

## PCB 3044 - Principles of Ecology – Spring- 2008

**Instructor:** Dr. John F. Weishampel (pronounced "WHY - sample?")  
**Office:** Room 102B Biological Sciences  
**Phone:** (407) 823-6634 (has voice mail)  
**e-mail:** jweisham@mail.ucf.edu  
**URL:** <http://pegasus.cc.ucf.edu/~jweisham> (my UCF schedule is posted here)

**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., after class Tuesdays & Thursdays until noon) to answer any questions.

**ClassWeb Site:** accessed through WebCT: <http://webct.ucf.edu/> or through your my.ucf.edu account. Lecture notes, grades, and potentially other relevant internet sites will be made available at this site. Most likely the latest PowerPoint lecture slides will be available the night before class. These will be purposefully incomplete to encourage active learning.

**Class Meeting Times:** Tuesdays and Thursdays, 9:00-10:15 AM, Health and Public Affairs 119.

**Intended Audience:** Biological Science majors & minors, Science Education majors, Preprofessional students, selected graduate students, and other interested parties.

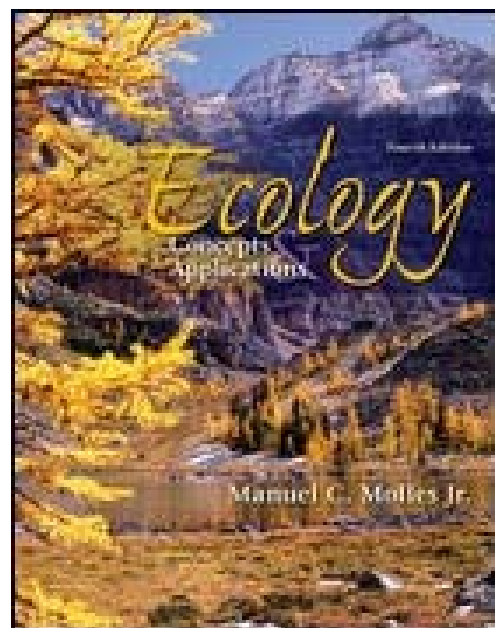
**Course Description:** The course covers the basic elements of ecosystems, biogeochemical cycling, environmental factor interactions, population dynamics, community development and structure.

### General Objectives Students are Expected to Achieve:

1. Understand the basic principles and unifying concepts of ecology as a cornerstone of a broad background in biology.
2. Learn some of the basic ecological terminology.
3. Appreciate and apply the theoretical concepts of ecology and the experimental evidence supporting them.
4. Become familiar with the scientific method as applied to ecological studies.
5. Gain an appreciation of ecology as a science and its role in understanding the man-nature interaction.

**Course Prerequisites:** The student should have minimally taken General Biology BSC 2010C and Biodiversity BSC 2011C.

**Text:** Molles, M.C. 2008. Ecology – Concepts and Applications (4th Edition) McGraw-Hill, Publishing Co., Inc. New York. Available at Book Store. The electronic (less expensive) version is also acceptable. Earlier editions of this text may work, but you need to be aware of updates and differences in chapter numbering.



## Lecture Schedule

Lec- ture	Date	Lecture Topic*	Reading
1	Tues., 1/8	Course Intro	Chapter 1
2	Thurs., 1/10	What is Ecology? What is its relevance	Chapter 1
3	Tues., 1/15	Life on Land	Chapter 2
4	Thurs., 1/17	Life in Water	Chapter 3
5	Tues., 1/22	Temperature	Chapter 4
6	Thurs., 1/24	Water	Chapter 5
7	Tues., 1/29	Energy	Chapter 6
8	Thurs., 1/31	Focus the Nation Teach-In – Student Union	
9	Tues., 2/5	Nutrients	Chapter 6
	Thurs., 2/7	<b>MIDTERM I</b>	
10	Tues., 2/12	Population Genetics – Evolution	Chapter 8
11	Thurs., 2/14	Population Distributions	Chapter 9
12	Tues., 2/19	Population Dynamics/Growth	Chapters 10 & 11
13	Thurs., 2/21	Life Histories	Chapter 12
14	Tues., 2/26	Competition	Chapter 13
15	Thurs., 2/28	Predation	Chapter 14
16	Tues., 3/4	Mutualism	Chapter 15
	Thurs., 3/6	<b>MIDTERM II</b>	
17	Tues., 3/18	Species Abundance and Diversity	Chapter 16
18	Thurs., 3/20	Community Structure	Chapter 17
19	Tues., 3/25	Primary Production	Chapter 18
20	Thurs., 3/27	Nutrient Cycling	Chapter 19
21	Tues., 4/1	Succession and Stability	Chapter 20
22	Thurs., 4/3	Landscape Ecology	Chapter 21
23	Tues., 4/8	Geographic Ecology	Chapter 22
24	Thurs., 4/10	Global Ecology	Chapter 23
	Tues., 4/15	<b>MIDTERM III</b>	
	Thurs., 4/17	Course Review	
	Tues., 4/22	<b>FINAL EXAM – 7:00 AM - 9:50 AM in HPA 119</b>	

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

## Student Responsibilities:

**Etiquette** – Students should show proper classroom etiquette. This class is full. So there should be few (if any) empty seats. Students should show up to class on time. 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. **You are expected to have read the material prior to class!** We will pretty much read the book cover to cover.

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

**Midterms and Final Exam** – There will be three 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 will cause trouble. The final exam will be comprehensive and mandatory. All exams will be multiple choice/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. The exams will be designed to make you think and function as additional learning experiences. If the clickers are working properly, you will not need to worry about scantron sheets.

### Performance Evaluation:

Midterms (2 x 30%)	= 60%
Final Exam	= 30%
Class Participation	= 10%
	_____
Total	= 100%

The grade scale will follow the traditional A = 90 to 100; B = 80 to <90; C = 70 to <80; etc. There will **not** be +’s or –’s. There will **not** be rounding up of numeric scores.

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: Principles of Ecology**

**Class Key: L35295N254**

### **You will need:**

- ✦ Class Key (from your instructor)
- ✦ Connection to the Internet
- ✦ Enrollment Code/coupon (from your *new* McGraw Hill textbook or your school bookstore)  
**or**
- ✦ Method of Payment (Credit card or personal check)

### 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](http://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**

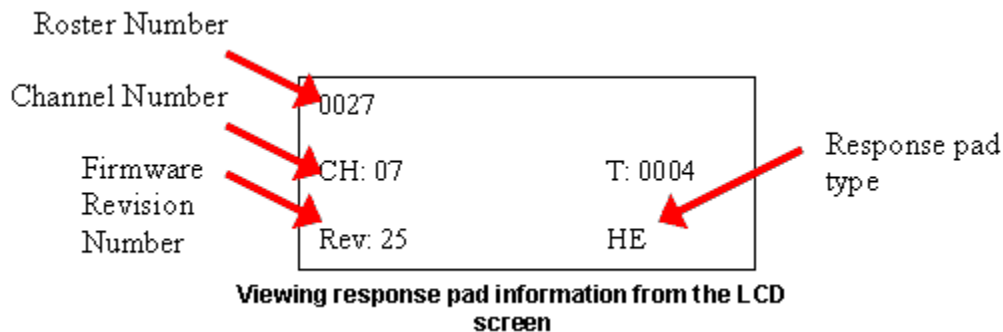
1. Click **Yes** to enroll immediately in your class.
2. Enter your **Class Key** in the space provided. If you have a Code, enter it in the **Code** box. Note that a Code is not required.
3. Click **Submit** and choose your payment options. Click **Continue**.
4. Fill in your billing information and 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<sub>RF</sub> 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](http://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.