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UNIVERSITY OF CINCINNATI BULLETIN

ANNOUNCEMENT OF THE

Graduate School of Arts and Sciences



1949-1950

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

Courses Omitted in 1949-50

The following courses, offered in alternate years or at longer intervals, will not be given in 1949-50: 106, Nineteenth-Century Poetry; 108, Studies in Shakespeare; 114, The English Drama from Its Beginnings to 1700; 116b, The Prose of the Romantic Period; 117, The Poetry and Drama of the Irish Literary Revival; 120, Main Currents in Literary Criticism; 124, Modern European Drama; 127, Literature of the Restoration; 128, New England Writers from Emerson to Frost; 134, English Comedy; 140, American Literature of the Twentieth Century; 141, Modern Prose; 143, Twentieth-Century Fiction; 151, Nondramatic Poetry of the Renaissance and Seventeenth Century; 170, Milton and His Age; 199, American Romanticism; 260, Foreign Backgrounds of English Literature.

Courses Offered in the Summer School in 1949

- s118a. AMERICAN LITERATURE BEFORE 1900. Mr. Weekes.
 s121a. MILTON. Primarily a graduate course. Mr. Krouse.
 s122a. ENGLISH PROSE FROM THE FIFTEENTH TO THE EIGHTEENTH CENTURY: TUDOR PERIOD. Mr. Krouse.
 s144a. THE MODERN CONTINENTAL NOVEL. Mr. Weekes.
 s118b. AMERICAN LITERATURE BEFORE 1900. Mr. Kreider.
 s121b. SPENSER. Primarily a graduate course. Mr. Kreider.
 s122b. ENGLISH PROSE FROM THE FIFTEENTH TO THE EIGHTEENTH CENTURY: STUART PERIOD. Mr. Boyce.
 s144b. THE MODERN CONTINENTAL NOVEL. Mr. Weekes.
 s250. RESEARCH. Departmental Staff.

For further information, see the Summer School Announcement.

GEOLOGY AND GEOGRAPHY

Head of Department: Professor J. L. RICH, Room 29, Old Tech Building; Professors CASE, BARBOUR, COULTER*; Associate Professors VON SCHLICHTEN, RITTENHOUSE, CASTER; Assistant Professors CROSS, FREY, _____; Instructors DURRELL, PRICE, BOWERS.

This Department offers work in geology leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy, and work in geography leading to the degree of Master of Arts.

Not all students admitted to graduate courses are accepted as candidates for degrees. Personal acquaintance and preliminary

*Absent on leave, 1949-50.

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 three- or four-day field trip.

The thesis required for the master's degree may represent either original research or a compilation and analysis of the literature on the chosen subject, of such a nature as to demonstrate the student's ability to sum up existing knowledge and to organize and express it in an approved manner.

For Graduate and Advanced Undergraduate Students

- *107. MINERALOGY. Lectures and laboratory. Three graduate credits each semester. Tu., Th., 10:30; M., 1:30-4:30. 34 Old Tech. Mr. von Schlichten.
108. INVERTEBRATE PALEONTOLOGY. A systematic survey of the important groups of invertebrate fossils with special emphasis on their zoological character and importance as index fossils. Lectures, laboratory, and conferences. Four graduate credits each semester. M., W., 11:30; Tu., Th., 1:30-4:30. 38 Old Tech. Mr. Caster.
Prerequisites: Geol. 1 or equivalent and a course in biology, zoology, or botany.
- *109. PRINCIPLES OF HISTORICAL GEOLOGY. An introduction to the study of earth history with particular emphasis on North America. Four graduate credits each semester. Tu., Th., 8:30; W., 1:30-4:30; S., 8:30-11:30. 38 Old Tech. Messrs. Caster, Cross.
Prerequisite: Geol. 1 or equivalent.
- 111a. PRINCIPLES OF GEOMORPHOLOGY. The interpretation of landscapes, especially as governed by geologic and climatic conditions. Three graduate credits. M., 1:30-3:30, and additional hours to be arranged. 26 Old Tech. Mr. Barbour.
Prerequisite: Geology 1 or equivalent.
Alternates with Geol. 117.
115. STRATIGRAPHY. Principles of stratigraphy and general stratigraphy of North America. Round-table seminar course, with correlated field work. Three graduate credits each semester. Three (or two) meetings a week by arrangement. 38 Old Tech. Messrs. Caster, Cross.
Prerequisite: Geol. 109. Geol. 108 desirable but not required.

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

117. **PHYSIOGRAPHY OF NORTH AMERICA.** Three graduate credits each semester. (Omitted in 1949-50. Regularly given every other year, alternating with Geol. 111a and 118b.)
- 118b. **WORLD PHYSIOGRAPHY.** Study of selected regions in geomorphic terms. Three graduate credits. M., 1:30-3:30, and additional hours to be arranged. 26 Old Tech. Mr. Barbour. Prerequisite: Geol. 1 or equivalent. Alternates with Geol. 117.
- *121b, *122b, *123b. **GEOLOGIC DEMONSTRATION TRIPS.** A two weeks' field excursion, immediately after spring examinations and before Summer School; generally in the Appalachian Highland. Conferences once a week, during the following semester, and the preparation of a comprehensive report to be submitted at the end of the first semester. The three numbers designate different routes followed in successive years. Three graduate credits. Mr. Durrell.
- 125a. **STRUCTURAL GEOLOGY.** Four graduate credits. (Omitted in 1949-50. Regularly given every other year, alternating with Geol. 256.)
- 130b. **INTERPRETATION OF AERIAL PHOTOGRAPHS.** Three graduate credits. (Omitted in 1949-50. Regularly given every other year, alternating with Geol. 256.)
- *148a. **COMMON ROCKS.** Use of megascopic characteristics to identify igneous, sedimentary, and metamorphic rocks, and to interpret their conditions of origin and subsequent alteration. Three graduate credits. Tu., Th., 9:30. Laboratory, Sec. I, F., 1:30-4:30; Sec. II, M., 1:30-4:30. 32 Old Tech. Mr. Rittenhouse. Prerequisites: Geol. 1 and 107 or equivalents.
- 157b. **BASIC SEDIMENTATION.** Principles governing the transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. Three graduate credits. Tu., Th., 9:30; F., 1:30-4:30. 32 Old Tech. Mr. Rittenhouse. Prerequisites: Geol. 1 and 107 or equivalents.
170. **SEMINAR.** Expected of all advanced students in geology and geography. No additional credit. Th., 4:30.
- *161a. **GEOGRAPHY OF SOUTH AMERICA.** Land and peoples: displacement of native cultures by Europeans; economic development of the modern states. Three graduate credits. M., W., F., 11:30. 30 Old Tech. Mr. Price. Prerequisite: Geog. 60a or 60Rb or equivalent.

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

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*163a. GEOGRAPHY OF EUROPE. The natural regions and political divisions are studied with regard to the social, political, and economic developments as related to geographic conditions. Three graduate credits. M., W., F., 11:30. 26 Old Tech. Mr. Case.

Prerequisite: Geog. 60a or 60Rb or equivalent.

*164a. GEOGRAPHY OF ASIA. A regional study of Asia with emphasis on the culture of the people and their ways of earning a living. Three graduate credits. M., W., F., 9:30. 26 Old Tech. Mr. _____.

Prerequisite: Geog. 60a or 60Rb or equivalent.

*166b. ECONOMIC GEOGRAPHY AND INTERNATIONAL TRADE. The distribution of the important raw materials; industry; the principles of world trade. Three graduate credits. M., W., F., 11:30. 26 Old Tech. Mr. Case.

Prerequisite: Geog. 60a or 60Rb or equivalent.

*167. GEOGRAPHY OF NORTH AMERICA. The natural regions of North America; present economic development and future possibilities as related to climate, relief, and resources. Three graduate credits each semester. M., W., F., 2:30. 37 Old Tech. Mr. Case.

Prerequisite: Geog. 60a or 60Rb or equivalent.

*168b. POLITICAL GEOGRAPHY. Three graduate credits. M., W., F., 1:30. Mrs. Bowers.

*169a. METEOROLOGY. Weather is studied from the points of view of observation, causes, and current methods of prediction. Three graduate credits. Tu., Th., 10:30, and one hour to be arranged. 26 Old Tech. Mr. Price.

172b. CLIMATOLOGY. The major climatic regions of the world. Description, explanation, and the distribution of each type. Three graduate credits. Tu., Th., S., 10:30. 26 Old Tech. Mr. Price.

Prerequisite: Geog. 69a or 60a or 60Rb or equivalent.

174a. FIELD GEOGRAPHY OF THE CINCINNATI REGION. Field trips in rural and urban areas to observe human uses and the natural landscape. Lectures and study of related material. Practice in elementary methods of field mapping. Three graduate credits. S., 8:30 to 5:00, and one hour to be arranged. Mr. Price.

Prerequisite: Geog. 60a or 60Rb or equivalent.

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

Primarily for Graduate Students

212. PETROGRAPHY. Principles of crystal optics. Rocks in thin sections; qualitative and quantitative classification. Four graduate credits each semester. M., W., 9:30; Tu., Th., 1:30-4:30. 32 Old Tech. Mr. von Schlichten.
Prerequisite: Geol. 107 or equivalent.
213. ADVANCED MEGASCOPIC PALEONTOLOGY. By permission of the instructor. Three graduate credits each semester. Two seminar-laboratory meetings per week to be arranged. 38 Old Tech. Mr. Caster.
Prerequisite: Geol. 108 or a course in zoology.
- 226a. METAMORPHISM. Changes produced in rocks by weathering and metamorphism, including microscopic examination of the minerals and internal structures of metamorphic rocks. Four graduate credits. Tu., Th., 8:30; M., F., 1:30-4:30. 32 Old Tech. Mr. Frey.
Prerequisite: Geology 212 or equivalent.
- 228a. GEOPHYSICS. A general course in practical geophysics, stressing geophysical methods used in guiding prospecting for oil and gas and for mineral deposits. The course is intended to give the geologist an understanding of geophysical maps and methods. (Omitted in 1949-50. Regularly given every other year, alternating with Geol. 226a.)
- 249b. ADVANCED CRYSTALLOGRAPHY. Crystal morphology. Systematic derivation of crystal classes on basis of symmetry. Introduction to derivation of space groups. Crystal structure of important silicate minerals. Three graduate credits. Tu., Th., S., 8:30. 32 Old Tech. Mr. von Schlichten.
Prerequisite: Geol. 107 or equivalent.
- 251b. PETROLOGY OF IGNEOUS ROCKS. Three graduate credits. (Omitted in 1949-50. Regularly given every other year, alternating with Geol. 249b.)
256. ECONOMIC GEOLOGY. Mineral fuels, useful nonmetallics, and ore deposits. Two weeks' field trip during spring recess. Four graduate credits each semester. M., W., 10:30; W., 1:30-4:30; S., 8:30-11:30. M., W., 37 Old Tech; W., S., 26 Old Tech. Mr. Rich.
Prerequisite: Geol. 212 or equivalent.
Alternates with Geol. 125a and 130b.

258. ADVANCED SEDIMENTATION. Methods of analyzing sediment samples; application of these methods to the identification and interpretation of sedimentary rocks. Three graduate credits each semester. Tu., Th., 10:30; Tu., 1:30-4:30. 34 Old Tech. Mr. Rittenhouse.
Prerequisites: Geol. 157b and 212 or their equivalents.
271. INDIVIDUAL WORK IN GEOLOGY. Credit depends on amount of work done. May be entered either semester. Geology Staff.
273. FIELD RESEARCH IN GEOLOGY. Summer work in the field under direction of the staff. One to six graduate credits.
275. INDIVIDUAL WORK IN GEOGRAPHY. Credit depends on amount of work done. May be entered either semester. Geography Staff.

Courses Omitted in 1949-50

The following courses, offered in alternate years or at longer intervals, will not be given in 1949-50: 110a, Ancient Life: Animals of the Past; 117, Physiography of North America; 125a, Structural Geology; 130b, Interpretation of Aerial Photographs; 152b, Glacial Geology; 162b, Geography of Africa; 165b, Geography of the Pacific; 227b, Groundwater; 228a, Geophysics; 251b, Petrology of Igneous Rocks.

Courses Offered in the Summer School in 1949

- *s163b. GEOGRAPHY OF EUROPE. Mr. Price.
- s273. FIELD RESEARCH IN GEOLOGY. Geology Staff.
- s275. INDIVIDUAL WORK IN GEOGRAPHY. Geography Staff.

For further information, see the Summer School Announcement.

GERMAN

Head of Department: Professor E. H. ZEYDEL, Room 505D, Teachers College; Professors LOTSPEICH, MERKEL; Assistant Professor SYRING.

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 4 and 5 in the College of Liberal Arts, or their equivalents, are required.

*Supplementary work is required of graduate students electing this course.

UNIVERSITY OF CINCINNATI
BULLETIN

ANNOUNCEMENT OF THE

*McMicken College of
Liberal Arts*



1949-1950

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

250. RESEARCH. Credit according to the amount of work elected. Departmental Staff.

Omitted during 1949-50: 6, Nineteenth-Century Poetry; 8, Studies in Shakespeare; 13, Intercollegiate Debating; 14, The English Drama from Its Beginnings to 1700; 16b, The Prose of the Romantic Period; 17, The Poetry and Drama of the Irish Literary Revival; 20, Main Currents in Literary Criticism; 24, Modern European Drama; 27, Literature of the Restoration; 28, New England Writers from Emerson to Frost; 34, English Comedy; 40, American Literature of the Twentieth Century; 41, Modern Prose; 43, Twentieth-Century Fiction; 48, Bibliography; 51, Nondramatic Poetry of the Renaissance and Seventeenth Century; 70, Milton and His Age; 80, Journalism; 99, American Romanticism; 260, Foreign Backgrounds of English Literature.

FINE ARTS

Assistant Professor MILLS (100 Wilson); Lecturer ADAMS (Art Museum).

1. (3, 3) INTRODUCTION TO ART. A study of the principles underlying the arts of sculpture and painting, and their historic implications, with special reference to the collections of the art museums of Cincinnati; collateral reading. Tu 3:50-5:00; S 9:30-11:00. The Saturday meeting will be held at the Art Museum; the Tuesday meeting, on the University campus. Mr. Adams.
2. (3, 3) MUSIC APPRECIATION. General approaches to music and musical form and expression; trends in musical art; selected musical literature. M W 2:30-4:00. 101 Wilson. Mr. Mills.

For statements regarding credit for work in the Art Academy of Cincinnati, the Cincinnati Conservatory of Music, and the College of Music of Cincinnati, see page 35.

GEOLOGY AND GEOGRAPHY

Professors RICH (*Head of Department*, 29 Old Tech), CASE (25 Old Tech), BARBOUR (510 Library), COULTER*; Associate Professors VON SCHLICHTEN (33 Old Tech), RITTENHOUSE (31 Old Tech) CASTER (2-C Old Tech); Assistant Professors CROSS (5 Old Tech), FREY (35 Old Tech); Instructors PRICE (23 Old Tech), DURRELL (1 Old Tech), BOWERS (36 Old Tech), _____; Museum Curator _____.

Fields of concentration, leading to the degree of B.A. or B.S., are offered in geology and in geography. The beginning courses in geology are planned as broad cultural surveys of the earth and its history—the processes which shape its surface and mold its

*Absent on leave.

landscapes; minerals and rocks; some of the important mineral resources; and the history of development of life as revealed by the fossil record. Geology 1 is the basic course preliminary to the advanced courses in the Department.

The beginning semester of geography (Geography 60a or 60Rb) deals with the basic principles of location, topography, weather and climate, and major vegetational and mineral resources—all desirable for further studies in geography. On its completion, the student is permitted to enter any of the other courses in geography except Geography 75.

A student wishing to major in geology shall present Geology 1, including laboratory, or its equivalent. He will then continue with Geology 7, 9, 21 (22, 23), and 50. Further courses in geology and their sequence will depend upon the plans and the interest of the student. For all students planning geology as a profession, a five- or eight-weeks' summer field course is most strongly recommended.

A student wishing to major in geography shall present Geography 60a or 60Rb, or its equivalent, Geology 1 or its equivalent, and Geography 50. Further courses in geography and their sequence will depend upon the plans and the interest of the student.

Among the nongeological courses recommended to students who will concentrate in geology are the following (preference depending in part on fields of concentration): Chemistry 1 and 2; Physics 1 and 2; Zoology 1 and 2, 5a, 7b; Botany 1 and 2, 27, 52; Geography 66 or one of the regional courses in geography; mathematics through calculus; Astronomy 1; German 1 and 1A; Economics 1; Philosophy 2.

Among the nongeographical courses recommended to students who will concentrate in geography are the following: Geology 11a, 17, 18, 30b; History 1, 2a, 10; Economics 1; Political Science 39; Botany 22, 23, 27; Sociology 3, 6, 7, 21.

Each autumn the Department conducts a three- or four-day field trip which it is expected will be attended by all advanced students in the Department.

Five-Year Co-ordinated Program in Geology. Students looking toward a *professional career* in geology are urged to follow a special co-ordinated program (described on page 34) especially designed to meet their needs, particularly if they intend to seek work involving applications of geology to the search for oil and gas, to mining, or to engineering. In this program, a student receives training in geology, the fundamentals of mathematics through calculus, chemistry through quantitative analysis, physics, mechanics, mechanical drawing, and surveying. Some of the work will be chosen from the "Degree" courses in engineering offered by the Evening College. All courses have been so scheduled as to provide a logical sequence of subjects and produce a uniformly

distributed load. A certain latitude of choice is possible, but changes should be made only after consultation with the Head of the Department of Geology. On the satisfactory completion of four years' work, the student will receive the degree of *Bachelor of Science in Geology*, and after an additional year of successful study in the Graduate School he will receive the degree of Master of Science. (See also page 34.) Students contemplating entering this course should consult in advance the Head of the Department of Geology and Geography who serves as their adviser throughout the course.

For interdepartmental programs including work in geography, see page 30.

GEOLOGY

1. (5, 5) INTRODUCTION TO GEOLOGY. This is the beginning course in geology for all who are intending to major in the subject and for all students who plan to complete the Liberal Arts science requirement with one ten-credit course. It is prerequisite to all other geology courses except Geology 7 and 10. It is not required for any geography courses, but is required of geography majors. With the permission of the instructor, students who do not offer geology in fulfillment of the science requirement may omit the laboratory. For such students, and for transfer students who may be taking only the laboratory, the lectures alone count 3 credits each semester, the laboratory alone 2 credits each semester. Lecture, M W F 8:30, 6 Old Tech; laboratory, 24, 26, Old Tech, Sec. I: M W 1:30-4:30; Secs. II and III: T Th 1:30-4:30. Mr. Durrell and assistants.
3. (3, 3) ELEMENTARY GEOLOGY. An elementary course for general students not expecting to do further work in the subject; fulfills the Liberal Arts science requirement only if taken in combination with an elementary course in another science. M W 8:30, 30 Old Tech; F 1:30-4:30, 26 Old Tech. Mr. Barbour.
7. (3, 3) MINERALOGY. Prerequisite: High-school or elementary college chemistry. T Th 10:30; M 1:30-4:30. 34 Old Tech. Mr. von Schlichten.
8. (4, 4) INVERTEBRATE PALEONTOLOGY. A systematic survey of the important groups of invertebrate fossils with special emphasis on their zoological character and importance as index fossils. Prerequisites: Geology 1 or equivalent and a course in biology, zoology, or botany. M W 11:30; T Th 1:30-4:30. 38 Old Tech. Mr. Caster.
9. (4, 4) PRINCIPLES OF HISTORICAL GEOLOGY. An introduction to the study of earth history with particular emphasis on North America. Prerequisite: Geology 1 or equivalent. T Th

8:30; W 1:30-4:30; S 8:30-11:30. 38 Old Tech. Messrs. Caster, Cross.

- 11a. (3) PRINCIPLES OF GEOMORPHOLOGY. The interpretation of landscapes, especially as governed by geologic and climatic conditions. (Alternates with Geology 17a.) Prerequisite: Geology 1 or equivalent. M 1:30-3:30; additional hours to be arranged. 26 Old Tech. Mr. Barbour.
12. (4, 4) PETROGRAPHY. Principles of crystal optics. Rocks in thin sections; qualitative and quantitative classification. Prerequisite: Geology 7 or equivalent. M W 9:30; T Th 1:30-4:30. 32 Old Tech. Mr. von Schlichten.
13. (3, 3) ADVANCED MEGASCOPIIC PALEONTOLOGY. By permission of the instructor. Prerequisite: Geology 8 or a course in zoology. Two seminar-laboratory meetings per week to be arranged. 38 Old Tech. Mr. Caster.
15. (3, 3) STRATIGRAPHY. Principles of stratigraphy and general stratigraphy of North America. Round-table seminar course with correlated field work. Prerequisite: Geology 9; 8 desirable, but not required. Three (or two) meetings a week by arrangement. 38 Old Tech. Messrs. Caster, Cross.
- 18b. (3) WORLD PHYSIOGRAPHY. Study of selected regions in geomorphic terms. (Alternates with Geology 17b.) Prerequisite: Geology 1 or equivalent. M 1:30-3:30; additional hours to be arranged. 26 Old Tech. Mr. Barbour.
- 21b, 22b, 23b. (3) GEOLOGIC DEMONSTRATION TRIPS. A two-weeks' field excursion, immediately after spring examinations and before Summer School, generally in the Appalachian highlands. Conferences once a week during the following semester and the preparation of a comprehensive report to be submitted at the end of the first semester. Special work required for graduate credit. The three numbers designate different routes followed in successive years. Prerequisite: Geology 1 or equivalent. Mr. Durrell.
- *26a. (4) METAMORPHISM. Changes produced in rocks by weathering and metamorphism, including microscopic examination of the minerals and internal structures of metamorphic rocks. Prerequisite: Geology 12 or equivalent. T Th 8:30; M F 1:30-4:30. 32 Old Tech. Mr. Frey.

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

- 48a. (3) COMMON ROCKS. Use of megascopic characteristics to identify igneous, sedimentary, and metamorphic rocks, and to interpret their conditions of origin and subsequent alteration. Prerequisites: Geology 1 and 7 or equivalents. T Th 9:30; Sec. I: F 1:30-4:30; Sec. II: M 1:30-4:30. 32 Old Tech. Mr. Rittenhouse.
- *49b. (3) ADVANCED CRYSTALLOGRAPHY. Crystal morphology. Systematic derivation of crystal classes on basis of symmetry. Introduction to derivation of space groups. Crystal structure of important silicate minerals. Prerequisite: Geology 7 or equivalent. T Th S 8:30. 32 Old Tech. Mr. von Schlichten.
56. (4, 4) ECONOMIC GEOLOGY. Mineral fuels, useful non-metallics, and ore deposits. (Alternates with Geology 25a and 30b.) Two-weeks' field trip during spring recess. Prerequisite: Geology 12 or equivalent. Lecture, M W 10:30, 37 Old Tech; laboratory, W 1:30-4:30, S 8:30-11:30, 26 Old Tech. Mr. Rich.
- 57b. (3) BASIC SEDIMENTATION. Principles governing the transportation, deposition, and subsequent alteration of sediments, with particular emphasis on the physical and chemical environments of accumulation. Prerequisites: Geology 1 and 7 or equivalents. T Th 9:30; F 1:30-4:30. 32 Old Tech. Mr. Rittenhouse.
- *58. (3, 3) ADVANCED SEDIMENTATION. Methods of analyzing sediment samples; application of these methods to the identification and interpretation of sedimentary rocks. Prerequisites: Geology 57b and 12 or equivalents. T Th 10:30; T 1:30-4:30. 34 Old Tech. Mr. Rittenhouse.
50. (3, 3) READINGS FOR SENIORS. Required of all seniors majoring in geology; not open to other students.
70. SEMINAR. Expected of all advanced students in geology and geography. No additional credit. Th 4:30.
71. INDIVIDUAL WORK IN GEOLOGY. Credit depends on amount of work done. May be entered either semester. Geology Staff.

Omitted during 1949-50: 2a, Geology of Mineral Resources; 5b, Topographic Mapping; 6, Geology of Cincinnati; 10a, Ancient Life: Animals of the Past; 17, Physiography of North America; 25a, Structural Geology; 27b, Groundwater; 28a, Geophysics; 30b, Interpretation of Aerial Photographs; 51b, Petrology of Igneous Rocks; 52b, Glacial Geology.

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