

Term Information

Effective Term Spring 2023

General Information

Course Bulletin Listing/Subject Area Earth Sciences
Fiscal Unit/Academic Org School of Earth Sciences - D0656
College/Academic Group Arts and Sciences
Level/Career Graduate
Course Number/Catalog 6650
Course Title How Rock, Ice, and Water Shaped Ohio
Transcript Abbreviation RockIceWaterOhio
Course Description We will explore the imprints of ancient oceans, colliding continents, flowing ice, and surging meltwater on Ohio's landscape. We will also investigate how Ohio's geologic past impacts its current environment. The course will consist of a series of field trips, from a few hours to two days in length. Students will research and present on chosen aspects of Ohio's natural history.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Sometimes
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites graduate standing
Exclusions
Electronically Enforced No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 40.0601
Subsidy Level Doctoral Course
Intended Rank Masters, Doctoral

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- The objectives of the course are to gain an understanding of:
 - (1) the geological history of Ohio, including the time periods represented by the rock record and their respective depositional environments,
 - (2) the landforms associated with advance and retreat of the Pleistocene ice sheets, and
 - (3) how Ohio's geologic history impacts its present-day environment and development.

Content Topic List

- Field Trip: Columbus Ravines & Waterfalls
Field Trip: Rocky Fork Creek
Field Trip: Lobdell Creek & Black Hand Gorge
Kelley's Island Overnight
Field Trip: Pickerington Ponds, Chestnut Ridge & Shallenberger SNP
- Field Trip: Oakes Quarry & Clifton Gorge
Field Trip: Mohican State Park
Hocking Hills Day Trip
ODNR Visit/Mini-Symposium
Student Presentations

Sought Concurrence

No

Attachments

- OhoGradFieldCourseSyllabus[20].docx: syllabus
(Syllabus. Owner: Panero, Wendy R)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Panero, Wendy R	09/01/2022 02:27 PM	Submitted for Approval
Approved	Panero, Wendy R	09/01/2022 02:28 PM	Unit Approval
Approved	Vankeerbergen, Bernadette Chantal	09/14/2022 11:56 AM	College Approval
Pending Approval	Cody, Emily Kathryn Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Hilty, Michael Vankeerbergen, Bernadette Chantal Steele, Rachel Lea	09/14/2022 11:56 AM	ASCCAO Approval

Proposed Syllabus for Earth Sciences 6650: How Rock, Ice and Water Shaped Ohio

Log on to carmen.osu.edu for course material and announcements.

Instructor: Prof. Ian Howat

Office: 119 Scott Hall (Byrd Center)

Email: howat.4@osu.edu

Office Hours: By appointment

Course Meeting Time and Place:

Mo 1:50PM - 4:50PM, Various Locations

Format of Instruction: Field experiences, background reading and presenting, discussion, research project and presentation, 3 Credit Hours per week

Course Description: We will explore the imprints of ancient oceans, colliding continents, flowing ice, and surging meltwater on Ohio's landscape. We will also investigate how Ohio's geologic past impacts its current environment. The course will consist of a series of field trips, from a few hours to two days in length. Students will research and present on chosen aspects of Ohio's natural history. The objectives of the course are to gain an understanding of:

- (1) the geological history of Ohio, including the time periods represented by the rock record and their respective depositional environments,
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- (3) how Ohio's geologic history impacts its present-day environment and development.

Texts: Weekly background readings from a variety of sources. These will be made available via Carmen.

Workload and Assignments: Class meetings or required field trips equivalent to three hours per week, including one, one-day and one, two-day (overnight) trip on weekends/vacation days. Class will not meet in the weeks prior to the weekend and fully day excursions. Students should expect an additional five hours per week for reading papers and preparation for presentation and discussion of material. Student presentations will occur during the last two weeks of the semester.

Grading:

Class/field trip attendance	33%
Active participation in discussions (preparation and discussion)	33%
Research Topic Presentation	33%

Grading Scale:

A (93 - 100), A- (90 - 92.9), B+ (87 - 89.9), B (83 - 86.9), B- (80 - 82.9), C+ (77 - 79.9), C (73 - 76.9), C- (70 - 72.9), D+ (67 - 69.9), D (60 - 66.9), E (< 60)

Course Outline and Expectations:

Students will be expected to attend all class meetings/excursions and to have completed the assigned reading beforehand. During these meetings, students will participate in discussions. Students who are unable to attend a class meeting/excursion due to illness or other excused absence will complete an alternative assignment, such as a report on a topic related to the field site.

Students will choose (with instructor guidance) a topic related to Ohio's geology, natural history and/or environment that they will research and present to the rest of the class. Students will meet individually with the instructor several times throughout the semester for guidance. Students will submit a one to two paragraph abstract of their presentation in the eleventh week of the class.

Presentations should be twenty minutes in length and include (1) a statement of the science question and its rationale, (2) a review of studies aimed at addressing this question, including their methodology, results and uncertainty, and (3) a concluding summary with a statement of the current state of knowledge, including remaining gaps. The presenter will then guide a class discussion of the topic.

OSU Statement on Academic Misconduct

"It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>."

OSU Statement on Disability Services

"Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, slds@osu.edu; slds.osu.edu."

Note that this course involves walking on uneven surfaces (i.e. rocky trails, stream beds) for distances of up to one mile.

Students with mobility limitations are encouraged to contact the

instructor as soon as possible to make alternative arrangements, including use of adaptive equipment, to enable full participation in the course.

OSU Statement on sexual misconduct/relationship violence:

“Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu”

OSU Statement on diversity:

“The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.”

Week	Activity	Readings
1	Introduction	Carman 1948 Goldthwait 1959 Mickelson 2003 ODNR Glacial Geology Brochure
2	Field Trip: Columbus Ravines & Waterfalls	FLOW Report Geology of High Banks Metro Park
3	Field Trip: Rocky Fork Creek	Frolking 1998 Angle 1995 Weatherington-Rice 2006 BRPC Field Trip Guide
4	Field Trip: Lobdell Creek & Black Hand Gorge	Geology of Lobdell Reserve Geology of Black Hand Gorge Frolking 2006
5	No Meeting (Prepare for field trip)	
6	Kelley's Island Overnight	Kelleys Island Field Guide The Geology of Kelleys Island Goldthwait 1979 Whillans 1979 Munro-Stasiuk 2005
7	Field Trip: Pickerington Ponds, Chestnut Ridge & Shallenberger SNP	Geology of Chestnut Ridge
8	Field Trip: Oakes Quarry & Clifton Gorge	Geology of Clifton Gorge Shumacher 2012 Gallagher Fen Leaflet
9	Field Trip: Mohican State Park	Geology of the Mohican State Park Region
10	No Meeting (Prepare for field trip)	
11	Hocking Hills Day Trip	Geology of the Hocking Hills State Park Region
12	ODNR Visit/Mini-Symposium	Background readings supplied by ODNR
13	Student Presentations	Presentation Abstracts
14	Student Presentations	Presentation Abstracts

