

PCB 3044 - Principles of Ecology – Summer A 2014

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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., after class Monday Tuesday, Wednesday 12-1 PM) to answer any questions. Please let me know that you will be coming in during this time.

- * For electronic communications, students must use Knight's E-mail addresses.
- * Due to confidentiality, grades must be discussed in person with the instructor and not via email.

ClassWeb Site: is accessed through webcourses 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 PowerPoint lecture slides will be available the night before class. These will be purposefully, somewhat incomplete to encourage active learning.

Class Meeting Times: Mondays, Tuesdays, Wednesdays, and Thursdays, 10:00-11:50 AM Classroom Building 2 Room 206 (lecture) and Technology Commons II Room 225 (computer lab). Generally, we will begin in CB2 208 for about an hour then half of the class will then move to TCII 225.

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 Biology I (BSC 2010C), Biology II (BSC 2011C), Chem I (CHM 2045).

Text: You will be using a digital text-workbook called SimUText Ecology that was funded by the National Science Foundation and developed by the SimBio company. You are required to purchase an access code and use a computer to read the textbook and do the associated problems. Internet access is needed to download the modules.



Lecture/Assignment/Quiz Schedule

Week	Lecture	Date	Lecture Topic*	SimUText Exercises (Due Date)
1	Organisms and Their Environment			
	1	Mon., 5/12	Course Intro / The Physical Environment	Physiological Ecology (5/18)
A	2	Tues., 5/13	Climate & Marine Systems	
B	3	Wed., 5/14	Freshwater & Terrestrial Systems	Evolution for Ecology (5/18)
A	4	Thurs., 5/15	Influence of Temperature & Water – Quiz 1	
2	Populations			
B	5	Mon., 5/19	Auto- & Hetero-trophic Energy	Life History (5/23)
A	6	Tues., 5/20	Evolution & Speciation	
B	7	Wed., 5/21	Life History	Population Growth (5/23)
A	8	Thurs., 5/22	Population Distribution & Abundance – Quiz 2	
3	Interactions among Organisms			
		Mon., 5/26	NO CLASS – Memorial Day	
B	9	Tues., 5/27	Population Growth	Competition (5/30)
A	10	Wed., 5/28	Population Dynamics / Competition /	
B	11	Thurs., 5/29	Predation, Herbivory, Parasitism & Mutualism – Quiz 3	Predation, Herbivory, and Parasitism (5/30)
4	Communities			
A	12	Mon., 6/2	Communities	Community Dynamics (6/6)
B	13	Tues., 6/3	Community Dynamics–Succession	
A	14	Wed., 6/4	Biogeography	Biogeography (6/6)
B	15	Thurs., 6/5	Species Diversity & Disturbance – Quiz 4	
5	Ecosystems			
A	16	Mon., 6/9	Productivity	Ecosystem Ecology (6/13)
B	17	Tues., 6/10	Energy Flow – Food Webs	
A	18	Wed., 6/11	Nutrients	Decomposition (6/13)
B		Thurs., 6/12	Biogeochemical Cycling – Quiz 5	
6	Applied and Large-Scale Ecology			
A	19	Mon., 6/16	Conservation Biology	Nutrient Cycling (6/19)
B	20	Tues., 6/17	Landscape Ecology & Ecosystem Management	
A	21	Wed., 6/18	Global Ecology & Climate Change	Climate Change (6/19)
B	22	Thurs., 6/19	Course Summary – Quiz 6	

The **A** & **B** letters designate computer lab groups that will have access to TCII 225 that day.

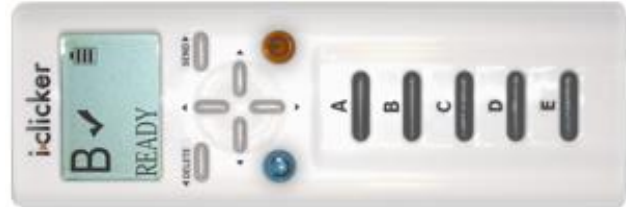
*The dates of these topics and quizzes serve as a guideline and are subject to change.

Student Responsibilities:

Etiquette – Students should show proper classroom etiquette. Students should show up to class on time. Students who need to leave the lecture room early should not come to lecture that day, but wait until the computer lab session begins. Students should not disrupt other students (or the instructor) in class by talking unless instructed to do so by the instructor.

Readings – SimUText Readings/Exercises, for the most part, are designed to coincide with and supplement the lecture component of the course. The order of SimUText assignments are listed above.

Clickers – You will need to bring your i>clicker2 (personal response system) to every lecture and quiz. 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 daily class participation or worse could result in a 0 on a quiz. You have two graces (misses) starting 5/14 and 2 potential days for bonus (5/12 and 5/13). To register your i>clicker, click on the i>clicker icon on the class webcourses site.



Quizzes – There will be six, weekly in-class lecture quizzes, covering material that roughly occurs at even intervals of the course. The lowest quiz 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. If you are happy with your prior five quiz performances, you may skip the final quiz. These will be multiple choice tests focusing on the lecture material. 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 quizzes will be designed to make you think and function as additional learning experiences. These will be i>clicker based exams and will not require scantrons.

SimUText Assignments – You will be doing 12 SimUText chapter exercises in the computer classroom (TCII-225) and either on your personal computer or public UCF computers. These can be done as a part of a small group (2-4) or individual effort. **However, I do not want to see or hear about someone who simply posts all the answers on-line!** Registration access codes for the SimUText component are available through the UCF Bookstore. Every student must purchase this item! If you will be using campus computers, you will also need a portable USB drive on which to install the software for campus use. The flash or thumb drive needs to be ~1-2 GB.

If you will be using UCF computers, You will need to download the installation file from webcourses and extract it and direct the installation to the USB drive which will be used in the UCF Computer Labs. See last page for information.

Performance Evaluation:

Quizzes (5 x 12%)	= 60% ;	Lowest of the 6 quiz grades will be dropped.
SimUText Exercises	= 30% ;	12 Modules (i.e., 2.5 points per module)
Class Participation	= 10% ;	Classroom clicker responses (1.67 pts / week)
Total	<u>= 100%</u>	

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.

There will be one opportunity for extra credit upto to 2.5 points by completing the “How Diseases Spread” SimUText tutorial. That will be due 6/19.

If you have already purchased your clicker and bring it and use it for the first two class periods, your Class participation can exceed 10%.

As always, 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.

Please follow the instructions below to subscribe to SimUText for your **Principles of Ecology SU14** course at **University of Central Florida**.

1. Go here: <https://simutext.com/register.jsp?accesskey=VKUB-mRuJ-bjD7-Xrzb-cCbq>
2. **If you purchased a SimUText registration voucher card from your bookstore**, enter that code in the Registration Voucher box on the Confirm Course Selection screen. **Otherwise, click the Continue button.**
3. Once you complete your registration, you must download and install the SimUText application to view your course materials. You will need the account information you created when you registered to log in to the SimUText System.

Should you encounter a problem registering, the access key for this course is:

VKUB-mRuJ-bjD7-Xrzb-cCbq.

Problems or questions? Visit [SimUText Support](#) to search our Knowledge Base and view Video Tutorials.

If you are not able to find the answer to your question, you can submit a support request from the support page.

SimUText Removable (USB) Drive Installation

If you are planning on not using a UCF computer for the SimUText, you will need to purchase a USB drive and will need to install a file (that you can download from webcourses) on that drive.

To use this version of SimUText on a USB drive:

1. Plug the USB drive into your PC. It must have at least 300 MB of free space on it.
2. Open Windows Explorer and navigate to My Computer. Note the drive letter ("E:", etc.) for the USB drive you mounted.
3. Return to the SimUText Installer and click Next from this screen to go to the Select Installation Folder screen.
4. Use the drop-down box to select the drive letter of your USB drive. Click Next.
5. At the Ready to Install screen, the Installation Folder should read "E:\SimUText" (assuming your USB drive letter is E:). Click Finish.

To launch SimUText from the USB drive on another computer:

1. Mount the USB drive on the computer.
2. In Windows Explorer, navigate to your USB drive. Open the SimUText folder and launch the SimUText application.
3. Chapters will download to the SimUText/labs folder on your USB drive. If you move the drive to another computer, you do not have to download the chapters again. All of your submitted answers are stored on the SimUText server and nothing is stored on the computer you use.

For more information, please visit <http://www.simbio.com/support/simutext>