

UNIVERSITY OF CINCINNATI
BULLETIN

ANNOUNCEMENT OF THE

*Graduate School of Arts and
Sciences*



1956-1957

PUBLISHED BY THE UNIVERSITY OF CINCINNATI
VAN WORMER ADMINISTRATION BUILDING
CINCINNATI 21, OHIO

England Writers from Emerson to Frost; 351-2, American Romanticism; 405-4, Old English; 409, History of the English Language; 431-2, English Drama from the Beginning to 1700; 433-4, English Comedy; 439, Spenser; 443-4, Studies in Shakespeare; 463-4, Seventeenth-Century Poetry; 471-2, Literature of the Restoration; 481-2, Eighteenth-Century Literature; 561-2, The Poetry and Drama of the Irish Literary Revival; 571-2, Modern Prose; 573-4, Twentieth-Century Fiction; 576, Twentieth-Century English Poetry.

Courses Offered in the Summer School in 1956

- ENGL. 301. ADVANCED COMPOSITION. Mr. Boyce.
 ENGL. 321. SATIRE: JUVENAL TO GEORGE ORWELL. Mr. Stewart.
 ENGL. 327. THE EPIC: HOMER'S *Iliad* TO BENET'S *John Brown's Body*. Mr. Rothwell.
 ENGL. 331. LITERARY UTOPIAS AND BRAVE NEW WORLDS: PLATO TO ALDOUS HUXLEY. Mr. Applegate.
 ENGL. 380. POETRY AND PROSE OF T. S. ELIOT. Mr. Boyce.
 ENGL. 483. THE ENGLISH NOVEL IN THE EIGHTEENTH CENTURY. Mr. Stewart.
 ENGL. 901, 902. RESEARCH IN ENGLISH. Staff.

For further information, see the Announcement of the Summer School.

GEOLOGY AND GEOGRAPHY

Head of Department: Professor WILLIAM F. JENKS (29 Old Tech); Professors CASE (25 Old Tech), BARBOUR (137 McMicken), COULTER (8 Old Tech), CASTER (2-C Old Tech); Associate Professor SUNDERMAN (31 Old Tech); Assistant Professors DURRELL (35 Old Tech), GROSS (33 Old Tech); Instructors L. G. WOLF (23 Old Tech), HODGKINS (7 Old Tech).

In geology this Department offers work leading to the degrees of Master of Science and Doctor of Philosophy. In geography the Department offers work leading to the degree of Master of Arts.

A student admitted to graduate work in geology is expected to have satisfactorily passed one-year courses in physics and chemistry, and an approved course in calculus or statistics. Biology is advised as preparation for graduate work chiefly in paleontology. Attention is called to undergraduate courses Geology 301-2 (Mineralogy), 310 (Geologic Field Techniques), 319 (Geologic Demonstration Trip), 321-2 (Historical Geology), and 469 (Common Rocks). Applicants for graduate study in geology are urged to take the Graduate Record Examination as well as the

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aptitude and advanced test in geology. A graduate student with inadequate background may be required to take one or more of these courses or basic courses in related sciences, usually without credit toward the graduate degree. Not all students accepted for graduate work are accepted as candidates for degrees. Personal acquaintance and examinations are required in order to determine their aptitude for self-directed effort. With an adequate basis of undergraduate study it may be possible to finish the work for a master's degree in one year, but the requirement cannot be stated in terms of time or credits. All graduate students will be required to participate in an annual fall four-day field trip.

The University Museum, in the same building as the Department, provides extensive research collections particularly with respect to the Paleozoic faunas of the Cincinnati region. The Departmental library contains 11,000 volumes on geology or geography. Geography students may also use the Depository Library of the Association of American Geographers.

GEOLOGY

*For Advanced Undergraduate and Graduate Students**

GEOL. 330. ADVANCED GEOLOGY FIELD TRIP. A two weeks' field excursion immediately after spring examinations and before Summer School. Main emphasis on historical and regional geology. Conferences and comprehensive report during following semester. 3 gr. cr. Mr. Caster.

Prerequisites: Geol. 317, 318, or 319 and 321-2 or equivalents.

GEOL. 425, 426. INVERTEBRATE PALEONTOLOGY. A systematic survey of the important groups of invertebrate fossils with special emphasis on their zoological character and geologic significance. 4 gr. cr. each semester. Lecture, T Th 10:30; laboratory, T Th 1:30-4:30. Mr. Caster.

Prerequisites: Geol. 101-2, 111-2 or equivalents; or a course in biology, zoology, or botany.

GEOL. 443. PHYSIOGRAPHY OF EASTERN UNITED STATES. (Alternates with Geol. 449.) 3 gr. cr. First semester, M 1:30-4:30. Mr. Barbour.

GEOL. 444. PHYSIOGRAPHY OF WESTERN UNITED STATES. (Alternates with Geol. 448.) 3 gr. cr. Second semester, M 1:30-4:30. Mr. Barbour.

*Supplementary work is usually required of graduate students electing these courses.

- GEOL. 470. BASIC SEDIMENTOLOGY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2 and 469 or equivalents.
- GEOL. 472. PRINCIPLES OF STRATIGRAPHY. Stratigraphic and biostratigraphic principles and methods used in interpreting origin and history of rocks, with emphasis on geochronology, paleoecology, and paleogeography. 3 gr. cr. Second semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.
- GEOL. 474. OPTICAL MINERALOGY. Crystal optics; use of the petrographic microscope for recognition of transparent minerals in immersion media. 4 gr. cr. Second semester, T Th 9:30, M W 1:30-4:30. Mr. Sunderman.
Prerequisites: Geol. 301-2, 469.
- GEOL. 480. INTERPRETATION OF AERIAL PHOTOGRAPHS. The geologic and geographic interpretation of aerial photographs and their use in mapping. 3 gr. cr. Second semester. Lecture and laboratory. Hours to be arranged. Mr. Durrell.
- GEOL. 503, 504. GEOLOGY SEMINAR. Required of all graduate students in geology. 1 gr. cr. each semester. Th 4:30. Staff.
- GEOL. 551. PETROGRAPHY AND PETROLOGY OF IGNEOUS ROCKS. 4 gr. cr. First semester, M W 11:30, T Th 1:30-4:30. Mr. Gross.
Prerequisites: Geol. 301-2, 469, and 474 or equivalents.
- GEOL. 552. PETROGRAPHY AND PETROLOGY OF SEDIMENTARY AND METAMORPHIC ROCKS. 4 gr. cr. Second semester, M W 11:30, T Th 1:30-4:30. Mr. Gross.
Prerequisites: Geol. 301-2, 469, and 474 or equivalents.
- GEOL. 563. PRINCIPLES OF ECONOMIC GEOLOGY. Physical and chemical processes producing economic concentration in mineral deposits. 3 gr. cr. First semester, T Th 11:30, W 1:30-4:30. Mr. Jenks.
Prerequisites: Geol. 301-2 and 589.
- GEOL. 566. PETROLEUM GEOLOGY. Geology of oil and natural gas. (Alternates with Geol. 564). 4 gr. cr. Second semester, T Th 11:30, M W 1:30-4:30. Mr. Jenks.
Prerequisite: Geol. 563.

GEOL. 589. STRATIGRAPHY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2 and 469 or equivalents.

GEOL. 921-2. STRATIGRAPHY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

GEOL. 971, 972. STRATIGRAPHY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

GEOL. 975. STRATIGRAPHY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

For Adv

GEOG. 307. METEOROLOGY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

GEOG. 308. CLIMATE. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

GEOG. 310. CLIMATE. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

GEOG. 311, 312. CLIMATE. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. 3 gr. cr. First semester, M W 9:30, F 8:30-11:30. Mr. Brooks.
Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents.

*Supplementary

GEOLOG. 589. STRUCTURAL GEOLOGY. Principles of rock deformation; geologic measurements; applications of descriptive geometry; methods of determination of structure in the field. 3 gr. cr. Second semester, T Th 11:30, F 1:30-4:30. Mr. Sunderman.

Prerequisite: Geol. 301-2 or equivalent.

Primarily for Graduate Students

GEOLOG. 921-2. STRATIGRAPHIC GEOLOGY. A survey of the stratigraphic history of North America. 3 gr. cr. each semester. Tu F 4:30-6:00. Mr. Caster.

Prerequisites: Geol. 470, 472.

GEOLOG. 971, 972. INDIVIDUAL WORK IN GEOLOGY. Credit depends on amount of work done. Geology Staff.

GEOLOG. 973. FIELD RESEARCH IN GEOLOGY. Work in the field under direction of the staff. 1-6 gr. cr.

GEOGRAPHY

*For Advanced Undergraduate and Graduate Students**

GEOG. 307. METEOROLOGY. Distribution of weather elements; precipitation, temperature, pressure, winds and solar radiation. Observation and prediction techniques. Relationships to human activity. 3 gr. cr. First semester, M W F 2:30. Mr. Hodgkins.

GEOG. 308. CLIMATOLOGY. Regional climatic patterns of the world. Analyses of causal factors, techniques of climatic classification; man's relationships to his climatic environment. 3 gr. cr. Second semester, M W F 2:30. Mr. Hodgkins.

GEOG. 310. CARTOGRAPHY. Map design, compilation, projection, and drafting. Maps as a research and teaching tool in the natural and social sciences. 3 gr. cr. First semester. Lecture, M 1:30; laboratory, W 2:30-5:30. Mr. Wolf.

GEOG. 311, 312. GEOGRAPHY OF NORTH AMERICA: THE UNITED STATES, CANADA, AND ALASKA. Regions of North America; present economic and social development and future potentialities as related to the natural environment. 3 gr. cr each semester. W 4:00-6:00 and one additional hour to be arranged. Mr. Case.

*Supplementary work is usually required of graduate students electing these courses.

Primarily for Graduate Students

GEOG. 977, 978. ADVANCED INDIVIDUAL WORK IN GEOGRAPHY. Advanced problems in topical or regional geography, or in geographic techniques or theory. Credit depends on amount of work done. Geography Staff.

GEOLOGY AND GEOGRAPHY

Courses Omitted in 1956-57

The following geology courses, offered in alternate years or at longer intervals, will not be given in 1956-57: 448, World Physiography; 449, Principles of Geomorphology; 564, Geology of Ore Deposits; 565, Nonmetallic Mineral Deposits; 909, Metamorphic Geology; 910, Advanced Mineralogy; 925-6, Advanced Megascopic Paleontology; 960, Ground Water; 963-4, Advanced Sedimentology; 979, Geophysics; 982, Glacial Geology. The following geography course will not be given in 1956-57: 547, Geography of Africa.

Courses Offered in the Summer School in 1956

*GEOG. 344. GEOGRAPHY OF RIMLAND ASIA. Mr. Hirt.

*GEOG. 352. CONSERVATION OF NATURAL RESOURCES. Mr. Hodgkins.

GEOG. 577, 578. SPECIAL PROBLEMS IN GEOGRAPHY. Messrs. Hodgkins, Wolf.

GEOL. 973, 974. FIELD RESEARCH IN GEOLOGY. Mr. Jenks.

GEOG. 977, 978. RESEARCH IN GEOGRAPHY. Messrs. Hodgkins, Wolf.

For further information, see the Announcement of the Summer School.

GERMANIC LANGUAGES AND LITERATURES

Head of Department: Professor EDWIN H. ZEYDEL (228 McMicken); Professor MERKEL (229 McMicken).

This Department offers work leading to the degrees of Master of Arts and Doctor of Philosophy.

Students electing work in this Department should have completed an undergraduate major in German or its equivalent. German 301-2 and 421-2 in the McMicken College of Arts and Sciences, or their equivalents, are required.

*Supplementary work is required of graduate students electing these courses. For further information see the Announcement of the Summer School.

261-65

UNIVERSITY OF CINCINNATI
BULLETIN

ANNOUNCEMENT OF THE

*McMicken College of
Arts and Sciences*



1956-1957

PUBLISHED BY THE UNIVERSITY OF CINCINNATI
VAN WORMER ADMINISTRATION BUILDING
CINCINNATI 21, OHIO

FINE ARTS

Assistant Professor HORNYAK (100 Wilson); Lecturers ADAMS, VON GROSCHWITZ.

101-2. INTRODUCTION TO ART. The principles underlying the arts of sculpture and painting and their historic implication, with special reference to the collections of the art museums of Cincinnati; collateral reading. Tu 3:30-5:00; S 9:30-11:00. The Saturday meeting will be held at the Art Museum; the Tuesday meeting on the University campus. Messrs. Adams, von Groschwitz. (Code: 15-060)

465-6. HISTORY AND LITERATURE OF MUSIC. Approaches to the enjoyment of music; art of music and its materials; the composer as a product and creator of his time; contemporaries in the arts, sciences, and politics and their philosophies and influence on music. Students are expected to attend selected symphony concerts on Friday afternoons. MW 2:45-4:15. Mr. Hornyak. (Code: 18-225)

For statements regarding credit for work in the Art Academy of Cincinnati or the College-Conservatory of Music of Cincinnati, see page 36.

GEOLOGY AND GEOGRAPHY

Professors JENKS (*Head of Department*, 29 Old Tech), CASE (25 Old Tech), BARBOUR (157 McMicken), COULTER (8 Old Tech), CASTER (2-C Old Tech); Associate Professor SUNDERMAN (31 Old Tech); Assistant Professors DURRELL (35 Old Tech), ———; Instructors WOLF (23 Old Tech), HODGKINS (7 Old Tech).

The student may choose a concentration leading to the B.A. or B.S. in Geology, or to the B.A. in Geography.

GEOLOGY

15-040

Geol. 101-2 and 111-2 taken together are the basic preliminary courses to all advanced courses in geology except Geol. 301-2.

To qualify for the B.S. degree with a major in geology a student shall have completed Geol. 301-2, 319 (317, 318), 321-2, 425-6, 501, 503-4; Chem. 101-2, 111-2; Phys. 101-2, 111-2; and Math. 221-2. Additional advanced courses in geology must be selected as electives. A reading knowledge of German or French is required by the end of the junior year.

To qualify for the B.A. degree in geology a student shall have completed Geol. 301-2, 319 (317, 318), 321-2, 425-6, 501, 503-4, and at least 18 hours of chemistry, mathematics, and physics.

Both the B.S. and B.A. majors may lead to graduate work in geology. Typical programs may be obtained from the Head of the Department.

For all students planning geology as a profession, a five- or eight-week summer field course is strongly recommended. Alternative acceptable field training may be obtained by summer work with one of the geological surveys or by summer field employment by a mining or oil company.

Each autumn all students majoring in geology are expected to attend a four-day field trip.

Students looking toward a professional career in geology may wish to follow a *Five-Year Program* leading to the B.S. and M.S. degrees (see p. 34). In this program a student receives training in geology, mathematics through calculus, basic chemistry, and basic physics. The program should be started in the freshman year, and must be planned as early as possible in consultation with the Head of the Department, who serves as adviser throughout the course. The program provides for little latitude of choice except in the final year, and changes may be made only with the permission of the adviser. Students who wish to apply for graduate study in geology here or elsewhere are urged to take the Graduate Record Examination during their final semester.

101-2. INTRODUCTION TO GEOLOGY. Prerequisite to all other geology courses except Geol. 103-4 and 301-2. It is not prerequisite to any geography courses, but is required of geography majors. With Geol. 111-2, it satisfies the science requirement. Geol. 101-2 and 111-2 form two parts of a single ten-credit course. With the instructor's permission, however, students who do not offer geology in fulfillment of the science requirement may take 101-2 alone. Lecture, MWF 8:30. Mr. Durrell.

111-2. INTRODUCTION TO GEOLOGY LABORATORY. A laboratory course to accompany Geol. 101-2. With the instructor's permission, transfer students and other qualified students may take the course without the lectures (101-2). MW 1:30-4:30; TTh 1:30-4:30. 2 crs. each sem. Mr. Durrell and assistants.

103-4. GENERAL GEOLOGY. An elementary course for general students not expecting to do further work in the subject; fulfills the science requirement only if taken in combination with an elementary course in another science. MW 8:30; F 1:30-4:30. 3 crs. each sem. Mr. Barbour.

301-2. MINERALOGY. Crystallography; introduction to crystal chemistry and atomic structures; occurrence, properties and uses of the important minerals; blowpipe and chemical tests.

Prerequisite: High-school or elementary college chemistry. TTh 9:30; MW 1:30-4:30. 4 crs. each sem. Mr. _____.

310. (2nd sem.) GEOLOGIC FIELD TECHNIQUES. Topographic mapping; geologic mapping; measurement of sections; use of instruments. S 8:30-12:30 and hours to be arranged. 3 crs. Mr. _____.
319. GEOLOGIC DEMONSTRATION TRIP. A two weeks' field excursion in May and June, 1956; the excursion is generally in the Appalachians. Conferences weekly during the following semester and a report to be submitted at the end of the first semester. (Alternates with Geol. 317 and 318; each number designates a different route.) 3 crs. Mr. Durrell.
- 321-2. PRINCIPLES OF HISTORICAL GEOLOGY. An introduction to the study of the physical and biological history of the earth with particular emphasis on North America. TTh 8:30; F 1:50-4:30; S 8:30-11:30. 4 crs. each sem. Mr. Caster.
350. ADVANCED GEOLOGY FIELD TRIP. A two weeks' field excursion immediately after spring examinations and before Summer School. Main emphasis on historical and regional geology. Conferences and comprehensive report during following semester. Prerequisites: Geol. 317, 318, or 319 and 321-2. 3 crs. Mr. Caster.
- 425-6. INVERTEBRATE PALEONTOLOGY. A systematic survey of the important groups of invertebrate fossils with special emphasis on their zoological character and geologic significance. Prerequisite: Geol. 101-2, 111-2 or equivalent, or a course in biology, zoology, or botany. TTh 10:30; TTh 1:30-4:30. 4 crs. each sem. Mr. Caster.
445. (1st sem.) PHYSIOGRAPHY OF EASTERN UNITED STATES. (Alternates with Geol. 449.) M 1:30-4:30. 3 crs. Mr. Barbour.
444. (2nd sem.) PHYSIOGRAPHY OF WESTERN UNITED STATES. (Alternates with Geol. 448.) M 1:30-4:30. 3 crs. Mr. Barbour.
469. (1st sem.) COMMON ROCKS. Use of megascopic characteristics to identify igneous, sedimentary, and metamorphic rocks and to interpret their conditions of origin and subsequent alteration. Prerequisite: Geol. 301-2 or equivalent. TTh 9:30; F 1:50-4:30. 3 crs. Mr. Sunderman.
470. (1st sem.) BASIC SEDIMENTOLOGY. Principles governing the origin, transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. Prerequisites: Geol. 301-2 and 469 or equivalents. MW 9:30; F 8:30-11:30. 3 crs. Mr. _____.

472. (2nd sem.) PRINCIPLES OF STRATIGRAPHY. Stratigraphic and biostratigraphic principles and methods used in interpreting origin and history of rocks, with emphasis on geochronology, paleoecology, and paleogeography. Prerequisites: Geol. 301-2, 425-6, and 470 or equivalents. MW 9:30; F 8:30-11:30. 3 crs. Mr. _____.
474. (2nd sem.) OPTICAL MINERALOGY. Crystal optics; use of the petrographic microscope for recognition of transparent minerals in immersion media. Prerequisites: Geol. 301-2, 469. TTh 9:30; MW 1:30-4:30. 4 crs. Mr. Sunderman.
480. (2nd sem.) INTERPRETATION OF AERIAL PHOTOGRAPHS. The geologic and geographic interpretation of aerial photographs and their use in mapping. Lecture and laboratory. Hours to be arranged. 3 crs. Mr. Durrell.
501. (1st sem.) READINGS FOR SENIORS. Required of all seniors majoring in geology. Not open to other students.
- 503-4. GEOLOGY SEMINAR. Required of all juniors and seniors majoring in geology. No additional credit except during second semester of senior year, when students will actively participate and receive 1 credit. Th 4:30.
551. (1st sem.) PETROGRAPHY AND PETROLOGY OF IGNEOUS ROCKS. Prerequisites: Geol. 301-2, 469, and 474 or equivalents. MW 11:30; TTh 1:30-4:30. 4 crs. Mr. _____.
552. (2nd sem.) PETROGRAPHY AND PETROLOGY OF SEDIMENTARY AND METAMORPHIC ROCKS. Prerequisites: Geol. 301-2, 469, and 474 or equivalents. MW 11:30; TTh 1:30-4:30. 4 crs. Mr. _____.
565. (1st sem.) PRINCIPLES OF ECONOMIC GEOLOGY. Physical and chemical processes producing economic concentration in mineral deposits. Prerequisites: Geol. 301-2 and 589. TTh 11:30; W 1:30-4:30. 3 crs. Mr. Jenks.
566. (2nd sem.) PETROLEUM GEOLOGY. Geology of oil and natural gas. (Alternates with Geol. 564.) Prerequisite: Geol. 563. TTh 11:30; MW 1:30-4:30. 4 crs. Mr. Jenks.
- 571-2. INDIVIDUAL WORK IN GEOLOGY. Credit depends on amount of work done. May be entered either semester. Geology Staff.
589. (2nd sem.) STRUCTURAL GEOLOGY. Principles of rock deformation; geologic measurements; applications of descriptive geometry; methods of determination of structure in the field.

Prerequisites: Geol. 301-2 and 321-2 or equivalents. TTh 11:30; F 1:30-4:30. 3 crs. Mr. Sunderman.

*921-2. STRATIGRAPHIC GEOLOGY. A survey of the stratigraphic history of North America. Prerequisites: Geol. 470, 472. Tu F 4:30-6:00. 3 crs. each semester. Mr. Caster. (Code: 14-040).

Omitted during 1956-57: 448, World Physiography; 449, Principles of Geomorphology; 564, Geology of Ore Deposits; 565, Nonmetallic Mineral Deposits; 909, Metamorphic Geology; 910, Advanced Mineralogy; 925-6, Advanced Megascopic Paleontology; 960, Ground Water; 963-4, Advanced Sedimentology; 979, Geophysics; 982, Glacial Geology.

GEOGRAPHY

15-041

A student wishing to major in geography shall present Geog. 100 or its equivalent, Geol. 101-2, 111-2 or its equivalent, Geog. 307, 308, 310, and 501-2. Further courses in geography and their sequence will depend upon the plans and the interest of the student, in consultation with the adviser in geography. A reading knowledge of a foreign language is required by the end of the junior year.

Among the nongeographical courses recommended to students who will concentrate in geography are the following: Geol. 449, 454, 448, 480; Hist. 107-8, 117, 207-8; Econ. 101-2; Pol. Sc. 471-2; Bot. 221-2, 925, 421-2; Soc. 301-2, 411-2, 340, 230.

The following year-courses may be entered in February with the instructor's permission: Geog. 311-2, 577-8.

100. (1st sem., repeated in 2nd sem.) FUNDAMENTALS OF GEOGRAPHY. A regional analysis and survey of the earth as the home of man. Man's varied relationships to his spatial environment and resources. Basic geographic concepts and principles. Two field trips. Prerequisite for Geog. 308, 327, 337, 538, 399. First semester, MWF 11:30; MWF 1:30; second semester, MWF 1:30. Mr. Hodgkins.
108. (2nd sem.) WORLD GEOGRAPHY. An introductory course in regional human geography. Prerequisite: Geog. 100 or equivalent. MWF 11:30. Mr. Coulter.
307. (1st sem.) METEOROLOGY. Distribution of weather elements; precipitation, temperature, pressure, winds, and solar radiation. Observation and prediction techniques. Relationships to human activity. MWF 2:30. Mr. Hodgkins.

*Primarily for graduate students. May be taken by qualified undergraduates by special permission of the instructor.