

PCB 3044: Principles of Ecology
Fall 2017 Syllabus
College of Science, Dept. of Biology



Lecture Location: Classroom Building 2 (CB2) 207
Section 1: Mondays and Wednesdays 8:00 am - 9:20 am

Instructor: Dr. Melinda Donnelly

E-mail: Melinda.Donnelly@ucf.edu

Office Hours: Monday: 10:00 am-12:00 pm; Wednesday: 1:00 pm- 3:00 pm

*if you cannot make these times, please contact me by email to schedule an appointment

Office Location: Biological Sciences Building, room 401A

Undergraduate Teaching Assistant: Victor Daza

Office Location: Rm 201, Biological Sciences Bldg. (BIO)

Email: victorjdaza@knights.ucf.edu

Email Policies: ALL questions regarding the class should be sent to the TA at victorjdaza@knights.ucf.edu

- If the TA cannot answer the question, it will be *forwarded by the TA* to the instructor.
- Include in your email subject: course title (i.e., Ecology) and section number (0001)
- Include in your email: (1) your full name, (2) course title (i.e., Ecology) and (3) section number (0001-Donnelly)
- The TA will try to respond within 48 hours, but some response times may be longer. Please plan accordingly and do not wait until the last minute to contact us with questions or concerns.
- Grades must be discussed in person with the instructor and will not be sent via email.
- All e-mail communications must be from your Knight's E-mail addresses.

Intended Audience: Biological Science majors & minors, Environmental Science majors, Science Education majors and Pre-professional students

Course Description: This 3-credit course will examine the structure and function of ecological systems, including populations, communities, and ecosystems. Objectives for students include: (a) master major concepts and basic terminology of ecology, (b) understand how evolution and ecology complement each

other, and (c) understand approaches of ecological study, including theory, observations, and experiments.

General Objectives Students are expected to achieve:

1. Understand the basic principles 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: C or better in Biology II (BSC 2011C) and Chemistry Fundamentals 1 (CHM 2045C).

Required Resources:

Text: Cain, Bowman, and Hacker. 2013. Ecology, 3rd ed. Sinauer Associates, Sunderland, MA. Available at campus bookstore.

I-clicker2 will be used for in-class participation credit. Participation will begin on Monday, August 28, 2017. Available at campus bookstore.

Webcourses - Ecology is a web-enhanced class. Announcements, lecture notes, quizzes, grades, supplemental readings and videos, and relevant web links will be made available at this site. Use your NID and myUCF password to log in.

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 is listed in the schedule on the last page. It will help you to succeed if you have read the material **prior to class**.

Lectures:

Students should show proper classroom etiquette. *Please do not be late or leave early, this disrupts the class.* All cell phones should be turned OFF when entering the classroom. Students who arrive late or need to leave the lecture room early should sit towards the rear to avoid disrupting the class. Students should not disrupt other students (or the instructor) in class by talking, texting, or using your computer for purposes unrelated to the lecture. People not adhering to these common courtesies will be asked to leave the class. Recording of lectures is permitted.

Assessments:

Exams (4 total, 22% each) 88%

Quizzes (lowest grade dropped) 6%

Clicker participation (2 dates dropped) 6%

Total = 100%

The overall semester grade will be rounded to the nearest whole number (e.g., a 79.49999 and below will round down, while a 79.5000 and above will round up). There will be no exceptions to this policy and no adjustments will be made to final grades.

Grading Scale:

A	90-100%
B+	87-89%
B	80-86%
C+	77-79%
C	70-76%
D+	67-69%
D	60-66%
F	<60%

Exams:

There will be four exams (22% each). The final exam (exam 4) is NOT comprehensive and will cover the material since the previous exam. The schedule for exams is listed in the table below. The questions will be primarily multiple choice but will also include some written short answer. All questions will pertain to material covered in both lectures, classroom discussions, and textbook readings.

Lecture Exam Policies:

1. **All exam grades count towards your semester grade. No exam grades will be dropped.**
2. All exams will be based on both lecture material, class discussions, and text reading assignments.
3. You must bring:
 - a) a pencil
 - b) your UCF ID – **note:** failure to show your ID may result in a score of zero for the exam.
 - c) IF a calculator is needed it must be a non-graphing, nonprogrammable type of calculator capable of performing the type of calculations discussed in the text and lecture (e.g. Texas Instruments TI-30 or Casio fx-300MS). You may not use a cell phone.

4. Scantrons will be supplied. You do not need to bring your own.
5. Exams 1-3 will begin promptly at the beginning of class and you will have the full 80 minutes. The final exam will occur at the scheduled time during finals week (see class schedule). It is not comprehensive and will only include the material covered since exam 3.
6. **You must attend the exam for your correct session.** There will be no exceptions to this policy. Similarly, you must take the final exam with your correct section.
7. **Do not arrive late.** Once the first student has turned in their exam, no one else will be allowed to start the test. Under no circumstances will extra time be allowed.
8. Prior to the exam, all books, notes and bags must be stowed under your seat.
9. Cell phones must be turned OFF and stowed during the exam period.
10. You must print your **PID number** on the scantron and question sheet. Be sure you know it!
11. Grades will be posted on WebCourses and we will inform the class when they are posted.
12. **REVIEW OF EXAMS** - Scantrons will not be returned to students. Instead, you may review your exam during the TA office hours or by appointment. Each exam must be reviewed prior to the next exam date (i.e. if you would like to review exam 1 this must be done before exam 2 is given).

Missed Exam Policy:

1. Make-up exams for exams 1, 2, and 3 will be provided **only** for students who must miss the exam due to official University business at which your presence was required (e.g. a university-sponsored team event). **Hard-copy documentation must be provided 48 hours in advance from the appropriate university body.** Other events may be excused at the Instructor's discretion and prior notification and documentation will be required.
2. For all other cases (e.g. illness, unforeseen emergencies, etc.) you must contact the professor promptly (within 24 hours or less) after missing the exam and provide **hard-copy documentation (a signed document from a doctor, police officer, judge etc. - not by e-mail) within one week.** The absence must have been caused by a valid emergency as defined by UCF and/or the professor, including but not limited to: major illness, serious family emergency, jury duty, military obligation, etc.
3. Make up exams will be in essay format.
4. All make-up exams will be completed at the Biology Testing Center during their designated hours within 1 week of the scheduled exam, unless other arrangements are approved by the instructor.
5. Unexcused absence from an exam will result in a failing grade for the missed exam.
6. All students are required to take the final exam and there will be **no make-up exams for the Final.**

Quizzes:

There will be 11 online quizzes and will occur every week except exam weeks and Thanksgiving week. Quizzes can be accessed in the class WebCourses site. Quizzes will open on Monday morning and will be due by Friday, 11:59 pm. You will have 30 minutes to complete each quiz. Quizzes are open book but require prior preparation to successfully complete the quiz in the time allotted. If you are not

satisfied with your grade on a quiz it may be taken a second time prior to the due date and the best score of the two will count.

The lowest quiz grade will be dropped. Thus, your quiz average will be determined using your 10 best quiz scores. There are **no make-up quizzes and no deadline extensions**. You are responsible for reading the text and taking the quizzes on time. The first quiz will occur at the end of week 1.

Two common problems with quiz submission you should note are:

- 1) Questions must be answered in order and you may not return to previous questions;
- 2) Final submission of the quiz must occur prior to the 30-minute deadline or the computer will not accept it.

In-Class Participation

Clickers:

You will need to bring your i>Clicker2 to lecture each day. Clickers will be used for in-class quizzes, opinion polls, on-the-fly knowledge assessments, and of course attendance. You must use the i>Clicker 2 (with the LCD screen). You may **not** use the i>Clicker1 or i>Clicker Go on your phone, laptop, or tablet. You can purchase or rent this from the UCF bookstore.



The required use of clickers will begin on Monday 8/28. You must have registered your i>Clicker2 by this day or you will not receive credit.

How to register your iclicker2:

1. The only valid way to register your i>Clicker2 for this class is through Webcourses. Even if you registered your i>Clicker2 in a previous semester you must reregister it this semester.
2. Log into the class webpage on Webcourses.
3. On the left-hand side menu click the tab named "i>clicker".
4. Click on the "i>clicker Registration" link.
5. Follow the instructions provided.

Most days in class, the professor will ask one or more questions for you to answer using your i>Clicker2. Answering these questions is necessary to receive: (A) Participation credit; (B) Extra credit.

(A) Participation: Your final participation grade is worth 6% of your overall grade. The responses do not need to be correct for you to receive credit for participation, however, you must be present for all questions in order to get credit for attendance on that date. Attendance of class regularly is necessary for successful completion of this course. Lecture slides will be posted on-line, however, additional material covered in class such as examples, practice problems and current event topics will be included on exams and may not be included in on-line lecture slides.

*****NOTE*** You may miss class two times and still receive full participation.** So, if you overslept, your car did not start, etc., there is no need to contact the instructor. More than two missed participation days will however result in reduction unless these absences are for authorized exceptional reasons including illness, court, military duty, or official university business. Written documentation from a competent authority (physician, coach, counselor, etc.) for such absences should be presented to the Instructor.

Your final participation grade will be calculated as follows:

(# of days you participated) / (total # of days with participation- 2). So, if there were 35 days then with the two allowed absences we would count it as 33 days. If you participated in 25 days then your participation grade will be $25/(35-2) = 0.758$ (75.8%).

(B) Extra Credit:

It is not necessary to respond correctly to participation questions to receive participation credit for a particular day, but correct responses will benefit your grade via extra credit added to your overall exam average. The maximum possible extra credit is 2%. Extra credit points missed for any reason cannot be made up under any circumstance.

Calculating your extra credit grade: There are 4 exams, each worth 100 pts, for a maximum of 400 points possible without extra credit. The maximum possible extra credit is 2% which is 8 points ($400 * 0.02 = 8$). To calculate your points, multiply your clicker average by 8. For example, if you correctly answered 91% of the questions asked, you will receive $0.91 * 8 = 7.28$ extra credit points added to your overall exam average.

- *****NOTE*** Clicker responses will only count when done within your assigned section. You will not receive any points for participation or extra credit if you attend a course section in which you are not enrolled.**
- **Clicker responses must be done on your own, unless otherwise indicated by the instructor. Discussing answers with a neighbor prior to clicking is considered cheating and could result in a zero for your final participation grade (see Academic Conduct section below).**
- **Bringing another student's clicker to class is also considered cheating and could result in a zero for your final participation grade.**

Extra Credit: Participation responses: Max possible = 2% added to your overall exam average (see "Participation" section for details)

Grade Policies

Grades for all quizzes, participation, bonus points and exams will be posted on UCF Webcourses. No grades will be given by e-mail. Questions about grades should be addressed during office hours or by appointment to maintain confidentiality. Anyone requiring grade forms signed during the semester must bring form to office hours. No grade forms will be signed before/after lecture or by e-mail.

Please note, Webcourses often calculates grades incorrectly and the “final grade” and “current grade” values shown on Webcourses may be inaccurate.

Study suggestions:

This is a fast-paced class covering multiple chapters each week. To succeed it is essential that you stay caught up by reading, attending lectures, and studying the material. Students who prepare for the exams by simply attending lectures and reading their notes several times are unlikely to succeed on the exams. Although the final exam is not cumulative, concepts build on each other and understanding one chapter is essential to understanding later chapters in this course. To succeed it is best to make your learning more active and focused. Active learning involves practicing the same skills you must perform on exams. In other words, quick recall of the appropriate information and applying it. To do this you should:

- A) Treat studying like it's a job. Set a schedule, show up for work, pay attention (i.e. no multitasking) while on the job. A general rule of thumb is 2-3 hours for every hour spent in class.
- B) Practice by Self-Testing. Make your own study questions: If you are like most people, you do not remember what you read/hear in sufficient detail to then be tested. However, it may be unclear which details you remember/understand and which you do not. The point in study questions is to figure out prior to an exam what you don't understand or have trouble remembering and work on that material. You do not want to realize during an exam that you don't understand something as well as you thought you did as it is now too late!

Ethics:

UCF faculty supports the UCF Creed. Integrity - practicing and defending academic and personal honesty is the first tenet of the UCF Creed. This is in part a reflection of the second tenet, Scholarship: -I will cherish and honor learning as a fundamental purpose of membership in the UCF community. Course assignments and tests are designed to have educational value; the process of preparing for and completing these exercises will help improve your skills and knowledge. Material presented to satisfy course requirements is therefore expected to be the result of your own original scholarly efforts.

Plagiarism and cheating - presenting another's ideas, arguments, words or images as your own, using unauthorized material, or giving or accepting unauthorized help on tests - contradict the educational value of these exercises. Students who attempt to obtain unearned academic credentials that do not reflect their skills and knowledge can also undermine the value of the UCF degrees earned by their more honest peers.

UCF faculty members have a responsibility for your education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to infringements of academic integrity. Penalties can include a Z-designation, failing grade in an assignment or in the course, or suspension or expulsion from the university. See <http://www.osc.sdes.ucf.edu/> for more information about UCF's Rules of Conduct.

Incomplete Grades

The current university policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course and the remaining work can be completed the next semester. The instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished by the end of the subsequent semester or the "I" will automatically be recorded as an "F" on your transcript.

Disability Access

The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Class Schedule

*Schedule subject to change and all changes will be given in class and posted on-line. The opening date of all quizzes are listed in below schedule and will be due by 11:59 pm on Fridays of each week. Correct answers to quizzes may be viewed on the Saturday morning after quiz closes.

Date	Lecture Topic	Book Chapter	Quizzes
8/21/2017	Syllabus, Introduction to Ecology	1	Quiz 1 opens
8/23/2017	The Physical Environment	2	
8/28/2017	The Biosphere (Participation Begins)	3	Quiz 2 opens
8/30/2017	The Biosphere	3	
9/4/2017	No Classes: Labor Day		Quiz 3 opens
9/6/2017	Evolution and Ecology	6	
9/11/2017	Water, Temperature, and Energy	4, 5	Quiz 4 opens
9/13/2017	Water, Temperature, and Energy	4, 5	
9/18/2017	Exam 1	Chapters 1-6	
9/20/2017	Life History	7	
9/25/2017	Behavioral Ecology	8	Quiz 5 opens
9/27/2017	Population Distribution and Abundance	9	
10/2/2017	Population Growth, Regulation, Dynamics	10, 11	Quiz 6 opens
10/4/2017	Population Growth, Regulation, Dynamics	10, 11	
10/9/2017	Exam 2	Chapters 7-11	
10/11/2017	Community Interactions	12 ,13,14,15	
10/16/2017	Community Interactions	12 ,13,14,15	Quiz 7 opens
10/18/2017	Community Interactions	12 ,13,14,15	
10/23/2017	The Nature of Communities	16	Quiz 8 opens
10/25/2017	The Nature of Communities	16	
10/30/2017	Change in Communities	17	Quiz 9 opens
11/1/2017	Biogeography	18	
11/6/2017	Exam 3	Chapters 12-18	

11/8/2017	Flow of Energy and Nutrients	20,21,22	
11/13/2017	Flow of Energy and Nutrients	20,21,22	Quiz 10 opens
11/15/2017	Conservation Biology	23	
11/20/2017	Landscape Ecology	24	No quiz this week
11/22/2017	No Class: Happy Thanksgiving		
11/27/2017	Ecosystem Management	24	Quiz 11 opens
11/29/2017	Global Ecology	25	
12/4/2017	Exam 4 (7:00am to 9:50am)	Chapters 20-25	