



UNIVERSITY OF CINCINNATI BULLETIN

Announcement

of



# The Graduate School

Published by the University of Cincinnati  
 Van Wormer Administration Building  
 Cincinnati, Ohio 45221

1964-1965

14-041-786. *Urban-Economic Geography: Production.* Theoretical interpretations of the changing patterns of primary, secondary, and tertiary production at varied scales. 3 gr. cr. Spring Quarter. MWF 10:00. Mr. McNee.

14-041-787. *Seminar: Geography and Economic Development.* Interpretation of differences in economic development among countries and within countries. 3 gr. cr. Winter Quarter. MWF 1:00. Mr. Roder.

14-041-792. *Seminar: Geographic Models.* The use of models in current geographic literature, particularly by McCarty, Warntz, Berry, Garrison, and Marble. 3 gr. cr. Winter Quarter. MWF 11:00. Mr. Roder.

Primarily for Graduate Students

14-041-878. *Seminar: Growth of Geographic Thought.* Detailed analyses of contemporary methodological problems. 3 gr. cr. Winter Quarter. Hours to be arranged. Mr. Cooper. Prerequisite: Geog. 678.

14-041-871. *Thesis Research.* Independent individual research in the preparation of the thesis for the M.A., M.C.P., or M.R.P. degree. Offered each Quarter. Hours and credits to be arranged. Staff.

14-041-971. *Dissertation Research.* Preparation of the Ph.D. dissertation. Offered each Quarter. Hours and credits to be arranged. Staff.

*Courses Omitted in 1964-1965:* 576, Resources Conservation; 582, Middle America; 589, Southeast Asia; 782, Historical Geography of the U. S.; 791, The Regional Concept and Area Analysis.

### Geology

Head of Department: Professor William F. Jenks (20 Old Tech); Professor Caster\* (4A Old Tech); Associate Professors Durrell (35 Old Tech), Koucky (10B Old Tech), Larsen (B11 Old Tech), Sunderman (31 Old Tech); Assistant Professors Hofmann (33 Old Tech), Huff (36 Old Tech).

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

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 recommended as preparation for graduate work chiefly in paleontology. A summer field course in geology or its equivalent, such as a summer at a marine biological station for paleontology majors, is required before admission or early in the graduate program.

Interviews and early exploratory conferences are required in order to determine the student's prior training and aptitude for advanced studies and independent research.

New laboratories for research in mineralogy, petrology, geochemistry, and sedimentology afford modern facilities for study.

The Geological Museum, in the same building, provides extensive research collections particularly with respect to the Paleozoic faunas of the Cincinnati region. The combined library of geology and geography contains more than 22,000 volumes.

\*Absent on leave, March 31-December 12, 1964.

For Advanced Undergraduate

15-040-037(-038,-039) in geology. No credit.

15-040-521(-522,-523) brate fossils. 3 gr. cr. prerequisites: Geol 101 or botany.

15-040-531(-532,-533) stratigraphic terminology. stratigraphic illustrations. Hofmann. Prerequisite: Geol 101.

\* 15-040-541(-542) Petrology. Quarters. MW 10:00-11:00.

15-040-547(-548). S. 8:00; F 8:00-11:00.

\* 15-040-574. *Glacial Geology.* Mr. Durrell.

15-040-575(or -576, or -577) discussion between spring and fall. Conferences and reports. 3 gr. cr. Autumn Quarter.

15-040-581. *Principles of Geology.* 1:00-4:00. Mr. Larsen.

15-040-582. *Petrology.* 1:00-4:00. Mr. Larsen.

15-040-583. *Petrology.* Quarter. TTh 11:00-12:00. equivalent.

15-040-641(-642). T. microscope for recording. Autumn and Winter Quarters.

15-040-675. *Geology.* 11:00. Mr. Jenks.

Primarily for Graduate Students

14-040-771. *Research.* Quarter. Staff.

14-040-774. *Regional Geology.*

14-040-801(-802,-803) structure theory, use of X-ray diffraction work. arranged. Mr. Koucky.

14-040-804(-805,-806) topics, such as crystallography. literature. 2 gr. cr.

## For Advanced Undergraduate and Graduate Students

15-040-037(-038,-039). *Geology Seminar*. Required of all graduate students majoring in geology. No credit. Tu 12:00-1:00. Staff.

15-040-521(-522,-523). *Invertebrate Paleontology*. Paleobiology of common invertebrate fossils. 3 gr. cr. each Quarter. TTh 9:30; W 1:00-4:00. Mr. Caster. Prerequisites: Geol. 101-2-3, 111-2-3, or equivalents, or a full course in biology, zoology, or botany.

15-040-531(-532,-533). *Stratigraphy*. Principles of sedimentation; lithologic analysis; stratigraphic terminology; lithologic and paleontologic correlation; facies analysis and stratigraphic illustration. 3 gr. cr. each Quarter. MW 11:00; Th 9:30-12:30. Mr. Hofmann. Prerequisite: Geol. 301-2-3, 321-2-3.

~~15-040-541(-542). *Principles of Geomorphology*. 3 gr. cr. Autumn and Winter Quarters. MW 10:00; F 1:00-4:00. Mr. Durrell.~~

15-040-547(-548). *Structural Geology*. 3 gr. cr. Autumn and Winter Quarters. MW 8:00; F 8:00-11:00. Mr. Jenks.

~~15-040-574. *Glacial Geology*. 3 gr. cr. Spring Quarter. MW 10:00; F 1:00-4:00. Mr. Durrell.~~

15-040-575(or -576, or -577). *Advanced Geology Field Trip*. A two weeks' field excursion between spring examinations and Summer School. Historical and regional geology. Conferences and report in Autumn Quarter. Each number refers to a specific route. 3 gr. cr. Autumn Quarter. Mr. Caster. Prerequisite: Permission of instructor.

15-040-581. *Principles of Petrology*. 4 gr. cr. Autumn Quarter. TTh 11:00; MF 1:00-4:00. Mr. Larsen. Prerequisite: Geol. 301-2-3 or equivalent.

15-040-582. *Petrology: Igneous Rocks*. 4 gr. cr. Winter Quarter. TTh 11:00; MF 1:00-4:00. Mr. Larsen. Prerequisite: Geol. 301-2-3 or equivalent.

15-040-583. *Petrology: Sedimentary and Metamorphic Rocks*. 4 gr. cr. Spring Quarter. TTh 11:00; MF 1:00-4:00. Mr. Larsen. Prerequisite: Geol. 301-2-3 or equivalent.

15-040-641(-642). *The Polarizing Microscope*. Crystal optics, use of the polarizing microscope for recognition of transparent substances in immersion media. 4 gr. cr. Autumn and Winter Quarters. MW 9:00; TTh 2:00-5:00. Mr. Sunderman.

15-040-675. *Geology of Ore Deposits*. 3 gr. cr. Spring Quarter. MW 8:00; F 8:00-11:00. Mr. Jenks.

## Primarily for Graduate Students

14-040-771. *Research on Special Problems*. Credit to be arranged. Offered each Quarter. Staff.

14-040-774. *Regional Tectonics*. 3 gr. cr. Winter Quarter. MWF 4:00. Mr. Jenks.

14-040-801(-802,-803). *Advanced Mineralogy*. Crystal morphology, X-ray and crystal structure theory, use of contact and optical goniometers, powder and single crystal X-ray diffraction work. 3 gr. cr. each Quarter. TTh 9:30 plus 3 laboratory hours to be arranged. Mr. Koucky.

14-040-804(-805,-806). *Seminar in Geochemistry, Mineralogy, and Petrology*. Special topics, such as crystal growth, imperfections, mineral phase equilibria; review of current literature. 2 gr. cr. each Quarter. Hours to be assigned. Messrs. Larsen, Koucky.

14-040-807(-808,-809). *Seminar in Stratigraphic Geology*. 3 gr. cr. each Quarter. TTh 8:00. Mr. Hofmann.

14-040-821(-822,-823). *Seminar in Megascopic Paleontology*. Reading knowledge of German and French desirable. By the instructor's permission. 3 gr. cr. each Quarter. MWF 9:00. Mr. Caster.

14-040-873. *Principles of Ore Deposition*. Physical and chemical processes producing economic concentration in ore deposits. 3 gr. cr. Autumn Quarter. MWF 4:00. Mr. Jenks.

14-040-874. *Universal Stage Microscope Studies*. Double variation and thin section techniques. 2 gr. cr. Spring Quarter. Hours to be arranged. Mr. Sunderman.

14-040-875. *Advanced Petrology: Igneous Rocks*. 4 gr. cr. Autumn Quarter. Mr. Larsen.

14-040-876. *Advanced Petrology: Sedimentary Rocks*. 4 gr. cr. Winter Quarter. MW 10:00; W 1:00-4:00; F 8:00-11:00. Mr. Larsen.

14-040-877. *Advanced Petrology: Metamorphic Rocks*. 4 gr. cr. Spring Quarter. MW 10:00; W 1:00-4:00; F 8:00-11:00. Mr. Larsen.

14-040-971. *Research*. By adviser's permission. Credits to be arranged. Offered each Quarter. Staff.

#### Germanic and Slavic Languages and Literatures

Head of Department: Professor Guy Stern (228 McMicken); Professor Merkel (229 McMicken); Associate Professors Pauls (639 Pharmacy), Syring (230 McMicken); Assistant Professors Rudowski (229 McMicken), Slessarev (231 McMicken).

This Department offers work leading to the degrees of Master of Arts and Doctor of Philosophy in Germanic languages and literatures. At present, no graduate work is offered leading to a degree in Slavic studies.

Students electing work in this Department should have completed an undergraduate major in German or its equivalent. All candidates for any graduate degree are required to take Germanic Languages 901-2-3, Methods and Bibliography; all candidates for the doctorate are required to take Early Germanic Philology, Old High German, and Middle High German. The successful completion of a reading course in a second Germanic language is strongly urged by the Department and will satisfy simultaneously The Graduate School's requirement of a second foreign language for the doctorate. (See page 26.)

For Advanced Undergraduate and Graduate Students

15-010-531(-532,-533). *Goethe's Lyrics*. An intensive study. 4 gr. cr. each Quarter. M 2:00-4:00. Mrs. Slessarev.

14-010-701(-702,-703). *The Literary Works of Bertold Brecht*. 4 gr. cr. each Quarter. MW 4:00-5:30. Mr. Stern.

Primarily for Graduate Students

14-010-804(-805,-806). *Early German*. Spring Quarter: Old High German; Summer Quarter: Middle High German. M 4:00-6:00. Mr. Merkel.

14-010-821(-822,-823). *Studies in Old German*. Spring Quarter: Old High German; Winter Quarter: Hebbel's *Die Nibelungen*. 3 gr. cr. each Quarter. F 4:00-6:00.

14-010-901(-902,-903). *Methodology in Germanic Linguistics*. Slessarev.

14-010-971. *Research*. Credits to be arranged. Staff.

*Courses Omitted in 1964-1965*: Advanced Stylistics. (These and other offerings are given on a

Language Training Courses

14-010-001(-002,-003). *German*. To acquire a reading knowledge of German. 3 gr. cr. per Quarter. W 4:30-6:30.

14-017-001(-002,-003). *Russian*. To acquire a reading knowledge of Russian. 3 gr. cr. per Quarter. M 4:00-6:00.

Head of Department: Professor Bradeen (616 Library), English; Professor Vogel (357 McMicken), Old High German; Professor Harlan (334 McMicken), Latin; Professor Pauls (639 Pharmacy), Slavic; Assistant Professors Rudowski (229 McMicken), Kafker (336 McMicken), V.

This Department offers work leading to the degrees of Master of Arts and Doctor of Philosophy in Germanic languages and literatures, and in social sciences, and in

A candidate for the degree of Master of Arts in Germanic languages and literatures must complete work in one of the six fields of Germanic languages and literatures, British, or American history. The successful completion of a reading course in a second Germanic language will be fulfilled in one academic year.

The degree of Doctor of Philosophy in Germanic languages and literatures is a full-time graduate study. A candidate must choose as a minor one of the following: Byzantine, Modern European, or American history. Minors from within the field of knowledge besides Germanic languages and literatures must take two foreign languages, and the candidate will take written

\* Absent on leave, January

Spring Vacation

Mon.-Sat., Mar. 22-27

\*Additional calendar items relating to a specific college schedule will be found in Part 2 of the *Bulletin* of that college.

Summer Commencement  
Summer Vacation

Sat., Aug. 28  
Mon., Aug. 30—Sat., Oct.

Calendars of the Evening College and the Summer School will be found in those *Bulletins*.

UNIVERSITY OF CINCINNATI

Announcement

of



# *McMicken College of Arts and Sciences*

Published by the University of Cincinnati  
Van Wormer Administration Building  
Cincinnati, Ohio 45221

1964-1965

## Geology

Professors Jenks (Head of Department, 20 Old Tech), Caster\* (4A Old Tech); Associate Professors Durrell (35 Old Tech), Koucky (B10 Old Tech), Larsen (B11 Old Tech), Sunderman (31 Old Tech); Assistant Professors Hofmann (33 Old Tech), Huff (36 Old Tech).

The student may choose a concentration leading to the B.A. or B.S. in geology.

Geology 101-2-3 and 111-2-3 taken together are preliminary to all advanced courses in geology except 301-2-3 and 521-2-3. Students who have completed 104-5-6 and wish to major in geology must take 111-2-3.

To qualify for the B.A. degree in geology a student shall have completed Geol. 037-8-9, 301-2-3, 281 (or 282 or 283), 321-2-3, 437-8, and 9 additional credits in geology, plus at least 27 credits in three of the following disciplines: chemistry, physics, zoology, botany, and mathematics.

To qualify for the B.S. degree with a major in geology a student shall include in his program Geol. 037-8-9, 301-2-3, 281 (or 282 or 283), 321-2-3, 437-8-9; Chem. 101-2-3, 112-3, 9 to 14 credits of Calculus and 9 to 15 credits of physics or zoology. In addition to the basic core of geology courses listed above, 18 credits in advanced courses in geology must be elected. A reading knowledge of German, French, or Russian is required prior to the senior year.

Both the B.A. and the B.S. majors may lead to graduate work in geology, usually considered essential for a professional career. A properly planned program may lead to the M.S. degree one year after obtaining the B.S. Typical programs may be obtained from the adviser.

For all B.S. candidates and all students planning geology as a profession, a six to eight weeks' summer field course or its equivalent is required. Alternative acceptable field training may be obtained by summer work at a marine biological station or with one of the geological surveys, or by summer field employment by a mining or oil company, with the approval of the adviser.

Each autumn all students majoring in geology are expected to attend a four-day field trip and should anticipate the cost, about \$35.

**15-040-101, 102, 103. Introduction to Geology.** Corequisite: Geol. 111-2-3 with which it satisfies the science requirement. Geol. 101-2-3 may be taken alone only with the instructor's permission. 3 ug. cr. ea. Qtr. MWF 8:00. Mr. Durrell.

**15-040-111, 112, 113. Introduction to Geology Laboratory.** A laboratory course to accompany 101-2-3. 2 ug. cr. ea. Qtr. Sections I, MW 1:00-4:00; II, TTh 2:00-5:00. Mr. Durrell and assistants.

**15-040-104, 105, 106. General Geology.** An elementary course for general students and teachers not expecting to major in earth sciences. Designed to fulfill the science requirements when taken with an elementary course in another science. 3 ug. cr. ea. Qtr. Lecture, TTh 8:00; laboratory, Sections I, M 1:00-4:00; II, W 1:00-4:00; III, F 1:00-4:00. Mr. Huff.

**15-040-171. Geology of the Cincinnati Region.** A Saturday field course to introduce students or teachers not expecting to do further work in earth sciences to the geology of the Greater Cincinnati area. 2 ug. cr. Autumn Quarter. W 4:00-6:00; S 9:00-4:00. Staff.

\*Absent on leave, March 31-December 12, 1964.

15-040-283. *Geologic Demonstration Trip*. A two weeks' field excursion south to Tennessee and Georgia at a time arranged by instructor during September 1964. One-hour conference weekly during the Autumn Quarter and a report to be submitted at the end of the Quarter. (Alternates with Geol. 281, Eastern trip, and 282, Northern trip.) 3 ug. cr. Autumn Quarter. Conferences, M 10:00. Mr. Koucky.

15-040-301, 302, 303. *Mineralogy*. Crystallography, crystal chemistry, atomic structures, geochemistry, and systematics of the common minerals. Prerequisite: College chemistry or permission of instructor. 3 ug. cr. ea. Qtr. TTh 11:00; Th 2:00-5:00. Mr. Koucky.

✓ 15-040-321, 322, 323. *Historical Geology*. The physical and biological history of the earth with particular emphasis on North America. 4 ug. cr. ea. Qtr. TTh 8:00; Tu 2:00-5:00; S 9:00-12:00. Mr. Caster and Staff.

15-040-437, 438, 439. *Readings for Seniors*. Required for seniors majoring in geology; not open to other students. 2 ug. cr. ea. Qtr. Senior thesis to be written in Spring Quarter.

15-040-479. *Common Rocks*. Hand specimen lithology and the genesis and alteration of rocks. Prerequisite: Geol. 301-2-3 or equivalent. 3 ug. cr. Spring Quarter. MW 9:00; Th 2:00-5:00. Mr. Sunderman.

15-040-487, 488, 489. *Individual Work in Geology*. Credit depends on amount of work done. May be entered any Quarter. Staff.

15-040-037, 038, 039. *Geology Seminar*. Required of all juniors and seniors majoring in geology. No credit. Th 12:00. Staff.

15-040-521, 522, 523. *Invertebrate Paleontology*. Paleobiology of common invertebrate fossils. Prerequisite: Geol. 101-2-3, Geol. 111-2-3 or equivalents, or a full course in biology, zoology, or botany. 3 ug. cr. ea. Qtr. TTh 9:30; W 1:00-4:00. Mr. Caster and Staff.

✓ 15-040-531, 532, 533. *Stratigraphy*. Principles of sedimentation; lithologic analysis; stratigraphic terminology; lithologic and paleontologic correlation; facies analysis and stratigraphic illustration. Prerequisite: Geol. 301-2-3, 321-2-3. 3 ug. cr. ea. Qtr. MW 11:00, Th 9:30-12:30. Mr. Hofmann.

15-040-541, 542. *Principles of Geomorphology*. 3 ug. cr. ea. Qtr. Autumn and Winter Quarters. MW 10:00; F 1:00-4:00. Mr. Durrell.

15-040-547, 548. *Structural Geology*. 3 ug. cr. Autumn and Winter Quarters. MW 8:00; F 8:00-11:00. Mr. Jenks.

15-040-574. *Glacial Geology*. 3 ug. cr. Spring Quarter. MW 10:00; F 1:00-4:00. Mr. Durrell.

15-040-575, 576, 577. *Advanced Geology Field Trip*. A two weeks' field excursion between spring examinations and Summer School. Historical and regional geology. Prerequisite: Permission of instructor. 3 ug. cr. Autumn Quarter. Staff.

15-040-581. *Principles of Petrology*. Prerequisite: Geol. 301-2-3 or equivalent. 4 ug. cr. Autumn Quarter. TTh 11:00; MF 1:00-4:00. Mr. Larsen.

15-040-582. *Petrology: Igneous Rocks*. Prerequisite: Geol. 301-2-3 or equivalent. 4 ug. cr. Winter Quarter. TTh 11:00; MF 1:00-4:00. Mr. Larsen.

15-040-583. *Petrology: Sedimentary and Metamorphic Rocks*. Prerequisite: Geol. 301-2-3 or equivalent. 4 ug. cr. Spring Quarter. TTh 11:00; MF 1:00-4:00. Mr. Larsen.

15-040-675. *Geology*. 11:00. Mr. Jenks.

15-040-641, 642. *The*. prerequisite: Geol. 301- Winter Quarters. M

Professors Stern (He Associate Professor McMicken), H. Slessa

German 101-2-3, 10 German. German of the requirement t

All courses in at the beginning of t

15-001-221, 222, 223.

*Note:* The language taking a nonelement per week), followed fillment of the requir is placed on the acc 104-5-6 (5 hours pe requires one year of versational skill in G

A placement first time who elect dents will take the la

15-010-101, 102, 103. 204-5-6, will satisfy th 9:00; MWF 10:00; N

15-010-104, 105, 106. the language require MTWThF 11:00. St

15-010-201, 202, 203. German literature, w completed German 10 have successfully con the B.S. degree or as 1:00; TTh 8:00-9:30.

15-040-675. *Geology of Ore Deposits*. 3 ug. cr. Spring Quarter. MW 8:00, F 8:00-11:00. Mr. Jenks.

15-040-641, 642. *The Polarizing Microscope*. Crystal optics, use of the polarizing microscope for recognition of transparent substances in immersion media. Prerequisite: Geol. 301-2-3 or permission of the instructor. 4 ug. cr. Autumn and Winter Quarters. MW 9:00; TTh 2:00-5:00. Mr. Sunderman.

### Germanic Languages and Literatures

Professors Stern (Head of Department, 228 McMicken), Merkel (229 McMicken); Associate Professor Syring (230 McMicken); Assistant Professors Rudowski (229 McMicken), H. Slessarev (231 McMicken).

German 101-2-3, 104-5-6, 201-2-3, and 204-5-6 will not count toward a major in German. German 231-2-3, 401-2-3, 437-8-9 and 501-2-3 shall be offered as a part of the requirement toward a major in German.

All courses in German, except Senior Readings (437-8-9), may be entered at the beginning of the Winter or Spring Quarter, with the instructor's permission.

15-001-221, 222, 223. *Modes of Literature*. For description, see page 39.

### German

*Note:* The language requirement may be satisfied in *one of three ways*. (1) By taking a nonelementary course (9 credits). (2) By taking German 101-2-3 (3 hours per week), followed by German 201-2-3 or 204-5-6 (3 hours per week). The fulfillment of the requirement in this manner requires *two years* of study; the emphasis is placed on the acquisition of *reading skill* in German. (3) By taking German 104-5-6 (5 hours per week). The fulfillment of the requirement in this manner requires *one year* of study; the emphasis is placed upon the acquisition of *conversational skill* in German.

A placement test is required of all students entering the University for the first time who elect courses in a modern foreign language begun elsewhere. Students will take the language courses indicated by their test scores.

15-010-101, 102, 103. *Elementary German*. This course followed by either 201-2-3 or 204-5-6, will satisfy the language requirement. 3 ug. cr. ea. Qtr. MWF 8:00; MWF 9:00; MWF 10:00; MWF 12:00; MWF 1:00; TTh 8:00-9:30. Staff.

15-010-104, 105, 106. *Elementary German with Conversation*. This course will satisfy the language requirement. 5 ug. cr. ea. Qtr. MTWThF 8:00; MTWThF 10:00; MTWThF 11:00. Staff.

15-010-201, 202, 203. *Intermediate German: General Readings*. Simple readings in German literature, with grammar review. Open to students who have successfully completed German 101-2-3 or who have had two years of high-school German or who have successfully completed German 104-5-6 (either to fulfill the B4 requirement for the B.S. degree or as an elective). 3 ug. cr. ea. Qtr. MWF 8:00; MWF 9:00; MWF 1:00; TTh 8:00-9:30. Staff.