



Syllabus



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SCI 518: Physical Geography

Credits: 4 CRN# 40193

Summer Term 2008, July 12th - September 5th

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Course Description

Overview

Physical Geography is the study of planet Earth. In this course, learners examine the nature of the Earth's six "spheres": the atmosphere (the layer of gases), hydrosphere (the water in oceans, streams, lakes, etc.), cryosphere (the ice in glaciers), geosphere (the solid earth), biosphere (life), and anthrosphere (humans and human activities). By investigating the processes operating within each sphere and how these spheres interact with each other to shape all aspects of our planet, learners gain an understanding of how the Earth works and how landscape features have formed.

Prerequisites

This course has no prerequisites.

Blackboard Orientations

There are no face-to-face sessions for this course. If you have never taken an Online Interactive Course (OIC) at the college, we highly recommend that you attend one of the [2-hour Blackboard Orientation sessions](#) available throughout the state. If you choose not to attend a face-to-face session, you are encouraged to view our new [Online Orientation with audio](#) at your own convenience.

Required Resources

Textbooks:

- Tim Flannery, **The Weather Makers**, ISBN 0-8021-4292-3
- Dougal Dixon, **The Practical Geologist**, ISBN 0-671-74697-9

The textbook is available online at MBS Direct at: <http://bookstore.mbsdirect.net/gsc.htm> (The course-CRN number for ordering this textbook is: 40193). Textbooks can also be purchased from MBS via phone, mail or fax. For additional information, visit the [Online Bookstore](#) section of the college web site.

PLEASE NOTE: It is the learner's responsibility to have purchased all required course materials before the start of the course. Learners are expected to meet all course expectations even if the shipment of a required textbook or other learning resource is delayed. Be sure to choose the shipping option that will get your text/resource delivered in a timely manner.

Learning Outcomes

Upon completion of this course, learners will be able to:

1. describe the nature of the six spheres (atmosphere, hydrosphere, cryosphere, geosphere, biosphere, and anthrosphere), explain the processes within each sphere, and summarize the interactions between the spheres;
2. utilize a variety of maps to access information about the world;
3. identify and describe the three types of rock which make up the geosphere, and explain how one type of rock is transformed into another in the rock cycle;
4. describe Earth's internal structure by identifying the major layers (crust, mantle, and core) and their subdivisions, and explain the processes that operate within each;
5. summarize the theory of plate tectonics, and explain how tectonic activity changes the Earth's surface and produces earthquakes and volcanoes;
6. describe the interactions between the geosphere, atmosphere, and biosphere which control weathering, mass wasting, and wind erosion, and explain how specific landscape features are produced;
7. observe in the field and describe the interactions between the geosphere, atmosphere, and hydrosphere which control river and wave erosion, and explain how specific landscape features are produced;
8. explain the interactions between the geosphere and the cryosphere which control glacial erosion, and explain how specific landscape features are produced; and
9. analyze a variety of human activities (anthrosphere) which, either intentionally or unintentionally, affect the other spheres and assess the impact of human activity on the world around us.

Evidence of Accomplishment

Course grades will be based upon the student's performance on the following:

Assignment/Activity	% of Final Grade
Quizzes (Each module will have quizzes related to the assigned readings)	40%
Field Site Wiki (Create a short guide to the local geography of a site of your choosing)	20%
Online Labs (Participate in two online labs and submit results)	20%
Discussion Board Forums (Exploratory questions extending the readings and activities will be discussed. Your grade will reflect knowledge rather than opinion).	20%
Total	100%

Course Grading Scale: The letter grade is representative of Granite State College's grading system.

A: 100-95	B: 86-84	C: 76-74	D: 66-64
A-: 94-90	B-: 83-80	C-: 73-70	D-: 63-60

B+: 89-87	C+: 79-77	D+: 69-67	F: 59-0
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NOTE: Students must receive a grade of "C" or better for all courses in their major.

Performance Evaluation

Quizzes

Quizzes are multiple-choice and are timed. Each student will have one hour to answer the set of questions provided. The number of questions will vary in each quiz. Quizzes must be completed in the module they are offered. All quizzes will be based on the text and additional assigned readings. One of the benefits of working online is that information is abundant, therefore most quiz questions will assess your skills rather than your memorization or ability to look up information. For instance, you will not be asked many knowledge-based questions like "what type of rock is granite?"; instead, most questions will be skill-based, like "what type of rock is shown in this picture?"

Quizzes are worth 40% of your grade.

Field Site Wiki

You will keep an online wiki describing a field site of your choosing. One of the fun parts of geography is the chance it provides to explore places. And the web is becoming a great way to share those explorations. As the course progresses you will have the opportunity to choose course topics that interest you, and explore those topics with extra depth in the context of your field site.

Your wiki is worth 20% of your grade.

Online Labs

You will participate in two online labs. These are extended activities that allow you to explore a couple topics in depth using directed exercises.

Online labs are worth 10% each, for a total of 20% of your grade.

Discussion Board

Participation means displaying knowledge of the reading material on a weekly basis. At the start of each module, I will post three or four chapter-related discussion questions. You will be asked to pick one question that has meaning for you, and then post your opinions, ideas, and reactions for others to see at his/her convenience. During the week, you are to respond to the postings of two other students. The key to making this interaction meaningful is not how many times you post; it's the quality of your thinking and reflection that counts the most. Please see the Participation Rubric in Course Contents for more details.

Discussion Board Participation is worth 20% of your grade.

Academic Honesty

An academic community is based on honesty and integrity. All work that you submit should be your own. When summarizing or explaining ideas that are based on another's work, make sure to cite references appropriately. (For more information on proper citation, see the Library's website: <http://www.granite.edu/current-students/virtual-library/writers-resources/>). Plagiarism will not be tolerated. Plagiarism is using another's words or even paraphrasing another's work without giving proper credit through the use of citations. For questions regarding Granite State College's academic honesty policy, see page 65 of the college catalog.

Outline of Course Structure & Content

The course has been broken up into 8 modules, with each corresponding week of the term. (e.g., Module 1 will be covered the first week of class, week 1 = module 1). Each week you will complete a set of readings, answer an exploratory question, post responses to additional readings and take a quiz. Assigned readings will be clearly listed. Additional readings will be posted to the discussion

board or will be located within the assignments found within the course content. Please check the Tasks List and the Announcements tool on a regular basis for frequent updates and information.

Module	Assignments/Activities
Module 1: Introduction & Mapping July 7 - 13	<ul style="list-style-type: none"> ● Explore the Course: Visit Course Kickoff page, Explore the menu buttons, and Check Announcements ● Read: <ul style="list-style-type: none"> ○ Course Notes ○ Dixon pg 6-13 ○ Online: Intro to The Six Spheres ○ Online: Illinois Earthquake News Article ○ Online: Latitude and Longitude, and Isopleth Maps ○ Online: How to Lie with Maps ● Online Lab: Updating information in an online map ● Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 1 question". Respond on discussion board to the question and to each other. ● Quiz: Take Module 1 Quiz
Module 2: Earth's Layers & Basic Rock Identification July 14 - 20	<ul style="list-style-type: none"> ● Read: <ul style="list-style-type: none"> ○ Course Notes ○ Dixon pg 16-27, 32-37 ○ Online: Burroughs, "At the Earth's Core, Chapter 1" ○ Online: Rock Identification Practice ● Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 2 question". Respond on discussion board to the question and to each other. ● Quiz: Take Module 2 Quiz ● DUE: Location of your field site
Module 3: Practical Geology & How We Know Stuff July 21 - 27	<ul style="list-style-type: none"> ● Read: <ul style="list-style-type: none"> ○ Course Notes ○ Dixon pg 88-121 ○ Online: Hutton and his strange science ○ Online: Why do we think we know these things? ● Field Work: Develop an initial description of your field site ● Discussion Board: Role-play disagreement between advocates of "young earth" and advocates of "deep time"; Exploratory Question will drive the debate, but different guidelines apply this week. ● Quiz: Take Module 3 Quiz
Module 4: Moving Plates & Relative Dating July 28 - Aug. 3	<ul style="list-style-type: none"> ● Read: <ul style="list-style-type: none"> ○ Course Notes ○ Dixon pg 38-43, 50-69 ○ Online: Relative Dating ○ Online: Earthquakes in New England: USGS ● Wiki: Start your wiki with different perspectives on your field site ● Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 4 question". Respond on discussion board to the question and to each other. ● Quiz: Take Module 4 Quiz

<p>Module 5: Weathering and Mass Wasting Aug. 4 - 10</p>	<ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Flannery, Part 1 ○ Dixon pg 70-87 ○ Online: Mass Wasting • Wiki: Expand your wiki and participate in others' wiki development. • Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 5 question". Respond on discussion board to the question and to each other. • Quiz: Take Module 5 Quiz
<p>Module 6: Hydrosphere Aug. 11 - 17</p>	<ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Flannery, Part 2 ○ Online: Erosion ○ Online: Flooding ○ Online: Mississippi Flood News ○ Online: NH Flood News • Online Lab: Virtual River • Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 6 question". Respond on discussion board to the question and to each other. • Quiz: Take Module 6 Quiz • Due: Virtual River Lab Notes
<p>Module 7: Ice Aug. 18 - 24</p>	<ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Flannery, Part 3 ○ Online: Signs of Glaciers in New England ○ Online: How Glaciers Work • Online Lab: Glacier Virtual Field Trip • Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 7 question". Respond on discussion board to the question and to each other. • Quiz: Take Module 7 Quiz • Due: Virtual Field Trip Notes
<p>Module 8: Human Impact Aug. 25 - 31</p>	<ul style="list-style-type: none"> • Read: <ul style="list-style-type: none"> ○ Flannery, Parts 4 & 5 ○ Online: Controversy in Climate Change • Wiki: Finish your wiki. • Discussion Board: Exploratory Question will be found on Discussion Board under the topic "module 8 question". Respond on discussion board to the question and to each other. • Quiz: Take Module 8 Quiz

Note: The content of this syllabus is subject to change as needed.

ADA

Granite State College will provide qualified individuals with disabilities the same educational opportunities available to persons without disabilities. When an individual's documented disability creates a barrier to educational opportunities, the College will attempt reasonable accommodation to remove the barrier. If you need assistance, it is important that you make contact early to ensure that your requests can be reviewed prior to the start of each term. If you wish to apply for accommodations, contact your academic advisor or the dean of learner services in the

Administration Offices in Concord. See ADA in the college catalog for details.

Institutional Assessment

Assessment is an ongoing process that enables the College to improve its programs, courses, and teaching methods. Institutional evaluation may be embedded in tests, exams, and other measurements of student learning. As members of a learning community, students, faculty, and staff will be expected to participate in the important process of assessment on occasion. Confidentiality of any data that identify participants is maintained.

Technical Assistance

For assistance with accessing your course or with other technical issues regarding your online course, contact the [GSC Technical Assistance Center](http://bbresources.granite.edu/techassist/help.htm) (<http://bbresources.granite.edu/techassist/help.htm>) or call **1-888-372-4270** (Hours: M-F, 8:30-5:00, on weekends messages are checked daily).

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