

GEOS 125A Introduction to Environmental Science

Fall Term 2012

Dr. Fred Soster, 216 Julian S&M, 658-4670, e-mail: fsoster@depauw.edu

Office Hours: By appointment or stop by anytime.

Class: 9:20 – 10:20 a.m., MWF, Rm. 223, Julian S&M.

Text: Principles of Environmental Science: Inquiry and Applications, 6th edition by W. P. Cunningham & M. A. Cunningham. McGraw Hill, 2011. ISBN # 978-0-07-338324-8.

Course Outline and Tentative Schedule

<u>Week</u>	<u>Topic</u>	<u>Reading Assignment</u>
8/22	Introduction	Chapter 1
8/27	Ecosystem Structure and Function	Chapter 2
9/3	Evolution, Species, Populations, and Communities	Chapter 3
9/10	EXAM I (1 hour) – Friday, September 14	
9/17	Human Populations	Chapter 4
9/24	Biodiversity and Extinction	Chapter 5
10/1	Environmental Conservation	Chapter 6
10/8	EXAM II (1 hour) - Friday, October 12	
	Fall Break – Saturday, October 13 through Sunday, October 21	
10/22	Food and Agriculture	Chapter 7
10/29	Atmosphere, Climate Change, and Air Pollution	Chapter 9
11/5	Water Resources and Water Pollution	Chapter 10
11/12	EXAM III (1 hour) – Friday, November 16	
11/19	Energy	Chapter 12
	Thanksgiving Recess – Wednesday, November 21 through Sunday, November 25	
11/26	Energy (continued)	Chapter 12
12/3	Waste Materials	Chapter 13
	FINAL EXAM (comprehensive) – Thursday, December 13, 8:30 a.m.	

Course Goals

1. Give you a scientific understanding of the major environmental issues facing human society today.
2. Help you develop critical thinking skills that will enable you to evaluate claims and arguments advanced by environmental "experts."
3. Learn about the scientific method and what science can and cannot do.
4. Encourage you to think about environmental issues and enter into discussions about possible solutions.
5. Help you recognize the environmental impact of your daily activities and make wise, informed decisions about life style activities that impact the environment.

Grading

Exam I	20%
Exam II	20%
Exam III	20%
Final Exam	25%
Quizzes	10%
Class Participation	5%

A \geq 90%; B = 80-89%; C = 70-79%; D = 60-69%; F < 60%

Class Policies

1. Regular attendance is expected. I do monitor attendance. You cannot get a good class participation grade if you do not come to class. Poor attendance and preparation for class will result in refusal on my part to give you reasonable attention and guidance in make-up work. See the Student Handbook for the University policy on attendance.
2. Absence on quiz days will result in a "0" for that quiz. I recognize that some absences are unavoidable, and in fairness to students who have valid excuses, I will drop the lowest quiz grade of the semester.
3. Make-up examinations are normally not given; however, I will consider requests for make-up exams on a case-by-case basis.
4. Academic integrity is expected. Violations will be handled in accordance with established University procedures as described in the Student Handbook.

Keys to Success in this Course

1. **Read the Assigned Chapter** in advance of lecture over that material. As you're reading, note any questions that you have.
2. **Ask Questions.** The only stupid question is one that is not asked. Because you will be responsible for material in each assigned chapter whether that material is specifically covered during lecture or not, it is essential to ask questions to clarify any concepts that you do not understand. PLEASE do not be too shy, embarrassed, intimidated, afraid, etc. to ask questions.
3. **Take Good Notes.** Students with complete notes seem to do better in class. Try to write down the key material from the lecture and include as many sketches as possible. Rewriting your notes will make them more legible and orderly, plus it will help you focus on areas that are still unclear. Be careful of falling into "TV-watching mode", as it is easy to look at the pictures and not take down any notes.
4. **Know the Key Terms** that are designated in **bold print** in the text. I will expect everyone to know these terms before I begin lecture and so will not define the majority of the terms in lecture. If I use a term that you don't understand, PLEASE ASK me to define it.
5. **Use the Glossary** in the back of the book to help understand key terms.
6. **Answer the Practice Quiz Questions** at the end of each chapter. If you are unsure about any of the answers after checking the chapter text, PLEASE ASK me.
7. **Check out the Internet.** The companion web site for our text is <http://www.mhhe.com/cunningham6e>. On this web site are additional materials & quizzes that will help enhance your understanding of the chapters. You also can use a search engine to find additional web sites of interest.
8. **Create your own Study Aids.** Some people like to highlight text in the chapter, others like to make flash cards, and still others like to study in groups and discuss the material. Feel free to experiment with what works for you. Because different people have different learning styles and because I am not trained in that field, I struggle to help people with questions like "I studied really hard for this test, but I still got a bad grade. What should I do?" (In fact, the intent of this sheet is to help this problem). I'm much more adept at answering science specific questions like "I've read the book and I don't understand how the different soil horizons actually form. Can you explain this to me?".
9. **Study the Material on a Regular Basis.** One of the main reasons for the pop quizzes is to help everyone maintain good study habits of regularly working with the assigned material. Procrastination and cramming just don't work for most of us. Get comfortable with the material as we go along so that you don't fall behind.
10. **Study for exams and quizzes as an Individual and then as a Group.** Different people study in different ways. I've found that it helps to study as an individual first (thinking about and learning the important concepts that were emphasized in class and in the textbook), then get together with others and study as a group (e.g., asking each other questions, brainstorming about what will be on the test, etc.).