

BSC 1050 – Biology and Environment - Fall 2007



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., Monday and Wednesday 1:30 -3:30 PM and Friday 1:30 - 2:30 PM) to answer any questions. However, if these times do not work for you, we can arrange another time.

Class Web Site: Accessible through <http://reach.ucf.edu/~bsc1050a/>.

Lecture notes, practice exams, grades, and relevant internet sites will be made available at this site. Most likely PowerPoint slides will be available the night before class. If this is your first time taking a web-assisted course go to: <http://reach.ucf.edu/passwords/> to help you logon.

Lecture Meeting Times: Mondays, Wednesdays, and Fridays, 12:30-1:20 PM Math and Physics Building (MAP) Room 260. The taping 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: Withgott, J.H. and Brennan, S.R. (2007) *Environment: The Science Behind the Stories*. Benjamin Cummings, New York.

Additional readings may be posted on-line at the class web site.

and

<http://www.envscienceplace.com/> which is the website associated with your textbook.



Lecture Schedule:

	Date	Lecture Topic *	Associated Reading
1	Mon. 8/20	Course Introduction	
Setting the stage			
2	Wed. 8/22	Tragedy of the Commons	Chapter 1
3	Fri. 8/24	Easter Island	Chapter 1
4	Mon. 8/27	Your Ecological Footprint	Chapter 1
Broad components of Environmental Science			
5	Wed. 8/29	How Science Works	Chapter 1
6	Fri. 9/31	History of Environmental Science	Chapter 2
	Mon., 9/3	Labor Day – No Classes	
7	Wed. 9/5	Environmental Ethics	Chapter 2
8	Fri. 9/7	Environmental Economics	Chapter 2
9	Mon. 9/10	Environmental Policy I	Chapter 3
10	Wed. 9/12	Environmental Policy II	Chapter 3
	Fri. 9/14	Midterm 1	
The Science of the Environment			
11	Mon. 9/17	Chemistry	Chapter 4
12	Wed. 9/19	Energy	Chapter 4
13	Fri. 9/21	Life	Chapter 4
14	Mon. 9/24	Evolution/Speciation	Chapter 5
15	Wed. 9/26	Populations	Chapter 5
16	Fri. 9/28	Communities	Chapter 6
17	Mon. 10/1	Systems Ecology	Chapter 7
18	Wed. 10/3	Biogeochemistry	Chapter 7
	Fri. 10/5	Midterm 2	
Environmental Problems			
19	Mon. 10/8	Human Population Growth I	Chapter 8
20	Wed. 10/10	Human Population Growth II	Chapter 8
21	Fri. 10/12	Soil & Soil Degradation /Overfertilization	Chapter 9
22	Mon. 10/15	Agriculture	Chapter 10
23	Wed. 10/17	Ecotoxicology	Chapter 14

24	Fri. 10/19	Atmospheric Pollution	Chapter 17
25	Mon. 10/22	Global Climate Change I	Chapter 18
26	Wed. 10/24	Global Climate Change II	Chapter 18
	Fri. 10/26	Midterm 3	

Environmental Systems and Dynamics

27	Mon. 10/29	Biodiversity	Chapter 11
28	Wed. 10/31	Biological Conservation	Chapter 11
29	Fri. 11/2	Ocean Systems	Chapter 16
30	Mon. 11/5	Freshwater Systems	Chapter 15
31	Wed. 11/7	Freshwater and Marine Conservation	Chapters 15-16
32	Fri. 11/9	Terrestrial Systems/Land Use	Chapter 12
	Mon. 11/12	Veteran's Day – No classes	
33	Wed. 11/14	Urbanization	Chapter 13
34	Fri. 11/16	Environmental Health	Chapter 14
	Mon. 11/19	Midterm 4	

Attempts at Solutions

35	Wed. 11/21	Consumerism	--
	Fri. 11/23	Thanksgiving Break – tofu turkey time	
36	Mon. 11/26	Fossil Fuels	Chapter 19
37	Wed. 11/28	Renewable and New Nonrenewable Energy	Chapters 20-21
38	Fri. 11/30	Waste Management	Chapter 22
39	Mon. 12/3	Sustainability	Chapter 23
	Fri. 12/7 10:00 AM – 12:50 PM	FINAL EXAM	

*The dates of these topics and exams serve as a guideline and are subject to change.

Student Responsibilities:

Etiquette – Students should show proper classroom etiquette. Students should show up to class on time. If arriving reasonably late, students should enter the lecture room quietly and sit in the back. If arriving unreasonable 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 - Readings, for the most part, are designed to coincide with and supplement the lecture component of the course. The order of reading assignments which generally follow the book chapter order are listed above.

Clickers – You will need to bring your clicker (personal response system) to lecture each day. Class participation grades will reflect clicker responses. These clickers will be used for midterm and final exams, opinion polls, on-the-fly knowledge assessments, attendance. Forgetting your clicker may result in a 0 for class participation for the day or worse, a 0 on an exam.

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. The final exam will be more comprehensive (with an emphasis on the material covered after the last midterm) and mandatory. These will be clicker tests. However, questions will involve more than a regurgitation of lecture notes or definitions. Questions will involve an analysis of new (but related) information or the synthesis of ideas. These will be derived from concepts covered in lecture and text readings and information on the class website. Lecture material will be emphasized. The exams will be designed to make you think and function as additional learning experiences.

Performance Evaluation:

Class Participation = 12%

4 Midterms (3 x 22%, lowest grade is dropped) = 66%

Final Exam = 22%

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.

Class Name: Biology & Environment (BSC 1050)

Class Key: F30639L288

You will need:

- ✦ Class Key (shown above)
- ✦ Connection to the Internet
- ✦ Method of Payment (Credit card or personal check - Cost is \$13)

Enrolling through CPSOnline

If you enroll through CPSOnline, you will first need to setup a CPSOnline account.

Create an Account

1. Go to www.einstruction.com.
2. Click on the **Students** link at the top left of the window.
3. Select your school or university from the drop-down menu.
4. Click **Choose Site**.
5. Enter your serial number in the space provided. You can find your serial number on your LCD screen when you turn on your pad: if your pad does not have an LCD screen, your serial number is on the back of the pad, under the battery cover.
6. Click **Create Your Account**.
7. Create a CPSOnline Username and Password and fill in your contact information. Click **Submit** to create your account.

You've now created a CPSOnline account. You can use your CPSOnline username and password to login anytime to CPSOnline. Now you can enroll your pad in your class.

Enroll in a Class

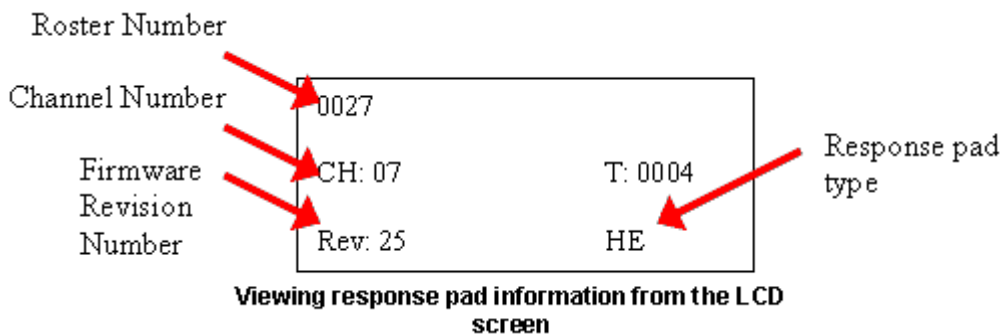
1. Click **Yes** to enroll immediately in your class.
2. Enter your **Class Key** in the space provided. If you have a Code, enter it in the **Code** box. Note that a Code is not required.
3. Click **Submit** and choose your payment options. Click **Continue**.
4. Fill in your billing information and click **Continue**.
5. To join an additional CPSOnline class, click the **Enroll in a class** button from the main menu.
6. Once you have finished enrolling in all of your classes, click **Log Out**. *So that CPSOnline properly records your information, log out of CPSOnline.*

NOTE: *If you enroll in more than one class using CPS, your response pad may have a different assigned number for each class. Note your assigned response pad number after you enroll for each class, and use the reminder emails from eInstruction to keep track of your information.*

Using CPS_{RF} in your class

The eInstruction response pad is easy to use with CPS. Use the information below to learn how to use the buttons on the pad. If you have any questions, log onto www.einstruction.com and use the **Customer Support** menu option. Type in your name and enter the live chat room for immediate help. You can also reach Technical Support at 888.333.7532.

- ✦ **Power** – turn the response pad on or off by pressing the **PWR/JOIN** button.
- ✦ **Join** – the response pads automatically search for a class roster to join whenever you turn on the pad.
 - **Initiate Join** – to have the response pad begin searching for a class roster to join, turn on the response pad and press the **PWR/JOIN** button.
 - **Manually Join** – to manually join a class, turn on the response pad and press the **PWR/JOIN** button twice. *Join:* appears on the LCD screen. Type in the channel number for the class roster you would like to join, and press **Send**.
- ✦ **Use Negative Numbers** – make a numeric response positive or negative by pressing the +/- button.
- ✦ **Enter Equations** – create equations by entering symbols into your response with the **Sym** button. You can include the following symbols: X, Y, =, (,), . (decimal), + (plus operator), - (minus operator), / (division operator), * (multiplication operator), (space)
- ✦ **View Response Pad Information** – to view the response pad channel, roster number, and firmware version, turn the pad on and press the < button.



- ✦ **View Serial Number** – to view the serial number for your response pad, simply press the **PWR/Join** button to turn on the response pad. The serial number displays in the LCD screen as your response pad searches for a class roster to join. Your serial number will begin with “r1...”.
- ✦ **Adjust LCD Screen Contrast** – to adjust the LCD screen contrast, press the > button. Use the **A1** button to decrease the contrast and the **C3** button to increase contrast.