BSC 1050 – Biology and Environment - Fall 2013

Instructor: Dr. John F. Weishampel (pronounced "WHY - sample?"), Professor of Biology
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Office Hours: It will be best to e-mail or call me to set a formal appointment. I am usually available in my office for official drop-in office hours (i.e., Wednesday & Friday 12:30 - 1:30 PM) to answer any questions. If these times do not work for you, we can try to arrange another time.

Class Web Site: Accessible through the http://webcourses.ucf.edu or through your http://my.ucf.edu account. Lecture notes, review questions, old midterms, grades, relevant internet sites and additional readings are posted at this site. Usually most of the PowerPoint slides will be available the day (sometimes night) before class. But as this is a later class, it is possible that they may be posted in the morning. If this is your first time taking a web-assisted course go to: http://learn.ucf.edu/ to help you logon and familiarize you with the the system.

Lecture Meeting Times: Mondays, Wednesdays, and Fridays, 4:30 - 5:20 PM Business Administration (BA), Room 119. Audio recording of lectures is permitted.

Course Description: The course is an introduction to the environmental sciences that stresses a scientific approach toward understanding the nature and scope of contemporary problems in relation to natural systems. It outlines the interactions of biological, physical, chemical, geological, and sociological principles that define natural and anthropogenic ecological change.

Course Purpose: To investigate environmental science and environmental systems in the context of real places, real people, real problems and real data.

Learning Objectives:
Upon successful completion of this course students will be able to:
1. Describe the structure and function of significant environmental systems.
2. Use scientific reasoning to identify and understand environmental problems
3. Critically evaluate arguments regarding environmental issues.
4. See the impact your choices and actions have on the environment.
5. Propose and evaluate potential solutions to environmental problems.

Text: You should obtain, i.e., buy, rent, borrow, share (not steal), an eBook or hardcopy version of the 2013 textbook: *Environmental Science for a Changing World* by A. Houtman, S. Karr, and J. Interlandi (W. H. Freeman / Scientific American). There is also a copy of this edition on 2-hour library reserve. The more expensive 2014 edition, though it includes more stuff, will also work; it contains all of the material from the 2013 edition.

Additional readings, activities, videos, etc. will be posted on-line at the class web site. These will also be drawn from for exam questions.

Lecture Schedule*:

	Date	Lecture Topic	Associated Textbook Reading
1	Mon. 8/19	Course Introduction	
Setting the stage			
2	Wed. 8/21	Tragedy of the Commons	Chpt 1
3	Fri. 8/23	Easter Island	Chpt 1
4	Mon. 8/26	Your Ecological Footprint	Chpts 1 / 5
Broad components of Environmental Science			
5	Wed. 8/28	How Science Works	Chpts 2 & 3 Appendices 2 & 3
6	Fri. 8/30	History of Environmental Science	Chpt 1
	Mon. 9/2	**Labor Day – NO CLASS**	
7	Wed. 9/4	Environmental Ethics	Chpts 1
8	Fri. 9/6	Environmental Economics	Chpt 5
9	Mon. 9/9	Environmental Policy	Chpts 2 & 3
	Wed. 9/11	**Midterm 1**	
	Fri. 9/13	**NO – CLASS Instructor going to China -** 是!	
The Science of the Environment			
10	Mon. 9/16#	Chemistry (on-line video lecture)	Chpt 6
11	Wed. 9/18#	Energy (on-line video lecture)	Chpt 6
12	Fri. 9/20#	Life (on-line video lecture)	Chpt 6
13	Mon. 9/23	Evolution/Speciation (Back from China)	Chpt 10
14	Wed. 9/25	Populations	Chpt 7
15	Fri. 9/27	Communities	Chpt 8
16	Mon. 9/30	Systems Ecology	Chpt 6 Appendix 4
17	Wed. 10/2	Biogeochemistry	Chpt 6
	Fri. 10/4	**Midterm 2**	
Environmental Problems			
18	Mon. 10/7	Human Population Growth I	Chpts 4 & 7
19	Wed. 10/9	Human Population Growth II	Chpts 4 & 7
20	Fri. 10/11	Agriculture I	Chpt 18

21	Mon. 10/14	Agriculture II	Chpt 18
22	Wed. 10/16	Ecotoxicology	Chpt 3
23	Fri. 10/18	Atmospheric Pollution	Chpts 2 & 21
24	Mon. 10/21	Global Climate Change I	Chpt 22
25	Wed. 10/23	Global Climate Change II	Chpt 22
	Fri. 10/25	**Midterm 3**	
Environmental Systems and Dynamics			
26	Mon. 10/28	Biodiversity	Chpt 9
27	Wed. 10/30	Biological Conservation	Chpt 10
28	Fri. 11/1	Ocean Systems	Chpts 13 & 14
29	Mon. 11/4	Freshwater Systems	Chpt 15
30	Wed. 11/6	Freshwater and Marine Conservation	Chpts 14 & 16
31	Fri. 11/8	Terrestrial Systems/Land Use	Chpts 11 & 12
	Mon. 11/11	**Veteran's Day – NO CLASS**	
32	Wed. 11/13	Urbanization	Chpt 26
33	Fri. 11/15	Environmental Health	Chpt 3
	Mon. 11/18	**Midterm 4**	
Moving Towards Solutions			
34	Wed. 11/20	Consumerism	Chpt 1
35	Fri. 11/22	Waste Management	Chpt 16
35	Mon. 11/25	Non-Renewable Energy	Chpts 19, 20 & 23
36	Wed. 11/27	Renewable Energy	Chpts 24 & 25
	Fri.	Thanksgiving Break – NO CLASS	
37	Mon. 12/2	Sustainability / Review	Chpts 5 & 26
	Fri. 12/6 4:00 – 6:50 PM	**FINAL EXAM (BA 119)**	

*The dates of these topics and exams serve as a guideline and are subject to change.
#Instructor is in China, video lectures will be provided on-line (so no need to come to BA 119).

Student Responsibilities:

Etiquette - Students should show proper classroom etiquette. Students should show up to class on time. If arriving reasonably late (<5 minutes), students should enter the lecture room quietly and sit in the back. If arriving unreasonably late (>5 minutes), students should not enter the room. Students who need to leave the lecture room early should not come that day. Students should not disrupt other students (or the instructor) in class by talking unless instructed to do so by the instructor.

Readings - In a very rough manner, textbook readings are designed to coincide with and supplement the lecture component of the course. The order of reading assignments are listed above. The nature of the course is somewhat non-linear so certain concepts and chapters are revisited with a different emphasis. In addition to textbook readings there will be additional readings, activities, that can be accessed through the website.

Clickers - You **will** need to bring your **i>clicker 2** (personal response system) each day (both lectures and exams). Participation grades will reflect clicker responses. Clickers will be used for in-class quizzes, opinion polls, on-the-fly knowledge assessments, attendance. Forgetting your clicker will result in a 0 for participation for the day (or worse 0 for a midterm). Beginning Wed. 8/28, you will have three participation graces. So if: your batteries run low, you forgot your clicker, your car did not start, you are sick, etc. a couple of times, there is no need to contact me.

Midterms and Final Exam - There will be four in-class lecture midterms, covering material that roughly occurs at even intervals of the course. The lowest midterm grade will be dropped. Thus, if you are unable to make one due to whatever, don't sweat it. But if you have to miss two, that could cause trouble. A make-up will require a doctor's or other exceptional excuse. The final exam will be more comprehensive (with an emphasis on the material covered after the last midterm) and mandatory. These will be **i>clicker 2** tests. However, questions typically involve more than a regurgitation of lecture notes or definitions. Questions often require analyses of new (but related) information or the synthesis of ideas. These are derived from lectures, readings, and information on the class website. Lecture material will be emphasized, followed by web distributed material then textbook readings. Exams are designed to make you think and function as additional learning experiences.

Performance Evaluation:

Class Participation = 10%

4 Midterms (3 x 22.5%, lowest grade is dropped) = 67.5%

Final Exam = 22.5%

Total = 100%

Your grade will be based on the following scale: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; 0-60 = F

UCF Students are expected to follow the **Golden Rule**: http://www.goldenrule.sdes.ucf.edu/

and

THE UCF CREED

Integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions.

Integrity
I will practice and defend academic and personal honesty.

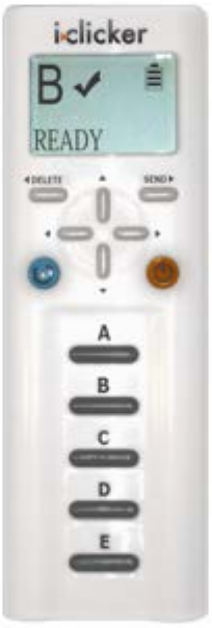
Scholarship
I will cherish and honor learning as a fundamental purpose of my membership in the UCF community.

Community
I will promote an open and supportive campus environment by respecting the rights and contributions of every individual.

Creativity
I will use my talents to enrich the human experience.

Excellence
I will strive toward the highest standards of performance in any endeavor I undertake.

Your i>clicker 2



If your clicker does not look like this, **you have the wrong clicker!**

You can rent this, buy this, share this (with someone who is not taking the class).

As we will be using it for your midterms and final exam, this is the only option that permits self-paced testing.

Registering your i>clicker 2

- If you go with option 1 or option 2, simply go to http://www.iclicker.com/support/registeryourclicker/ to register your clicker and follow the instructions.

Important Registration Information:

- When entering your First and Last Names, please use your official names according to UCF. **No nicknames or petnames or aliases.**

- Also when asking for your Student ID, please use your official UCF **NID (Network ID)**, that is typically the first two letters of your first name followed by six (occasionally five) numbers.

- Your alphnumeric i>clicker remote ID is found on a bar code sticker on the bottom of the back of your i>clicker remote. It typically consists of eight numbers and letters.

If you are having difficulty registering or using your i>clicker 2 contact a Technical Support Agent – ASAP

Call **1-866-209-5658** and go through the phone tree to contact a Technical Support Agent.