Earth Science 100: Introduction to the Earth

Credits: 3.0 CRN: 592 Section: 01 Lecture meets MWF, 9:00-9:50 a.m., 121 Science 1 Building Prerequisites: None. Gen Ed 2: Satisfies LA and N2

Instructor

Dr. Les Hasbargen Office: 219 Science Building Ph.: 607-436-2741 Email: Leslie.Hasbargen@oneonta.edu Office hours: MWF 10:00-10:50 a.m. Instructor's web site: <u>http://employees.oneonta.edu/hasbarle/index.html</u>

Textbook and Learning Resources

- **Textbook** (*required*): Essentials of Geology, by Stephen Marshak, 4th Edition, W. W. Norton & Company, Inc. ISBN 0-393-91939-4. The Geotours Workbook (often packaged with the textbook) is not required for the course. I will allow students to purchase the ebook version of the textbook online at <u>www.NortonEbooks.com</u> for a substantial discount.
- TopHat Account, in class student response system (optional). Use this link to get an account set up: <u>https://s3.amazonaws.com/thm-</u> <u>corporate/Support/Guides/Student+Quick+Start+Guide+%28S2013%29.pdf</u>. Students who use TopHat in class to answer questions receive extra credit. See below under grading for details.
- Angel (<u>https://angel.oneonta.edu/</u>) is used extensively in this course to transmit information such as the syllabus and lecture schedule, lecture notes, and quizzes. You will use your SUNY Oneonta email ID and password to access course information on Angel.

Course Description ESCI 100 Introduction to the Earth 3 s.h.

- An introduction to the earth sciences; concepts developed in astronomy, geology, geophysics, meteorology, and oceanography. Lecture only. Credit cannot be applied toward science requirement in any science major in Liberal Arts or Secondary Education. Students who have had high school earth science should consider other introductory earth science classes. (LA, N2)
- *SUNY Learning Outcome for N2* "Students will demonstrate understanding of the methods scientists use to explore natural phenomena including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical analysis. Students will demonstrate application of scientific data, concepts, and models in one of the natural sciences."

Course Overview

Welcome to Earth Science! This course serves as an introduction to processes that operate within the Earth and on Earth's surface, and the rocks that give us the story of such interactions. The course will focus on Earth's crust, earthquakes, volcanoes,

landslides, floods, and coasts, and emphasize the interactions of human society with the natural environment. Bring your curiosity, bring your questions, and come prepared to learn!

Course Goals/Objectives The primary goals of the course are 1) to provide students with an awareness and basic understanding of Earth's geological systems and how these systems interact with human activities, and 2) an understanding of the process of scientific inquiry.

Grading

Grades will be based on midterm exams, online quizzes, and a final exam.

- *Exams*. There will 3 midterm exams and 1 cumulative final exam in this course. Exam questions will consist of multiple-choice, short answer, and true-false questions. There will be roughly 50-60 questions on the midterm exams, and roughly 120 questions on the final. If you anticipate missing an exam, **you must contact the instructor before the date of the exam**. Suitable reasons for absence include serious illness, a death in the family, or a personal tragedy. See the Undergraduate Catalog for excusable absences. A make-up exam will be provided at an alternative time.
- Quizzes. There will weekly quizzes during the course administered online through Angel. The questions will be multiple-choice and true-false. Each quiz will usually have ~10-20 questions, and be available to take for credit for 1 week. There are no makeups for missed quizzes. The quizzes are designed to help you learn content, as well as introduce you to the way that your instructor frames questions. Because the goal of these quizzes is to help you learn (and we often learn best by making mistakes!!), you can take the quiz as often as you like until you get a score you are happy with. Students will have around 10-15 minutes to take the quiz. The times in which to take the quiz for credit will be posted on Angel.
- *Extra Credit*. You can gain up to 5% toward your course percentage by using a student response system during class. You will need to purchase an account with TopHat. You can use a laptop, smart phone, or text messaging device to answer queries from the instructor during lectures. The amount of extra credit you earn depends on how often you respond to questions, and how well you answer the questions, in class.

Here's the breakdown on grading:

- 10% Quizzes (about 10)
- 60% Midterm Exams (3)
- <u>30%</u> Final exam (1)

100%

Note that the Final Exam is cumulative, and receives significant weight toward your course grade. The philosophy behind this is that your other grades won't hurt you as much, and thus you are not penalized as much for wrong answers. By the final, you should have learned from your mistakes!! Final grade assignments will be guided by the standard University curve given below.

Percent	Grade	Percent	Grade	Percent	Grade	Percent	Grade
93-100	А	87-89.9	B+	77-79.9	C+	67-69.9	D+
90-92.9	A-	83-86.9	В	73-76.9	С	63-66.9	D
< 60	F	80-82.9	B-	70-72.9	C-	60-62.9	D-

Optional Field Trip

There will be an optional field trip for the interested on Saturday, October 12. The trip will take ~8 hours, and will explore evidence of past environments displayed in the beautiful landscapes in the area. More info on this trip will be provided as the date for the trip draws close. The University will supply transportation. Bring lunch, camera, notebook, sturdy hiking shoes, rain jacket, snacks, and water.

Week	Monday	Wednesday	ne is required). Friday			
		v	•			
8/26 to 8/30	No Class	Course Overview	Tectonics, Ch. 1-2			
9/2 to 9/6	Plate Tectonics	Plate Tectonics	Plate Tectonics			
9/9 to 9/13	Earthquakes, Ch. 8	Earthquakes	Earthquakes			
9/16 to 9/20	Earthquakes	Earthquakes	Tsunamis, Ch. 8			
9/23 to 9/27	Tsunamis	Review for Exam	Exam 1			
9/30 to 10/4	Igneous Rocks	Igneous Rocks	Volcanoes, Ch. 5			
10/7 to 10/11	Volcanoes	Volcanoes	Volcanoes			
SATURDAY, OCTOBER 12; OPTIONAL FIELD TRIP						
10/14 to 10/18	Mountains, Ch. 9	NO CLASS	NO CLASS			
10/21 to 10/25	Mountains	Mountains	Review for Exam			
10/28 to 11/1	Exam 2	Rivers: Flood Movie	Rivers, Ch. 14			
11/4 to 11/8	Rivers	Sed. Rocks, Ch. 6	Sed. Rocks			
11/11 to 11/15	Sed. Rocks	Landslides, Ch. 13	Landslides			
11/18 to 11/22	Landslides	Landslides	Coasts, Ch. 15			
11/25 to 11/29	NO CLASS	NO CLASS	NO CLASS			
12/2 to 12/6	Coasts	Coasts	Review for Exam			
12/9 to 12/13	Exam 3	Plate Tectonics recap	Review for Final			
12/16-12/20		12/18, Wed., Final Exam, 8-10:30				

Lecture Schedule (this schedule is subject to change if more time is required).

College Calendar Fall 2013

August 25-27 Sunday-Tuesday		New Student Arrival & Orientation		
August 28	Wednesday	Classes Begin		
October 15	Tuesday	College Closes After Last Class		
October 21	Monday	Classes Resume		
November 22	Friday	College Closes After Last Class		
December 2	Monday	Classes Resume		
December 8	Sunday	December Recognition		
December 16-20 Monday-Friday		Finals		

Date and Time	Monday Dec 16	Tuesday Dec 17	Wednesday Dec 18	Thursday Dec 19	Friday Dec 20
8:00am- 10:30am	10 MWF	10 Tu Th	9 MWF	8:30 Tu Th	8 MWF
11:00am- 1:30pm	12 MWF	2:30 Tu Th	11 MWF	1 Tu Th	2 MWF
2:00pm- 4:30pm	1 MWF	11:30 Tu Th	4 MW	4 Tu Th	3 MWF

Final Exam Week Class Schedule December 16 - 20, 2013

Emergency Evacuation/Shelter-in-Place Procedures

In the event of an emergency evacuation (i.e. fire or other emergency), classes meeting in IRC are directed to **reassemble at the Fine Arts Building** so that all persons can be accounted for. Complete details of the College's emergency evacuation, shelter-in-place, and other emergency procedures can be found at <u>http://www.oneonta.edu/security</u>.

ADA (Americans With Disabilities Act) Statement

All individuals who are diagnosed with a disability are protected under the Americans with Disabilities Act, and Section 504 of the Rehabilitation Act of 1973. As such, you may be entitled to certain accommodations within this class. If you are diagnosed with a disability, please make an appointment to meet with Student Disability Services (SDS), 209 Alumni Hall, ext. 2137. All students with the necessary supporting documentation will be provided appropriate accommodations as determined by the SDS Office. It is your responsibility to contact SDS and provide the teacher with your accommodation plan before a test.

Policy on Academic Dishonesty

Academic dishonesty results in a loss of trust and open-ness which is the heart and soul of student-mentor relations, and indeed, of learning and discovery. Plagiarism and cheating will not be tolerated in this course. Please see the Code of Student Conduct for definitions and repercussions of Academic Dishonesty (http://www.oneonta.edu/development/judicial/code.pdf).

Course Expectations and Guidelines

I expect you to follow the guidelines for behavior below:

- Attend all classes and arrive punctually.
- If unavoidably late for a class, enter quietly and unobtrusively, and behave in other required ways to minimize distraction.
- Remain alert and attentive during lectures, discussions, and other class/lab activities.
- Avoid unnecessary conversation during lectures, discussions, and other class/lab activities.
- Contribute to class experiences by asking relevant questions, offering relevant examples or views, adequately answering questions posed by others, engaging in critical and

independent thought, and challenging both the instructor and the curriculum materials assigned for the course.

- Demonstrate courtesy and respect in dealing with instructors and classmates.
- Recognize and seek to understand diverse points-of-view.
- Plan to spend 2 to 3 hours out-of-class time in academic study for every one hour of class attendance.
- Thoroughly plan and prepare for classes.
- Notify the instructor in advance, if possible, or in a timely fashion, if unable to attend a class or lab, take a scheduled exam or quiz, submit a scheduled assignment, or remain in the classroom for the entire class meeting because of unavoidable circumstances.
- You are expected to read each chapter before we cover it in class. This will allow you to formulate questions concerning material that is not clear, or that you would like to have covered in greater detail. I use lectures to focus on the most important aspects of the topic. I strongly encourage you to ask questions during lecture. There are no 'dumb' or 'stupid' questions. Often the questions you have are shared by others. You should view lectures as the time and place for discussion, and I welcome your thoughts and questions!
- Any reasonable accommodation will be provided for students with physical, sensory, learning, or psychiatric disabilities. Please contact me for assistance as early as possible.
- If English is not your primary language and you would like to have additional time in which to take the exams, let me know. Anyone who needs additional time for the exams will be extended the same courtesy.