

Term Information

Effective Term Spring 2020

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 Undergraduate
Course Number/Catalog 1200
Course Title Introduction to Earth Science Laboratory
Transcript Abbreviation Intro EarthSc Lab
Course Description Laboratory application of basic earth sciences principles to the identification and categorization of rocks and minerals, use and construction of maps to solve geological problems, and analysis of Earth's physical processes.
Semester Credit Hours/Units Fixed: 1

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 Laboratory
Grade Roster Component Laboratory
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus, Lima, Mansfield, Marion, Newark

Prerequisites and Exclusions

Prerequisites/Corequisites Prereq or concur: EARTHSC 1105 OR 1108 OR 1151 OR 2203 OR 2205 OR 2206 or 2206(S)
Exclusions EARTHSC 1100, 1121, 1122
Electronically Enforced Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 40.0601
Subsidy Level Baccalaureate Course
Intended Rank Freshman, Sophomore, Junior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

Course Details

Course goals or learning objectives/outcomes

- Introduction to basic earth science skills, including
 - (1) the identification and categorization of rocks and minerals,
 - (2) use and construction of maps to solve geological problems,
 - (3) analysis of Earth's physical processes.

Content Topic List

- Identification and Classification of Minerals
- Identification and Classification of Igneous Rocks
- Identification and Classification of Metamorphic Rocks
- Identification and Classification of Sedimentary Rocks
- Plate Tectonics and mapping
- Age dating of materials
- Groundwater, streams, and flooding
- Methods in paleoclimatic reconstructions

Sought Concurrence

No

Attachments

- EARTHSC1200 Syllabus.pdf: syllabus

(Syllabus. Owner: Panero,Wendy R)

Comments

- The course is part of our BS curriculum revision (to be submitted 8/30), to permit a broader list of options for the major preparation; this course will give students the necessary introductory lab experience not available in lecture-only introductory courses.

EarthSc 2206(S) will be proposed at the same time. *(by Panero,Wendy R on 08/26/2019 12:38 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Panero,Wendy R	08/26/2019 12:38 PM	Submitted for Approval
Approved	Panero,Wendy R	08/26/2019 12:39 PM	Unit Approval
Approved	Haddad,Deborah Moore	08/26/2019 12:57 PM	College Approval
Pending Approval	Vankeerbergen,Bernadette Chantal Oldroyd,Shelby Quinn Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler	08/26/2019 12:57 PM	ASCCAO Approval

EARTHSCI 1200 Introduction to Earth Science Lab Syllabus

Semester YEAR

Instructor: NAME

Email: EMAIL.#

Mailbox: Mendenhall 275

Office: Office ###

Office Hours: Time, Day

Required: “Exercises for EARTH SCIENCES”, Hayden-McNeil Publishing (ISBN 978-0-7380-7955-4); Scientific Calculator, pencil and eraser, notebook paper.

“An Introduction to Geology,” Johnson et al., 2017: <http://opengeology.org/textbook/>

Meeting: Once a week, 110 minutes

Course goals and learning objectives:

Students will demonstrate competency in the hands-on aspects of basic earth sciences principles, including

- (1) the identification and categorization of rocks and minerals,
- (2) use and construction of maps to solve geological problems,
- (3) analysis of Earth's physical processes.

This course is designed to provide hands on experience with geologic materials and modern geological methods as a complement to Earth Sciences 1105, 1108, 1151, 2203, 2204, 2205, and 2206.

Grading:

Grading weights

5% lab quizzes

95% lab assignments, equally weighted

Extra Credit

Up to 5% on each lab assignment, for the weekly “What is this rock?” bonus.

Grading Scale

100-93% **A**; 92-90% **A-**; 89-87% **B+**; 86-83% **B**; 82-80% **B-**; 79-77% **C+**; 76-73% **C**; 72-70% **C-**

Lab meetings: Each week will follow the same pattern: a 5-minute quiz to assess your preparation for the week’s lab, a 10-20 minute introductory lecture on the background material and process for the lab, and then at least 85 minutes to complete the laboratory assignment before the end of the period.

Quizzes:

- Each meeting will begin with a brief quiz on the introductory material for each lab assignment. Be certain to allow at least 30-60 minutes to read this material carefully before lab.
- You will not be tested on the gritty details, which we expect you to learn during the activity—focus on answering the question, “What will I do in lab and why?”

Due Dates and Late Assignments:

- Lab assignments are due at the end of your scheduled lab period. Late assignments will not be accepted.
- All work will be graded; **the two lowest weekly lab assignment grades for the semester will be dropped.**

Attendance:

- Attendance will be taken at each lab.

Make-Up Labs:

- Your attendance is expected and required at every assigned lab session and **no make-up labs** will be scheduled.

General Rules:

- **Show courtesy and respect** to your instructor and lab mates.
- Students must either tear out lab book sheets or bring photocopies. Labs completed on loose-leaf paper **will not be accepted**. Do not come to class with completed labs or pre-marked labs.
- Working in groups will be common in this course, but **turn in individual work and ideas**. Plagiarism and cheating (e.g. copying answers) will not be tolerated and will be handled according to OSU's academic misconduct policy.
- When a question prompts you to show work, **you must show your work** and use **proper units** to get full credit for problem. Be thorough—show your entire process in a way that is **COHESIVE** and **NEATLY WRITTEN**. Indicate final answers by boxing in answer.
- Students are responsible for keeping track of their own grades and should retain graded labs until final grades received.
- Students with disabilities: please notify the lab instructor of recommended accommodations as soon as possible.

What I expect of you:

- Communicate issues (scheduling, struggles with coursework, disability, family emergency, etc.) in a *timely manner*
- **ASK QUESTIONS**...these labs fit a lot of content into a short lab period. If you are stuck on a question, ask for help sooner rather than later so you will finish the lab on time.
- Treat your classmates and instructor with respect—there is no tolerance for hate or discrimination in this classroom and any instances of this will be reported to disciplinary councils.

Lab Schedule:

Week of...	Lab Name (Found in Lab manual)	Preparatory Reading
Jan 7 th	Exercise 1: Introduction to Geosciences + Orton Hall field trip	Introduction to Geology: Chapter 1 & the lab assignment
Jan 14 th	Exercise 6: Absolute and Relative Dating	Introduction to Geology: Chapter 7 & the lab assignment
Jan 21 st	No labs	
Jan 28 th	Exercise 4: Plate Boundaries	Introduction to Geology: Chapter 2 & the lab assignment
Feb 4 th	Exercise 12: Earthquakes	Introduction to Geology: Chapter 9 & the lab assignment
Feb 11 th	Exercise 5: Volcanoes and Hotspots	Introduction to Geology: Chapter 4 & the lab assignment
Feb 18 th	Exercise 2: Minerals	Introduction to Geology: Chapter 3 & the lab assignment

Feb 25th	Rock Identification: <u><i>Igneous Rocks</i></u>	Introduction to Geology: Chapter 4
Mar 4th	Rock Identification: <u><i>Sedimentary Rocks</i></u>	Introduction to Geology: Chapter 5
Mar 11th	No labs	
Mar 18th	Rock Identification: <u><i>Metamorphic Rocks</i></u>	Introduction to Geology: Chapter 6
Mar 25th	Exercise 7: Topographic Maps	The lab assignment
Apr 1st	Exercise 11: Paleoclimate	Introduction to Geology: Chapter 15 & the lab assignment
Apr 8th	Exercise 10: Water History of the South Oval	Introduction to Geology: Chapter 11 & the lab assignment
Apr 15th	Exercise 8: Streams and Flooding	Introduction to Geology: Chapter 11 & the lab assignment

Disability Services

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W.

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/>.

Student Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student’s ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life’s Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling [614-292-5766](tel:614-292-5766). CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at [614-292-5766](tel:614-292-5766) and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Statement on Harassment

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, Kellie Brennan, at titleix@osu.edu

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.