Course Description

Study of the scientific principles that influence our planet, its rocks, mountains, atmosphere, and oceans.

Course Textbook


Course Learning Outcomes

Upon completion of this course, students should be able to:

1. Identify the most important elements that compose Earth's continental crust.
2. Explain the processes of weathering, erosion, and mass wasting.
3. Examine the cause of earthquakes and volcanoes.
4. Describe Earth's interior structure and composition.
5. Explain the theory of plate tectonics.
6. Examine ocean currents, the causes of tides, and shoreline erosion.
7. Define the science of meteorology and explain the difference between weather and climate.
8. Examine the formation and forms of clouds and precipitation.
9. Describe air pressure, how it is measured, and how it changes with altitude.
10. Recognize the contributions of Nicolaus Copernicus, Tycho Brahe, Johannes Kepler, Galileo, and Sir Isaac Newton to modern Astronomy.
12. Discuss stellar evolution.

Credits

Upon completion of this course, the students will earn three (3) hours of college credit.

Course Structure

1. **Unit Learning Outcomes:** Each unit contains Learning Outcomes that specify the measurable skills and knowledge students should gain upon completion of the unit.
2. **Unit Lesson:** Each unit contains a Unit Lesson, which discusses unit material.
3. **Reading Assignments:** Each unit contains Reading Assignments from one or more chapters from the textbook. Chapter presentations and Supplemental Readings are provided in each unit study guide to aid students in their course of study.
4. **Learning Activities (Non-Graded):** These non-graded Learning Activities are provided in Units I and VII to aid students in their course of study.
5. **Key Terms:** Key Terms are intended to guide students in their course of study. Students should pay particular attention to Key Terms as they represent important concepts within the unit material and reading.
6. **Unit Assessments:** This course contains eight Unit Assessments, one to be completed at the end of each unit. Assessments are composed of multiple-choice questions and written response questions.
7. **Unit Assignment:** Students are required to submit for grading a Unit Assignment in Unit IV. Specific information and instructions regarding this assignment are provided below. A grading rubric is included with the assignment in Unit IV. Specific information about accessing this rubric is provided below.
8. **Final Exam (Proctored):** Students are to complete a Final Exam in Unit VIII. All Final Exams are proctored—see below for additional information. You are permitted four (4) hours to complete this exam in the presence of your approved proctor. This is an open book exam. Only course textbooks and a calculator, if necessary, are allowed when taking proctored exams. The Final Exam is composed of multiple-choice questions.

9. **Ask the Professor:** This communication forum provides you with an opportunity to ask your professor general or course content related questions.

10. **Student Break Room:** This communication forum allows for casual conversation with your classmates.

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**CSU Online Library**

There is a virtual library with resources, including both journals and ebooks, to support your program and your course at Columbia Southern University. eResources are accessible 24 hours a day/7 days a week from the CSU Online Library gateway page. To access the library, log into myCSU, and then click on CSU Online Library. Resources are organized in the library by title, but if you click on Research Guides, you will find eResources arranged by subject.

The Library Reference service is available 7 days a week; you can reach CSU's virtual librarians by e-mailing thevirtuallibrarian@columbiasouthern.edu. These professional librarians will be glad to help you develop your research plan or to assist you in any way in finding relevant, appropriate, and timely information.

Librarian responses may occur within minutes or hours, but it will never take more than 24 hours for a librarian to send a response to the e-mail address you have provided. Replies to reference requests may include customized keyword search strategies, links to videos, research guides, screen captures, attachments, a phone call, live screen sharing, meeting room appointments, and other forms of instruction.

**Unit Assignment**

**Unit IV Assignment**

**Evaluating Earth Science Resources**

Determining whether or not a resource is reliable can be quite challenging, but there are tips that can help you decide. Choosing reliable sources is important because unreliable sources can include false information and biases that you do not want referenced in your assignment.

There are five criterion to check in order to determine if the source is reliable. They are as follows:

1. authority
2. accuracy
3. objectivity
4. currency
5. relevance

In order to view the full explanation of each criterion, visit the How to do Research page of the CSU Online Library or click http://libguides.columbiasouthern.edu/content.php?pid=512448&sid=4495733

For the Unit IV Assignment, you will evaluate the effectiveness of three resources related to the study of earth science. For each source, you will evaluate the five criterion and decide whether or not you would recommend the source to be used in an academic setting.

Click [here](#) to open the Word document containing the details of the Unit IV Assignment. You will complete the assignment in that document and save it as your last name and student ID number (example: Smith12345).

Information about accessing the Blackboard Grading Rubric for this assignment is provided below.
APA Guidelines

CSU requires that students use APA style for papers and projects. Therefore, the APA rules for formatting, quoting, paraphrasing, citing, and listing of sources are to be followed. Students can find CSU's Citation Guide in the myCSU Student Portal by clicking on the “Citation Resources” link in the “Learning Resources” area of the myCSU Student Portal. This document includes examples and sample papers and provides information on how to contact the CSU Success Center.

Grading Rubrics

This course utilizes analytic grading rubrics as tools for your professor in assigning grades for all learning activities. Each rubric serves as a guide that communicates the expectations of the learning activity and describes the criteria for each level of achievement. In addition, a rubric is a reference tool that lists evaluation criteria and can help you organize your efforts to meet the requirements of that learning activity. It is imperative for you to familiarize yourself with these rubrics because these are the primary tools your professor uses for assessing learning activities.

Rubric categories include: (1) Assessment (Written Response) and (2) Assignment. However, it is possible that not all of the listed rubric types will be used in a single course (e.g., some courses may not have Assessments).

The Assessment (Written Response) rubric can be found embedded in a link within the directions for each Unit Assessment. However, these rubrics will only be used when written-response questions appear within the Assessment.

Each Assignment type (e.g., article critique, case study, research paper) will have its own rubric. The Assignment rubrics are built into Blackboard, allowing students to review them prior to beginning the Assignment and again once the Assignment has been scored. This rubric can be accessed via the Assignment link located within the unit where it is to be submitted. Students may also access the rubric through the course menu by selecting “Tools” and then “My Grades.”

Again, it is vitally important for you to become familiar with these rubrics because their application to your Assessments and Assignments is the method by which your instructor assigns all grades.

Final Examination Guidelines

Final Exams are to be administered to students by an approved Proctor. CSU approves two flexible proctoring options: a standard Proctor, who is chosen by the student and approved by the university, or Remote Proctor Now (RP Now), an on-demand, third-party testing service that proctors examinations for a small fee.

Students choosing RP Now must have an operational webcam/video with audio, a high-speed Internet connection, and the appropriate system rights required to download and install software.

To review the complete Examination Proctor Policy, including a list of acceptable Proctors, Proctor responsibilities, Proctor approval procedures, and the Proctor Agreement Form, go to the myCSU Student Portal from the link below.

http://mycsu.columbiasouthern.edu

You are permitted four (4) hours to complete this exam in the presence of your approved Proctor. This is an open book exam. Only course textbooks, writing utensils, and a calculator, if necessary, are allowed when taking proctored exams.

You may use only your textbook as source material for your response. All source material must be referenced (paraphrased and quoted material must have accompanying citations). You may use the *Publication Manual of the American Psychological Association* (APA Style Guide) or the *CSU Citation Guide* for reference.
Communication Forums

These are non-graded discussion forums that allow you to communicate with your professor and other students. Participation in these discussion forums is encouraged, but not required. You can access these forums with the buttons in the Course Menu. Instructions for subscribing/unsubscribing to these forums are provided below.

Once you have completed Unit VIII, you MUST unsubscribe from the forum; otherwise, you will continue to receive e-mail updates from the forum. You will not be able to unsubscribe after your course end date.

Click here for instructions on how to subscribe/unsubscribe and post to the Communication Forums.

Ask the Professor

This communication forum provides you with an opportunity to ask your professor general or course content questions. Questions may focus on Blackboard locations of online course components, textbook or course content elaboration, additional guidance on assessment requirements, or general advice from other students.

Questions that are specific in nature, such as inquiries regarding assessment/assignment grades or personal accommodation requests, are NOT to be posted on this forum. If you have questions, comments, or concerns of a non-public nature, please feel free to e-mail your professor. Responses to your post will be addressed or e-mailed by the professor within 48 hours.

Before posting, please ensure that you have read all relevant course documentation, including the syllabus, assessment/assignment instructions, faculty feedback, and other important information.

Student Break Room

This communication forum allows for casual conversation with your classmates. Communication on this forum should always maintain a standard of appropriateness and respect for your fellow classmates. This forum should NOT be used to share assessment answers.

Grading

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Course Schedule/Checklist (PLEASE PRINT)

The following pages contain a printable Course Schedule to assist you through this course. By following this schedule, you will be assured that you will complete the course within the time allotted.
By following this schedule, you will be assured that you will complete the course within the time allotted. Please keep this schedule for reference as you progress through your course.

### Unit I

**Discovering Earth Science and its Materials**

**Review:**
- Unit Study Guide
- **Learning Activities (Non-Graded):** See Study Guide

**Read:**
- Introduction to Earth Science
- Chapter 1: Minerals: Building Blocks of Rocks
- Chapter 1 Presentation: See Study Guide
- Chapter 2: Rocks: Materials of the Solid Earth
- Chapter 2 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

**Submit:**
- Assessment

**Notes/Goals:**

### Unit II

**Landscapes**

**Review:**
- Unit Study Guide

**Read:**
- Chapter 3: Landscapes Fashioned by Water
- Chapter 3 Presentation: See Study Guide
- Chapter 4: Glacial and Arid Landscapes
- Chapter 4 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

**Submit:**
- Assessment
- Proctor Approval Form

**Notes/Goals:**

### Unit III

**Plate Tectonics and Restless Earth**

**Review:**
- Unit Study Guide

**Read:**
- Chapter 5: Plate Tectonics: A Scientific Theory Unfolds
- Chapter 5 Presentation: See Study Guide
- Chapter 6: Restless Earth: Earthquakes, Geologic Structures, and Mountain Building
- Chapter 6 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

**Submit:**
- Assessment

**Notes/Goals:**
## Unit IV: Igneous Activity and Geologic Time

### Review:
- Chapter 7: Fires Within: Igneous Activity
- Chapter 7 Presentation: See Study Guide
- Chapter 8: Geologic Time
- Chapter 8 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

### Read:
- Chapter 7: Fires Within: Igneous Activity
- Chapter 7 Presentation: See Study Guide
- Chapter 8: Geologic Time
- Chapter 8 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

### Submit:
- Assessment
- Assignment

## Unit V: Oceans

### Review:
- Unit Study Guide

### Read:
- Chapter 9: Oceans: The Last Frontier
- Chapter 9 Presentation: See Study Guide
- Chapter 10: The Restless Ocean
- Chapter 10 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

### Submit:
- Assessment

## Unit VI: Earth’s Atmosphere

### Review:
- Unit Study Guide

### Read:
- Chapter 11: Heating the Atmosphere
- Chapter 11 Presentation: See Study Guide
- Chapter 12: Moisture, Clouds, and Precipitation
- Chapter 12 Presentation: See Study Guide
- Supplemental Reading: See Study Guide

### Submit:
- Assessment

Notes/Goals:
## Unit VII
### The Atmosphere in Motion and Weather Patterns and Severe Weather

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### Notes/Goals:

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## Unit VIII
### The Solar System and Beyond

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### Notes/Goals:

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