Our Geologic Environment
GSCI 100

Course Goals:
"Our Geologic Environment" will explore the wild and wonderful aspects of our ever-changing planet. We will investigate how the Earth has evolved and is evolving due to actions incorporated within three of the 'spheres' that make our planet unique: the geosphere (solid Earth), the hydrosphere (water on our planet), and the atmosphere. All three of these spheres are interconnected and have an impact on the biosphere-the sphere to which humans belong.

Geology is all around us and has an impact on everything. Through this course, I hope that you gain an appreciation for the major Earth systems and how they interact with each other. I also hope that you gain a better sense as to the relationships of humans and our environment. Finally, I hope that this course makes you dangerous! Yes…dangerous in the sense that you will be able to evaluate scientific information, and apply your 'scientific' knowledge to your lives and surroundings.

Upon successful completion of this course, you will be able to…

1) demonstrate an understanding of the Earth as a system and identify and discuss interactions between the geosphere, hydrosphere, and atmosphere (specifically those that include humans and their environment).
2) discuss the meaning of "science" and identify how it plays a role in your life.
3) extract information from geologic materials (e.g. graphs, rocks, maps, etc.) and use your observations to synthesize reasonable conclusions.

Means of Assessment:
Your success in this class will be assessed in the arenas of lecture and lab. Your final class grade will be determined by weighting your lecture grade 3/4 and your laboratory grade 1/4 and you must pass lab to pass the class

The specific details regarding grade distribution are as follows (and are subject to change):

Lecture (3/4 of final grade):

Quizzes:	120 points
Midterm I:	100 points
Midterm II	100 points
Final:	130 points

Grade scale:

A	94-99	C+	78-79
A-	90-93	C	74-77
B+	88-89	C-	70-73
B	84-87	D	65-70
B-	80-83	E	<65

Readings: Please compete the reading prior to the lecture, as we will build upon what you have read and distill and clarify the text.

Quizzes: There will be a quiz once a week. These will cover material from recent lectures, the day's reading, or other lecture material. There will be four quizzes before each exam. *If you have taken all four quizzes, you will receive 1 extra credit point on the following exam.*

Quiz Make-up: If you know that you will be absent on a quiz day, you can take a make-up quiz. You must contact Dr. Farthing prior to the quiz day and then obtain the makeup quiz at the next lecture that follows the class that you miss.
If you miss a quiz without prior notification, you will not be able to make it up.

Lecture Exams and Final: There will be two "midterm" exams in the lecture as well as a final exam. The exams will be in short answer and short essay format. The final is cumulative.

Exam conflicts: If you have a conflict with the exam days, contact Dr. Farthing at least a week in advance to set up an alternative exam time.

Office Hours: I have an open-door policy…if my door is open…come on in…. you don't need an appointment during my office hours. If you would like to make an appointment, sign up for a meeting time on the calendar posted on my office door. If there is no convenient time, please contact me and we will set up an alternative time.

Accommodations: SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional or learning disabilities. Students should contact the Director in the Office of Disability Services to discuss needed accommodations. If you have special needs please alert Dr. Farthing ASAP.

Academic Dishonesty: See the section on academic dishonesty in the Student Code of Conduct for complete details regarding the definition and penalties for cheating and plagiarism. Grades on quizzes and exams involving cheating will be divided amongst the guilty parties (so a 90 = 45's for 2 people). In addition, any cheating will be reported to the administration and may lead to disciplinary action since it is a violation of the Student Code of Conduct.

Classroom Civility: In a healthy academic community there is civility between the members. Activities within the classroom that are considered harmful, spiteful, racist, sexist, uncivil, or demeaning could result in judicial action and even dismissal from the school. The message here is be thoughtful and considerate of your colleagues.

Important notes: 1) Come to class and please be on time
2) I do not curve.

Class #	*Lecture topic*	*Reynolds et al. readings*
1	Introduction and a sense of time	1.1, 1.2 and 9.9 through 9.11
2	Earth's Anatomy	1.3, p. 119 (ophiolites), 12.14
3	Earth's anatomy continued and Plate Tectonics	2.5 and 3.1 through 3.6
4	***NO CLASS***	***LABOR DAY***
5	Plate Tectonics (part 2)	3.7, 3.8, 3.10, and 5.7, 10.2, 10.3, 10.6
6	Plate tectonics and minerals	4.1 and 4.3 through 4.5
7	Minerals and rocks	4.7 and 4.10 through 4.12
8	Interpretation of Igneous rocks	5.0 through 5.3 and 5.6 through 5.10
9	Interpretation of Sedimentary rocks	7.0, 7.1, 7.3 through 7.11
10	Interpretation of Metamorphic rocks	8.6 through 8.9
11	Rocks wrap-up	
12	Relative ages	9.0, 9.1, 9.7
13	Relative ages continued	
14	Absolute ages	9.2
15	**EXAM 1**	
16	EXAM 1-part II and volcanoes	6.0 through 6.3 and 6.6
17	volcanoes cont.	6.7, 6.11 through 6.15
18	Folds and Faults and EQ-pt. 1	8.4 and 8.5
19	***NO CLASS***	***FALL BREAK***
20	earthquakes	12.0 through 12.5
21	earthquakes	12.6, 12.9, 12.11, 12.12, 12.17
22	weathering	15.0 through 15.4
23	soils	15.5-15.6
24	weathering and mass wasting	15.7 through 15.10
25	mass wasting	15.12
26	surface water	16.0 through 16.2, 16.5
27	surface water	16.8 through 16.10, 16.12, 16.14
28	floods	16.16
29	Surface water continued	17.1
30	**EXAM 2**	
31	EXAM 2-part II and groundwater	17.3 through 17.5, 17.6, 17.7B, 17.8
32	groundwater and pollution	17.9 and 17.10
33	Groundwater continued	
34	shoreline processes	14.0 through 14.3
35	shoreline processes	14.4 through 4.6
36	glaciers	14.10 and 14.11
37	glaciers	14.12, 12.13, and 14.14A
38	***NO CLASS***	***THANKSGIVING BREAK***
39	Global warming	13.10
40	Global warming II-Carbon Cycle	13.11
41	Snowball Earth	
42	The atmosphere…its past and present	13.12
43	C in fuels --oil and gas	18.1 and 18.2
44	C in fuel-coal	18.3
45	review	
46	**FINAL EXAM**	**12:00-3:00**

GSCI 100: Our Geologic Environment – Lab – All Sections
Fall 2010

Course Description:
This lab is a part of GSCI 100, a course intended for non-science majors who have an interest in their natural physical environment. The lab is designed to foster hands-on learning with the intention to build an understanding of the interactions between Earth processes, the environment, and humans. Topics covered in this lab include Earth materials, geologic hazards, geological tools, environmental change, and global environmental issues.

Expectations: Students should come to lab on time and be prepared. Being prepared includes having thoughtfully completed pre-lab readings and assignments.

Required Text: Exploring Geology, 1st Edition, by Reynolds, Johnson, Kelly, Morin and Carter

Means of Assessment:

10%	pre-lab assignments
20%	weekly lab assignments
10%	weekly lab quizzes
60%	2 lab exams (30% each)
100%	TOTAL

- Late assignments will not be accepted
- Missed labs, quizzes, exams or prelabs may not be made up without prior notice given only to your lecture professor.
- Your lab grade will count for 1/4 of your total grade for GSCI 100.
- You must pass the lab to pass the course. A score greater than 65% is considered passing.

Attendance:
- There are no make-up labs.
- If you know you will miss your lab, contact in advance your lecture professor and arrange to attend an alternative lab session for credit. *These arrangements may **not** be made with your T.A*.

Pre-lab: There are pre-lab readings and short assignments for each week. The pre-lab assignments are due at the beginning of lab. The goal of these exercises is to equip you with the vocabulary and background information necessary to complete the week's lab in an intelligent fashion. The prelabs must be downloaded from MyCourses,

Laboratory Assignments: Each week's lab is designed to be finished within the allotted lab time. Your work is checked for completion, and if you have made a concerted effort on all questions, you will receive a 100% for that week's lab assignment. You then must "grade" your own work by referring to an answer key provided to you by the instructor. It is in your best interest to do this with care so that you see what you do and do not understand. Your grade for the lab assignments is based entirely on participation: if you attempt to do the lab, you will earn the credit.

Quizzes: There is a quiz at the beginning of each week's lab. These quizzes assess your understanding of the previous week's lab. They also keep you on track with your pre-lab work. Finally, they are intended to familiarize you with the format of the lab exams. The questions on the quizzes will pertain to material from the previous lab and the pre-lab assignment.

Quizzes are given at the beginning of each lab and are done electronically, so please arrive on time and have your laptop up and ready to take the quiz before class starts. *If you are late and miss the quiz, you will **not** be able to make it up.*

Lab exams: There are two exams in this laboratory. Each exam is in short answer/multiple choice format. To succeed on these exams, a solid understanding of the concepts from the individual labs and pre-lab assignments is essential. Each exam consists of 2 parts. For the first part, students take the exam individually on lab computers. For the second part students are encouraged to work in groups to answer the same exam questions. These two portions are weighted as follows: 80% individual 20% group.

GSCI Learning Center: Each week from 9:30-3:00 on Fridays the GSCI Learning Center is open in ISC 142. During this time geology majors are available to answer questions about lab material and lecture material. This is a great opportunity to get some one-on-one attention, so we encourage you to make use of it. Past students who have taken advantage of the Learning Center have earned higher scores on exams.

Accommodations: SUNY Geneseo makes reasonable accommodations for persons with documented physical, emotional or learning disabilities. Students should consult with the Director in the Office of Disability Services. During the first week of the semester, students should alert your lecture professor regarding any needed accommodations.

Office Hours: We want to encourage you to meet with your professors. It helps you get to know them and for them to get to know you. If their office hours do not work for you, please contact them directly to set up an alternative time.

Important notes:
1) Come to class and please be on time.
2) Missed labs may not be made up without prior notice. Prior notice can only be given to your lecture professor
3) We do not accept late assignments.
4) We do not curve.

GSCI 100 LAB Schedule-Fall '10

Week #	**Lab topic**
1	Lab introduction
2	Plate Tectonics
3	Minerals
4	Rocks
5	Rocks and Plate Tectonics
6	Volcanoes
7	NO LAB—Fall Break
8	**LAB EXAM #1**
9	Geological Structures
10	Topography Maps
11	Floods
12	Groundwater
13	NO LAB-Thanksgiving Break
14	Shorelines
15	**LAB EXAM #2**