURAL SOCIOLOGY. (3) Prerequisites: 1, 2, or equivalent. Saunders
ARTS AND SCIENCES

82. [106] URBAN SOCIOLOGY. (3) Prerequisites: Sociology 1, 2, or equivalent. Saunders

101. SOCIAL PSYCHOLOGY. (3) (Same as Psychology 101.)

102. COLLECTIVE BEHAVIOR. (3) Sociological approach to the analysis of human behavior. Prerequisites: 1, 2, or equivalent, and 101. Walter

107, 108. [107ab] MAN AND SOCIETY IN LATIN AMERICA. (2,2) Prerequisite: 73 or equivalent. Does not give credit toward Sociology major or minor. (Offered in 1947-48 and alternate years.) Jorrín

109. CRIMINOLOGY. (3) Crime as a social phenomenon. Prerequisite: 71 or equivalent. Miller

110. JUVENILE DELINQUENCY. (2) Prerequisite: 71. Ellis

111, 112. [111ab] SOCIAL PROBLEMS OF LATIN AMERICA. (2,2) Prerequisite: 73 or equivalent. Does not count toward Sociology major and minor. (Offered in 1948-49 and alternate years) Jorrín

117. SOCIAL PROBLEMS OF NEW MEXICO. (3) Saunders

122. PRINCIPLES OF SOCIOLOGY. (3) Chiefly for students who have had no previous courses in Sociology. Credit not allowed to those who have credit for any other course in Sociology. Walter

140. ECONOMIC SECURITY. (3) (Same as Economics 140). Walter

151, 152. [151ab] INTRODUCTION TO SOCIAL WORK. (3,3) Yr. Prerequisite: 72. Credit suspended until completion of 152. Ellis

154. RACE AND CULTURE RELATIONS. (3) Saunders

163. [163, 164] HISTORY OF SOCIAL THOUGHT. [Contemporary Social Thought, Early Social Thought] (3) Prerequisites: 1, 2, or equivalent, and 6 additional hours of Sociology. Miller

166. [201ab] METHODS IN SOCIOLOGY. [Research Methods] (3) Prerequisite: 163. Miller

170. ORGANIZATION AND ADMINISTRATION OF SOCIAL WELFARE. (3) (Same as Government 170). Ellis

195. POPULATION PROBLEMS. (3) Prerequisite: 81 or 82. Walter

197. FIELD OBSERVATION AND PARTICIPATION. (3) Prerequisites: 151 and 152. Ellis

251, 252. [251ab] PROBLEMS. (3,3) Graduate Staff

300. THESIS. (4-6) Graduate Staff

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College of ENGINEERING
THE DUTIES of the engineer are so varied and far-reaching that no single definition adequately portrays his services to the human race. He should, however, be able to apply the laws of nature to the benefit of mankind, to manage and to control technical works and industries, and to apply his scientific training and experience to the political and social problems of his day. Such a variety of work requires men of good character who are well grounded in the fundamentals of the profession of engineering.

It is the purpose of the College of Engineering to train the student in the elements of his branch of engineering, and to develop honesty, loyalty, industry, and thoroughness, so that he may enter the profession of his choice with profit to mankind as well as to himself.

ADMISSION

A detailed statement of entrance requirements will be found under "Admission."

SCHOLASTIC REGULATIONS

Students in the College of Engineering will be governed by the scholastic regulations given under "General Academic Regulations."

COURSES OF STUDY

The College of Engineering offers four-year programs of study leading respectively to the degrees of Bachelor of Science in Civil Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering, Bachelor of Science in Mechanical Engineering-Aeronautical Option, Bachelor of Science in Mechanical Engineering-Petroleum Option, Bachelor of Science in Chemical Engineering, Bachelor of Science in Naval Science-Engineering, and Bachelor of Science in Industrial Arts. It is also possible to arrange a program of study so that the Bachelor of Arts degree can be obtained in one additional year.

GRADUATE STUDY

A program of graduate work is offered in the College of Engineering leading to the Master of Science degree in the department in which the student desires to major. For complete details regarding the requirements for graduate work, consult the graduate bulletin.

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COLLEGE OF ENGINEERING

AERONAUTICAL ENGINEERING. The work in aeronautical engineering is offered as an option in the Department of Mechanical Engineering; however, a complete four-year program of study is offered in this field.

CHEMICAL ENGINEERING. Chemical Engineering is that branch of engineering concerned with the development and application of manufacturing processes in which chemical or certain physical changes of material are involved.

The course in Chemical Engineering is planned to afford the student broad training in the fundamentals of mathematics, physics, chemistry, and engineering to meet the needs of the chemical or related industries, where men competent to design, develop, and operate new processes and to improve existing ones are required. The chemical engineer is not specifically trained for only one industry. The distinctly professional courses of unit operations and unit processes enable him to apply his knowledge to any chemical or process industry with relatively little difficulty.

The graduate chemical engineer will find many avenues of opportunities in research and development; production, operation, and maintenance; management and administration; design, construction, and installation; technical service and sales; consulting; teaching, and technical writing, etc.; in such industries as industrial chemicals, petroleum, explosives, plastics, rubber products, paper and allied products, synthetic rubber, food products, drugs, insecticides, glass, cement, clay, iron and steel, paints and varnishes, oils, soaps, rayon and synthetics, etc.

NAVAL SCIENCE. A student enrolled in the Navy R.O.T.C. may earn the Degree of Bachelor of Science in Naval Science-Engineering by completing the curriculum outlined for this degree under curricula offered by the College of Engineering. A student receiving the Naval Science degree can complete the requirements for a Bachelor of Science degree in Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, or Mechanical Engineering-Aeronautical Option in two additional semesters.

LABORATORIES AND EQUIPMENT

DRAWING AND DESIGN LABORATORIES. Three well-equipped rooms in Hadley Hall are provided for all of the drafting room work offered.

CHEMICAL ENGINEERING LABORATORY. The new Chemical Engineering building has a floor space of over 8,000 sq. ft. and contains a laboratory adequately equipped with pilot plant equipment for
use in the study of unit operations of chemical engineering such as fluid flow, heat flow, evaporation, distillation, air conditioning, absorption, filtration, crystallization, etc., and unit processes such as nitration, sulfonation, hydrogenation, etc.

The process development laboratory is well equipped for the study of small scale manufacture of chemical products. Smaller laboratories are provided for the testing of fuels, gases, water, etc.

Adequate classroom space and a design laboratory are available. Shop facilities are in conjunction with the well equipped University shop.

CIVIL ENGINEERING LABORATORIES. The department provides laboratories for road material, building material, and hydraulics, and surveying equipment to be used in all types of elementary and advanced field courses.

The materials testing laboratory is equipped for making tests of cement, concrete, stone, brick, tile, timber, steel, soils, and other material used in engineering practice. Tests are conducted by students to illustrate the properties of these materials. The laboratory is also used for research problems and, to a limited extent, for commercial testing. All equipment and all tests conform to accepted standards of engineering practice.

The hydraulics laboratory is equipped to study the flow of water in open channels, through pipes and orifices, and over weirs, illustrating the principles of hydraulics as used in the theoretical courses and in courses in water supply, sewerage, and drainage.

The highway testing laboratory contains a complete set of equipment for making standard tests on road oils and asphalts, and also machines for testing of gravels used in highway construction. Field work and office computation in surveying are conducted with modern equipment of the highest grade.

The materials laboratories of the New Mexico State Highway Department have been built in space adjoining the Civil Engineering laboratories and contain modern equipment adequate for making all types of tests of road building materials. These laboratories are open for inspection by engineering students and for research work by members of the faculty.

ELECTRICAL ENGINEERING LABORATORIES. The Electrical Engineering department has four laboratories and a design room, all of which are well equipped to illustrate the practical applications of the theory studied in the class room.

POWER LABORATORY. The power laboratory is equipped with all the common types of both D.C. and A.C. motors and generators.
and the necessary manual and automatic starters and controllers for their operation, and special machines such as a rotary converter, adjustable speed A.C. motor, sine-wave and harmonic generators, a Ward-Leonard M-G set, a variable phase, variable frequency alternator, and a mercury arc rectifier. Operating and loading devices are available so that all the standard and some special tests on both A.C. and D.C. motors and generators can be made.

The transformer section includes a number of standard transformers of various capacities and voltage ratings, and a special testing transformer, autotransformers, voltage regulators, etc.

The power for all laboratories is supplied at 2300 volts and then stepped down to 115 and 230 volts. Special transformers supply 440 volt service to the distribution panel. Direct current is supplied by two motor generator sets.

**Measurements Laboratory.** The measurements laboratory is equipped to make accurate measurements in D.C. and A.C. power, and radio frequencies up to 5000 megacycles. Equipment includes galvanometers, all types of indicating instruments, Wheatstone bridge, radio frequency bridge, standard signal generators, wave meters, square wave generator, oscilloscopes, string oscillographs, insulation tester, rotating standard, watt-hour meters, instrument transformers, relays, graphic recording wattmeter, frequency indicators, power-factor indicator, and many other measuring devices.

**Communications Laboratory.** The radio-communications laboratory is particularly well equipped to study the complex problems presented by modern communications circuits. The pre-radar and ultra-high frequency section of the laboratory consists of standing wave ratio measuring section, wave guides, ultra-high frequency wave meter, tubes, klystron, megotrons (lighthouse tubes), parabolic, horn type radiators, and measuring accessories.

The department has a high frequency transmitter and R.C.A. dynamic demonstrator, radio frequency oscillators, bridges, meters and other accessories. Two 150 foot steel towers provide excellent facilities for the study of antennae and radiating problems.

**Industrial Electronics Laboratory.** The new Industrial Electronics Laboratory is complete with a 25 Kw. Ignitron Converter, Thyratron motor control, motor speed regulator, A.C. and D.C. voltage regulators, electronic air cleaner, automatic synchronizer, electronic timers of various types, photoelectric controllers, 150 Kv. industrial X-ray, induction heating and dielectric heating furnace, welders and electronic welding controls, supplemented by a miscellany of high vacuum and gas tubes and testing equipment.
MECHANICAL ENGINEERING LABORATORY. This laboratory is maintained in connection with the University heating plant. The students study and observe a modern boiler plant in actual operation. Equipment is provided for experimental work in the fields of heat power, of air and gas flow, and of refrigeration.

In the field of heat power, the laboratory has the following major equipment in addition to auxiliary equipment and necessary instruments:

- A steam engine equipped with a Prony brake, two types of valves, two types of governors, and steam engine indicator.
- A steam turbine equipped with an oil relay governor and a water brake. This unit is also connected to a direct current generator for loading.
- A surface condenser with a steam-air injector.
- A small vertical fire-tube boiler equipped for gas firing.
- Two 300-h.p. water-tube boilers fired with gas and equipped with forced-draft fan, induced-draft fan, and automatic combustion control.
- An electric dynamometer with a Ford V-8 engine, a Dodge engine, and Waukesha Multifuel engine.
- A gasoline engine with a variable compression ratio for fuel research. A small stationary gasoline engine equipped with electric dynamometer.
- Calorimeters for determining the heat value of solid, liquid, and gas fuels.

In the field of air and gas flow, the laboratory is equipped with a steam-driven, two-stage air compressor, an air-flow test set, and recording and indicating meters for measuring the flow of air, steam, and natural gas.

In the field of refrigeration, the laboratory is equipped with a complete test plant including an ammonia compressor, receivers, coolers, heat exchangers, etc.

Shop. The machine shop is equipped with lathes, shapers, drill presses, vertical and horizontal milling machines, surface and universal grinders for working metal. The sheet metal shop has a very good assortment of tools and equipment. The wood-working equipment includes band, circular, and jig saws, joiner, lathe, hand tools and benches for pattern making and cabinet work.

The welding shop contains A.C. and D.C. arc welding, gas welding and cutting equipment.

AERONAUTICAL ENGINEERING LABORATORY. This laboratory is equipped to provide for experimental work in aerodynamics, airplane structures and aircraft engines. The equipment approved for
this laboratory includes aircraft engines, both air cooled and water cooled, wing sections, fuselage sections, air navigation instruments, radio communication equipment, and a wind tunnel to study fluid phenomena.

Petroleum Engineering Laboratory. The laboratory for this department is housed in the heating plant with the mechanical engineering laboratory. Equipment is available for the study of oil and gas flow, fuel analysis and lubrication as well as tests on the various types of heat engines and pumps.

Requirements for Graduation

Candidates for the degree of Bachelor of Science in any of the departments must complete all of the work outlined in their respective curricula. Electives, where permitted, are to be chosen with the advice and consent of the head of the major department. The course of study for the first year is uniform for all departments. At the end of the freshman year, the student should elect the course which he intends to follow and report his choice to the Dean's office.

Students who are required to take English A must do so in addition to the regular courses in English. Two thirds of the semester hours in the required work must be of C grade or better, and the total number of grade points in the hours offered for graduation must equal the total number of hours.

Curricula Offered by the College of Engineering

Courses of Study for All Engineering Students.

Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 15 College Algebra</td>
<td>Math 22 Analytic Geometry 3</td>
</tr>
<tr>
<td>Math. 16 Plane Trigonometry</td>
<td>Engl. 2 Intro. to Lit. 3</td>
</tr>
<tr>
<td>Engl. 1 Intro. to Rhetoric</td>
<td>Chem. 2L or 4L General 4.5</td>
</tr>
<tr>
<td>Chem. 1L General</td>
<td>Engr. 2L Draw. &amp; Desc. Geom. 3</td>
</tr>
<tr>
<td>Engr. 1L Draw. &amp; Desc. Geom.</td>
<td>Engr. 4 Introduction to Engr. 3</td>
</tr>
<tr>
<td>Engr. 3 Introduction to Engr.</td>
<td>Physical Educ. 1</td>
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<td>18</td>
<td>17-18</td>
</tr>
</tbody>
</table>

Note: Students deficient in English will be required to take English A in addition to English 1. Students deficient in mathematics will take Math. 14 in addition to Math. 15, 16, and 22.
COLLEGE OF ENGINEERING

CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

SOPHOMORE YEAR

First Semester
- Math. 53 Intro. to Calc. 4
- Physics 51L General 4
- Chem. 103L Organic 5
- Ch. E. 51 Chem. Calculations 2
- Econ. 105 Prin. of Economics 3

Second Semester
- Math. 54 Intro. to Calc. 4
- Physics 52L General 4
- Ch. E. 52 Ind. Stoichiometry 3
- Chem. 104L Organic 5
- C. E. 60 Applied Mechanics 3

JUNIOR YEAR

Ch. E. 111 Prin. Ch. Engr. 4
Ch. E. 113L Unit Operations Lab. I 2
Chem. 111L Physical Chemistry 4
Chem. 53L Quan. Analysis 5
M. E. 105 Mechanics 2

Ch. E. 112 Prin. Chem. Engr. 4
Ch. E. 114L Unit Operations Lab. II 2
Chem. 112L Physical Chem. 4
M. E. 104L Thermodynamics 3
C. E. 102L Str. of Materials 4

SENIOR YEAR

Ch. E. 191 Prin. Ch. Processes & Thermo. I 3
Ch. E. 181L Chem. Process Lab. I 2
E. E. 105L Adv. Surveying 3
Ch. E. 171 Chem. Engr. Econ. 2
Ch. E. 161 Organic Unit Process 3
Govt. 109 Prob. of Democracy 3
Ch. E. 151 Seminar 1/2
Electives (tech.) 2

Ch. E. 192 Prin. Ch. Processes & Thermo. II 3
Ch. E. 182L Chem. Proc. Lab. II 2
Ch. E. 194L Chem. Engr. Design 2
E. E. 106L Adv. Surveying 3
Ch. E. 196L Lubrs., Fuels & Comb. 3
Ch. E. 162 Inorganic Unit Proc. 2
Engineering Law 3
Ch. E. 152 Seminar 1/2
Ch. E. 198 Field Trip 0

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

SOPHOMORE YEAR

First Semester
- Math. 53 Intro. to Calc. 4
- Physics 51L General 4
- C. E. 53L Elem. Surveying 2
- Econ. 105 Prin. of Economics 3
- Engl. 64 Inf. Writing 3
- P. E. 1

Second Semester
- Math. 54 Intro. to Calc. 4
- Physics 52L General 4
- C. E. 54L Adv. Surveying 3
- C. E. 60 Applied Mechanics 3
- Econ. 141 Labor Problems 3
- P. E. 1

JUNIOR YEAR

C. E. 102L Str. of Materials 4
M. E. 105 Mechanics (Dynamics) 2
C. E. 110L Hydraulics 4
C. E. 111L Stresses 2
C. E. 115L Masonry Materials 3
C. E. 55L Engr. Astron. 2

C. E. 118 L. Highway Engr. 4
C. E. 114L Th. of Simple Struct. 2
C. E. 117L Reinforced Concrete 2
C. E. 104L Curves & Earthwork 3
Geol. 4 Engineering Geology 3
E. E. 105L Elec. Applications 3

C. E. 157F Field Surveying 2

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## COLLEGE OF ENGINEERING

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>C. E. 158L</td>
<td>Steel &amp; Wood Structures</td>
<td>3</td>
</tr>
<tr>
<td>C. E. 159L</td>
<td>Masonry Structures</td>
<td>3</td>
</tr>
<tr>
<td>C. E. 161L</td>
<td>Water Supply</td>
<td>3</td>
</tr>
<tr>
<td>C. E. 167L</td>
<td>Soils</td>
<td>3</td>
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<tr>
<td>E. E. 166L</td>
<td>Elec. Applications</td>
<td>3</td>
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<tr>
<td>Govt. 103</td>
<td>Prob. of Democracy</td>
<td>3</td>
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### CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>Math. 53</td>
<td>Calculus</td>
<td>4</td>
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<tr>
<td>Physics 51L</td>
<td>General</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 51L</td>
<td>Computations</td>
<td>4</td>
</tr>
<tr>
<td>Engl. 64L</td>
<td>Inf. Writing</td>
<td>4</td>
</tr>
<tr>
<td>Econ. 105</td>
<td>Prin. of Econ.</td>
<td>4</td>
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<th>Credits</th>
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<tbody>
<tr>
<td>Math. 54</td>
<td>Calculus</td>
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<tr>
<td>Physics 52L</td>
<td>General</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 54L</td>
<td>Elec. &amp; Mag. Cir.</td>
<td>4</td>
</tr>
<tr>
<td>C. E. 60</td>
<td>Applied Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>Shop 12L</td>
<td>General</td>
<td>4</td>
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<td>P. E.</td>
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#### JUNIOR YEAR

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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>E. E. 113L</td>
<td>Elec. &amp; Mag. Cir.</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 111L</td>
<td>Dir. Current Mach.</td>
<td>4</td>
</tr>
<tr>
<td>M. E. 105</td>
<td>Mechanics (Dynamics)</td>
<td>4</td>
</tr>
<tr>
<td>C. E. 102L</td>
<td>Struct. of Materials</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 115L</td>
<td>Elec. &amp; Mag. Fields</td>
<td>4</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>E. E. 132L</td>
<td>Electronics</td>
<td>4</td>
</tr>
<tr>
<td>C. E. 112L</td>
<td>Fluid Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>M. E. 104L</td>
<td>Elem. of Therm.</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 146</td>
<td>E. E. Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Econ. 141</td>
<td>Labor Problems</td>
<td>4</td>
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### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>E. E. 151L</td>
<td>A. C. Mach.</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 111L</td>
<td>Engr. Econ.</td>
<td>4</td>
</tr>
<tr>
<td>Govt. 103</td>
<td>Prob. of Democracy</td>
<td>4</td>
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<tr>
<td>Engr. 171</td>
<td>Seminar</td>
<td>4</td>
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<tr>
<td>M. E. 55L</td>
<td>Mechanics</td>
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<table>
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<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>E. E. 152L</td>
<td>A. C. Mach.</td>
<td>4</td>
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<tr>
<td>E. E. 162L</td>
<td>Elec. Engr. Des.</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 172L</td>
<td>Ind. Appl.</td>
<td>4</td>
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<tr>
<td>Engr. 172</td>
<td>Seminar</td>
<td>4</td>
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<tr>
<td>Engineering Law</td>
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#### Power Option

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>E. E. 155L</td>
<td>Ind. Electronics</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>E. E. 196L</td>
<td>Power Trans. &amp; Dist.</td>
<td>4</td>
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</table>

#### Communication Option

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. E. 193L</td>
<td>Comm. Engr.</td>
<td>4</td>
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### CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Math. 53</td>
<td>Intro. to Calc.</td>
<td>4</td>
</tr>
<tr>
<td>Physics 51L</td>
<td>General</td>
<td>4</td>
</tr>
<tr>
<td>Shop 64L</td>
<td>Pattern Making</td>
<td>4</td>
</tr>
<tr>
<td>Econ. 105</td>
<td>Prin. of Economics</td>
<td>4</td>
</tr>
<tr>
<td>M. E. 53</td>
<td>Engr. Materials</td>
<td>4</td>
</tr>
<tr>
<td>P. E.</td>
<td></td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math. 54</td>
<td>Intro. to Calc.</td>
<td>4</td>
</tr>
<tr>
<td>Physics 52L</td>
<td>General</td>
<td>4</td>
</tr>
<tr>
<td>M. E. 56L</td>
<td>Machine Drawing</td>
<td>4</td>
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<tr>
<td>C. E. 60</td>
<td>Applied Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>Shop 70L</td>
<td>Machine Shop</td>
<td>4</td>
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<tr>
<td>P. E.</td>
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## COLLEGE OF ENGINEERING

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>M. E. 101L</td>
<td>Heat Power Engr.</td>
<td>3</td>
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<tr>
<td>M. E. 103L</td>
<td>Heat Power Lab.</td>
<td>2</td>
</tr>
<tr>
<td>M. E. 105</td>
<td>Mechanics (Dyn.)</td>
<td>2</td>
</tr>
<tr>
<td>C. E. 102</td>
<td>Str. of Materials</td>
<td>4</td>
</tr>
<tr>
<td>E. E. 105L</td>
<td>Elec. Applications</td>
<td>3</td>
</tr>
<tr>
<td>M. E. 114L</td>
<td>Mechanisms</td>
<td>4</td>
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### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>M. E. 151L</td>
<td>M. E. Lab</td>
<td>2</td>
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<tr>
<td>M. E. 153L</td>
<td>M. E. Design</td>
<td>3</td>
</tr>
<tr>
<td>M. E. 155</td>
<td>Power Plants</td>
<td>3</td>
</tr>
<tr>
<td>M. E. 162</td>
<td>Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>E. E. 153L</td>
<td>Electron &amp; Controls</td>
<td>3</td>
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<tr>
<td>Govt. 103</td>
<td>Prin. of Democracy</td>
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<tr>
<td>Shop</td>
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</table>

## CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (continued)

### AERONAUTICAL OPTION

#### (Senior Year)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>M. E. 153L</td>
<td>M. E. Design</td>
<td>3</td>
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<tr>
<td>M. E. 167</td>
<td>Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>C. E. 111L</td>
<td>Stresses</td>
<td>2</td>
</tr>
<tr>
<td>E. E. 153L</td>
<td>Electron &amp; Control</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
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<td>4</td>
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<tr>
<td>Govt. 103</td>
<td>Problems of Democracy</td>
<td>3</td>
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<tr>
<td></td>
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<td>18</td>
</tr>
</tbody>
</table>

### PETROLEUM PRODUCTION OPTION

#### (Senior Year)

Substitute Geology 1, 5L and 2, 6L for M. E. 53 and one shop course and take Chemistry and one other Geology course as electives before graduation.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. E. 151L</td>
<td>Mech. Engr. Lab.</td>
<td>2</td>
</tr>
<tr>
<td>M. E. 160</td>
<td>Int. Comb. Engines</td>
<td>3</td>
</tr>
<tr>
<td>M. E. 181</td>
<td>Petroleum Production</td>
<td>3</td>
</tr>
<tr>
<td>Govt. 103</td>
<td>Prob. of Democracy</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
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<td>18</td>
</tr>
</tbody>
</table>

* M. E. 156 Ind. Engineering
  M. E. 165 Air-Conditioning


**COLLEGE OF ENGINEERING**

**CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN NAVAL SCIENCE-ENGINEERING**

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>Math. 15 College Algebra</td>
<td>Math. 22 Analytic Geometry</td>
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<tr>
<td>Math. 16 Trigonometry</td>
<td>Engl. 1 Intro. to Rhetoric</td>
</tr>
<tr>
<td>Chem. 1L General</td>
<td>Chem. 2L General</td>
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<tr>
<td>N. S. 11</td>
<td>N. S. 12</td>
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### SOPHOMORE YEAR

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<tr>
<th>Math. 53 Intro. to Calc.</th>
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<tbody>
<tr>
<td>Physics 51L General</td>
<td>Physics 52L General</td>
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<tr>
<td>N. S. 51</td>
<td>N. S. 52</td>
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<tr>
<td>Engl. 2 Intro. to Lit.</td>
<td>Engl. 64 Inf. Writing</td>
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<tr>
<td>Shop 64L Pattern Making</td>
<td>Shop 70L Machine Shop</td>
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<tr>
<td>P. E.</td>
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</tbody>
</table>

For the Junior and Senior years the student will elect one of the following groups.

A student receiving the Naval Science Degree can complete the requirements for a Bachelor of Science Degree in Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, or Mechanical Engineering Aeronautical Option in two additional semesters.

### CHEMICAL ENGINEERING

#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>Chem. 103L Organic</td>
<td>Chem. 104L Organic</td>
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<tr>
<td>N. S. 101</td>
<td>N. S. 102</td>
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<tr>
<td>Ch. E. 51 Chem. Calculation</td>
<td>Ch. E. 52 Ind. Stoichiometry</td>
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<td>Econ. 105 Prin. of Econ.</td>
<td>C. E. 60 Applied Mechanics</td>
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<tr>
<td>Chem. 53L Quan. Anal.</td>
<td>M. E. 104L Thermodynamics</td>
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#### SENIOR YEAR

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<tbody>
<tr>
<td>Ch. E. 113L Unit Oper. Lab I</td>
<td>Ch. E. 114L Unit Oper. Lab II</td>
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<tr>
<td>N. S. 151</td>
<td>N. S. 152</td>
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<tr>
<td>M. E. 105 Mechanics</td>
<td>C. E. 102L Str. of Materials</td>
</tr>
<tr>
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### Civil Engineering

#### Junior Year

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>N. S. 101</td>
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<tr>
<td>C. E. 115L Masonry Materials</td>
<td>3 C. E. 60L Applied Mechanics</td>
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<tr>
<td>E. E. 105L Electrical Appl.</td>
<td>3 E. E. 106L Electrical Appl.</td>
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<tr>
<td>Econ. 105 Prin. of Econ.</td>
<td>3 Econ. 141 Labor Problems</td>
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<tr>
<td>Electives</td>
<td>3 Geol. 4 Engr. Geol.</td>
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#### Senior Year

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<tr>
<td>C. E. 102L Str. of Materials</td>
<td>4 C. E. 118L Highway Engr.</td>
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<tr>
<td>N. S. 151</td>
<td>3 N. S. 152</td>
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<tr>
<td>C. E. 115L Stresses</td>
<td>2 C. E. 114L Th. of Simple Struct.</td>
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<tr>
<td>C. E. 116L Engr. Astron.</td>
<td>2 C. E. 117L Reinforced Concrete</td>
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<tr>
<td>C. E. 110L Hydraulics</td>
<td>4 C. E. 104L Curves &amp; Earthwork</td>
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<td>M. E. 105 Mechanics</td>
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### Electrical Engineering

#### Junior Year

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<tr>
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<tr>
<td>E. E. 51L Computations</td>
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<td>3 N. S. 102</td>
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<td>C. E. 60 Applied Mechanics</td>
<td>3 Econ. 141 Labor Problems</td>
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<td>M. E. 55L Mechanisms</td>
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#### Senior Year

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<tr>
<td>E. E. 115L Elec. &amp; Mag. Cir.</td>
<td>5 E. E. 132L Electronics</td>
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<tr>
<td>E. E. 101L D. C. Machines</td>
<td>3 E. E. 114L E. E. Analysis</td>
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<td>N. S. 151</td>
<td>3 N. S. 152</td>
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<td>M. E. 105 Mechanics</td>
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### Mechanical Engineering

#### Junior Year

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<tr>
<td>N. S. 101</td>
<td>3 N. S. 102</td>
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<tr>
<td>M. E. 112L Mechanisms</td>
<td>4 C. E. 60L Applied Mechanics</td>
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<td>Econ. 105 Prin. of Econ.</td>
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<td>E. E. 105L Elec. Applications</td>
<td>3 E. E. 106L Elec. Applications</td>
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#### Senior Year

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## COLLEGE OF ENGINEERING

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>M. E. 101L Heat Power Engr.</td>
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<td>M. E. 103L Heat Power Lab.</td>
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<td>N. S. 151</td>
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<tr>
<td>M. E. 105 Mechanics</td>
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<tr>
<td>C. E. 102L Str. of Materials</td>
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### CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN INDUSTRIAL ARTS

#### FRESHMAN YEAR

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<tr>
<th>Semester</th>
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<tr>
<td>First Semester</td>
<td>Eng. 1 Intro. to Rhet.</td>
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<tr>
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<td>Math. 15 Algebra</td>
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<td></td>
<td>Engr. 1L Draw. &amp; Desc. Geom.</td>
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<tr>
<td></td>
<td>Shop 10L Woodwork</td>
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<td>Chem. 11L General</td>
<td>4</td>
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<tr>
<td></td>
<td>Engl. 2 Intro. to Lit.</td>
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<tr>
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<td>Math. 16 Trigonometry</td>
<td>3</td>
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<tr>
<td></td>
<td>Engr. 2L Draw. &amp; Desc. Geom.</td>
<td>3</td>
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<tr>
<td></td>
<td>Shop 20L Machine Shop</td>
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<td>Chem. 2L General</td>
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#### SOPHOMORE YEAR

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<tr>
<td>Physics 11L General</td>
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<td>Shop 62L Woodwork</td>
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<tr>
<td>M. E. 53 Engr. Materials</td>
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<td>Speech 55 Speech for Bus. &amp; Prof.</td>
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<tr>
<td>C. E. 69 Applied Mechanics</td>
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<tr>
<td>Shop 60L Cabinet Work</td>
<td>3</td>
</tr>
<tr>
<td>Shop 61L Pattern Making</td>
<td>3</td>
</tr>
<tr>
<td>M. E. 55L Mechanisms</td>
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#### JUNIOR YEAR

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<tr>
<td>E. E. 109L Applied Elect.</td>
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<td>M. E. 104L Elem. of Thermo.</td>
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<tr>
<td>Shop 107L Foundry Practice</td>
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<td>Econ. 141 Labor Problems</td>
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#### SENIOR YEAR

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<tbody>
<tr>
<td>E. E. 110 Applied Elect.</td>
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<tr>
<td>Shop 109L Arc &amp; Acety. Weld.</td>
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<tr>
<td>M. E. 156 Ind. Engineering</td>
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<tr>
<td>Electives</td>
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COLLEGE OF ENGINEERING

DEPARTMENTS OF INSTRUCTION

Courses numbering: from 1-49, lower division, normally open to freshmen; from 50-99 lower division, normally open to sophomores; from 100-199, upper division, normally open to juniors, seniors and graduates; 200-400 open to graduates only. Graduate credit for courses listed is allowed at the discretion of the Graduate Committee.

Symbols used in course descriptions: L—part of the course is laboratory work; F—course is given during field session; SS—course offered in eight weeks' summer session only; Yr.—course offered throughout two semesters and credit for a single semester's work is suspended until the entire course is completed; *—course open to General College students; †—course offered for General College credit only; ()—semester hours credit; credit hours separated by a dash (1-3) indicate variable credit in the course; []—former course number or title.

A schedule of course offerings, including hours of meeting, is issued at the opening of each session. The University reserves the right to cancel any listed course or to make a substitution in instructors when necessary.

ENGINEERING

Professors Farris (Dean), Castonguay, Ford, Tapy, Wagner; Associate Professors Grace, Steen; Assistant Professors Bailey, Barton, Foss, Hardgrave, Heimerich, May; Instructors Blankley, Clough, Gafford, Hazard, Ironside, Johnston, Senter; Graduate Fellows Burris, Gutierrez.

GENERAL COURSES

*1L, 2L. ENGINEERING DRAWING AND DESCRIPTIVE GEOMETRY. (3, 3) The essentials of drafting including the use of instruments, lettering, projecting, sections, developments, isometric drawing, and working drawings, and the theory and science of engineering drawing. Approved drawing equipment required. 6 hrs. lab.

3, 4. INTRODUCTION TO ENGINEERING. (1, 3) Orientation and engineering problems.

55L. ARCHITECTURAL DRAFTING. (3) Preparation of complete small-scale working drawings for small buildings. Prerequisites: Engr. 1L, 2L.

171, 172. SEMINAR. (1, 1) Prerequisite: senior standing.

143
CHEMICAL ENGINEERING

51. CHEMICAL CALCULATIONS. (2) More extensive problem work in the stoichiometric principles of chemistry, including composition changes; the material balance; units and dimensions. Prerequisite: Chemistry 2L or 4L or the equivalent.

52. INDUSTRIAL STOICHIOMETRY. (3) The application of the fundamental laws of chemistry, physics, and mathematics to industrial chemical calculations. Prerequisites: Ch. E., 51, Physics 51L and Math. 53.

111. PRINCIPLES OF CHEMICAL ENGINEERING. (4) A study of the unit operations and their application to the chemical industry. Problems in the flow of fluids, heat transfer, evaporation, filtration, crushing and grinding, mechanical separation, and related topics. Prerequisite: Ch. E. 52.

112. PRINCIPLES OF CHEMICAL ENGINEERING. (4) A continued lecture and recitation study of the unit operations and their applications to the chemical industries. Problems in air conditioning, drying, distillation, gas absorption, extraction, crystallization, and similar topics. Prerequisite: Ch. E. 113L.

113L. UNIT OPERATIONS, LABORATORY I. (2) Laboratory practice and experimental study of the unit operations covered in Ch. E. 111. Prerequisite: must accompany course Ch. E. 111. 6 hrs. lab.

114L. UNIT OPERATIONS, LABORATORY II. (2) Experimental laboratory study of the unit operations covered by course Ch. E. 112. Prerequisites: Ch. E. 113. Must accompany Ch. E. 112. 6 hrs. lab.

151, 152. SEMINAR. (1/2, 1/2) Senior year. Reports on selected topics and surveys. Presentation and discussion of papers from current technical journals, and topics of interest to the chemical engineer.

161. ORGANIC UNIT PROCESSES. (3) A study of the theoretical basis and application of unit processes to the organic chemical industry. Studies involving nitration, halogenation, sulfonation, oxidation, alkylation, hydrolysis, polymerization, and similar topics. Prerequisites: Chemistry 103L, 104L, and Ch. E. 112.

162. INORGANIC UNIT PROCESSES. (2) A study of the processes and manufacturing methods used in the more important industries based on inorganic chemistry. Prerequisites: Chemistry 111L, and Ch. E. 112.

171. CHEMICAL ENGINEERING ECONOMICS. (2) Discussion of factors other than engineering and chemical which determine the feasibility of putting a chemical on the market. Particular reference to control of raw materials, markets, competition,
patent situation, and related topics. Prerequisite: Economics 105.

181L. CHEMICAL ENGINEERING PROCESS LABORATORY I. (2)
Experimental laboratory studies employing a series of unit operations and unit process to produce small quantities of chemicals by pilot plant methods. Emphasis on literature review, laboratory notebook, and reports. Prerequisites: Chemistry 111L, and Ch. E. 161 or Ch. E. 162. 6 hr. lab.

182L. CHEMICAL ENGINEERING PROCESS LABORATORY II. (2)
Continuation of Ch. E. 181L; but may be taken as an independent unit. Prerequisites: Chemistry 111 and Ch. E. 161 or Ch. E. 162. 6 hrs. lab.

191. PRINCIPLES OF CHEMICAL PROCESSES AND THERMODYNAMICS I. (3)
A study of the energy relations in chemical processes. Application of thermodynamics, chemical kinetics to operations involved in the chemical industry. Prerequisites: M. E. 104L, Chemistry 111L and Ch. E. 112.

192. PRINCIPLES OF CHEMICAL PROCESSES AND THERMODYNAMICS II. (3)
Continuation of Ch. E. 191L. Prerequisite: Ch. E. 191.

194L. CHEMICAL ENGINEERING DESIGN. (2) Selection and design of process equipment, layout of building and cost estimates. Prerequisites: Ch. E. 112, 191. 1 hr. lecture, 3 hrs. lab.

196L. LUBRICANTS, FUELS, AND COMBUSTION. (3) Laboratory examinations, analysis and testing of water, fuels, and lubricants, and the evaluation of their properties as applied in the chemical industry. Prerequisites: Chemistry 53L and Ch. E. 51. 2 hrs. lecture, 3 hrs. lab.

198. FIELD TRIP. (0) Required for graduation. Annual inspection tour to leading chemical plants in different sections of the country. Approximately one week is spent on these visits. Prerequisite: senior standing.

CIVIL ENGINEERING

4L. SURVEYING. (2) Lectures and field practice in plane surveying with emphasis on the use of the plane table. For geology majors only. 1 lecture, 3 hrs. lab.

53L. [51L] ELEMENTARY SURVEYING. (2) Lectures and field practice in traversing, leveling, determination of areas, and care and adjustment of instruments. 1 lecture, 3 hrs. lab.

54L. [53L] ADVANCED SURVEYING. (3) Lectures and field practice in precise triangulation and leveling. Topographic mapping; land surveying; elementary photogrammetry; office computations. Prerequisites: C. E. 53L and Math. 22. 1 lecture, 6 hrs. lab.
COLLEGE OF ENGINEERING

55L. [54L] ENGINEERING ASTRONOMY. (2) Lectures and field practice in the astronomical determination of azimuth, longitude, latitude, and time; and non-mathematical descriptive astronomy. Prerequisite: C. E. 54L. 1 lecture, 3 hrs. lab.


102L. STRENGTH OF MATERIALS. (4) The theory of the elastic behavior of engineering materials and a comparison of experimental results obtained in the laboratory. Prerequisite: C. E. 60. 3 lectures, 3 hrs. lab.

104L. CURVES AND EARTHWORK. (3) Lectures and field practice in the establishment of highway and railroad curves, earthwork, mass diagrams, and office computations. 2 lectures, 3 hrs. lab.

107L. STRENGTH OF MATERIALS. (3) (For Industrial Arts students.) The mechanics of materials; theory of beams, columns and shafts. Prerequisite: C. E. 60. 2 lectures, 3 hrs. lab.


111L. STRESSES. (2) Graphical and analytical solutions of framed structures such as beams, girders, and trusses. Prerequisite: C. E. 60. 1 lecture, 3 hrs. lab.

112L. FLUID MECHANICS. (4). Flow net, hydrostatics and fundamental properties affecting fluid motion. Prerequisite: M. E. 105. 3 lectures, 3 hrs. lab.

114L. THEORY OF SIMPLE STRUCTURES. (2) Reactions, moment and shear diagrams, moving load systems; influence lines and equivalent uniform loadings. Prerequisites: C. E. 102L and C. E. 111L. 1 lecture, 3 hrs. lab.

115L. MASONRY MATERIALS. (3) The manufacture and properties of lime, clay products, and cement; occurrence and properties of stone, sand, and gravel; design and tests of concrete and mortars. Prerequisite: junior standing. 2 lectures, 3 hrs. lab.

117L. REINFORCED CONCRETE. (2) The analysis and design of elementary reinforced-concrete members; properties of concrete; specifications. Prerequisite: C. E. 111L. 1 lecture, 3 hrs. lab.

118L. HIGHWAY ENGINEERING. (4) Theory and practice in design, construction and maintenance of low cost, intermediate and high type road surfaces. Financing, operation, and
comparative study of road types. Prerequisite: C. E. 54L. 3 lectures, 3 hrs. lab.

152. CONSTRUCTION SPECIFICATIONS AND COSTS. (Contracts and Specifications) (2) Preparation of contract documents, quantity survey, cost estimates, and cost reports. Prerequisite: senior standing.

157F. FIELD SURVEYING. (2) Summer camp, two weeks. Practice in topographic surveying. Complete surveys of projects are made and the notes used for mapping. Prerequisite: C. E. 53L.

158L. STEEL AND WOOD STRUCTURES. (3) The design and detail of girders, roof trusses, highway and railway bridges, building frames, and mill buildings. Prerequisite: C. E. 114L. 2 lectures, 3 hrs. lab.

159L. MASONRY STRUCTURES. (3) Design and detail of reinforced concrete structures such as building, retaining walls, and simple type of bridges. Prerequisite: C. E. 117L. 2 lectures, 3 hrs. lab.

160L. RIGID FRAMES. [Structural Design] (3) Modern methods in analysis of rigid frames and continuous beams, with emphasis on the slope and deflection method. Prerequisite: C. E. 114L. 2 lectures, 3 hrs. lab.

161L. WATER SUPPLY. (3) A study of works for collection, storage, purification, and distribution of municipal water supplies; sources of supply—streams, lakes, impounding reservoirs, wells. Prerequisite: C. E. 110L. 2 lectures, 3 hrs. lab.

162L. SANITARY ENGINEERING. (3) A study of the principles of sewage—both storm and sanitary; design and construction of sewerage systems and disposal plants. Prerequisite: C. E. 110L. 2 lectures, 3 hrs. lab.

167L. SOILS. (3) Origin, characteristics, and classification of soils for engineering purposes; sampling; compaction of embankments; frost action; and laboratory practice in testing of soils. Prerequisite: Geol. 4. 2 lectures, 3 hrs. lab.

170. ADVANCED MECHANICS OF MATERIALS. (3) Analysis of stresses in thickwalled cylinders, unsymmetrical bending, curved beams, hooks, flat plates and torsion of structural members. Methods of stress measurements. Prerequisite: C. E. 102L. 2 lectures, 3 hrs. lab.

171. BUILDING CONSTRUCTION. (3) A resume of various types of buildings and appurtenances; construction methods and details. Preparation of quantity surveys and estimates of cost. Planning of cost control during construction. Prerequisite: senior standing. 2 lectures, 3 hrs. lab.

184. WATER POWER. (2) Problems in design and construction
COLLEGE OF ENGINEERING

relating to reservoirs, dams, conduits, and general hydraulic engineering. Prerequisite: C. E. 110L.

185. HYDROLOGY. (3) Occurrence and movement of water by natural processes. Analysis of rainfall, runoff, evaporation and infiltration data.

190L. MUNICIPAL ENGINEERING. (3) City planning; street systems; subdivisions; housing; zoning; building codes and design of municipal details. 1 lecture, 6 hrs. lab.

191. HIGHWAY ADMINISTRATION AND FINANCE. (3) Design, financing, and administration of rural highways and city street improvements; highway bond issues; taxes and special assessments; Federal aid to highway construction.

195L. PLAIN CONCRETE. (3) Use of admixtures in concrete and critical review of research in the field of concrete mixes. Prerequisite: C. E. 115L. 1 lecture, 6 hrs. lab.

204. FLOOD CONTROL. (3) Flood runoff, retarding basin, spillway and conduit design, channel improvements. Prerequisite: C. E. 185.

205. SOIL MECHANICS. (3) Properties of foundation materials and their ability to exert and resist loads, with applications toward foundation designs for retaining walls, dams, buildings, and other structures. Problems.

206. HYDRAULICS OF OPEN CHANNEL FLOW. (3) Backwater curves and the hydraulic jump. Prerequisite: C. E. 185.

209L, 210L. [210LJ THEORY OF INDETERMINATE STRUCTURES. (3, 3) The study of classical and modern methods in analysis of indeterminate structures and comparison of experimental results obtained from models. Prerequisite: C. E. 160L. 2 lectures, 3 hrs. lab.

211L, 212L. RESEARCH AND TESTING OF BUILDING MATERIALS. (3) Special research studies of non-metallic constructional materials for strength, effect of moisture, insulating value, and comparative costs. 1 lecture, 6 hrs. lab.

213L, 214L. RESEARCH AND TESTING OF HIGHWAY MATERIALS. (3) Special research studies of highway materials. Design of rigid and non-rigid pavements, bituminous mixes, soil aggregate stabilization mixes, and load distribution on subgrades. 1 lecture, 6 hrs. lab.

215, 216. ADVANCED MASONRY DESIGN. (6) Design and detail of conduits, chimneys, complex foundations, piers, multistory buildings, arch dams and bridges.

251, 252. PROBLEMS. (3, 3) Advanced reading, design, or research.

300. THESIS. (4-6)
ELECTRICAL ENGINEERING

51L. ELECTRICAL ENGINEERING COMPUTATIONS. (3) Problems in electrical engineering involving the use of determinants, series, complex numbers, hyperbolic functions. Prerequisite: Math. 22. 2 lectures, 3 hrs. lab.

54L. ELECTRIC AND MAGNETIC CIRCUITS. (5) Direct current electric and magnetic circuits under steady state and transient conditions. Prerequisite: E. E. 51L; co-requisite: Math. 58. 3 lectures, 6 hrs. lab.

101L. DIRECT CURRENT MACHINES. (4) Theory and application of D. C. motors and generators and their control equipment. Prerequisite: E. E. 54L. 3 lectures, 3 hrs. lab.

105L. ELECTRICAL APPLICATIONS. (3) Theory and application of D.C. motors and generators. Prerequisite: Math. 54 and Physics 52L. 2 lectures, 3 hrs. lab.

106L. ELECTRICAL APPLICATIONS. (3) Theory and applications of A.C. circuits and machines to industrial problems. Prerequisite: E. E. 105L. 2 lectures, 3 hrs. lab.

109L, 110L. APPLIED ELECTRICITY. (3, 3) Direct and alternating current circuits and machines and their practical application to the machines in small shops. Prerequisite: Physics 52L or equivalent, and Math. 22. 2 lectures, 3 hrs. lab.

111. ENGINEERING ECONOMY. (2) The elements of economics as applied to engineering problems. Prerequisite: Economics 105.

113L. ELECTRIC AND MAGNETIC CIRCUITS. [Alternating Current Circuits] (5) Single phase and polyphase circuits, wave analysis, coupled circuits, steady state and transient solutions. Prerequisite: E. E. 54L and Math. 54. 3 lectures, 6 hrs. lab.

115. ELECTRIC AND MAGNETIC FIELDS. (3) Study of fields associated with electric and magnetic circuits.


146. ELECTRICAL ENGINEERING ANALYSIS. (3) A course emphasizing the fundamentals of electric and magnetic circuits and their solution by Heaviside. Prerequisites: E. E. 113L, 115.

151L, 152L. [151abL] ALTERNATING CURRENT MACHINERY. (4, 4) Prerequisites: E. E. 106L, 113L. 3 lectures, 3 hrs. lab.

153L. ELECTRONICS AND CONTROL. (3) Application of electromagnetic and electronic control to industrial problems. Prerequisites: E. E. 105L, 106L. 2 lectures, 3 hrs. lab.


186. Generating Stations. (3) The engineering and economic considerations governing the location, design, and operation of electric power plants, and the elementary principles of corporate finance and rate-making. Prerequisites: Economics 105 and E. E. 151L.

193L. Communication Engineering. (4) Theoretical treatment of networks, resonant, circuits, transmission lines, filters, coupled circuits, equalizes, and basic ultra-high frequency theory. Prerequisite: E. E. 132 L. 3 lectures, 3 hrs. lab.

194L. Communication Engineering. (4) Theory, design, and application of class A, AB, and B, C amplifiers, frequency and amplitude modulators and demodulators to telephone and radio communication circuits. Prerequisite: E. E. 193L. 3 lectures, 3 hrs. lab.

195L. Industrial Electronics. (4) Electronics as applied to industrial problems. Rectifiers, speed and voltage regulators, automatic synchronizers, industrial X-ray, high frequency heating, etc. Prerequisite: E. E. 132L. 3 lectures, 3 hrs. lab.

196L. Power Transmission and Distribution. (4) Electrical and mechanical characteristics; economics of transmission and distribution systems. Prerequisite: E. E. 151L. 3 lectures, 3 hrs. lab.

203L. Techniques of Solving Engineering Problems. (4)

204L. Electro-Dynamics. (4)

212L. Electric and Magnetic Fields. (4) Advanced electric and magnetic fields. Prerequisite: permission of instructor. 3 lectures, 3 hrs. lab.

251, 252. Problems. (3, 3) Advanced reading, design, or research.

300. Thesis. (4-6)

MECHANICAL ENGINEERING

53. Engineering Materials. (3) Characteristics of metals, alloys, wood, and concrete, and of the manufacture and heat treatment of iron and steel. Prerequisite or co-requisite: Chemistry 2L.

55L. Mechanisms. (3) Displacements, velocities, and accelerations of such machine elements as links, cams, gears, chains, and
56L. Machine Drawing. (3) Detail and assembly drawing of machine parts. Prerequisites: Engr. IL, 2L. 1 lecture, 6 hrs. lab.

101L. Heat, Power Engineering. (3) Theory and characteristics of heat engines and heat power equipment. Prerequisites: Math. 54 and Chem. 2L. 3 lectures, 3 hrs. lab.

102L. Thermodynamics. (3) Prerequisite: M. E. 101L.


104L. Elements of Thermodynamics. (3-4) Principles of heat engines and thermodynamics. Not for mechanical and chemical engineers. Prerequisite: Math. 54. 3 lectures, 3 hrs. lab., but course may be taken for 3 hrs. credit without lab.

105. Mechanics. (2) Principles of dynamics. Prerequisite: C. E. 60.

114L. Mechanisms. (4) Displacements, velocities, and accelerations of such machine elements as links, cams, gears, chains. Prerequisites: Engr. IL, 2L, M. E. 56L. 2 lectures, 6 hrs. lab.

115L. Elementary Machine Design. (4) Introduction to transmission of power by gears, belting, and shafting; proportioning for strength of fastenings, coupling, shafts, and frames; design of gears for strength and wear; specification of fits and tolerances; principles of lubrication and bearing design. Prerequisite: M. E. 114L and C. E. 102L. 3 lectures, 3 hrs. lab.

151L. Mechanical Engineering Laboratory. (2) Tests of steam boilers, engines, turbines, pumps and compressors. Prerequisite: M. E. 155. 6 hrs. lab.

152L. Mechanical Engineering Laboratory. (2) Tests of internal combustion engines, their fuels and lubricants. Prerequisite: M. E. 102; co-requisite: M. E. 160. 6 hrs. lab.

153L, 154L. Mechanical Engineering Design. (3, 3) Analysis and design of some piece of equipment selected from the field of mechanical, aeronautical, or petroleum engineering. Prerequisites: M. E. 114L and C. E. 102L, M. E. 115L. 1 lecture, 6 hrs. lab.

155. Power Plants. (3) Types and equipment. Prerequisite: M. E. 102.

156. Industrial Engineering. (3) The principles of management applied to the general operation of engineering projects and manufacturing plants. Prerequisite: senior standing.
COLLEGE OF ENGINEERING

160. **INTERNAL COMBUSTION ENGINES.** (3) Theories of Otto and Diesel type engines. Prerequisite: M. E. 102.

162. [162L] **REFRIGERATION.** (3) The theory of refrigeration and the testing of refrigerating equipment. Prerequisite: M. E. 102.

165. **AIR-CONDITIONING.** (3) Methods used to heat, cool, humidify, clean, and distribute air in buildings. Prerequisites: M. E. 102, 162.

167, 168. [167abL] **AERODYNAMICS.** (3, 3) Application of the fundamental principles of mechanics and hydrodynamics to the study of airplane design and performance. Prerequisites: M. E. 102, 167.

171. **AIRPLANE STRUCTURES.** (2) Application of fundamental principles of structural theory to practical airplane design. Prerequisites: M. E. 102L, 167.

181, 182. [181ab] **PETROLEUM PRODUCTION.** (3, 3) Oil field development, methods of drilling and oil recovery, preliminary refining, storage, and transportation. Prerequisite: senior standing.

202. **MECHANICS OF MACHINERY.** (3) Study of static and dynamic forces in machines, with special emphasis on high speed machinery, advanced velocity and acceleration analysis, balancing of rotating and reciprocating machine elements, and elementary mechanical vibrations.

206. **ADVANCED THERMODYNAMICS.** (3)

211. **ADVANCED HEATING AND AIR-CONDITIONING.** (3)

251, 252. [251ab] **PROBLEMS.** (3,3) Advanced reading, design, or research.

300. **THESIS.** (4-6)

SHOP

10L. **WOODWORK.** (2) Instruction in proper use of hand tools, knowledge of common tools, joinery, and the setting up, and the operation, of woodworking power machinery. 6 hrs. lab.

12L. **GENERAL SHOP.** (1) General shop work for E. E.'s only. 3 hrs. lab.

20L. **MACHINE SHOP.** (2) Bench work such as filing, tapping, and simple layouts, and the operation of engine lathes, drill presses, shapers, grinders, and milling machines. 6 hrs. lab.

60L. **CABINET WORK.** (3) Working knowledge of all types of joints and finishes, construction of some article built complete, and the study of styles of furniture. Prerequisite: Shop 10L. 1 lecture, 6 hrs. lab.
62L. WOODWORK. (3) Use of steel square and elementary construction. Prerequisite: Shop 10L. 1 lecture, 6 hrs. lab.

64L. PATTERN MAKING. (3) Construction of patterns such as one-piece, two-piece, straight and irregular parting; core box design and construction; and the methods of marking and storage. 1 lecture, 6 hrs. lab.

70L. MACHINE SHOP. (3) Advanced machine-shop processes on all machines and the machining and assembling of some machine such as wood lathe, permanent mold, sub press, wood vise. 1 lecture, 6 hrs. lab.

104L. PATTERN MAKING. (3) Construction of master patterns, plaster models, metal patterns and core boxes, gated patterns, and plated patterns of both wood and metal. Prerequisite: Shop 64L. 1 lecture, 6 hrs. lab.

105L. SHEET METAL WORK. (3) Construction of forms used in heating, ventilating, and air conditioning; development of intersections; and the proper uses of hand tools and turning machines. Prerequisite: junior-standing. 1 lecture, 6 hrs. lab.

107L. FOUNDRY PRACTICE. (3) Bench molding, core making, and sand tempering; the melting and casting of ferrous and non-ferrous metals; and the cleaning of castings. 1 lecture, 6 hrs. lab.

109L. ARC AND ACETYLENE WELDING. (3) Use of arc and oxyacetylene welding, the brazing of ferrous and non-ferrous metals, and torch cutting. 1 lecture, 6 hrs. lab.

151L, 152L. HEAT TREATING AND WELDING. (1, 1) Prerequisite: senior standing. Open to mechanical engineering students only. 3 hrs. lab.
College of EDUCATION
COLLEGE OF EDUCATION

THE PURPOSE of the College of Education is to correlate the forces of the University in order to meet the needs of the state in the preparation and certification of teachers, supervisors, and administrators. The college sets for itself these tasks: the thorough training of elementary and high school teachers and of supervisory and administrative officers, and the provision of courses in the various fields of education, and opportunities for research.

The curricula are based upon the assumption that the teacher or supervisory officer should have a broad and liberal education; that he should be master of the subject or group of subjects that he expects to teach; and that his training should be supplemented by professional education designed to give a knowledge of the pupils to be taught, the problems to be met in teaching, and the new meaning of the subjects of instruction. For the prospective teacher this policy has the effect of placing the emphasis upon the subjects he intends to teach.

STANDARDS

Graduation from the College of Education meets the requirements of the New Mexico State Board of Education for certification of high school and elementary teachers, and the recommendations of the North Central Association of Colleges and Secondary Schools as to professional subjects in education and the proper subject matter courses for purposes of high school teaching. Because of the tendency in various states to increase the number of credit hours in education for certification, students are advised to secure credit in not less than twenty-four semester hours in education, including general psychology.

PRINCIPLES GOVERNING THE COLLEGE OF EDUCATION IN ITS TEACHER EDUCATION PROGRAM

1. The direction of the programs of all students expecting to receive a Bachelor's degree in Education should be under the supervision of the College of Education.

2. Although it shall be the general policy of the College of Education to accept the recommendation of the department concerned, the College of Education reserves the right of final approval of the specific courses within fields as suitable majors or minors for students enrolled in the College of Education.
3. All courses in educational methods are to be taught by persons approved by the Dean of the College of Education.

4. For those students who desire to prepare themselves to teach music or art in the elementary, junior high, and senior high schools, majors in Music Education and Art Education are offered.

5. Instructors teaching courses in both methods and subject matter courses are considered members of the faculty of the College of Education as well as of the college in which the subject matter courses are represented.

ADMISSION

For the quantitative requirements for admission to the College of Education, see "Admission."

In the admission of applicants to the College of Education, the following points will be considered: (1) good moral character, (2) physical and intellectual fitness, and (3) personal qualities necessary for success in some field of education.

A student intending to prepare for teaching should register in the College of Education, in order that he may be educationally guided and be enabled to make the necessary professional adjustments.

MAXIMUM NUMBER OF HOURS

No student in this College may enroll for more than 17 semester hours, plus one hour of physical education (or military drill in the case of N.R.O.T.C. students), unless his standing for the previous semester was at least B in two-thirds of his studies, with no grade below C; and then only by presenting a written petition to the Committee on Scholarship, which may, in its discretion, grant permission to enroll for extra work up to a maximum of 19 hours.

EXTRA-CURRICULAR ACTIVITIES FOR TEACHERS

In choosing teachers, principals and superintendents are always eager to find candidates who are able to handle extra-curricular activities or who have developed some particular ability which will contribute to the life of the school. From the point of view of getting a position and becoming indispensable after the position has been secured, such specialized abilities as those which enable teachers to direct glee clubs, coach athletic and debating teams, manage student publications, and sponsor school clubs of various kinds are extremely important. There are many opportunities at the University for securing training and experience in these fields. It is strongly recommended that prospective teachers take advantage of them.
PRACTICE TEACHING FACILITIES

The College of Education has made arrangements with the Albuquerque public school authorities whereby student teaching is carried on under the personal direction of selected teachers, who act as critic teachers under the general direction of a professor of education in the College of Education.

The facilities of the city school system furnish an excellent opportunity for students to work in a practical laboratory where the principles and best practice in teaching can be exemplified and applied. The practice teaching is correlated with the subjects taught in the University.

LABORATORIES

LABORATORY FOR THE DEPARTMENT OF SECONDARY EDUCATION. The facilities of the Department of Secondary Education have been materially increased by the equipment of a workroom, or laboratory, in which will center all work connected with the professional training of high school teachers. The major publishing houses are keeping this room supplied with textbooks and other materials of secondary education with which students will wish to become familiar. Here, too, will be found various types of research materials for students in this department.

LABORATORY AND MATERIALS FOR THE DEPARTMENT OF ELEMENTARY EDUCATION. A large workroom is available for students. It is equipped with apparatus and materials to assist in constructing units of work for practice teaching and classwork.

LABORATORY IN COMMERCIAL EDUCATION. A laboratory in commercial education is now available for those who are preparing to teach in that field. This laboratory has been added to meet a recognized need in the public schools.

LONGFELLOW SCHOOL. Through a cooperative arrangement with the Albuquerque Public Schools, the University is enabled to use the Longfellow School for demonstration and practice teaching. Here in typical situations the beginning teacher is assisted in solving her problems by experienced critic teachers. The work is under the direction of the school principal and the director of practice teaching in the College of Education.

PLACEMENT BUREAU

A placement bureau, one function of which is to assist students and graduates of the University in obtaining positions in the teaching profession, is maintained by the University. The bureau aims to keep on file a complete record of the scholarship, experience, and
COLLEGE OF EDUCATION

personal qualifications of each candidate for a position. Copies of these records will be mailed to school officials at their request. The University reserves the right to refuse to extend its cooperation to students who apply for positions for which they are manifestly unfit.

Blanks for registration may be obtained from the Placement Bureau. A fee of $2 is charged each registrant and includes permanent registration. No commission is charged by the Bureau. Communications should be addressed to the Placement Bureau.

SCHOLARSHIP REGULATIONS

See p. 62.

REQUIREMENTS FOR GRADUATION

Upon the completion of all specified requirements, candidates for degrees in the College of Education who major in commercial work, educational administration, home economics, mathematics, or a science, receive the degree of Bachelor of Science in Education; those who major in physical education receive the degree of Bachelor of Science in Physical Education; those who major in industrial arts receive the degree of Bachelor of Science in Industrial Arts Education; and those who major in other subjects receive the degree of Bachelor of Arts in Education.

Candidates for degrees in the College of Education are required to comply with the following regulations:

1. Students who plan to be high school teachers should complete a major and a minor in subjects usually taught in high schools.

2. A major is the principal subject which the student desires to teach in high school. It consists of a minimum of twenty-four semester hours above freshman grade in the subject selected. It must be chosen with the advice of the dean.

A minor should be selected in a subject which the student plans to teach, and whenever possible, the student should secure a second minor. The specific requirements for majors and minors are listed under the several departments; the work in these fields must be of at least C quality, and courses in which the grade of D is earned are accepted only as electives.

3. It is often necessary for the teacher of science to teach classes in more than one field. The same is true of teachers of social science. This makes it impossible for students to make adequate preparation for teaching in these fields by completing a major in any one department of the University.

Therefore, students preparing to teach in one of these fields will
be permitted to complete either a general Major in Science or a general Major in Social Science as follows:

A. MAJOR IN SCIENCE IN SECONDARY EDUCATION. The major in science shall consist of 48 hours, including freshman courses, in the Departments of Biology, Chemistry, Geology, and Physics. The student shall offer a minimum of 12 hours in each of three of these departments. No minor is required, but one is strongly recommended. Survey courses will not be accepted toward the major. Necessary deviation from the rule requiring 40 hours above 100 will be approved in individual cases.

B. MAJOR IN SOCIAL STUDIES IN SECONDARY EDUCATION. Students preparing to teach the social studies in secondary schools may be permitted to offer a major in general social studies. Such general social studies major shall consist of at least 48 hours, including freshman courses, of which 18 hours must be in the Department of History, 9 hours in the Departments of Government and Citizenship and Economics, 9 hours in the Departments of Sociology, Anthropology, and in Geography courses, 12 hours in electives from social studies departments. No minor is required with the general social studies major, but one is strongly recommended.

4. The demand for teachers of commercial subjects has steadily increased in recent years. Students preparing to teach in high schools may now offer a major or minor in this field. Upon graduation, they will receive the degree of Bachelor of Science in Education.

5. Students preparing to teach should follow the curriculum as outlined. A minimum of 128 semester hours, including physical education (or equivalent N.R.O.T.C. credits), is required for graduation. This amount is based upon an average quality of work done. Ninety hours of the total must be C grade or better, and, in addition, students transferred from other institutions must make a grade of C or better in three-fourths of the hours earned in the University of New Mexico.

6. In addition to the required work in majors and minors, professional courses in education are required as outlined in the various curricula. All candidates for degrees are required to take a course in observation and practice teaching.

7. Students who desire to prepare for administrative or supervisory positions should major in the curriculum for administrators and supervisors, and should minor in some subject which has bearing upon their chosen field of work.
COLLEGE OF EDUCATION

8. Students who plan to teach in the elementary schools are not required to have a major or a minor, nor meet the group requirements listed below. They will be expected to follow the curriculum as outlined on p. 162.

9. Each candidate for a degree must complete at least 40 semester hours in courses numbered above 100.

10. No student shall be recommended for graduation unless he shows ability to write and speak clear and correct English.

11. For minimum residence requirements, see p. 66.

GROUP REQUIREMENTS

Students must complete the following requirements in the various groups. As much of this work as possible should be done in the freshman and sophomore years, and professional work and major and minor requirements should be completed in the junior and senior years. For required courses in physical education, see p. 174.

I. ENGLISH. As evidence of proficiency in oral and written English a student must earn 12 semester hours. Six hours must be earned in English 1, 2 and 6 additional hours must be earned in courses numbered above 50. (In the elementary curriculum, these additional hours must be in literature. In the secondary and administrative curricula some courses in public speaking are suggested.)

II. FOREIGN LANGUAGE. A student who has been admitted with no credit in a foreign language, or who begins a language in which he has done no work in high school is required to complete four semesters or twelve hours credit in one foreign language.

Other students continuing a language begun in high school will be tested and assigned to courses according to ability shown. Such students will then complete the remainder of the twelve hours required. Substitutions may be made as follows:

(1) Administrators and supervisors may substitute an equal number of hours of professional subjects.

(2) Students preparing to teach in high school may substitute an equal number of hours in their major and minor fields in addition to the regular requirements. This additional work must be of C grade or better.

(3) Students preparing to teach in the elementary schools are advised to take Spanish, but no foreign language is required.
III. SOCIAL STUDIES. Nine semester hours (not more than 6 from one department) must be completed in approved* courses in the Departments of Anthropology, Economics, History, Government and Citizenship, Philosophy, or Sociology. A student admitted with less than one unit in social science is required to complete 12 hours in this group.

IV. MATHEMATICS AND SCIENCES. Eleven semester hours (not more than 8 from one department, and including 6 hours in courses that require laboratory work) must be completed in approved* courses in the Departments of Biology, Chemistry, Geology, Home Economics, Mathematics, Physics, or Psychology. A student admitted with high school deficiencies in both mathematics and science is required to complete a total of 17 hours in this group.

CURRICULA

The following curricula have been outlined for the purpose of directing students in their chosen fields of work. There are curricula for students preparing to teaching in high schools and for students who wish to teach in the elementary schools.

Special curricula are provided for students preparing to teach art, music, physical education, home economics, commercial subjects or industrial arts in public schools.

The course in the Department of Naval Science and Tactics may be substituted during each semester of each school year for courses in required Physical Education. The course in Naval Science may also be substituted for courses in each of the curricula as prescribed by the dean.

CURRICULUM FOR STUDENTS PREPARING TO TEACH IN HIGH SCHOOL,
(Leading to the degree of Bachelor of Arts in Education or Bachelor of Science in Education.)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
<td>English 2</td>
</tr>
<tr>
<td>Mathematics or Science</td>
<td>3-4</td>
<td>Mathematics or Science</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
<td>Social Studies</td>
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<tr>
<td>**Foreign Language</td>
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<td>**Foreign Language</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td>Electives</td>
</tr>
</tbody>
</table>

* For approved courses, see departments of instruction.
** For substitution see Group Requirements for Graduation.
COLLEGE OF EDUCATION

SOPHOMORE YEAR

English 3
Psychology 51 3
Social Studies 3
**Foreign Language 3
Physical Education 1
Electives 6-7

SOPHOMORE EDUCATION 54 (Psychology) 3
**Foreign Language 3
Physical Education 1
Electives or Science 6-7

JUNIOR YEAR

Education 101 3
Education 141 3
Majors and Minors 8-9

†Teachers Course 3
§Majors and Minors 10-11

SENIOR YEAR

Education 122 3
Education 135 2
Education 183 (Psych.) 3
Sociology 81 3
Elective: Same, plus Child Study 6

** For substitution see Group Requirements for Graduation.
† If not taken during the sophomore year, an advanced course must be
substituted according to the advice of the Dean.
§ For required courses see departments of instruction.
§ One teacher's course, according to the advice of the Dean.

CURRICULUM FOR STUDENTS PREPARING TO TEACH
IN ELEMENTARY GRADES
(Leading to the degree of Bachelor of Science in Education.)

FRESHMAN YEAR

First Semester Second Semester

English 1 3
Biology 1L 4
History 1 or 11 3
Art 3 2
P. E. 1
Elective: Language or Anthro. 3

Elected: Language or Anthro. 3

SOPHOMORE YEAR

English 53 3
Geology 1 3
History 51 3
Language or Mathematics 3
Psychology 51 3
Music Education 93 2
P. E. 1

English 54 3
Geology 2 or 54 3
History 52 3
Language or Child Study, H. E. 158 3
Education 72 2
Music Education 94 2
P. E. 1

JUNIOR YEAR

Education 121 3
P. E. 119 2
Education 124 3
Sociology 110 2
Elective:
Dramatic Art
Corrective Speech
Geology 54
Anthropology
College Arithmetic
Sociology 71
Library Science 162
COLLEGE OF EDUCATION

SENIOR YEAR

Education 107 2 Education 102 3
Education 125 3 Education 136 5
English 82 3 Education 120 2
Government 103 3 Electives 4
Elective: Child Psychology, Art or Music 6

All programs must be approved by Head of Department.
* For those who fail to pass an achievement test.

CURRICULA IN PHYSICAL EDUCATION, see pp. 176-178.

CURRICULUM FOR STUDENTS PREPARING TO TEACH HOME ECONOMICS

(Leading to the degree of Bachelor of Science in Education.)
The College of Education curriculum for students preparing to teach Home Economics is approved by the State Department of Vocational Education for the training of teachers of homemaking who desire to teach in the federally-aided schools of the state.

FRESHMAN YEAR

First Semester  Second Semester
English 1 3 English 2 3
Biology 1L 4 Biology 36 3
Art 2 4 Art 4 2
Home Economics 1 or 2L 3-4 Intro. to Social Science 1 3
Physical Education 1 Home Economics 1 or 2L 3-4
Library Science 21 2 Physical Education 1

SOPHOMORE YEAR

Intro. to Social Science 2 3 English 3
Chemistry 41L 5 Chemistry 42L 5
Psychology 51 3 Psychology 54 3
Home Economics 53L 3 Home Economics 54L 3
Home Economics 63L 3 Home Economics 64L 3
Physical Education 1 Physical Education 1

JUNIOR YEAR

Home Economics 127L 4 Home Economics 132 3
Biology 98L 4 Education 141 3
English 3 Home Economics 109 3
Home Economics 138L 4 Electives 6

SENIOR YEAR

Home Economics 107 3 Home Economics 196 1
Education 107 2 Home Economics 128 3
Education 153 3 Home Economics 133L 3
Electives 7 Education 155d 3
Education 156 5
COLLEGE OF EDUCATION

CURRICULA FOR STUDENTS PREPARING TO TEACH MUSIC EDUCATION

(Leading to the degree of Bachelor of Arts in Education.) The following courses will satisfy the requirements for a major study in Music Education. Candidates must complete a minor study in some other teaching subject, and follow the curriculum for Elementary or Secondary Education. Applied music must include voice and piano study, the number of hours in each to be determined upon consultation with the Head of the Department of Music Education.

If electives are selected in the Music Department, the following courses are recommended: Music 95, 96, 35, 36, 157, 158, 159, 160, Dramatic Art 89, 90, or applied music.

Curriculum for students preparing to teach music in the elementary grades: (Students preparing to teach music in the elementary schools should follow the elementary curriculum as outlined on p. 162, and should take the required number of hours and courses to complete their major in lieu of the electives provided in the elementary curriculum.)

| Music 5, 6 | 6 *Music 45, 46 | 2 |
| Music 55, 56 | 4 Applied Music | 6 |
| *Music 39, 40 | 4 Ensemble Music | 2 |

Curriculum for students preparing to teach music in the secondary schools:

| Music 5, 6 | 6 Music 153, 154 | 4 |
| Music 35, 36 | 6 Music Education 94, 155f | 5 |
| *Music 39, 40 | 4 Ensemble Music | 4 |
| *Music 45, 46 | 2 Applied Music | 8 |
| Music 55, 56 | 4 Dramatic Art 89 | 3 |
| Music 157, 158 | 4 |

The following music courses will satisfy the requirements for a minor study in Music Education. Students who minor in Music Education must pass a satisfactory examination in piano and voice, or take one hour each in voice and piano class instruction.

| Music 5, 6 | 6 Music Education 94 or 155f | 2-3 |
| Music 55, 56 | 4 Ensemble Music | 2 |
| Music 39, 40 | 4 |

*Music 39, 40 and 45, 46 are to be taken concurrently.

CURRICULUM FOR ADMINISTRATORS AND SUPERVISORS

(Leading to the degree of Bachelor of Science in Education.) Twenty-four semester hours of work in courses numbered above 50 are necessary for a major. The following courses are acceptable toward meeting the requirements for a major study in administration and supervision. Candidates must also complete a minor in some field other than education.
COLLEGE OF EDUCATION

<table>
<thead>
<tr>
<th>Educational Psychology</th>
<th>3</th>
<th>City School Administration</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>History of Education</td>
<td>3</td>
<td>Problems of Education in N. M.</td>
<td>2</td>
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<tr>
<td>Educational and Psychological Tests</td>
<td>3</td>
<td>Elementary Educ.</td>
<td>3</td>
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<tr>
<td>Child Psychology</td>
<td>3</td>
<td>Educational and Vocational Guid.</td>
<td>3</td>
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<td>The Principal and His School</td>
<td>3</td>
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CURRICULUM FOR ART SUPERVISORS, JUNIOR AND SENIOR HIGH SCHOOL TEACHERS
(Leading to the degree of Bachelor of Arts in Education.) Arranged for supervisors and teachers of Art Education.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>English 1</td>
<td>3</td>
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<tr>
<td>Math. or Science</td>
<td>3-4</td>
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<tr>
<td>Art 3</td>
<td>2</td>
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<td>Art 55</td>
<td>2</td>
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<td>Physical Education</td>
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<tr>
<td>Art 27</td>
<td>2</td>
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<tr>
<td>Electives</td>
<td>3-4</td>
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<tr>
<th>SOPHOMORE YEAR</th>
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<tr>
<td>English</td>
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<td>Psychology 51</td>
</tr>
<tr>
<td>Social Studies</td>
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<td>Art 1</td>
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<tr>
<td>Art 57</td>
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<tr>
<td>Physical Education</td>
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<td>Electives</td>
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<th>JUNIOR YEAR</th>
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<tbody>
<tr>
<td>Education 102</td>
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<tr>
<td>Education 107</td>
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<tr>
<td>Art 69</td>
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<tr>
<td>Art Crafts</td>
</tr>
<tr>
<td>Social Studies</td>
</tr>
<tr>
<td>Electives (Art)</td>
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<table>
<thead>
<tr>
<th>SENIOR YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 155a</td>
</tr>
<tr>
<td>Education 128</td>
</tr>
<tr>
<td>Electives (Art)</td>
</tr>
</tbody>
</table>

CURRICULUM FOR STUDENTS PREPARING TO TEACH COMMERCIAL WORK
(Leading to the degree of Bachelor of Science in Education.)

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
</tr>
<tr>
<td>Lab. Science</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
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</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>†Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td>Business Administration 5</td>
<td>3</td>
</tr>
<tr>
<td>Math. 1</td>
<td>3</td>
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165
COLLEGE OF EDUCATION

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>English 64</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 51</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
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</tr>
<tr>
<td>Business Administration 11#</td>
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<tr>
<td>Business Administration 13#</td>
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<tr>
<td>*Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td>B. A. 65</td>
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JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Business Administration 53</td>
<td>3</td>
</tr>
<tr>
<td>*Education 101</td>
<td>3</td>
</tr>
<tr>
<td>Education 141</td>
<td>3</td>
</tr>
<tr>
<td>Education 107</td>
<td>2</td>
</tr>
<tr>
<td>Business Administration 51</td>
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<tr>
<td>Minor and Electives</td>
<td>4</td>
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<tr>
<td>Business Administration 54</td>
<td>3</td>
</tr>
<tr>
<td>Education 102</td>
<td>3</td>
</tr>
<tr>
<td>Education 153</td>
<td>3</td>
</tr>
<tr>
<td>Business Administration 52</td>
<td>2</td>
</tr>
<tr>
<td>Minor and Electives</td>
<td>6</td>
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SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Teachers' Course (Educ. 155g)</td>
<td>3</td>
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<tr>
<td>Business Administration 106</td>
<td>3</td>
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<tr>
<td>Minor and Electives</td>
<td>6-8</td>
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<tr>
<td>Business Administration 157</td>
<td>3</td>
</tr>
</tbody>
</table>

*One of these courses is required.

†Substitutions for Foreign Language may be deferred to the Junior Year and should be approved by the major department head.

CURRICULUM FOR STUDENTS PREPARING TO TEACH INDUSTRIAL ARTS
(Leading to the degree of Bachelor of Science in Industrial Arts Education.)

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics, Elective</td>
<td>3</td>
</tr>
<tr>
<td>Engineering 1L</td>
<td>3</td>
</tr>
<tr>
<td>Shop 10L</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry 1L</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td>P. E.</td>
<td>1</td>
</tr>
<tr>
<td>English 2</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics, Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>Engineering 2L</td>
<td>3</td>
</tr>
<tr>
<td>Shop 20L</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry 2L</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td>P. E.</td>
<td>1</td>
</tr>
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</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 64</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics, Elective</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 51</td>
<td>3</td>
</tr>
<tr>
<td>Physics 11L</td>
<td>4</td>
</tr>
<tr>
<td>Shop 64L</td>
<td>3</td>
</tr>
<tr>
<td>P. E.</td>
<td>1</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 54</td>
<td>3</td>
</tr>
<tr>
<td>Shop 60L</td>
<td>3</td>
</tr>
<tr>
<td>Shop 70L</td>
<td>3</td>
</tr>
<tr>
<td>Physics 12L</td>
<td>4</td>
</tr>
<tr>
<td>P. E.</td>
<td>1</td>
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JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 141</td>
<td>3</td>
</tr>
<tr>
<td>Engineering 55L</td>
<td>3</td>
</tr>
<tr>
<td>Shop 105L</td>
<td>3</td>
</tr>
<tr>
<td>E. E. 109L</td>
<td>3</td>
</tr>
<tr>
<td>Economics 105</td>
<td>3</td>
</tr>
<tr>
<td>*Education 107</td>
<td>2</td>
</tr>
<tr>
<td>Education 153</td>
<td>3</td>
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<tr>
<td>M. E. 56L</td>
<td>3</td>
</tr>
<tr>
<td>Shop 104L</td>
<td>3</td>
</tr>
<tr>
<td>E. E. 110L</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Social Science—History 51</td>
<td>3</td>
</tr>
<tr>
<td>52, Sociology, Education 105, 106</td>
<td>3</td>
</tr>
</tbody>
</table>

* Not required of students who expect to teach in other states.
COLLEGE OF EDUCATION

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Education 115</td>
<td>3</td>
</tr>
<tr>
<td>Shop 107L</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Technical</td>
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<tr>
<td>Elective: General</td>
<td>3</td>
</tr>
<tr>
<td>Education 156</td>
<td>5</td>
</tr>
<tr>
<td>Elective: Technical</td>
<td>3</td>
</tr>
<tr>
<td>History 51, Sociology, Education 105 or 106</td>
<td>3</td>
</tr>
<tr>
<td>Elective: General</td>
<td>3</td>
</tr>
</tbody>
</table>

DEPARTMENTS OF INSTRUCTION

Courses numbering: from 1-49, lower division, normally open to freshmen; from 50-99, lower division, normally open to sophomores; from 100-199, upper division, normally open to juniors, seniors, and graduates; 200-400, open to graduates only. Graduate credit for courses listed is allowed at the discretion of the Graduate Committee.

Symbols used in course descriptions: L—part of the course is laboratory work; F—course is given during field session; SS—course offered in eight weeks' summer session only; Yr—course offered throughout two semesters and credit for a single semester's work is suspended until the entire course is completed; *—course open to General College students; †—course offered for General College credit only; () semester hours' credit; credit hours separated by a dash (1-3) indicate variable credit in the course; [ ]—former course number or title.

A schedule of course offerings, including hours of meeting, is issued at the opening of each session. The University reserves the right to cancel any listed course or to make a substitution in instructors when necessary.

EDUCATION

Professors Nanninga (Dean), Clauve, Diefendorf, Fixley, Gribble (Visiting), Reid, Tireman, White; Associate Professor Moyers; Instructors Israel, Runge; Graduate Fellows Thomson, Walter.

GENERAL EDUCATION

72. Health Education. (2) Health instruction in elementary schools. White

95. Social Arts. (2) SS Standards of social behavior.

101. History of Education in Europe. (3) Moyers

102. History and Philosophy of American Education. (3) Moyers
### COLLEGE OF EDUCATION

**105, 106. [105ab] ADULT EDUCATION.** (3-3) Origin, development, philosophy, objectives, methods, and materials.

**107. PROBLEMS OF EDUCATION IN NEW MEXICO.** (2) New Mexico school system. 

**109. EDUCATIONAL SOCIOLOGY.** (3) Sociological aspects of school problems.

**110. THE USE OF AUDIO-VISUAL AIDS IN TEACHING.** (2) Chief attention will be given to the aims and techniques of audio-visual aids in the classroom; illustrative use of films; types of aids explored.

**112. CURRENT EDUCATIONAL PROBLEMS.** (2) Staff

**115. EDUCATIONAL AND VOCATIONAL GUIDANCE.** (3) Principles and methods. 

**116. PROFESSIONAL ADJUNCTS.** (1) Attention to personality traits, the interview and written application, effective speech, personal budget, community relationships. For juniors and seniors only. 

**151. PROBLEMS.** (1-3) Staff

**251. PROBLEMS.** (1-3) Graduate Staff

**300. THESIS.** (4-6) Graduate Staff

### ELEMENTARY EDUCATION

**17. ARTS AND CRAFTS FOR ELEMENTARY SCHOOLS.** (3) Industrial needs of the child; art concerned with food, clothing, shelter, records, utensils, tools, and machines. Crafts are demonstrated and executed; problems in clay, weaving, textiles, papier mache, toy-making, booklet making, and expression through miscellaneous crafts materials. Designed to meet the State Department of Education requirements in arts and crafts. Staff

**42. CLASSROOM ORGANIZATION AND MANAGEMENT.** (3) SS Reid

**52. TEACHING ENGLISH TO NON-ENGLISH SPEAKING CHILDREN.** (2) SS For pre-first and first grade teachers. 

**61. TEACHING READING IN THE PRIMARY GRADERS.** (3) SS Methods and materials in pre-first to the fourth grades. 

**62. TEACHING OF LANGUAGE, SOCIAL STUDIES, AND ARITHMETIC.** (3) SS Materials and methods in grades one to four. 

**64. PRACTICE TEACHING IN ELEMENTARY GRADERS.** (4) SS: Prerequisites: an observation course and 61. Co-requisite: 62 

**93, 94. [93ab] MUSIC EDUCATION.** (2, 2) Music fundamentals for elementary teachers; methods and materials for elementary grades. 

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119. [P. E. 123] Teaching of Physical Education in Elementary Grades. (2) Gugisberg
120. Children's Literature. (2) Materials and techniques of teaching. Tireman
121. Supervision of Pre-First and Primary Reading. (3) Staff
122. Supervision of English and Social Studies. (3) Supervision of language, and social studies. If Education 61 has been taken, consult instructor before enrolling in this course. Tireman
123. Supervision of Intermediate Reading. (3) Supervision of reading in the fourth, fifth, and sixth grades. Diagnosis and remedial work. Prerequisite: 61 or 122. Tireman
124. Supervision of Elementary Science. (3) Tireman
125. The Curriculum in Art Education. (3) Curriculum building, development of significant units for teaching art, analysis and evaluation of courses of study, and examination of available tests in the arts. Staff
129k. Social Studies Curriculum Workshop. (1-5) Curriculum units in the social studies field. The student must spend in the workshop two hours per week for one semester per hour of credit earned. Enrollment is limited to those who have over 60 hours and are teaching or have had teaching experience. Moyers
135. Supervision of Arithmetic. (2) Moyers
136. Practice Teaching in Elementary Grades. (5) Prerequisites: an observation course, 121, 122, and 123. 90 clock hours minimum of practice teaching. Tireman
221. Investigations in Primary Language Arts. (2) Graduate Staff
222. Investigations in Intermediate Language Arts. (2) Graduate Staff
232. Investigations in Social Studies. (2) Graduate Staff
233. Philosophy of the Activity Program. (2) Graduate Staff
235. Investigations in Arithmetic. (2) Moyers
237. The Elementary School Curriculum. (2) Graduate Staff
238. Supervision of the Elementary School. (3) Graduate Staff
251, 252. [251ab] Problems. (1-3 each semester) Graduate Staff
252. Bilingual Education. (2) Tireman
274. Study of Education Classics. (2) Graduate Staff
300. Thesis. (4-6) Graduate Staff
141. Principles of Secondary Education. (3) Diefendorf

143. Principles and Practices of Distributive Education. (3) Traces the development of vocational business distributive education under the federal George-Deen and Smith-Hughes Acts. Shows how to organize, set up and carry on secondary cooperative part-time retail selling classes, pre-employment sales courses and adult programs for workers employed in distributive occupations. Runge

147. Extra-Curricular Activities in the Secondary School. (3) The guiding principles of pupil participation in the extra-curricular life of the junior and senior high school. Fixley

148. Development of Instructional Materials in Distributive Education. (3) Examination made of texts, workbooks, pamphlets, sales manuals, outlines, government publications, trade journals, bulletins and all instructional materials available for use in distributive education classes. Course of study worked out for secondary cooperative part-time retail selling class and other distributive study groups. Runge

149. Retail Store Operation and Management. (3) Principles of good retail store operation and management with emphasis on the teaching of these fundamentals in distributive education classes. Stress will be placed on methods of developing in students special abilities needed for retailing success. Runge

153. High School Methods. (3) Prerequisite: Psychology 54 or 183. Diefendorf

155. The Teaching of High School Subjects. All specific methods courses are listed under the general number, Education 155, with the designating subscripts as indicated. These courses carry credit in education only, not in the subject matter departments. Required of students following secondary curricula. Prerequisite: 153.

a. The Teaching of Art in High School. (3)
b. The Teaching of Biology in High School. (3)
c. The Teaching of English in High School. (3) Prerequisite: English 2. Keleher
d. The Teaching of Home Economics in High School. (3)
e. The Teaching of Mathematics in High School. (3)
f. The Teaching of Music in High School. (3) Prerequisite: 94. (Offered only on demand.)
g. The Teaching of Commercial Subjects in High School. (3)
COLLEGE OF EDUCATION

h. THE TEACHING OF SCIENCES IN HIGH SCHOOL. (3)
k. THE TEACHING OF SOCIAL STUDIES IN HIGH SCHOOL. (3)
m. THE TEACHING OF SPANISH IN HIGH SCHOOL. (2) (Offered in alternate years.)
n. THE TEACHING OF READING IN THE JUNIOR HIGH SCHOOL. (2)
o. THE TEACHING OF DISTRIBUTIVE EDUCATION IN HIGH SCHOOL. (3) Runge
p. THE TEACHING OF PHYSICAL EDUCATION IN HIGH SCHOOL. (3)

156. PRACTICE TEACHING IN HIGH SCHOOL. (5) Observation and teaching in Albuquerque High School. Prerequisite: 153. 1 lecture, 5 hrs. practice teaching a week. Diefendorf
159. DIRECTED STUDY. (3) Theory and practice of directing pupil study. Diefendorf
241. SEMINAR IN SECONDARY EDUCATION. (2) Diefendorf
242. HIGH SCHOOL CURRICULUM. (3) Trends and practical programs. Diefendorf
244. THE JUNIOR HIGH SCHOOL. (2) History of the junior high school movement and some of the problems arising from its organization and administration. Diefendorf
251, 252, [251ab] PROBLEMS. (1-3 each semester) Graduate Staff
254. HEALTH EDUCATION, METHODS FOR SECONDARY SCHOOLS. (SS)
258. [158] HIGH SCHOOL SUPERVISION. (3) Moyers
270. DIAGNOSIS IN PHYSICAL AND HEALTH EDUCATION. SS
272. ADMINISTRATION OF HEALTH EDUCATION. SS
300. THESIS. (4-6) Graduate Staff

EDUCATIONAL ADMINISTRATION

164. CITY SCHOOL ADMINISTRATION. (3) Required of all administrative majors. Educational, financial, and administrative principles. Fixley
166. THE PRINCIPAL AND HIS SCHOOL. (3) Organization and administration, and supervision of a single school. Fixley
171. PROBLEMS OF THE TEACHING PROFESSION. (3) The principles of educational administration and organization as applied to the duties and responsibilities of the classroom teacher. Nanninga
201, 202, [201ab] RESEARCH METHODS IN EDUCATION. (2, 2) Required of all candidates for a graduate degree in education. Fixley
206. Seminar in Educational Administration. (2) Advanced reading and problems in educational administration. Fixley 251, 252. [251ab] Problems. (1-3 each semester.) Graduate Staff

261. School Law. (3) Legislation and court decisions, with special reference to New Mexico school law. Fixley

263. State School Administration. (3) State school systems. Federal and state policy, and forms of control. Nanninga

268. Public School Finance. (3) Special attention to New Mexico. Fixley

277. School Buildings and Equipment. (3) Problems, standards, committee reports, field trips. Fixley

300. Thesis. (4-6) Graduate Staff

EDUCATIONAL PSYCHOLOGY

*54. Educational Psychology. (3) An introductory course. Limited to sophomores. Prerequisite: Psychology 1L, 2L, or 51. Welch

131. Educational and Psychological Tests. (3) Prerequisites: Psych. 2L or 51. Credit not allowed to those who have credit for Psychology 185. Shaklee

180. Advanced Statistical Methods in Psychology. (3) Prerequisites: Psych. 51 and Math. 42 or equivalent. Shaklee

183. Educational Psychology. (3) Advanced course. Prerequisites: Psychology 1L, 2L or 51. Welch

187. Child Psychology. (3) The principles of human behavior in infancy, childhood, and adolescence. Prerequisites: Psychology 1L, 2L, or 51. Shaklee

190L. Clinical Psychology. (3) Clinical practice in the administration of psychological tests. Prerequisite: Psychology 2L or 51. 1 lecture, 4 hrs. lab. Shaklee

251, 252. [251] Problems. (2-3 each semester) Graduate Staff

300. Thesis. (4-6) Graduate Staff

HOME ECONOMICS

Professor Simpson (Head); Associate Professor Schroeder; Assistant Professor Tucker.

GROUP REQUIREMENTS

Home Economics 53L and 54L count toward Science and Mathematics (Group IV).
MAJOR STUDY

See curriculum under "College of Education." For requirements for a major in dietetics in the College of Arts and Sciences, consult the Dean of the College.

MINOR STUDY

Home Economics 1, 2L and 12 hours in courses numbered above 50, or 20 hours specified by the Head of the Department.

NOTE: The College of Education curriculum for students preparing to teach home economics is approved by the State Department of Vocational Education for the training of teachers of homemaking who desire to teach in the federally-aided schools of the state.

1. HOMEMAKING. (3) Clothing selection—from the standpoint of artistic, economic, and hygienic standards. Tucker

2L. HOMEMAKING. (4) Food preparation and elementary nutrition; child development; personal problems. 1 lecture, 4 hrs. lab. Simpson, Schroeder

53L, 54L. [53abL] Food for the Family Group. (3, 3) Selection, preparation, and service of family meals. 1 lecture, 4 hrs. lab. Staff

63L, 64L. [63abL] Dressmaking. (3, 3) 63L: Pattern study; construction of clothing emphasizing fitting and techniques of finishing. Open to elective. 64L: Adaptation of patterns; problems in designing. Prerequisite: 1 or permission of instructor. 1 lecture, 4 hrs. lab. Tucker

104. NUTRITION. (2) Primarily for physical education majors. The relation of nutrition to the health program; normal nutrition.

107L. Advanced Foods. (3) Food economics; household marketing; food laws; history of cookery. Prerequisites: Home Economics 54L and Chemistry 41L, 42L. 1 lecture, 4 hrs. lab. Simpson

109. Home Furnishings. (3) Tucker

127L. Nutrition and Dietetics. (4) Prerequisite: 107L. 3 lectures, 2 hrs. lab. Simpson

128. Family Relationships. (3) Schroeder

132. Household Management. (3) Schroeder

133L. Home Management House. (3) Six weeks' residence required. Prerequisite: 132. Schroeder

138L. Child Care and Development. (4) Observation and assistance in the nursery school. 3 lectures, 2 hrs. lab. Schroeder
COLLEGE OF EDUCATION

140L. NURSERY SCHOOL METHODS AND ADMINISTRATION. (3) Observation and practical experience in guidance of children in nursery school, including an investigation of play materials, literature, music, equipment, records, housing, and budget. 1 lecture, 4 hrs. lab.

196. HOME ECONOMICS SEMINAR. (1-2) Staff

The following courses are primarily for students who wish to become dietitians.

150L. LARGE QUANTITY COOKERY. (3) Standard methods of food production in quantity; cost accounting; standardization of formulas; menu planning and table service. Prerequisites: 107L, 127L. 1 lecture, 4 hrs. lab. Dining Hall Staff

151. DIET IN DISEASE. (3) A study of the adaptation of diet in the treatment of impaired digestive and metabolic conditions. Prerequisites: 107L, 127L. Simpson

157L. QUANTITY PURCHASING. (3) Factors influencing quality, grade, and cost of food products. Current procedures in large quantity purchasing. Prerequisites: 107L, 127L, 150L. 1 lecture, 4 hrs. lab. Dining Hall Staff

159. INSTITUTIONAL MANAGEMENT. (3) Principles of scientific management applied to institutional administration. Experience in the food service and housing facilities on the campus. Prerequisites: 107L, 132, 157L. Dining Hall Staff

DIVISION OF HEALTH, PHYSICAL EDUCATION AND RECREATION

Professors White (Head), Johnson (Head, Department of Physical Education for Men); Associate Professor Gugisberg (Head, Department of Physical Education for Women); Assistant Professors Barnes, Clements, Petrol; Instructors Dooley, Dear, McGill, McNamara, Milliken; Harris, M.D. (Director, University Health Service); Kling, M.D., (University Physician).

ALL UNIVERSITY REQUIREMENTS

Four semester hours of required physical education (or equivalent N.R.O.T.C. credits) shall be completed by all undergraduate students at the University. Veterans and students over thirty years of age are exempted from the physical education requirement. Not more than one hour may be earned in a semester except by physical education majors and minors. Not more than four semester hours of required physical education may count toward a degree. Men may substitute participation in major sports for required physical

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education for that part of the semester during which they are actively engaged in a sport, provided that they are enrolled in the section designated by the Department Head. Physical education majors and minors may not substitute their participation in sports for the required physical education classes.

The instructor in each course should be consulted concerning proper clothing or uniform.

There is a special fee of $20.00 per semester for each course in Equitation. A special fee of $10.00 is charged for lessons in skiing.

*PHYSICAL EDUCATION ACTIVITY COURSES FOR MEN*

**M1. Activity Course.** (1) This course is designed to get the men into the best possible physical condition through such activities as conditioning and coordination exercises, swimming, tumbling, gymnastics, apparatus, touch football, speed-ball, basketball, combatives, seasonal recreational sports and games. Sections as required. Staff

**M2. Activity Course.** (1) This course is designed to get the men into the best possible physical condition through such activities as basketball, combatives, volleyball, tennis, track and field, swimming, softball, seasonal recreational sports and games. Sections as required. Staff

**M55. [25a] Beginning Equitation.** (1) Dooley

**M56. [25b] Low Intermediate Equitation.** (1) Dooley

**M57. [26a] High Intermediate Equitation.** (1) Dooley

**M58. [26b] Advanced Equitation.** (1) Dooley

**M59. High Advanced Equitation.** (1) Test required. Dooley

**M61. [27a] Beginning Golf.** (1) Dear

**M62. [27b] Intermediate Golf.** (1) (Not offered in 1947-48.) Dear

**M63. [27c] Advanced Golf.** (1) Dear

**M92. Mexican and New Mexican Dances.** (1) Sedillo

**M93. [21] American Country Dances.** (1) McGill

*PHYSICAL EDUCATION ACTIVITY COURSES FOR WOMEN*

Activity Courses for freshmen:

**W1. Orientation.** (1) Archery, volleyball, American country dancing, recreational games, bowling, basketball, badminton. Staff

**W2. Orientation.** (1) Modern dance, swimming, golf, tennis, softball, recreational games. Staff
COLLEGE OF EDUCATION

Activity Courses for sophomores and upperclassmen:

W51. **BEGINNING TENNIS.** (1) Staff
W52. **INTERMEDIATE TENNIS.** (1) Staff
W53. **ADVANCED TENNIS.** (1) Staff
W55. [25a] **BEGINNING EQUITATION.** (1) Dooley
W56. [25b] **LOW INTERMEDIATE EQUITATION.** (1) Dooley
W57. [26a] **HIGH INTERMEDIATE EQUITATION.** (1) Dooley
W58. [26b] **ADVANCED EQUITATION.** (1) Dooley
W59. **HIGH ADVANCED EQUITATION.** (1) Test Required. Dooley
W61. [27a] **BEGINNING GOLF.** (1) Dear
W62. [27b] **INTERMEDIATE GOLF.** (1) (Not offered in 1947-48.) Dear
W63. [27c] **ADVANCED GOLF.** (1) Dear
W66. [33] **BEGINNING SWIMMING.** (Not offered in 1947-48.) McGill
W67. [34] **INTERMEDIATE SWIMMING.** (1) (Not offered in 1947-
48.) McGill
W68. **ADVANCED SWIMMING.** (1) McGill
W69. [37] **LIFE SAVING AND WATER FRONT SAFETY.** (1) Upon
satisfactory completion of the requirements, the American Red
Cross Senior Life-saving Certificate and the Water Front Safety
Certificate is obtainable. McGill
W71. **BEGINNING SWIMMING, INDIVIDUAL AND TEAM SPORTS.** (1)
Staff
W72. **INTERMEDIATE SWIMMING, INDIVIDUAL AND TEAM SPORTS.**
(1) Staff
W73. **ADVANCED SWIMMING, INDIVIDUAL AND TEAM SPORTS.** (1)
Staff
W79. [23] **FENCING.** (1) (Not offered in 1947-48.) Staff
W80. **INDIVIDUAL AND TEAM SPORTS.** (1) Staff
W81. **TEAM SPORTS.** (1) (Not offered in 1947-48.) Staff
W90. [36] **RECREATIONAL GAMES.** (1) Staff
W91. [1, 35] **MODERN DANCE.** (1) Staff
W92. **MEXICAN AND NEW MEXICAN DANCES.** (1) Sedillo
W93. [21] **AMERICAN COUNTRY DANCING.** (1) McGill

MAJOR STUDY IN HEALTH AND PHYSICAL EDUCATION FOR MEN

Outlined for men preparing to teach physical education. This
curriculum leads to the degree of Bachelor of Science in Physical
Education.

176
COLLEGE OF EDUCATION

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>English 2</td>
</tr>
<tr>
<td>Chem 41L</td>
<td>Biology 1L</td>
</tr>
<tr>
<td>Social Science</td>
<td>Chem 42L</td>
</tr>
<tr>
<td>Physical Education M1</td>
<td>Social Science</td>
</tr>
<tr>
<td>Electives</td>
<td>Physical Education M2</td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

| Speech 55      | English |
| Psychology 51  | Education 54 |
| Physical Education 61L | Physical Education 62L |
| Health Education 72 | Physical Education 41L |
| Physical Education 40L | Physical Education M2 |
| Physical Education 22L | Social Science |
| Physical Education M1 | Physical Education M2 |
| Electives      | 1 Biology 56 |

JUNIOR YEAR

| Physical Education 101L | Education 102 |
| Education 107          | 2 Biology 93L |
| Education 141          | Physical Education 164L |
| Education 101          | Home Economics 104 |
| Education 185          | Physical Education 167 |
| Electives              | 3 Electives |

SENIOR YEAR

| Education 158 | Education 156 |
| Physical Education 161 | Physical Education 172 |
| Physical Education 136 | Physical Education 186 |
| Physical Education 185L | Health Education 185 |
| Physical Education 183L | 2 Electives |
| Electives       | 3-4 |

MAJOR STUDY IN HEALTH AND PHYSICAL EDUCATION FOR WOMEN

The curriculum leading to a degree of Bachelor of Science in Physical Education is designed for the training of teachers and supervisors of health and physical education.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education W1</td>
<td>Physical Education W2</td>
</tr>
<tr>
<td>English 1</td>
<td>English 2</td>
</tr>
<tr>
<td>Chem 41L</td>
<td>Chem 42L</td>
</tr>
<tr>
<td>Social Science</td>
<td>Biology 1L</td>
</tr>
<tr>
<td>Electives</td>
<td>Social Science</td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

| Speech 55       | English |
| Psychology 51   | 3 P. E. Elective-Activity Course |
| Social Science  | Education 54 |
| Biology 96      | Education 72 |
| Activity Course Elect. | Physical Education 65 |
| Electives       | 4 Electives  |
COLLEGE OF EDUCATION

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 107</td>
<td>2</td>
</tr>
<tr>
<td>Education 141</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 105</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 107</td>
<td>2</td>
</tr>
<tr>
<td>Education 101</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 104.1L</td>
<td>4</td>
</tr>
<tr>
<td>P. E. Elec.-Activity Course</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
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</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Physical Education 155</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 101</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 161</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 155L</td>
<td>2</td>
</tr>
<tr>
<td>Education 153</td>
<td>3</td>
</tr>
<tr>
<td>P. E. Elec. Activity Course</td>
<td>1</td>
</tr>
<tr>
<td>Electives or Education 155p</td>
<td>3</td>
</tr>
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</table>

MINOR STUDY IN ATHLETIC COACHING FOR MEN

This minor of 24 semester hours is offered to qualify men to meet the demands of high schools and colleges for coaches and athletic supervisors who are also prepared to teach some academic subject. Practical work which is required, but given no academic credit, is to be arranged at the discretion of the Department according to the student's needs. Physical Education 40L and 41L are recommended for all minors although not required.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Economics 104</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 22L</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 61L</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 62L</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 186</td>
<td>2</td>
</tr>
</tbody>
</table>

MINOR STUDY IN PHYSICAL EDUCATION FOR MEN

This minor of 24 semester hours is intended to meet the needs of those students who wish to combine the teaching of physical education with their major subjects. Physical Education 40L is recommended for all minors although it is not required.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Education 72</td>
<td>2</td>
</tr>
<tr>
<td>Home Economics 104</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 135L</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 161</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 41L</td>
<td>2</td>
</tr>
</tbody>
</table>

MINOR STUDY IN PHYSICAL EDUCATION FOR WOMEN

In addition to the four credits of activity courses needed to meet the University requirement for freshmen and sophomores those who wish to have a minor in physical education must take:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education 65 or 155</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education 101</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 107</td>
<td>2</td>
</tr>
</tbody>
</table>

178
ACADEMIC COURSES

*22L. Theory and Practice of Basketball. (Men) (2) 2 lectures, 2 hrs. lab. Clements

*40L. Gymnastic Technique and Practice. (Men) (2) Fundamental techniques of gymnastics and athletic activities, field ball, games and aquatics, apparatus, gymnastics, tumbling. 2 lectures, 2 hrs. lab. Petrol

*41L. Sports Technique and Practice. (Men) (2) Fundamental techniques of additional gymnastics and athletic activities, diamond and court ball games and individual sports, gymnastic drill, games, combatives. Prerequisite: 40L. 2 lectures, 2 hrs. lab. Petrol

*61L. Theory and Practice of Football. (Men) (2) 2 lectures, 2 hrs. lab. Johnson

*62L. Theory and Practice of Track and Field Athletics and of Baseball. (Men) (2) 2 lectures, 2 hrs. lab. Johnson

*65. Sports Technique and Practice. (Women) (2) Discussion of game techniques, rules, equipment, and officiating in softball, basketball, soccer, speedball, volleyball. McGill

*72. Health Education. (2) (Same as Education 72.) Health instruction in elementary schools. White

101. Principles, History, Methods of Physical Education. (Women) (3) (An elective course for men) Gugisberg

104L. Human Anatomy and Kinesiology. (4) Prerequisites: Biology II, 36. 3 lectures; 2 hrs. lab. Dr. Harris

105, 106. [105ab] Recreational Leadership. (Women) (3, 3) (An elective course for men.) McGill

107. Teaching Methods in Folk Dancing. (2) Prerequisite: Activity course in folk dancing. McGill

119. [125] The Teaching of Physical Education in the Elementary Grades. (Women) (2) (Same as Education 119.) (An elective course for men.) Gugisberg

135L. Corrective Physical Education. (2) Abnormalities of spine, feet, and posture. Prerequisites: 104L and 167. Johnson


155. Sports Technique and Practice. (Women) (2) Discussion of game techniques, rules, equipment, officiating in archery, tennis, badminton, bowling, and recreational games. Prerequisite: Activity course in each sport. McGill
COLLEGE OF EDUCATION

155p. THE TEACHING OF PHYSICAL EDUCATION IN HIGH SCHOOL. (3) (Same as Education 155p.) Gugisberg

156. DANCE THEORY. (Women) (2) History and principles of dance form. Methods of directing various types of dancing in an educational program. Staff

161. FIRST AID. (2) American Red Cross Instructor’s Certificate in First Aid will be granted upon satisfactory completion of the course. Clements, Kling

162L. THEORY AND PRACTICE OF INTRAMURAL ATHLETICS. (Men) (3) 2 lectures, 2 hrs. lab. Clements

167. PHYSICAL DIAGNOSIS AND TESTS AND MEASUREMENTS (3) Technique of determining physical fitness for participation in athletics. Johnson

172. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION. (3) Johnson, Gugisberg

183L. [183a] PRACTICE COACHING. (Men) (2) 2 lectures, 2 hrs. lab. Johnson

185. ADMINISTRATION OF A HEALTH PROGRAM. (2) Gugisberg

186. PROBLEM METHODS IN PHYSICAL EDUCATION. (2) White and Staff

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College of
FINE ARTS
THE College of Fine Arts is established for the following purposes: (1) to stimulate a greater interest in the arts; (2) to offer those who wish to specialize in any of the fields of art an opportunity to do so; (3) to coordinate more efficiently the work in dramatics, music, and painting and design; and (4) to make a better use of the unique facilities afforded by the state of New Mexico for the study and practice of the arts.

DEPARTMENTS AND DEGREES OFFERED

As constituted, the departments of this college are: Art (Painting and Design), Dramatic Art, and Music.

Courses leading to the degree of Bachelor of Fine Arts in Dramatic Art, Music, and Art are offered; in the combined curriculum, successful candidates will receive the degree of Bachelor of Fine Arts.

GRADUATION REQUIREMENTS

Candidates for degrees must complete all requirements outlined in the respective curricula. One hundred hours must be of C grade or better; and in addition, students transferred from other institutions must make a grade of C or better in three-fourths of the hours earned in the University of New Mexico.

A course in the Department of Naval Science and Tactics may be substituted during each semester of the school year for the course in physical education. In addition, the Naval Science course may be substituted in each of the curricula for courses as prescribed by the Dean.

CURRICULA

CURRICULUM IN ART—PAINTING AND DESIGN

(Leading to the degree of Bachelor of Fine Arts in Art. Hours required for graduation, 132.)

<table>
<thead>
<tr>
<th>FRESHMAN YEAR</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1</td>
<td>2</td>
<td>Art 2</td>
</tr>
<tr>
<td>Art 3</td>
<td>2</td>
<td>Art 4</td>
</tr>
<tr>
<td>Art 5</td>
<td>2</td>
<td>Art 6</td>
</tr>
<tr>
<td>Art 7</td>
<td>2</td>
<td>Art 8</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td>English</td>
</tr>
<tr>
<td>Language</td>
<td>3</td>
<td>Language</td>
</tr>
<tr>
<td>Physical Education</td>
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<td>Physical Education</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

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COLLEGE OF FINE ARTS

SOPHOMORE YEAR
Electives in Major Group 6-6
Electives in Group II Courses 2-2
Electives in Group not chosen as Major (either I or II) 2-2
Social Science 3-3
Physical Education 1-1
Gen. Univ. Elect. 3-3
Total 17-17

JUNIOR YEAR
Electives in Major Group 6-6
Elective in Group III Courses 2-2
Elective in any Group 2-2
Natural Science 3-3
Literature 3-3
Total 16-16

SENIOR YEAR
Electives in Major Group 6-6
Elective in Group III Courses 2-2
Elective in any Group 4-4
General University Electives 5-5
Total 17-17

All courses in the Art Department are divided into the following Groups:

Group I — Painting and Design, Drawing and Sculpture Courses
Group II—Crafts, Commercial and Photography Courses
Group III—Art History

Two major courses of study are set up in the curricula of art; the student majoring in art will choose at the end of his freshman year a major working field in either Group I or Group II courses.

For II Majors 18 hours of the following courses may be substituted for Group II courses: Art 89, 189.

Requirements in some I and II courses may be taken in the Field School of Art at Taos, which is recommended for at least one summer.

Students are advised to choose their electives in fields which will broaden the scope of their education.

CURRICULUM IN DRAMATIC ART
(Leading to the degree of Bachelor of Fine Arts in Dramatic Art. Hours required for graduation, 132.)

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1</td>
<td>3 English 2</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3 Foreign Language</td>
</tr>
<tr>
<td>Drama 10</td>
<td>3 Drama 11</td>
</tr>
<tr>
<td>Drama 29</td>
<td>3 Drama 2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1 Physical Education</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

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### COLLEGE OF FINE ARTS

#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Design</td>
<td>3</td>
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<tr>
<td>Foreign Language</td>
<td>3</td>
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<tr>
<td>Drama 75</td>
<td>3</td>
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<tr>
<td>Drama 85</td>
<td>3</td>
</tr>
<tr>
<td>Drama 89</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
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#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 53</td>
<td>3</td>
</tr>
<tr>
<td>Drama 135</td>
<td>3</td>
</tr>
<tr>
<td>Drama 175</td>
<td>3</td>
</tr>
<tr>
<td>Drama 161</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy Elective</td>
<td>2.3</td>
</tr>
<tr>
<td>Other Electives</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

#### SENIOR YEAR

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drama 185</td>
<td>3</td>
</tr>
<tr>
<td>Drama 197</td>
<td>3</td>
</tr>
<tr>
<td>English 141</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

It is strongly urged that the student broaden his field of study by choosing electives from the curricula of other colleges of the University, especially courses in the social sciences, so as to gain better insight into the problems of contemporary society.

In addition to the planned course of study, students of the Department participate in all phases of production of three-act and one-act plays. So far as is possible, this work is correlated to class work.

In lieu of courses not offered during certain terms, substitution made with the advice of the Head of the Department will be accepted.

### CURRICULA IN MUSIC

(Leading to the degree of Bachelor of Fine Arts in Music.)

Four major fields of concentration are offered, namely: Theory; Applied Music (Instrumental); Applied Music (Voice); and Music Literature. Hours required for graduation, 130.
## Field of Concentration—Theory

### Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 5 (Harmony)</td>
<td>Music 6 (Harmony)</td>
</tr>
<tr>
<td>Music 35 (History)</td>
<td>Music 36 (History)</td>
</tr>
<tr>
<td>Music 1 (Applied)</td>
<td>Music 2 (Applied)</td>
</tr>
<tr>
<td>Ensemble</td>
<td>Ensemble</td>
</tr>
<tr>
<td>English 1 (Intro. to Rhet.)</td>
<td>English 2 (Intro. to Lit.)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Social Science Electives</td>
<td>Social Science Electives</td>
</tr>
<tr>
<td></td>
<td>16</td>
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</table>

### Sophomore Year

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Music 95 (Counterpoint)</td>
<td>Music 96 (Counterpoint)</td>
</tr>
<tr>
<td>Music 51 (Applied)</td>
<td>Music 52 (Applied)</td>
</tr>
<tr>
<td>Music 55 (Orchestral Instr.)</td>
<td>Music 56 (Orchestral Instr.)</td>
</tr>
<tr>
<td>English Elective</td>
<td>English Elective</td>
</tr>
<tr>
<td>Modern Language Elective</td>
<td>Modern Language Elective</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Mathematics or Science Electives</td>
<td>Mathematics or Science Electives</td>
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<tr>
<td></td>
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### Junior Year

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Music 153 (Orchestration)</td>
<td>Music 154 (Orchestration)</td>
</tr>
<tr>
<td>Music 159 (Form and Analysis)</td>
<td>Music 160 (Form and Analysis)</td>
</tr>
<tr>
<td>Ensemble</td>
<td>Ensemble</td>
</tr>
<tr>
<td>Music 101 (Applied)</td>
<td>Music 102 (Applied)</td>
</tr>
<tr>
<td>Modern Language Elective</td>
<td>Modern Language Elective</td>
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<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
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<td></td>
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### Senior Year

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Music 191 (Composition)</td>
<td>Music 192 (Composition)</td>
</tr>
<tr>
<td>Music 157 (Choral Conducting)</td>
<td>Music 158 (Orchestral Conducting)</td>
</tr>
<tr>
<td>Historical Music Literature</td>
<td>Historical Music Literature</td>
</tr>
<tr>
<td>Ensemble</td>
<td>Ensemble</td>
</tr>
<tr>
<td>Music 151 (Applied)</td>
<td>Music 152 (Applied)</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
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</tbody>
</table>

## Field of Concentration—Applied Music (Instrumental)

### Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 5 (Harmony)</td>
<td>Music 6 (Harmony)</td>
</tr>
<tr>
<td>Music 35 (History)</td>
<td>Music 36 (History)</td>
</tr>
<tr>
<td>Music 1 (Applied)</td>
<td>Music 2 (Applied)</td>
</tr>
<tr>
<td>English 1 (Intro. to Rhet.)</td>
<td>English 1 (Intro. to Lit.)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Social Science</td>
<td>Social Science</td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

† See Ensemble Music, p. 196.
‡ See Historical Music Literature, p. 197.
# COLLEGE OF FINE ARTS

## SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 95 (Counterpoint)</td>
<td>3</td>
</tr>
<tr>
<td>Music 51 (Applied)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble †</td>
<td>1</td>
</tr>
<tr>
<td>Music 55 (Orchestral Instr.)</td>
<td>2</td>
</tr>
<tr>
<td>Modern Language Elective</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics or Science</td>
<td>1</td>
</tr>
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## JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 101 (Major Instrument)</td>
<td>4</td>
</tr>
<tr>
<td>Music 119 (Minor Instrument)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble †</td>
<td>1</td>
</tr>
<tr>
<td>Music 159 (Form and Analysis)</td>
<td>2</td>
</tr>
<tr>
<td>Modern Language Elective</td>
<td>3</td>
</tr>
<tr>
<td>English Electives</td>
<td>3</td>
</tr>
<tr>
<td>Other Electives †</td>
<td>2</td>
</tr>
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</table>

## SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 151 (Applied)</td>
<td>4</td>
</tr>
<tr>
<td>Historical Music Literature ‡</td>
<td>2</td>
</tr>
<tr>
<td>Music 157 (Choral Conducting)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble †</td>
<td>1</td>
</tr>
<tr>
<td>Other Electives †</td>
<td>7</td>
</tr>
</tbody>
</table>

## FIELD OF CONCENTRATION—APPLIED MUSIC (VOCAL)

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 5 (Harmony)</td>
<td>Music 6 (Harmony)</td>
</tr>
<tr>
<td>Music 1 (Voice)</td>
<td>Music 2 (Voice)</td>
</tr>
<tr>
<td>Music 19 (Piano)</td>
<td>Music 20 (Piano)</td>
</tr>
<tr>
<td>Ensemble †</td>
<td>Ensemble †</td>
</tr>
<tr>
<td>English 1 (Intro. to Rhet.)</td>
<td>English 2 (Intro. to Lit.)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Social Science</td>
<td>Social Science</td>
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</tbody>
</table>

17

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 95 (Counterpoint)</td>
<td>3</td>
</tr>
<tr>
<td>Music 51 (Voice)</td>
<td>4</td>
</tr>
<tr>
<td>Music 59 (Piano)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble †</td>
<td>1</td>
</tr>
<tr>
<td>Music 35 (History)</td>
<td>3</td>
</tr>
<tr>
<td>French or German</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

17

† See Ensemble Music, p. 196.  
‡ See Historical Music Literature, p. 197.
## College of Fine Arts

### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 101 (Voice)</td>
<td>4</td>
</tr>
<tr>
<td>Ensemble†</td>
<td>1</td>
</tr>
<tr>
<td>Historical Music Literature ‡</td>
<td>2</td>
</tr>
<tr>
<td>French or German</td>
<td>3</td>
</tr>
<tr>
<td>English Elective</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics or Science</td>
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Total: 16

### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 151 (Voice)</td>
<td>4</td>
</tr>
<tr>
<td>Music 157 (Choral Conducting)</td>
<td>2</td>
</tr>
<tr>
<td>Music 187 (Vocal Coaching)</td>
<td>1</td>
</tr>
<tr>
<td>Music 159 (Form and Analysis)</td>
<td>2</td>
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<tr>
<td>Other Electives</td>
<td>6</td>
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</table>

Total: 15

### Field of Concentration—Music Literature

#### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Music 5 (Harmony)</td>
<td>3</td>
</tr>
<tr>
<td>Music 25 (History)</td>
<td>3</td>
</tr>
<tr>
<td>Music 1 (Applied)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble†</td>
<td>1</td>
</tr>
<tr>
<td>English 1 (Intro. to Rhet.)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
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</tbody>
</table>

Total: 16

#### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 95 (Counterpoint)</td>
<td>3</td>
</tr>
<tr>
<td>Music 51 (Applied)</td>
<td>2</td>
</tr>
<tr>
<td>English Electives</td>
<td>3</td>
</tr>
<tr>
<td>Modern Language Electives</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics or Science</td>
<td>3</td>
</tr>
<tr>
<td>Historical Music Literature ‡</td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 17

#### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Music Literature ‡</td>
<td>2</td>
</tr>
<tr>
<td>Music 159 (Form and Analysis)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble†</td>
<td>1</td>
</tr>
<tr>
<td>Music 101 (Applied)</td>
<td>2</td>
</tr>
<tr>
<td>Modern Language Elective</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

Total: 15

† See Ensemble Music, p. 196.
‡ See Historical Music Literature, p. 197.
Students are advised to choose a part of their electives from fields such as literature, English or foreign, social science and mathematics and science, to the end of avoiding overspecialization in music. Before graduation every candidate for the Bachelor's degree must demonstrate a degree of proficiency at the piano equivalent to that expected of students completing Music 1 (Piano).

NOTE: Students who are unable to pass an examination in Sight Singing and Ear Training 3, 4, will find it necessary to readjust the order in which they take the above curricula in order to take Music 3 and 4 before Harmony 5 and 6.

COMBINED CURRICULUM IN FINE ARTS
(Leading to the degree of Bachelor of Fine Arts.) Hours required for graduation, 132, including:
(a) Group requirements as listed under College of Arts and Sciences, or under the College of Education,
(b) Four semester hours of physical education
(c) Major study or its equivalent in Art, Dramatic Art, or Music; and
(d) Minor study or its equivalent in Art, Dramatic Art, or Music (other than major field).

(A holder of the B.F.A. degree is eligible for certification as a teacher by the New Mexico State Board of Education if he has completed the requirements as stated in the Rules and Regulations governing such certification. The North Central Association requires approximately fifteen hours of courses in Education for approval of teachers employed in its member secondary schools.)

PRE-OCCUPATIONAL THERAPY
Occupational Therapy is described as "any physical or mental activity prescribed by the physician and supervised by the trained therapist to aid in recovery from disease or injury."

The training of students in these activities, which consist of manual skills, educational pursuits, and pre-vocational training, as well as training in courses that are primarily directed towards the
medical functions involved are the two main purposes of the pre-occupational therapy courses.

PRE-PROFESSIONAL. The Pre-Occupational Therapy course at the University of New Mexico covers a period of two years. The University offers the following curriculum to equip the student with the basic academic and laboratory courses which will provide him with those prerequisites sought in the records of students applying to the accredited schools of Occupational Therapy. He will normally transfer to accredited schools of Occupational Therapy at the sophomore or junior level, although it is possible to enter these schools as an advanced standing student already possessing a degree.

The Philadelphia School of Occupational Therapy has established three or four scholarships a year for students from the University of New Mexico who have earned a degree in Fine Arts (a degree in Education with a major in a Fine Arts field is also acceptable).

CURRICULUM. The following curriculum for freshmen in pre-Occupational Therapy is suggested:

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych. 1L (General)</td>
<td>Psych. 2L (General)</td>
</tr>
<tr>
<td>Biology 1L (General)</td>
<td>Biology 2L (General)</td>
</tr>
<tr>
<td>Art 7, 8 (General Crafts)</td>
<td>Art 57 (Woodwork, leather, tin, etc.)</td>
</tr>
<tr>
<td>Chemistry 41L (Fundamentals inorganic and organic, standard requirement for modern work in P. E., H. E., and nursing)</td>
<td>Chem. 42L (Continuation)</td>
</tr>
<tr>
<td>P. E. 161 (First Aid)</td>
<td></td>
</tr>
</tbody>
</table>

The following courses on pre-Occupational Therapy are also offered:

- Educa. 115 (Educational and Vocational Guidance) 3
- Biology 36 (Human Physiology) 3
- Biology 93L (General Bacteriology) 4
- Art 3, 4 (Creative Design) —per sem. 2
- Art 27 (Lettering) 2
- Psych. 196 (Physiological Psychology—correlation of behavior and structure with emphasis on the nervous system) 3
- P. E. 104L (Human Anatomy and Kinesiology) 4
- P. E. 135L (Corrective P. E.) 2
- Psych. 61 (Abnormal Psychology) 3
- Psych. 101 (Social Psychology—behavior of individuals as influenced by human beings) 3
- Psych. 187 (Child Psychology) 3
- Art 77 and 78 (General Commercial Art) 2
COLLEGE OF FINE ARTS

Art 157—(Latin-American Crafts) (Weaving textiles) per sem. 3
Home Economics 104 (Nutrition) 2
Sociology 72 (Social Pathology—diagnosis, remedial and prevention programs with functional failures of society) 3
Art 87, 88 (Photography) per sem. 2

SPECIALIZED OR PROFESSIONAL SCHOOLS. The curriculum prescribed by the American Medical Association sets up a minimum course length of 25 full-time calendar months totalling 60 semester hours. This curriculum includes a minimum of 30 hours devoted to theoretical training, 30 semester hours of technical training, and 9 months of clinical affiliations. The training schools divide this curriculum into 3 academic years, and examination of the various approved schools' catalogs will reveal amplifications of, and additions to, these minimum course requirements.

Registration of Occupational Therapists is controlled by the American Occupational Therapy Association and is the professional certification of therapists, designating them as qualified to practice. O.T.R. after the name of a therapist is comparable to an R.N. or an M. D. Eligibility to the Registry is met by graduation from an accredited school and entrance is by examination.

For further information about the Pre-Occupational Therapy Program at the University of New Mexico, write: Mela Sedillo, Director, Pre-Occupational Therapy Program, Art Department, The University of New Mexico, Albuquerque.

COLLEGE OF FINE ARTS

DEPARTMENTS OF INSTRUCTION

Courses numbering from 1-49, lower division, normally open to freshmen; from 50-99, lower division, normally open to sophomores; from 100-199, upper division, normally open to juniors, seniors, and graduates; 200-400, open to graduates only. Graduate credit for courses listed is allowed at the discretion of the Graduate Committee.

Symbols used in course descriptions: L—part of the course is laboratory work; F—course is given during field session; SS—course offered in eight weeks’ summer session only; Yr—course offered throughout two semesters and credit for a single semester’s work is suspended until the entire course is completed; *—course open to General College students; †—course offered for General College credit only; ( ) semester hours’ credit, credit hours separated by a dash (1-3) indicate variable credit in the course; [ ]—former course
COLLEGE OF FINE ARTS

number or title; † may be repeated without duplication of credit to the limit of 8 hours' credit for students of the College of Fine Arts, 4 hours for others; ** open to any student in the University on approval of the instructor.

A schedule of courses offered, including hours of meeting, is issued at the opening of each session. The University reserves the right to cancel any listed course or to make a substitution in instructors when necessary.

ART (PAINTING AND DESIGN)

Professors Adams, Chapman, Douglass; Associate Professors Davey, Jonson; Assistant Professors Haas, (Acting Head), Sedillo, Tatschl, Todd; Teaching Assistant Montenegro; Graduate Fellows Evans, Van Wart.

MAJOR STUDY

41 hours, including: Art 1, 2, 3, 4, 5, 6, 7, 8; 6 hours additional in Group I courses; 5 hours additional in Group II courses; 4 hours additional in Group III courses; with a total of 12 hours in courses numbered over 100. One summer in the Field School of Art in Taos is recommended.

MINOR STUDY

24 hours, including: Art 1, 2, 3, and 4; 6 hours of Group I (Art 5, 6, 55, 56, 65, or 95); 6 hours of Group II (Art 7, 8, 27, 37, 57, 67, 77, 78, 87, 88, 107, 137, 157, 158, 177, 178); 21; and 52. One summer in the Field School of Art in Taos is recommended.

FIELD SESSIONS

Each summer, field sessions in art are normally conducted at Taos and Santa Fe. Courses 53F, 55F, 56F, 63F, 65F, 67F, 103F, 155F, 158F, 163F, and 199F are usually offered at Taos; courses 31, 132, and 199F are usually offered at Santa Fe.

PRE-OCCUPATIONAL THERAPY

See curriculum on page 187.

MATERIALS, STUDENT WORK

Students enrolling in art courses furnish their own materials, except certain studio equipment provided by the University.

All work when completed is under the control of the Department until after the annual exhibition of student work. Each student may be required to leave with the Department one or two pieces of original work to be added to the permanent collection.
CREDIT

For one semester hour of credit it is expected that the student do approximately 48 clock hours of work (3 clock hours per week through the semester), which includes time spent in recitation, preparation, and laboratory. If full laboratory hours are not assigned in the schedule, they will be arranged by the instructor.

Prerequisites for all courses, unless otherwise indicated:

Group I - Art 3, 4, 5, 6
Group II - Art 3, 4, 7, 8
Group III - Art 1, 2

*1. [52a] General Art History. [History of Art] (2) (Group III) Introductory study of the entire history of art. Todd

*2. General Art History. (2) (Group III) Continuation of Art I. Todd

*3, 4 [lab] Creative Design. (2, 2) (Group I) Introduction to line, color, form, and composition. Haas, Sedillo, Tatschl, Todd

*5, 6. [45] Beginning Drawing. (2, 2) (Group I) General introduction to the methods and theories of drawing and painting. Adams, Douglass, Tatschl

*7, 8. General Crafts. (2, 2) (Group II) Introduction to the processes involved in crafts. Sedillo, Tatschl, Todd

*21. Art Appreciation. (2) (Group III) General introduction to the field of art. No prerequisite. Haas, Todd

*27. [32] Lettering. (2) (Group II) Creative lettering, elementary instruction in lettering composition and calligraphy. No prerequisite. Douglass

*31. [25] Indian Art. (2) (Group III) Development and symbolism of the decorative art of the Pueblos and other tribes. No prerequisites. Chapman

*37. Beginning Ceramics. (2) (Group II) Study of ceramics, including practice in casting, shaping, wheel throwing, firing, and glazing. No prerequisites. Tatschl

52. [52b] Art History-Renaissance. (2) (Group III) Analytical study of painters and painting of the Renaissance period. Haas

53. Beginning Painting and Design. (2) (Group I) Introductory study of the painters' craft. Required of all Group I majors. Haas, Montenegro

55. [45] Drawing. (2) (Group I) Craftsmanship in drawing of life, cast and still life; in various media. Adams, Douglass, Tatschl
COLLEGE OF FINE ARTS

56. [45] DRAWING. (2) (Group I) Continuation of Art 55, including human anatomy (required of all Group I majors).
   Adams, Douglass, Tatschl

57. [75ab] LATIN-AMERICAN CRAFTS. (2 per semester to a maximum of 6) (Group II) General crafts with emphasis on the use of native materials of New Mexico. Research in Spanish design and Latin American methods. Of interest to teachers. (Open to freshmen other than art majors.) Sedillo

63. PAINTING AND DESIGN. (2 per semester to a maximum of 6) (Group I) Adams, Davey, Jonson

65. [51] LIFE DRAWING. (2 per semester to a maximum of 6) (Group I) Study of drawing from the human figure.
   Adams, Davey, Jonson

67. GRAPHIC ART. (2) (Group II) Techniques and methods in lithography, etching, and woodcuts. Prerequisites: 3, 4, 5, 6, and 45 or 46.
   Tatschl

77, 78. [71ab] GENERAL COMMERCIAL ART. (2, 2) (Group II) Art and layout in advertising. Various techniques and methods of reproduction. Optional work in cartooning. Prerequisites: 3, 4, 5, 6, and 27.
   Douglass

87, 88. [74ab] PHOTOGRAPHY. (2, 2) (Group II) Elementary photography including shooting, dark room procedure and photographic composition. (A camera is necessary for this course.) No prerequisite.
   Haas

89. [85] SCULPTURE. (2 per semester to a maximum of 6) (Group I) Technique, executed in various media, of sculpture. Tatschl

132. [125] INDIAN ART. (2) (Group III) Prerequisite: 31.
   Chapman

137. CERAMICS. (2) (Group II) Continuation of Art 37.
   Tatschl

141. [152a] HISTORY OF MODERN ART. (2) (Group III) Survey and discussion of painting and sculpture in the Western Hemisphere.
   Sedillo, Todd

152. [152b] HISTORY OF MODERN ART. (2) (Group II) Survey and discussion of painting and sculpture from the Renaissance to the present day.
   Sedillo, Todd
154. MATERIALS AND MEDIA. (2) (Group I) Experimentation in the various media of painting, including tempera, mixed technique, Gouache, etc. Haas

155. [151] ADVANCED LIFE DRAWING. (3 per semester to a maximum of 9) (Group I) Prerequisite: 55. Adams, Davey, Jonson

157. [175] LATIN AMERICAN CRAFTS. (3 per semester to a maximum of 18) (Group II) Prerequisite: 57 Sedillo

158. GRAPHIC ARTS. (2) (Group II) Techniques and methods of etching, lithography, and woodcut. Prerequisite: 67. Tatschl

161. HISTORY OF ORIENTAL ART. (2) (Group III) History of Oriental art from its inception to present day. Haas, Todd

163. ADVANCED PAINTING AND DESIGN. (3 per semester to a maximum of 18) (Group I) Prerequisite: 63. Adams, Davey, Jonson

177, 178. [171ab] COMMERCIAL ART PROBLEMS. [Advertising Problems] (3, 3) (Group II) Second year commercial art. Prerequisites: 77, 78. Douglass

189. [185] ADVANCED SCULPTURE. (3 per semester to a maximum of 12) (Group I) Prerequisite: 89. Tatschl

192. [153] CONTEMPORARY MEXICAN PAINTERS. (2) (Group III) Lectures and discussions on the main figures of the art movement in Mexico. No prerequisite. Sedillo

199. [191abcd] SPECIAL PROBLEMS. (2 per semester to a maximum of 12) (Group I, II, III) Open only to seniors and graduates. Staff

251, 252. HISTORY OF ART. (2, 2) (Group III) A factual survey applied to the appreciation of art, the student specializing in the field he has chosen for outside work. Haas

291, 292. [295ab] SEMINAR. (2, 2) (Group III) The practical study of aesthetics, art criticism analysis. Staff

299. [291] PROBLEMS. (2 each semester to a total of 8) (Group I, II, III) Staff

300. THESIS. (4-6) (Group III) Staff

DRAMATIC ART

Associate Professor Snapp (Head); Instructors Miller, Simon.

MAJOR STUDY

College of Fine Arts: see Curriculum on p. 181.

For the purpose of combined curriculum in Fine Arts: 48 hours including Drama 1, 2, 10, 11, 29, 30, 75, 76, 85, 86, 89, 90, plus 12
COLLEGE OF FINE ARTS

hours to be chosen from Drama 135, 175, and 185. See also group requirements of College of Arts and Sciences and College of Education.

College of Education: 1, 2, 10, 11, 29, 30, 75, 76, 89, 90, 161, and English 141. Total 36 hrs.

MINOR STUDY

1, 2, 10, 11, 29, 30, 89, 90, English 141. Total 27 hrs.

*1, 2. [lab] FUNDAMENTALS OF SPEECH AND READING. [Reading and Speaking] (3, 3) (Same as Speech 1, 2) The preparation and delivery of original and practical extemporaneous speeches, including a study of rhetorical principles, audience psychology; methods of presentation, and the basic principles of the physiology of speech and voice. Staff

*10, 11. [lab] THEATRE HISTORY. (3, 3) The development of dramatic art from the Greeks to the present day, with a study of historical backgrounds of dramatic thought and with special emphasis on production techniques. Miller

29, 30. [lab] STAGE CRAFT. (3, 3) Methods, materials, and techniques of stage carpentry. Students construct scenery for season's productions. 3 lectures, 3 hrs. lab. Miller

40. MAKE-UP. (3) A practical course on the art of make-up for the stage, covering both basic principles and specific techniques. Simon

51. RADIO DRAMA PRODUCTION. (3) Adapting, editing, and producing dramatic radio programs; directing and production techniques. Radio workshop. Staff

75, 76. [lab] TECHNICAL PRODUCTION. (3, 3) Analysis, planning, and construction of stage scenery and properties. Study of the theater plant. Prerequisite: minimum of one semester of stage craft. Miller

85, 86. [lab] ACTING TECHNIQUE. (3, 3) Methods of interpretation for both modern and historical productions. Prerequisites: 1, 2. Snapp

89, 90. [lab] REHEARSAL AND PERFORMANCE. (3, 3) Elementary techniques of both actor and director. Analysis of plays for methods of interpretation in production. Snapp

135, 136. [lab] STAGE LIGHTING. (3, 3) Theory and practice of present-day methods of lighting the stage. Simon

140. ADVANCED TECHNICAL PRODUCTION. (3) Theater architecture and theater planning, sight lines, acoustics, equipment, and installations. Advanced problems of the scene technician. Miller

150. THEATER. ORGANIZATION AND MANAGEMENT. (3) A practical and correlated study of the University theater, the civic and
COLLEGE OF FINE ARTS

community, and the professional theater. Principles of production, organization, programming, house management, budgets, advertising and box office.

Miller

161, 162. [160ab] Advanced Rehearsal and Performance. (3, 3) Detailed study of directing techniques. Analysis of scripts. Rehearsal by students, under supervision, of one-act plays for class presentation. Prerequisite: 89, 90. Snapp

175, 176. [175ab] Scene Design. (3, 3) Materials, techniques, and methods of scene design and scene painting. Student designs compete for season's productions. Simon

185, 186. [185ab] Costume Design. (3, 3) Historic, modern, and stylized costume and how to design it for the stage. Students execute costumes for season's productions. Simon

197, 198. [199ab] Problems. (3, 3) Advanced work in any of the following fields: directing, lighting, or scene design. Prerequisites: the student must have completed, or give concrete evidence of mastery of all preliminary courses offered in his chosen field. Staff

MUSIC

Professor Robb (Head); Associate Professors Frederick, Keller, Robert; Assistant Professors Ancona, Kunkel, Redman; Instructors Burg, Dawson, Firlic, Hincs.

MAJOR STUDY

For purposes of combined curriculum in Fine Arts: 42 hours including 5, 6 and 39, 40, 16 hours of applied music and 4 hours of ensemble music. See also curricula under College of Fine Arts and College of Education.

MINOR STUDY

College of Arts and Sciences: 16 hours of theoretical courses (including 5, 6) and 4 hours of applied music. College of Education: see curriculum on p. 164. For purposes of combined curriculum in Fine Arts: 24 hours including 39, 40, 5 and 6, and 4 hours of applied music and 2 hours of ensemble music.

RECITALS AND PUBLIC EXERCISES

Music majors and minors are required to attend certain specified recitals and to take part in recitals and public exercises. Loss of credit may result from failure to observe this rule.

Students are requested not to perform in public without the consent of the Department.
ENSEMBLE MUSIC

One credit hour represents two hours weekly of rehearsal plus necessary preparation.

*†37, 38. [37ab] PIANO ENSEMBLE. (1, 1) Study and performance of literature for two or more pianos; selected from all periods including the contemporary. Open to qualified piano students with consent of instructor. Special fee.

Robert, Ancona, and Staff

*†*41, 42. [41ab] UNIVERSITY BAND. (1, 1) Study and performance of band literature.

Kunkel

‡131, 132. [131ab] CHAMBER MUSIC. (1, 1) Frederick

‡141, 142. [141ab] UNIVERSITY BAND. (1, 1) Prerequisite: two years in 41, 42.

Kunkel

VOCAL

*†*43, 44. [43ab] UNIVERSITY MIXED CHORUS. (1, 1) Study and performance of choral literature.

Firlie

‡143, 144. [143ab] UNIVERSITY MIXED CHORUS. (1, 1) Prerequisite: two years in 43, 44.

Firlie

*†*23, 24. [23ab] WOMEN'S GLEE CLUB. (1, 1) Study of sacred and secular compositions covering a wide variety of styles. Concert appearances required; participation in public functions encouraged as a community service.

Firlie

‡123, 124. [123ab] WOMEN'S GLEE CLUB. (1, 1) Prerequisite: two years in 23, 24.

Firlie

*†*21, 22. [21ab] MEN'S GLEE CLUB. (1, 1) For description see 23, 24.

Firlie

‡121, 122. [121ab] MEN'S GLEE CLUB. (1, 1) Prerequisite: two years in 21, 22.

Firlie

THEORY, HISTORY, CONDUCTING, AND COMPOSITION

THEORY AND HISTORY

*3, 4. [3ab] SIGHT SINGING AND EAR TRAINING. (2, 2) Notation, intervals, key signatures, sight reading, and ear training.

Robert

*5. 6. [5ab] HARMONY. (3, 3) An applied study of traditional harmony: aural, written, keyboard, including altered chords and modulations. Prerequisite: 3, 4 or equivalent.

Frederick, Robert

35, 36. [36ab] SURVEY OF MUSIC HISTORY. (3, 3) Its social and artistic significance in the history of human progress. 35: Through the Eighteenth century; 36: during the Nineteenth
COLLEGE OF FINE ARTS

and Twentieth centuries. Open to non-music majors with consent of the instructor. Students may be required to attend one listening period of one hr. each, every week, at the option of the instructor. Robb

*95, 96. [95ab] COUNTERPOINT. (3, 3) 95: Sixteenth century counterpoint; 96: applied counterpoint. Prerequisite: 5, 6. Frederick

THEORY, CONDUCTING, AND COMPOSITION

159, 160. [152ab] FORM AND ANALYSIS. (2, 2) Analysis, aural and from the score, of the structural, harmonic and contrapuntal elements of music from the primary forms through the symphony and concerto. Prerequisite: 95, 96. Keller

153, 154. [153ab] ORCHESTRATION. (2, 2) Building of the orchestral score; detailed study procedures of past and present masters of orchestral techniques. Scoring of complete works and carrying through of projects to actual performance. Prerequisites: 55, 56, 95, 96. Kunkel

157. [157a] CHORAL CONDUCTING. (2) Technique of conducting choral groups. Prerequisite: 5, 6. Firlie

158. [157b] SCORE READING AND ORCHESTRAL CONDUCTING. (2) Technique of conducting orchestras and studying scores. Prerequisite: 159, 160. Frederick

191, 192. [190ab] COMPOSITION. (2, 2) Creative work in original composition, primarily in the smaller homophonic and polyphonic forms, including the writing of fugues. Prerequisites: 95, 96, 159, 160. Robb

HISTORICAL MUSIC LITERATURE

Prerequisite: 35, 36.

Students may be required to attend listening periods of one to three hours every week at the option of the instructor. Normally only one of these courses will be offered each semester.

82. [182] LIFE AND WORKS OF LUDWIG VAN BEETHOVEN. (2) Staff

83. EIGHTEENTH AND NINETEENTH CENTURY OPERA. (2) Italian, French, German, and Russian music-drama. Robb


93. [193] FOLK MUSIC OF THE SOUTHWEST. (2) A detailed study of examples of the indigenous Anglo-American, Spanish-American, and Indian folk music of the Southwest. Robb
171. INTRODUCTION TO MUSICOLOGY. (2) Survey of scientific data and conclusions in the various musical fields. Staff

172. COMPARATIVE STUDY OF CONTEMPORARY MUSIC LITERATURE. (2) Emphasis placed on music of the Americas, integrally and in relation to European sources, past and present. Robb

180. PALESTRINA, VICTORIA, DES PREZ, THEIR PREDECESSORS AND CONTEMPORARIES. (2) Ancona

181. MUSIC OF JOHANN SEBASTIAN BACH. (2) Staff

MUSIC APPRECIATION

39, 40. [163ab] MUSIC APPRECIATION. (2, 2) Designed for the general student who wishes to supplement his academic knowledge. Ancona

COACHING

187, 188, 189, 190. [189abcd] VOCAL COACHING. (1 hr. each semester) One half-hour of private instruction per week carries one hour of credit. Required of all senior voice students and open to juniors with consent of instructor. Credit will not be allowed for more than two semesters' work except by special written approval of the Head of the Department on recommendation of the instructor. Special fee. Robert

195, 196. ACCOMPANYING. (1, 1) One-half hour of private instruction per week carries one hour of credit. Students are required to accompany other students in practice and at recitals as part of the requirement for receiving credit. Special fee. Robert

PEDAGOGY

45. 46. [165ab] METHODS IN MUSIC APPRECIATION. (1, 1) Appropriate literature and its presentation: to elementary school pupils; to junior and senior high school pupils. May be taken concurrently with 39, 40 or subsequently. Ancona

APPLIED MUSIC (Private Instruction)

One half-hour lesson per week earns two hours' credit per semester. Additional fee. A student whose field of concentration is applied music is required to give a public recital in the junior year and another in the senior year. Students should consult the appropriate advisers before enrolling for applied music.

The Department offers degree courses for students electing the curricula in applied music, and also secondary courses for students desiring a cultural background in music. The secondary courses are open to beginners in applied music in all fields. The student may continue these courses through four years.
Students electing applied music as a field of concentration who have had no previous training in piano will be required to enroll in the secondary course in piano.

Students who have had previous training in piano will take a placement examination.

DEGREE COURSES

1, 2. [lab] FRESHMAN COURSE. (2-4) each semester
51, 52 [51lab] SOPHOMORE COURSE. (2-4 each semester)
101, 102. [101ab] JUNIOR COURSE. (2-4 each semester)
151, 152. [151ab] SENIOR COURSE. (2-4 each semester)

SECONDARY COURSES

*19, 20. [19ab] FRESHMAN COURSE. (1-2 each semester)
*69, 70. [69ab] SOPHOMORE COURSE. (1-2 each semester)
119, 120. [119ab] JUNIOR COURSE. (1-2 each semester)
169, 170. [169ab] SENIOR COURSE. (1-2 each semester)

PIANO
Ancona, Dawson, Hines, Keller, Robert

ORGAN (Students enrolling for organ are required to have a foundation in piano)
Ancona

VIOLIN AND VIOLA
Burg, Frederick

CELLO AND GUITAR
Burg

WIND INSTRUMENTS
Kunkel

VOICE
Firlie, Redman

REQUIREMENTS IN THE FIELDS OF APPLIED MUSIC. PIANO.
Entrance requirements for Piano majors: an ability to play major and minor scales correctly in moderately rapid tempo, also broken chords in octave position in all keys; studies such as Czerny's School of Velocity; Bach, Little Preludes; a few Bach Two-Part Inventions and compositions corresponding in difficulty to Mozart, Sonata C major (K.545), Beethoven, Sonata Op. 49, No. 1, Schubert, Impromptu, Op. 142, No. 2, Scherzo in B flat.

At the end of the second year (Music 1, 2 and 51, 52) the student should have acquired a technique sufficient to play scales in parallel and contrary motion and in thirds, sixth, and tenths, and arpeggios and octaves in rapid tempo. He should have studied compositions of at least the following grades of difficulty: Bach, at least one complete French Suite; Beethoven, Sonatas or movements from Sonatas such as Op. 2, No. 1, Op. 10, No. 1, Op. 10, No. 2, Op. 14, No. 2; Haydn, Sonata E flat, No. 3; Mozart, Sonata F Major (K.332),
COLLEGE OF FINE ARTS

Fantasia in D minor; Mendelssohn, Song Without Words; Chopin, Polonaise C sharp minor, Valse in A minor; Schumann, Novelette, Op. 21, No. 1; and some compositions by standard modern composers. The student should demonstrate his ability to read at sight accompaniments and compositions of moderate difficulty.

At the end of the fourth year (Music 101, 102 and 151, 152), the candidate must have acquired the principles of tone production and velocity and their application to scales, arpeggios, chords, octaves, and double notes. He must have a repertory comprising the principal classics and romantic and modern compositions, such works, for example, as: Bach, several preludes and fugues from the Well-Tempered Clavichord, Italian Concerto, Chromatic Fantasia and Fugue, an English Suite or Partita; Mozart, Sonata A major (K.331), a concerto; Scarlatti, Sonatas; Beethoven, Sonatas such as Op. 31, No. 3, Op. 53, Op. 57; Schumann, Carnaval; and the more difficult compositions of Brahms, Chopin, and Liszt; compositions by standard modern composers such as Debussy, Ravel, Rachmaninoff, Scriabin, Hindemith, Bartok, etc.

Candidates are required to give a junior and senior recital and they must have considerable experience in ensemble and as accompanists.

VIOLIN. Entrance requirements for Violin students: an ability to play etudes of the difficulty of the Kreutzer Etudes, up to 32, and the Rode or Kreutzer concerti. An elementary knowledge of the piano is desirable.

By the end of the second year the student should be able to play at least works corresponding in difficulty to the Viotti Concerto No. 22 or the Spohr Concerto No. 2.

By the end of the fourth year the student should be able to perform works such as the Mendelssohn E Minor Concerto, the Wieniawski Concerto in D minor, or the Bruch G Minor.

VOICE. To enter the four year degree course in voice a student must be able to sing standard songs in English, with good phrasing and musical intelligence shown.

1, 2. Emphasis is placed upon the skillful use of the breath, elimination of tension, and amplification of resonance. Songs suited to the capacity of the pupil are studied as follows:

1. Eight songs from Early Italian Songs and Airs or from Italian Anthology, Vols. I & II.

2. Three songs from “Bergerettes” by Weckerlin (for those who have had high school French).
COLLEGE OF FINE ARTS

3. Three songs in German by Schubert, Schumann, Brahms or other masters (for students who have had German in high school).
4. For those who are not qualified to do group 2 & 3, six old English songs may be substituted.
5. Six songs by modern composers.
6. Four songs suitable to the individual voice.
   Total—24 songs in freshman year.

52. 52.
   1. Six additional songs from Early Italian Songs and Airs or from Italian Anthology, Vols. I & II.
   2. Aria from Mozart operas.
   3. Three recitatives and arias from the less difficult oratorios.
   4. Eight songs by German or French composers (according to the language studied).
   5. Six songs by modern American composers.
   Total—24 songs in sophomore year.

101, 102
Four arias suited to the individual voice, from operas.
Four recitatives and arias suited to the individual voice from sacred oratorios.
Eight French songs of the Nineteenth and Twentieth centuries.
Eight German songs from the Nineteenth and Twentieth centuries.
Eight songs in English by modern composers.
Total—32.
Junior Recital.

151, 152.
Four additional arias in Italian, German, French, or English.
Four additional arias from sacred oratorios.
Eight French songs of the Nineteenth and Twentieth centuries.
Eight German songs from the Nineteenth and Twentieth centuries.
Eight songs in English by modern composers.
Total—32.
Senior Recital.

A total repertoire of 112 songs should be completed by the end of the fourth year of voice study. A list of such repertoire should be compiled by each student of voice and turned in to the Head of the Voice Department and passed on by the music faculty before candidate shall receive his degree. Correct diction in English,
COLLEGE OF FINE ARTS

Italian, French and German should be mastered during the study of the above repertoire. A poised stage manner and a pleasing personality should be thoroughly acquired, as a voice pupil is called on frequently to sing in music assemblies beginning with the freshman year.

Other Fields of Applied Music. Instruction in Applied Music is offered also in the following fields of instruments: Bassoon, Cello, Flute, Horn, Oboe, Organ, Percussion, Trombone, Trumpet, and Tuba. For requirements in these fields, see the instructor.

GROUP INSTRUCTION

*‡55, 56. [55ab] Orchestral Instruments. (2, 2) Group instruction in the playing of woodwind, brass, and stringed instruments. Of special importance to the prospective instrumental teacher and conductor. Kunkel

‡155, 156. [155ab] Orchestral Instruments. (2, 2) Continuation of 55, 56. Kunkel
College of
PHARMACY
COLLEGE OF PHARMACY

PHARMACY is the science which treats of medicinal substances. It embraces not only a knowledge of medicines and the art of preparing and dispensing them but also their identification, selection, preservation, combination, analysis, and standardization.

The purpose of the College of Pharmacy is to provide a thoroughly scientific foundation for the pursuit of the profession of pharmacy in all its branches; to prepare students not only to operate drug stores but to fit them as well for other phases of pharmaceutical activities—to become hospital pharmacists, pharmacists in the Army or Navy, state or federal service, to take up pharmaceutical manufacturing in its many phases, to engage in pharmaceutical research or teaching. The elements of the fundamental natural sciences, biology, chemistry, mathematics and physics, must be studied and their principles understood before their applications to pharmacy can naturally be considered. For this reason students in pharmacy are required to pursue courses in these fundamental sciences, where they have the advantage of close association with students in other departments of the University.

The College of Pharmacy is an integral part of the University and is governed by the same general policy that characterizes that institution.

ADMISSION

The requirements for admission to the freshman class are the same as those for the College of Arts and Sciences, except that one and one-half units of algebra and one unit of geometry are required. It is particularly desirable that the preliminary preparation include physics, chemistry, botany, physiology, Latin, typing, and commercial arithmetic.

SCHOLASTIC REGULATIONS

Students in the College of Pharmacy will be governed by the scholastic regulations given under "General Academic Regulations."

ADVANCED STANDING

The general requirements are those for the College of Arts and Sciences. In accordance with a ruling adopted by the American Association of Colleges of Pharmacy at the Dallas, Texas, meeting in 1937, any student entering a school or college of pharmacy with
advanced standing is required to complete three full years of resident study for the degree of Bachelor of Science in Pharmacy, unless such advanced standing was earned in a school or college of pharmacy.

REGISTRATION

Licensure as a pharmacist is under control of the New Mexico State Board of Pharmacy.

SCHOLARSHIPS AND LOANS

Scholarships and loans will be available to those who qualify. For information write to the Dean, College of Pharmacy.

DEGREE REQUIREMENTS

The degree of Bachelor of Science in Pharmacy is granted upon completion of the course. The candidate for graduation must have completed a total of 130 credit hours and must have completed all the work in the pharmacy curriculum. The total number of grade points in the hours offered for graduation must equal the total number of hours. At no time shall the student carry more than nineteen hours per semester.

CURRICULUM

The four-year curriculum leading to the degree of Bachelor of Science in Pharmacy is a standard college course for the practice of pharmacy. The curriculum below was initiated in the fall of 1945, at which time it was not thought feasible to offer pharmacy courses of all levels during the first year. Therefore, the policy was established that students be admitted to the College of Pharmacy with the understanding that the first degrees in pharmacy could be earned no earlier than June of 1949. In the academic year 1947-48 in addition to the first four semesters, the fifth and sixth semesters will be offered. Electives, where permitted, are to be chosen from those courses in the liberal and cultural fields with the advice and consent of the student’s adviser.

Students who are required to take English A must do so in addition to the regular courses in English.

The professional courses in pharmacy are not open to election for credit by non-pharmacy students without permission of their respective deans.
# Curriculum Leading to the Degree of Bachelor of Science in Pharmacy

## Courses of Study: Recommended Sequence

### Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>English 1 (Intro. to Rhet.)</td>
<td>English 2 (Intro. to Lit.)</td>
</tr>
<tr>
<td>Pharmacy 1L (Orientation)</td>
<td>Pharmacy 2 (Calculations)</td>
</tr>
<tr>
<td>Chem. 1L (General)</td>
<td>Chem. 2L (General)</td>
</tr>
<tr>
<td>Biology 1L (General)</td>
<td>Biology 2L (General)</td>
</tr>
<tr>
<td>Math. 15 (College Algebra)</td>
<td>Math. 16 (Plane Trigono.)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Physical Education</td>
</tr>
<tr>
<td><strong>Total Credits:</strong> 18</td>
<td><strong>Total Credits:</strong> 17</td>
</tr>
</tbody>
</table>

### Sophomore Year

| Pharmacy 51L (Pharm. Prep. I) | Pharmacy 72L (Pharmacognosy I) |
| Physics 11L (General) | Physics 12L (General) |
| Chem. 53L (Quant. Analysis) | Psychology 51 (General) |
| Intro. to Soc. Sci. 1 | Bus. Ad. 5 (Prin. of Accounting) |
| Physical Education | Physical Education |
| **Total Credits:** 17 | **Total Credits:** 18 |

### Junior Year

| Chemistry 101L (Organic) | Pharmacy 102L (Organic) |
| Biology 56 (Human Physiology) | Biology 93L (Gen. Bacteriology) |
| Biology 59L (Human Physiol. Lab.) | Pharmacy 12L (Pharm. Preps. II) |
| Economics 105 (General) | Pharmacy 122 (Pharm. Law) |
| Speech 2 (Fundamentals of Speech) | Pharmacy 162L (Pharm. of Med. Prod. I) |
| Electives | Pharmacy 142 (First Aid) |
| **Total Credits:** 18 | **Total Credits:** 17 |

### Senior Year

| Pharmacy 181L (Disp. Pharm. I) | Pharmacy 182L (Disp. Pharm. II) |
| Pharmacy 169L (Pharm. of Med. Prod. II) | Pharmacy 172L (Pharmacognosy II) |
| Pharmacy 191L (Pharm. Chem.) | Pharmacy 196L (Pharmacology) |
| Pharmacy 155 (Drugstore Manag.) | Pharmacy 176 (Insecticides) |
| Electives | Pharmacy 121 (History of Pharm.) |
| **Total Credits:** 17 | **Total Credits:** 17 |

## College of Pharmacy

### Department of Instruction

Courses numbering: from 1-49, lower division, normally open to freshmen; from 50-99, lower division, normally open to sophomores; from 100-199, upper division, normally open to juniors, seniors, and graduates.
SYMBOLS USED IN COURSE DESCRIPTIONS: L—part of the course is laboratory work; F—course is given during field session; SS—course offered in eight weeks' summer session only; Yr—course offered throughout two semesters and credit for a single semester's work is suspended until the entire course is completed; *—course open to General College students; †—course offered for General College credit only; ( )—semester hours’ credit; [ ]—former course number or title.

A schedule of course offerings, including hours of meeting, is issued at the opening of each session. The University reserves the right to cancel any listed course or to make a substitution in instructors when necessary.

PHARMACY

Professor Bowers (Dean), Castle.

*1L. PHARMACEUTICAL ORIENTATION. (3) A beginning course in the fundamental principles and processes of pharmacy, including background material in pharmaceutical history, literature, and terminology, and the practical application of mathematics to pharmacy. 2 lectures, 3 hrs. lab.

*2. PHARMACEUTICAL CALCULATIONS. (2) Metrology. A study of the systems of measurements and various calculations used in the practice of pharmacy. Prerequisite: 1L or concurrent registration.

5IL. PHARMACEUTICAL PREPARATIONS I. (4) A course devoted to a study of the various classes of pharmaceutical preparations (official and non-official) including the preparation of typical examples of each. Included also are the fundamentals of Latin as used in pharmacy and medicine. Prerequisite: Chemistry 1L. 2 lectures, 6 hrs. lab.

72L. PHARMACOGNOSY I. (4) A study of the science which treats of the history, source, cultivation, collection, preparation, distribution, commerce, identification, composition, purity and preservation of drugs of vegetable and animal origin. Prerequisites: Chemistry 1L and 2L, Biology 1L and 2L. 2 lectures, 6 hrs. lab.

121. HISTORY, LITERATURE, AND ETHICS OF PHARMACY. (1) A study of the development of the science and profession and a survey of its past and present literature.

122. PHARMACEUTICAL LAW. (1) A study of the laws and regulations relating to the practice of pharmacy, together with a consideration of the principles of constitutional law, statutory law, and common law which bear upon the work and responsibilities of the pharmacist.
142. **First Aid, Public Health and Hygiene.** (1) This course combines the standard Red Cross First Aid course with the principles of prevention and control of diseases, and the application of the pharmacist's knowledge and facilities to the promotion of public health and welfare in cooperation with public and private health agencies, and including a survey of municipal, state, and federal health regulations. Staff

152L. **Pharmaceutical Preparations II.** (4) A continuation of Pharmacy 51L. 2 lectures, 6 hrs. lab. Staff

155. **Drug Store Management.** (2) Management of retail pharmacies including a description and analysis of the operating problems which must be met in the successful conduct of a retail store, professional shop and hospital pharmacy. Staff

162L. **The Pharmacy of Medicinal Products I.** (3) A study from the pharmaceutical viewpoint of the official and non-official inorganic substances used as medicines or in the preparation of medicines. Prerequisites: Chemistry 1L and 2L. 2 lectures, 3 hrs. lab. Staff

163L. **The Pharmacy of Medicinal Products II.** (4) A study of the pharmaceutical utilization of natural and synthetic organic substances of official and non-official origin. Prerequisite: senior standing. 2 lectures, 6 hrs. lab. Staff

172L. **Pharmacognosy II.** (3) A continuation of 72L. A study of animal and vegetable drugs and their constituents. Prerequisite: senior standing. 2 lectures, 3 hrs. lab. Staff

176. **Insecticides, Fungicides, Parasiticides, Rodenticides.** (1) This course is designed to familiarize the pharmacist with the problems and methods of control of insects, fungi, parasites, and rodents. Prerequisites: Biology 1L and 2L. Staff

181L. **Dispensing Pharmacy I.** (4) Dispensing pharmacy is broadly defined as the translation of the sciences underlying pharmacy into the art of pharmacy. More specifically it is the application of the scientific and practical knowledge upon which the practice of pharmacy is based to the extemporaneous compounding of drugs and medicines and making these available under proper control. Prerequisite: senior standing. 2 lectures, 6 hrs. lab. Staff

182L. **Dispensing Pharmacy II.** (4) A continuation of 181L. A study of the compounding and dispensing of prescriptions, including incompatibilities. 2 lectures, 6 hrs. lab. Staff

191L. **Pharmaceutical Chemistry.** (4) A course embracing the fundamental analytical operations as used in determining
the identity, strength, and purity of drugs and chemicals. Pre-requisites: Chemistry 1L, 2L, 53L, 101L, 102L. Staff 196L. PHARMACOLOGY. (3) A study of the effects produced by drugs on the living organism and the mechanisms whereby these effects are produced. The action of the more important drugs is demonstrated upon living animals. It includes the relationships of pharmacology, posology, therapeutics, toxicology and bioassay. Prerequisite: senior standing. 2 lectures, 3 hrs. lab. Staff
College of

BUSINESS ADMINISTRATION
UPON recommendation of the University Senate and the Administrative Council, the Regents have approved the establishment of a College of Business Administration to be in operation beginning the fall semester, 1947. The new College will provide for a number of concentrations in specific fields in addition to general requirements for all students in the College. A special bulletin will be issued several months in advance of the opening of the school term which will give full details in regard to admission, requirements, the various concentrations offered, etc. Prospective students may apply after June 1, 1947, to the Director of Admissions, University of New Mexico, Albuquerque for a copy of this bulletin.
GENERAL COLLEGE
GENERAL COLLEGE

The General College has been planned in terms of two-year programs. It makes provision for rather large numbers of students who, for one reason or another, do not find the four-year course advisable. Some of these groups are:

1. Those who are interested in general, instead of specialized, types of knowledge. Students of this sort prefer an overview of a field with emphasis upon general principles rather than upon techniques and details, and are to be taken care of to a large extent by survey courses. Even specialists in one field of knowledge, however, will find use for comprehensive surveys in others.

2. Those who wish to "explore." Interest in one or more of the fields of knowledge is a prime factor in college success; and this interest, together with greater efficiency in mental habits, can often be fostered through exploration.

3. Those who desire distinctly vocational courses of the semi-professional nature. Many capable young people want courses that lead to definite vocational techniques, even though they are not interested in general academic training.

4. Adults who have no interest in degrees or in technical courses, but who desire information and guidance in general or practical fields.

5. Finally, there are those young people who know from the beginning that either for financial or other reasons they must place a time limit upon their higher education. They may prefer either the general or the vocational type of training, but they are forced to look for that from which they can derive the most nearly finished and comprehensive results in less than four years.

ADMISSION REQUIREMENTS

For admission requirements to the General College, see "Admission." Applicants for admission are held to the regulations as set down in the general admission section, except that the Committee on Entrance and Credits may accept an individual who has been recommended by the General College Committee for special consideration.

A student with more than 60 semester hours, exclusive of physical education, is not permitted to enter the General College.

SCHOLARSHIP REGULATIONS

See pp. 62-63.
GENERAL COLLEGE

TRANSFER

A student may be recommended for transfer from the General College to one of the other colleges of the University at the end of any semester or summer session, after having been registered for twelve or more hours (six or more hours in summer session), (1) when the average for the first semester in the University is equal to 1.2 (not applicable to transfer students), or (2) after receiving the General College Diploma, on the same basis as any other transfer student.

COMPLETION OF COURSE

Sixty-four hours of passing work, exclusive of non-theoretical courses in physical education, must be completed in order to fulfill the requirements for the General College diploma. Normally, this work will be divided into four semesters as indicated below.

Students registering in the General College may pursue courses in the Department of Naval Science and Tactics only with the permission of the Dean of the General College and the Head of the Department of Naval Science and Tactics. For those students enrolled in the Naval R.O.T.C. Unit, the course in Naval Science may be substituted for the course in Physical Education.

GENERAL COLLEGE

ACADEMIC COURSE†

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<thead>
<tr>
<th>Freshman Year</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td></td>
<td>First Semester</td>
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<tr>
<td>English 1</td>
<td>3 English 2</td>
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<tr>
<td>Intro. to Soc. Sci.</td>
<td>3 Intro. to Soc. Sci.</td>
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<tr>
<td>Orientation 9</td>
<td>1 P. E.</td>
</tr>
<tr>
<td>English A</td>
<td>2 Math., Spanish or Elect.*</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 Electives</td>
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<tr>
<td>Electives</td>
<td>4</td>
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<td>16</td>
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SOPHOMORE YEAR

Electives from courses starred (*) in catalog 16 in catalog 16

ART

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<thead>
<tr>
<th>Freshman Year</th>
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<tr>
<td></td>
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<tr>
<td>English 1</td>
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<tr>
<td>Intro. to Soc. Sci.</td>
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<td>Art 1</td>
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<td>Art 3</td>
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<td>Art 5</td>
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<tr>
<td>Electives</td>
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</tbody>
</table>

* Choice of: Art 3, 4, 27, 31, 55, 56; Business 4, 5, 6, 8, 9; Engineering 1L, 2L, 3, 4; Home Economics 1, 2L; Mathematics 14; Applied Music; P. E. 22L, 61L, 62L; Spanish 1, 2, 41, 42, 55, 56.

† For courses open to General College students see offerings marked * and † under college sections.
GENERAL COLLEGE

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>First</td>
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<td></td>
<td>Mathematics</td>
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<td></td>
<td>Business Administration</td>
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<td></td>
<td>Business 2</td>
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<td>Electives</td>
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<td>Second</td>
<td>English 67</td>
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<td></td>
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**FRESHMAN YEAR**

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<tr>
<td>First</td>
<td>English 1</td>
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<td></td>
<td>Intro. to Soc. Sci.</td>
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<td>Home Ec. 1</td>
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<tr>
<td></td>
<td>Psychology 1L</td>
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<td>Biology 36</td>
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<td></td>
<td>Electives</td>
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<tr>
<td>Second</td>
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<td>Intro. to Soc. Sci.</td>
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<td>Home Ec. 2L</td>
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**SOPHOMORE YEAR**

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**HOME-MAKING**

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<td>Psychology 1L</td>
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<td>Biology 36</td>
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**INDUSTRIAL ARTS**

See first two years Industrial Arts Curriculum, College of Engineering. Some adjustments to fit individual needs may be arranged.

**PRE-PROFESSIONAL**

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<th>Semester</th>
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213
GENERAL COLLEGE

SOPHOMORE YEAR
To be arranged with the Dean of the College.

MUSIC

FRESHMAN YEAR

First Semester

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<th>Course</th>
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Second Semester

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SOPHOMORE YEAR

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FRESHMAN YEAR

First Semester

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Second Semester

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SOPHOMORE YEAR

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SECRETARIAL

FRESHMAN YEAR

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Second Semester

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SOPHOMORE YEAR

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<td>Business 9</td>
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<td>Electives</td>
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</table>
NAVAL RESERVE OFFICERS' TRAINING CORPS

This department is administered by officers of the United States Navy and Marine Corps under rules promulgated by the Navy Department.

The mission of the NROTC is to provide, by a permanent system of training and instruction in essential naval subjects at the University of New Mexico, a source from which qualified officers may be obtained for the Navy and Marine Corps, and for Naval Reserve and Marine Corps Reserve.

DEPARTMENT OF NAVAL SCIENCE

Captain Newsom, U. S. N., (Head), Professor; Commander Daunis, U. S. N., Associate Professor; Lieutenant Commander Bampton, U. S. N., Associate Professor; Lieutenant Commander Jeffery, U. S. N., Associate Professor; Captain McLellan, U. S. M. C., Assistant Professor.

Students enrolled in the NROTC Unit, University of New Mexico, may be enrolled in any college in the University. NROTC students must pursue a course of study which will lead to a baccalaureate degree. Completion of the Naval Science requirements will constitute completion of a minor study in the College of Arts and Sciences.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>NS11 Intro. to Naval Science</td>
<td>NS12 Communications &amp; Tactics</td>
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SOPHOMORE YEAR

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<tr>
<th>NS51 Ordnance &amp; Fire Control</th>
<th>NS52 Fire Control</th>
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JUNIOR YEAR

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<tr>
<th>NS101 Navigation</th>
<th>NS102 Advanced Seamanship</th>
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SENIOR YEAR

<table>
<thead>
<tr>
<th>NS151 Naval Engineering</th>
<th>NS152 Nav. Engr. &amp; Damage Cont.</th>
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Marine Corps subjects are substituted for Marine Corps applicants during junior and senior years.
OTHER DIVISIONS OF THE UNIVERSITY

THE GRADUATE SCHOOL

COMMUNICATIONS concerning graduate study should be sent directly to the Dean of the Graduate School. Communications in regard to admission to the Graduate School should be sent to the Director of Admissions. Transcripts in the possession of students are not acceptable, but should be sent to the Director of Admissions from the institution previously attended.

DEGREES OFFERED

Graduate work leading to the Master's degree is offered in the departments of Anthropology, Art Education, Biology, Chemistry, Economics and Business Administration, Education, Civil Engineering, Electrical Engineering, Mechanical Engineering, English, Geology, Government and Citizenship, History, Inter-American Affairs, Mathematics, Modern Languages and Literature, Painting and Design, Physics, Psychology, Sociology, and a limited amount of work in Fine Arts.

The degree of Doctor of Philosophy is offered in American Civilization, Anthropology, English, History, and Spanish.

Candidates should consult the head of the department concerned and the Dean of the Graduate School before registering.

ADMISSION

Graduates of any recognized college or university may apply for admission to the Graduate School, with a view to becoming candidates for degrees. Selection of advanced students is based on the scope and quality of the applicant's scholastic record and his qualifications for independent study.

Graduates of institutions other than the University of New Mexico should file complete certified transcripts of their records with the Director of Admissions at least one month before registration. Students presenting such transcripts will be given a statement regarding the availability of credit for such work at this University. Any student may be refused admission if his previous college record is of such inferior quality as to indicate inability to pursue advanced work satisfactorily.

EXTENSION AND CORRESPONSE COURSES

The University accepts no graduate work by extension or correspondence from other institutions.
OTHER DIVISIONS

SCHOLARSHIPS, FELLOWSHIPS, AND ASSISTANTSHIPS

A number of scholarships, fellowships, and assistantships are available for graduate students. Application blanks may be obtained from the office of the Graduate School.

INFORMATION

For further information regarding advanced work and the conditions under which higher degrees may be obtained, consult the Graduate Catalog or the Graduate Office.

SUMMER SESSION

A summer session of eight weeks is conducted each year on the campus. (For dates, see the Calendar.) Every attempt is made to meet specialized needs of the particular student group of the session. Emphasis is placed on advanced and graduate work. A special program is offered for teachers and school administrators. The summer climate is warm but delightful; nights are cool. The residential halls are regularly operated during the Summer Session. A separate bulletin on the Summer Session may be obtained by addressing the Director of the Summer Session, or the Director of Admissions.

FIELD SESSIONS

Field sessions are usually conducted each summer by the Departments of Anthropology, Art, and Engineering. Work in Biology and Geology is sometimes offered in the field. (For dates, see the Calendar.) Separate bulletins are published on the field sessions, and may be obtained by addressing the head of the department concerned.

EXTENSION DIVISION

The Division of Extension and Adult Education of the University is a member of the National University Extension Association. A special extension bulletin is issued each year, giving regulations and information concerning courses and services rendered by the Extension Division.

For a copy of the extension bulletin and further information, address the Director of Extension, Division of Extension and Adult Education, University of New Mexico, Albuquerque.
INFORMATION FOR VETERANS

QUESTIONS AND ANSWERS ABOUT G. I. BILL 346

The following questions and answers are for veterans who are interested in filing claim under the G. I. Bill (346).

Q-Is there any way in which I can qualify for benefits under this bill on fewer than ninety days' active service?
A-Yes, if you were discharged on account of an injury or disability actually incurred while in service.

Q-What educational institutions may I select?
A-Any that will accept you.

Q-How soon must I claim my rights under the G. I. Bill?
A-Not later than four (4) years after date of your discharge from service or the close of World War II, whichever is the later.

Q-How long will this opportunity for training be open to me?
A-For nine (9) years after the close of World War II, but you must present your claims within four (4) years after your discharge or the close of the war, whichever is the later.

Q-What is the longest period for which a veteran may procure education for training under the G. I. Bill?
A-Four (4) years.

QUESTIONS AND ANSWERS ABOUT THE VOCATIONAL BILL

If you intend to apply under Public Law 16 (Vocational Rehabilitation), study the following questions and answers.

Q-How long must I have served in order to be eligible for vocational training under this bill?
A-So far as length of service is concerned, you are eligible if you have served in either the army or navy at any time between September 16, 1940, and the close of World War II.

Q-Must I be eligible to a pension before I can claim under this law?
A-Yes.

Q-Would such eligibility alone qualify me for benefits?
A-No. Your disability must be one which the Veterans Administration considers a vocational handicap.

Q-Must the disability have been incurred while I was in service?
A-Not necessarily. It might be a disability which existed when you entered the service, but has been aggravated by your service duties.
INFORMATION FOR VETERANS

Q—To how much vocational training am I entitled?
A—To whatever amount (not to exceed four [4] years) the Veterans Administration considers necessary to fit you for gainful employment.

Q—How long may I wait before applying for benefits under this bill?
A—The law goes out of effect nine (9) years after the close of World War II, but applications should be made early.

Q—What training institution may I enter?
A—Any one in your own state or in the region of the Veterans Administration in which your home is situated, or elsewhere if approved by the regional chief of the vocational rehabilitation and education division of the Veterans Administration.

Q—What studies or course of training may I select?
A—Any that the Veterans Administration will approve.

Q—To what financial benefits am I entitled while I am in training?
A—Allowance for all necessary tuition, fees, textbooks, supplies and equipment will be made to the institution or training agency in which you are enrolled.

Q—Do I receive any compensation?
A—Yes, a monthly pension.

TYPICAL QUESTIONS FROM THE SERVICES

Q—Have you established any scholarships or loans to veterans?
A—The scholarships and awards of the University are listed on p. 51. Although none of these is set up specifically for veterans a veteran would be eligible for them on the same basis as other students.

Q—May a veteran who has not been graduated from high school enter the University?
A—Yes. A veteran who is 19 years of age may enter as a special student, with permission of the Dean of his college; after two semesters he can petition to change to regular status. See p. 35.

Q—Will you admit a veteran who is not eligible, because of age, to enter under the “special student” ruling?
A—If a veteran is deficient in high school requirements but is not old enough to enter as a special student, he should write the Admissions office. Special consideration will be given to his case by the Committee on Entrance and Credits and he will be notified whether or not he is eligible for admission.

Q—Will a veteran whose high school record is deficient be considered for admission if he demonstrates ability to do college work
INFORMATION FOR VETERANS

by examinations such as the general educational development test of the USAFI?

A—Yes.

Q—Will college credit be granted at the University of New Mexico to veterans for A.S.T.P., V-12, and other service training programs studied at colleges and universities?

A—Yes. Credit for college training programs will ordinarily be granted on the same basis as allowed by the offering college or university. The veteran should request that a transcript of his record be sent directly to the Admissions office wherever he expects to enroll. Such transcript will be considered on the same basis as the usual transfer of college credits.

Q—Does your institution give credit for basic or recruit training?

A—Yes. The University grants a maximum of eight semester hours credit for completion of basic or recruit training.

Q—Will college credit be granted for service courses, educational programs, and experience in the service?

A—If you received training in the armed forces in fields related to the educational program of the University, consideration will be given to the granting of college credit by examination. Application for such credit will be included in USAFI Form 47 intended for use while still in the service. Upon discharge, service personnel are issued papers which contain the information necessary for evaluation of service record (e. g., the Navy "Notice of Separation," the "Army Separation Qualification Record").

Q—May veterans enter at any time?

A—No. A student may not enter after the second week of the semester. (See the Calendar.)

Q—Does the veteran take a physical examination? Is medical attention provided? Does the University have an infirmary?

A—Veterans take the same physical examination as all new students. The University maintains a full-time physician and nurse, and an Infirmary. The local Veterans Hospital is conveniently located for services to veterans.

Q—Does your institution have a placement service?

A—A placement bureau is maintained for students preparing to be teachers. In other fields students are assisted through the department in which they are majoring. Veterans under Public Law 16 are undergoing training for the specific purpose of restoring employability. Placement counseling given these veterans by the Veterans Administration helps find employment.
INFORMATION FOR VETERANS

For veterans under Public Law 346, the Manual of Advisement and Guidance, issued by the Veterans Bureau, states that Vocational Guidance will include placement counseling if the veteran desires it. In other words, a veteran will get assistance in his efforts to secure employment, suitable to his occupational capacities, as evaluated during the vocational advisement procedure. It will be noted that there is an Administrator of Retraining and Re-employment appointed by the President under Public Law 458, which is concerned with coördination of every federal state activity that has to do with vocational rehabilitation or education or training.

The veteran has at his disposal the services of the Veterans Employment Service and New Mexico State Employment Service, which is active in actually placing veterans in employment. The central state office of this service is located at 111 S. Sixth St., Albuquerque. The state's 13 local offices of this service for veterans are located at Albuquerque, 105 S. Sixth St., and in the following other cities: Santa Fe, Las Vegas, Raton, Clovis, Hobbs, Carlsbad, Roswell, Alamogordo, Las Cruces, Silver City, Gallup, Taos, and Tucumcari. There are, in addition, 10 full time detached offices located in Belen, Estancia, Socorro, Farmington, Española, Portales, Santa Rosa, Clayton, Hot Springs, and Reserve.

Q—Is physical education required of a veteran?
A—No.

Q—Does your institution provide campus employment for veterans?
A—Yes. Any student may apply for employment on the campus through the Personnel office. Although the Personnel office often places students in jobs off campus, such employment is usually obtained directly by the student.
DEGREES AND AWARDS

DEGREES CONFERRED
June Twenty-fourth, Nineteen Hundred Forty-six

COLLEGE OF ARTS AND SCIENCES

BACHELOR OF ARTS

NAME: MAJOR; MINOR
Selma Jean Amhrose: English; Business Administration
Margot Astrov: Anthropology; German
Marianna Baca: Sociology; Home Economics
Nicolae Jean Becker: Psychology; Business Administration
*Robert Northcutt Burlingame: English; Philosophy
Mary Mozelle Chalk: Inter-American Affairs
Jennifer Chatfield: Anthropology; Geology
Dorothy Cornelius: Business Administration; Art
James Manly Daniel: History; Mathematics, Naval Science
Mary Catherine Darden: History; Philosophy
Herbert W. Dick: Anthropology; Geology
Rosemary Fischer: Business Administration; Music
William Burke Greene: Sociology; Government
Kathleen Eugenia Lassiter: Government; History
Vivian Louise Lewis: Government; English
Jane Irvin McCormick: Sociology; Anthropology
Mary Jane Major: Sociology; History
Janet L. Malloy: Economics; History
Katherine E. Medary: Inter-American Affairs
Gisa Marie Neuhaus: Economics; Biology
Richard L. Niditch: Anthropology; Sociology
Gertrude M. Richards: English; Sociology
*Frederick J. Rink: Mathematics; German
Martin F. Salas: Inter-American Affairs
Ruth Schneider: Inter-American Affairs
*Betsy Scone: Spanish; Philosophy
Vivienne H. Seis: History; English
*Gideon Sjoberg: Sociology; Government
Thomas Brece Stribling: English; History
Lyle E. Teutsch, Jr.: Government; History
Jorge T. Velasquez F.: Inter-American Affairs
Jane Ann Yust: Anthropology; Sociology

BACHELOR OF SCIENCE

NAME: MAJOR; MINOR
James Gordon Brown: Mathematics; Naval Science
Marguerite Anita Cheuvront: Dietetics; Sociology
Richard Philip Cox: Biology; Chemistry
Dorothy Ann Fletcher: Mathematics; Government
Kurt Frederick: Chemistry; Biology
Ruth Leona Greene: Chemistry; Mathematics
Ross B. Johnson: Biology; Geology
Robert Howard Mulkey: Mathematics; Naval Science
Samuel E. Neff: Biology; Chemistry
DEGREES AND AWARDS

Delbert Leroy Rutledge: Mathematics; Economics
* A. Helene Schau: Geology; Mathematics
* Marjorie Ann Tireman: Biology; English

BACHELOR OF BUSINESS ADMINISTRATION

NAME: MAJOR; MINOR
Billie Rene Earnhart: Business Administration
James Malone: Business Administration
William John Olin: Business Administration
George Hector Peppin: Business Administration
Diana Jeanne Wolf: Business Administration
* With Distinction

COLLEGE OF ENGINEERING

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Geary M. Allen, Jr.  Quentin Kielich
George C. Burrows, Jr.  Tom J. Lawrie
Eldred L. Hein  Ralph Baptist Rustigan

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Lorenzo Aguilar  John Patrick Pace
Vicente Arroyo  Randolph G. Poole
Jay George Beaver  Frederick J. Rink
Robert Joseph Cardinal  Robert B. Rountree
Maynard Powell Goudy  William Jackson Singrey
John Robert Hall  Alvin Devern Swanson
James Arthur Hollowell  William McKinney Terry, Jr.
Robert Karler  Edward Alvin Tiner
William Boyd Lynch, Jr.  Robert Dean Turner
James Mathew McCoy  Dennis Luverne Vath
William Harry Mulder  Robert Leo Wagner
Rolf L. Nelson  George David Wertz
Robert Francis O'Brien, Jr.  Romayne Flemming Whitmer
Melvin Gordon Young, Jr.

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Verne Eugene Blake, Jr.  Robert W. Hines
Rowand R. Chaffee  William E. Luther

BACHELOR OF SCIENCE IN NAVAL SCIENCE ENGINEERING

Frank Robert Eslinger  Jack E. Van Antwerp

COLLEGE OF EDUCATION

BACHELOR OF ARTS IN EDUCATION

NAME: MAJOR; MINOR; CURRICULUM
Leonor Andrade: Spanish; History; —; High School
John E. Baca: Spanish; English; High School
Cordelia Chavez: Sociology; Psychology; Elementary
Burton Clyde Curtis: Social Studies; —; High School
Charlemagne Curtis: Music Education; History; High School
Marita McCanna Dickinson: English; Home Economics; High School
Evelyn Amelia Ellis: Social Studies; —; Elementary
Marilouise Gibbs: English; Home Economics; High School
Ruth E. Graham: Government; Home Economics; High School
Lupe Pauline Gutierrez: Spanish; Sociology; High School

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DEGREES AND AWARDS

Jean Hale: Social Studies; —; Elementary
Norma R. Jordan: Music Education; English; High School
Catherine Mead: Art Education; English; Art Supervisor
Candelaria Ortega: Sociology; Home Economics; Elementary
Frances Adele Requadt: Art Education; English; High School
Edward Rodarte: Spanish; English; High School
Celestina Sanchez: Spanish; History; High School
Vidal Trujillo: History; Spanish; High School

BACHELOR OF SCIENCE IN EDUCATION

NAME: MAJOR; MINOR; CURRICULUM
Georgene V. Barre: Home Economics; —; Home Economics
Maxine Ruth Elliott Bullock: Home Economics; —; Home Economics
Viola Evelyn Johnson: Administration & Supervision; English; Adm. & Superv.
Lily Erlinda Pacheco: —; —; Elementary
Viola Mae Sandier: —; —; Elementary
Alice R. Simpson: Administration & Supervision; —; Adm. & Superv.
Gladys Fay Stewart: Psychology; Home Economics; Elementary
Mary Frances Williams: —; —; Elementary

BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

NAME: MAJOR; MINOR; CURRICULUM
Pauline May Cheuvront: Physical Education; —; Physical Education
John Myron Houk: Physical Education; History; Physical Education
Ruth Shirley Spaulding: Physical Education; General Science; Physical Ed.
* With Distinction

COLLEGE OF FINE ARTS

BACHELOR OF FINE ARTS IN ART (PAINTING AND DESIGN)
Rose Mary Evans
Margaret Celeste Hight
Fern Roberts
Mary Elizabeth Wroth

BACHELOR OF FINE ARTS IN MUSIC
Carolyn Meier

GRADUATE SCHOOL

MASTER OF ARTS
NAME: MAJOR
Gloria Eisen Aledort: Inter-American-Affairs
Ralph Seymour Bowyer: Education Administration
Carl Haley Chapman: Anthropology
Robert G. Conway: Economics
William Parvin Davies: Education Administration
Patricia M. Hannah: Government
Frances Hoag Kuliasha: English
Fred Landavazo: Education Administration
T. T. McCord, Jr.: Economics
Eleuto Medina: Secondary Education
Robert Si Nanninga: Education Administration
Carlos A. Robaina: Spanish
Peter J. Turano: Government
Alvin Warren: Education Administration
Michael W. White: Education Administration

225
DEGREES AND AWARDS

MASTER OF SCIENCE
NAME: MAJOR
Jane Shellenberger Grubgeld: Botany
Caswell Silver: Geology
Robert DeWitt Spensley: Botany

HONORARY DEGREES
NAME: DEGREE
William Aloysius Keleher: Master of Arts
Vicente Teodulo Mendoza: Master of Music
Earl Lake Moulton: Master of Arts
Robert Lawrence Stearns: Doctor of Laws

TWO-YEAR CERTIFICATES AND DIPLOMAS

CERTIFICATE OF SECRETARY-INTERPRETER WITH SPECIALIZATION IN INTER-AMERICAN AFFAIRS
Faye Jean Thomas

GENERAL COLLEGE DIPLOMAS (TWO-YEAR COURSE)
Vito Armijo Evelyn Torres
(As of February 23, 1946)

AWARDS, 1946-47
The American Association of University Women Scholarship—Miss Pauline Dittmer

The Philo S. Bennett Scholarship—Miss Mary Velarde
The Faculty Women's Club Scholarship—Miss Marion Burton
The Alfred Grunsfeld Memorial Scholarships—Mr. Warren A. Smart, Mr. Arthur Loveridge
The Miriam N. Grunsfeld Scholarships—Miss Joan Taul, Miss Caroline Farnsworth

Frederick Herbert Kent and Christina Kent Scholarships—Miss Willia Gifford, Mr. Cecil Brinningstool, Mr. Deftano Varela

Newman Club Scholarship—Miss Bertha Gonzales
The Phrateres Club Tuition Scholarship—Miss Joan Taul
Spur Sophomore Scholarship—Miss Lois Lembke
The Alpha Delta Pi Prize—Miss Caryl Zemek
The Dove Asch Prize—Miss Pauline Cheuvront
The George E. Breece Prize in Engineering—Mr. Frederick J. Rink
The Chi Omega Prize in Economics—Miss Gisa Neuhaus
The Charles Florus Coan Prize—Miss Mary Catherine Darden
The Marian Coons Prize—Miss Maxine Bullock
The Harry L. Dougherty Memorial Prize in Engineering—Mr. Frank E. Hawley
The H. J. Hagerman Prize—Mrs. Mable Price Alexander, Mr. Demetrius Sturges
The Telfair Hendon, Jr., Memorial Prize—Mr. Robert N. Burlingame
The Marcella Reidy Mulcahy Memorial Prize—Mr. Charles Wiley
The New Mexico Section of the American Society of Civil Engineers Award—Mr. Garry M. Allen, Jr., Mr. George C. Burrows, Jr.

The Phi Kappa Phi Senior Prize—Miss Marjorie Ann Tireman
The Rose Rudin Roosa Prize—Mr. Laird Dunbar
The George St. Clair Memorial Prize—Mr. John Connell
The Lenna M. Todd Memorial Prize—Mr. Sam Schulman, Mr. Laird J. Dunbar, Mr. William Gross, Mr. Bill Wallrich, Mr. Charles Wiley
The C. T. French Medal—Mr. Frederick J. Rink
The Phi Sigma Medal in Biology—Mr. Robert Spensley
Classification of Students

Classification of students in the various colleges is based upon the following standards of credit hours earned:

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Statistics for 1946-47

Complete statistics for the year were not available when this catalog went to press.

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THE UNIVERSITY OF NEW MEXICO
APPLICATION FOR ADMISSION

(This form is to be mailed to the Director of Admissions, University of New Mexico, Albuquerque, New Mexico)

No application will be acted upon until all necessary transcripts are received.

Mr. (Check) Miss Mrs.
Name ____________________________ (Last) (First) (Middle)
Permanent Address ____________________________________________
Present Address if Different from Permanent Address ____________________________
Age _______ Date of Birth __________ Race _______ Married? _______
Have you been a member of the U. S. Armed Forces? ______
Are you applying for admission under the G. I. Bill 346? ______
Public Law 16? _______ Of what Country are you a citizen? ______
Nationality of Parents: Father _______ Mother _______

Underline the college you expect to enter:
Arts and Sciences, Education, Engineering, Fine Arts, Pharmacy, Business Administration, General College (two-year), Graduate School

What will be your major field of study? _______ Minor? _______
Underline the session for which you expect to enroll: Semester I, Semester II, Summer, Field Session in ______

Name of high school last attended ____________________________ Date of graduation __________
Location of high school ____________________________
City _______ State _______
Have you previously enrolled in the University of New Mexico? ______
Residence □, extension □, or correspondence □, courses? ______
In which session were you last enrolled? ____________________________
List all other colleges or universities attended, and dates of attendance: ______
(Indicate extension or correspondence enrollment also)
(Failure to comply fully with this request will be considered a serious breach of honor)

Of what college or university are you a graduate? _______
What degree? _______ When conferred? _______
Are you eligible to return to the institution last attended if you desire to do so? _______
Do you plan to work toward a degree at the University of New Mexico? _______
Are you having official transcripts sent to us from all institutions attended? _______
Parent’s name and permanent address ____________________________
or Guardian’s name and permanent address ____________________________

Of what city and state are you a resident? ____________________________
If a resident of New Mexico, give dates of residence: ____________________________
Will you need University housing? ____________________________
*Are you enclosing the $5.00 evaluation fee? _______
I certify that the above information is correct. Dated: ____________________________

Signed: ____________________________
(Applicant’s usual signature)

*Required of non-veteran applicants transferring from other colleges. (See p. 32 of Catalog.)
THIS FORM MUST BE FILED WITH YOUR APPLICATION FOR ADMISSION. YOUR APPLICATION IS NOT COMPLETE WITHOUT IT.

Return this form with your application to the Director of Admissions, University of New Mexico, Albuquerque, N. M.

THE UNIVERSITY OF NEW MEXICO
COUNSELING AND TESTING SERVICES

Mr.
Name Miss ___________________________ Mrs. ___________________________

Last First Middle

Permanent Address __________________________________________________________

Present Mailing Address if Different from Permanent Address __________________________

Age Date of Birth Mo. Day Yr. Race ________________

Marital Status: Single □ Married □ Other (explain) __________________________

Place of Birth __________________________ Of what city and state are you a resident? __________________________

Citizen of what country? __________________________ Have you been a member of the U. S. Armed Forces? Yes □ No □

From __________ to __________ Check if applying for training under Public Law 346 (G.I. Bill) □ Or under Public Law 16 (Disability) □

What high school did you last attend? __________________________________________

Location of school __________________________ Did you graduate? __________________________

Yes □ No □ If so, when? __________________________ If not, what was highest grade completed? ____________

If a graduate of a New Mexico high school, did you take the Statewide Test for High School Seniors? Yes □ No □ In what year? ____________ At what school did you take it? __________________________

If not a high school graduate, have you taken the USAFI General Educational Development Tests? Yes □ No □ Where? __________________________ When? __________________________

What languages do you use in addition to English? List them: __________________________

Check the College you expect to enter: Arts and Sciences □ Education □ Engineering □ Fine Arts □ General College (two year) □ Graduate School □ Pharmacy □ Business Administration □ Other __________________________

What will be your major field of study? __________________________

What will be your minor field of study? __________________________

When do you expect to enroll in the University (place date after semester you choose): Semester I ____________ Semester II ____________

Summer ____________ Field session in ____________
Have you previously attended the University of New Mexico? ______

When? ____________________________ List all colleges and universities attended and dates of attendance: (Include extension or correspondence courses)

____________________________________

Are you transferring any credits in English Composition? Yes□ No □

Of what college or University are you a graduate? __________________________

____________________________________

What degree(s) and when conferred? __________________________

____________________________________

In the remaining space write a clear statement of your educational objectives. State in your own words what training you want, what your goals are, and how you plan to achieve them.

____________________________________

____________________________________

____________________________________

____________________________________

____________________________________

Date ____________________________ Signature ____________________________