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GEO-105-001  
Fall 2007  
Tuesday & Thursday, 12:30-1:45pm  
205 Smith

## GEO105-001: Sustainable Earth

**TURN OFF cell phones before class starts.**

**Meeting time:** TR, 12:30 - 1:45pm, Smith 205.

**Prerequisites:** None.

**Description:** This four-hour natural science course provides an understanding of important Earth resources and how their utilization impacts the environment through water pollution, air pollution and hazardous waste production. Laboratory includes an introduction to geographic information systems (GIS) and field trips to local sites of environmental interest.

**Learning Objectives:** At the conclusion of the course, students will have a greater understanding of earth resources and the environmental impacts associated with their use. Students will be able to:

- 1) Identify earth resources
- 2) Discuss the limitations of those resources
- 3) Identify hazards associated with those resources

**TENTATIVE Schedule of Topics to be covered:** This schedule is provided as a guideline and is subject to change. For an up-to-date schedule or to check the required reading for the next class period, please visit the eLearning page for this class.

Date	Topic	Assigned Reading
Week 1 Aug. 23	Logistics and Introduction	Chapter 1, issue 13
Week 2 Aug 28, 30	Population growth Rocks and minerals	Chapter 1, issue 13 Chapter 2
Week 3 Sep 4, 6	Rocks and minerals <b>Exam 1 (chapters 1, 2; issue 13)</b>	Chapter 2
Week 4 Sept. 11, 13	Water resources	Chapter 10
Week 5 Sept. 18, 20	Water resources Soil as a resource	Chapter 10 Chapter 11
Week 6 Sept. 25, 27	Rock and mineral resources	Chapter 12
Week 7 Oct. 2, 4	<b>Exam 2 (chapters 10, 11, 12)</b> Fossil fuels	
Week 8 Oct. 9	Fossil fuels	Chapter 13, issue 8
Week 9 Oct. 16, 18	Fossil fuels Alternative energy	Chapter 13, issue 8 Chapter 14, issue 10, 12, 19
Week 10 Oct. 23, 25	Alternative energy Waste disposal	Chapter 14, issue 10, 12, 19 Chapter 15, issue 18
Week 11 Oct. 30, Nov. 1	Waste disposal <b>Exam 3 (chapters 13, 14, 15; issues 8, 10, 12, 18, 19)</b>	Chapter 15, issue 18
Week 11 Nov. 6, 8	Water pollution	Chapter 16, issue 16
Week 12 Nov. 13, 15	Air pollution	Chapter 17
Week 13 Nov. 20	Geology and climate	Chapter 9
Week 14 Nov. 27, 29	Geology and climate	Chapter 9
Week 15 Dec. 4, 6	Environmental law	Chapter 18

**FINAL EXAMINATION: Monday December 10, 11:30am-2:00pm (chapters 16, 17, 9, 18; issue 16)**

**Attendance Policy:** Though attendance is not taken in class, students are expected to attend all classes. It is difficult to pass this class if you have not attended class. Some material presented in class is not in your textbooks, thus, attendance is strongly urged. If you miss a class, you are advised to acquire the notes from one of your peers. Tardiness to this class is also frowned upon as it disrupts the learning of your peers -- be respectful and on time.

**Laboratory:** You must attend lab. If you fail the lab, it is extremely difficult to pass the class because the lab grade is 25% of the final grade you will receive in this class.

**Examinations:** Note that the examination dates (with the exception of the final) are tentative. Any known absences that may coincide with an exam should be cleared with the instructor by August 31. After this date, exams missed without prior permission will be given only on presentation of an approved medical excuse. The doctor's note must include his/her office number so that departmental personnel can check validity. No exceptions! If an excuse is found to be falsified, it will immediately be handed over to the associate dean for follow-up. Contact me immediately if you miss an exam. Time and place for the make-up exam will be arranged with the instructor and will take the form of either oral or essay questions. If you arrive at an examination after someone has already finished, you will not be allowed in the room to take the examination and you will not be allowed to make up the examination.

**Clicker questions (Classroom Participation System, CPS):** In order to encourage class participation you will be evaluated based on the frequency and correctness of your clicker responses. During each class, questions will be posed based on the material being presented. Completing the assigned reading prior to class will help you greatly. The answers to these questions will constitute 5% of the final grade. For each question, 50% will be awarded for answering the question and 50% will be based on the correctness of your answer. In determining the final in-class participation grade, the lowest three class scores will be ignored.

**Relevant web links:** Over the course of the semester, each student must send me (via the mail function in eLearning) four links to a news article relevant to this class. Acceptable source are limited to the New York Times, BBC, CNN, NPR, MSNBC, USA Today, Fox News, and the Tuscaloosa News. A maximum of one link per week will count towards your grade. If duplicate links are sent only the first instance will be accepted. This will constitute 3% of your final grade

**Quizzes:** One day prior to the start of each new chapter a short quiz, based on that chapter will be made available on eLearning. This must be completed prior that chapter being discussed in class. This will constitute 5% of your final grade.

**eLearning discussions:** Periodically I will post questions/comments on the eLearning discussion board. Participation in the ensuing discussions is worth 2% of your final grade.

**Grading Policy:**

<b>Exams (4)</b>	<b>60%</b>
<b>Clicker questions</b>	<b>5%</b>
<b>Web links</b>	<b>3%</b>
<b>Quizzes</b>	<b>5%</b>
<b>eLearning discussion participation</b>	<b>2%</b>
<b>Lab</b>	<b>25%</b>

Grades will be assigned as follows:

100-97 A+; 96-93 A; 92-90 A-; 89-87 B+; 86-83 B; 82-80 B-; 79-77 C+; 76-73 C; 72-70 C-; 69-67 D+; 66-63 D; 62-60 D-; <60 F

**Policy for making up missed course work:** All course work will be made up in the students own time.

**Text:** Environmental Geology, 7<sup>th</sup> ed. – selected chapters, C.W. Montgomery  
Taking Sides: Clashing Views on Environmental Issues, 12<sup>th</sup> ed., - selected chapters, T.E. Easton  
Sustainable Earth Lab Manual – custom UA edition.

**CPS:** This class *requires* a CPS remote, which is available for purchase from the campus store (and can be sold back at the end of the semester). You must have the CPS pad in class on August 30 -- **no exceptions**. You must bring this remote to class everyday. You are responsible for ensuring that the batteries have not run down – as such, you are advised to carry a spare set of batteries. The CPS pad is used to respond to questions in class, helps me to know who comes to class and participates, and is used to take our tests. It is a violation of the academic honor code to bring someone else's CPS

remote to class. I can easily figure out if this happens by calling class attendance. If I find that this has occurred or I see a student with two remotes, the responsible parties will be immediately referred to the associate dean for follow-up. Students also need to register for the class via the einstruction web site (<http://www.einstruction.com>). When you go to register, you will have to pay an enrollment fee. The bookstore also sells enrollment codes should you wish to spend more money. The class key is **G31756J744**. An enrollment guide and instructions on how to use the CPS remote are available on the WebCT page for this class

**eLearning:** This class *requires* the use of eLearning for a variety of functions. PDF-formated versions of the PowerPoint presentations will be posted along with study guides and answer keys for tests. Useful links will also be provided. You will use eLearning to communicate with me via the mail function. eLearning can be accessed through myBama..

**Students with disabilities:** Students with disabilities who need accommodations made should present an accommodation letter to me as soon as possible. These letters can be obtained from the Office of Disability Services.

**Academic Honor Code:** All students are expected to be honorable, observe standards of conduct appropriate to a community of scholars, and adhere to the Academic Honor Pledge. Cheating, knowingly plagiarizing material (e.g. from books or the web), or helping another student commit these acts will not be tolerated. Text messaging in the classroom or using a CPS unit other than your own is considered cheating.

**Office Hours:** Office hours are Tuesday and Thursday 11:15-12:15 in Smith 107. You can also e-mail me or call me to make an appointment should these times coincide with previous engagements. Please come to see me if you need any help with this class.