

PCB 3044: Principles of Ecology  
Department of Biology, College of Science

3 Credit Hours

**Instructor Information**

Instructor: Dr. Melinda Donnelly

Email: Melinda.Donnelly@ucf.edu

Office Location: Biological Sciences (BIO) Building, room 401A

Virtual Office Hours: Mondays: 10 am to 11 am and Wednesdays: 9 am to 11 am on Chat on Webcourses or Zoom (by appointment)

Appointments outside of posted office hours are available and scheduled by email

Undergraduate Teaching Assistant: Cristina Lingvay

Office Hours: Tuesdays and Thursdays, 2:00-3:30 pm, on Zoom

Email Policies: ALL questions regarding the class should be sent to Cristina Lingvay by using the following email: EcoTA2@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, particularly over weekends and holidays. Please plan accordingly and do not wait until the last minute to contact us with questions or concerns.

Grades must be discussed with the instructor by requesting a meeting on Zoom.

All e-mail communications must be from your Knight's E-mail addresses, any other emails will not receive a response per UCF policy.

**Course Information**

Term: Fall 2021

Course Number & Section: PCB 3044.0001

Course Name: Principles of Ecology

Credit Hours: 3

Class Meeting Days: Mondays and Wednesdays, 3:00-4:20 PM

Class Location: ENG2 102

Course Modality: Face-to-Face (P)

Enrollment Requirements

Course Prerequisites: C or better in Biology II (BSC 2011C) and Chemistry Fundamentals 1 (CHM 2045C).

### **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.

### **Course Materials and Resources**

Textbook: Ecology 5th Edition by William D. Bowman; Sally D. Hacker; Publisher: Sinauer Associates, Sunderland, MA. Multiple versions and options for purchase and rent are available- purchasing the access code for the publisher site is recommended due to additional on-line content to support the virtual nature of this course.

eTextbook option: ISBN: 9781605359236, 1605359238

Print version ISBN: 9781605359212, 1605359211.

Internet Access and Webcourses

Webcourses will be used for aspects of this class, including class related material and communication:

- Course Syllabus
- Weekly Modules
- Lecture Slides
- Exam review material
- Weekly Quizzes, Participation Assignments
- Announcements
  - To ensure that you receive important announcements, you are required to have your announcements setting turned on. You are responsible for information sent to students via Webcourses Announcements.
- Grades for all course components

### **Student Learning Outcomes**

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.

## Assessment and Grading Procedures

Assessment	Percentage of Grade
On-Line Participation	6%
Weekly Quizzes	6%
4 lecture exams (22% each)	88%
Total	100%

### Final Course Grade Rounding Policy:

If your final total across all grading components is less than or equal to one percent below a higher grade, rounding up to the higher grade will occur only if you scored at the higher grade on 3 of the 4 exams. For example, if your overall course grade was an 89% and your exam scores were 84, 91, 92, and 93, your final grade will be rounded up to an A because three of the tests scored at 90 or above. If, however your exam grades were 85, 88, 92, and 94, the grade would remain a B+ because only 2 of your 4 exam grades were 90 or above. As there are many students in this class I strive for consistency and fairness. For this reason, there will be no exceptions to this policy and no other adjustments will be made. In other words, unless the above criteria are met, a 79.99 is still a 'C+' and no additional curving or extra credit will be offered.

### 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%

\*In compliance with FERPA, no grades will be given via email or phone

Students wishing to discuss their grades must request an appointment with Dr. Donnelly by email.

Grades will not be discussed with any individual (even parents) other than the student

### **Course Activity Details**

#### Attendance Verification for Financial Aid Students

Faculty are required to document student attendance/participation in this course so that financial aid monies are disbursed appropriately and in a timely manner.

To document your attendance and participation in this course you are required to complete the Academic Engagement Activity - Syllabus Quiz in Webcourses no later than Friday, August 27th.

Failure to complete this quiz will result in the delay of your financial aid funds

This quiz is related to the lecture syllabus. Your score on this quiz will count as 1 pt towards your general participation grade (described below).

#### General Participation Grade (6% of semester grade)

Your Participation grade will be evaluated based on responses to questions embedded in weekly modules and discussion postings. At the end of the semester, the lowest 2 participation grades will be dropped. Contact Dr. Donnelly if additional participation activities are missed; documentation may be required at the discretion of instructor for additional excused participations.

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.

#### Weekly Quizzes (6% of semester grade)

There will be eleven online quizzes given through Webcourses, one per week except for the first week of classes and any week an exam is being given.

Each quiz will consist of multiple choice questions and short-answer questions based on module content.

These quizzes are intended to help you learn along the way. The quizzes are open-book and 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.

Your lowest (1) quiz grade will be dropped from your final grade.

Quizzes will be open on Mondays and close at 11:59PM on Friday.

Important: There are NO makeups or excused absences for missed quizzes (unless a student can provide documentation affecting them longer than 1 week, e.g. extended hospitalization, sequestered jury duty, etc. that prevented computer access).

If you miss taking a quiz, you will receive a zero (0) for that quiz's grade. Therefore, do NOT wait until the last minute to take the quiz.

Technical or internet difficulties will NOT be accepted as an excuse for missing quizzes.

Students are responsible for knowing the quiz due dates which can be found on Webcourses.

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 Webcourses will not accept it.

Lecture Exams (88% of semester grade)

Four exams will be given throughout the semester on-line on Webcourses during scheduled class time:

Exam 1: Monday, Sept. 20th

Exam 2: Monday, October 11th

Exam 3: Monday, Nov. 8th

Exam 4 (Final Exam Time): Wednesday, December 8th, 1 pm to 3:50 pm

Each exam is worth 22% of final grade- all exams count towards final grade.

Exam content is based on material covered in book chapters, lectures, and modules.

Exams are open notes and open book, however, Lockdown browser will be required when taking the exam.

Review the information about LockDown Browser and download at:

[https://cdl.ucf.edu/support/webcourses/respondus/download/Links to an external site.](https://cdl.ucf.edu/support/webcourses/respondus/download/Links%20to%20an%20external%20site)

Once installed, test your browser with this practice quiz: Lockdown Browser Practice Quiz- Requires Respondus LockDown Browser

Failure to take the exam during the assigned date and time will result in a zero (0) grade for the exam

Exams 1,2, and 3 will start on Webcourses promptly at 3:00 pm and you will have 80 minutes to complete.

Exam 4 will occur during scheduled final exam time for this course on Dec. 8th from 1:00 pm to 3:50 pm.

Any students signing in late to the exam must complete the exam in the time remaining

### **Make-up Exams and Assignments**

Per university policy, you are allowed to submit make-up work (or an equivalent, alternate assignment) for authorized university-sponsored activities, religious observances, or legal obligations (such as jury duty). If this participation conflicts with your course assignments, I will offer a reasonable opportunity for you to complete missed assignments and/or exams. The make-up assignment and grading scale will

be equivalent to the missed assignment and its grading scale. In the case of an authorized university activity, it is your responsibility to show me a signed copy of the Program Verification Form for which you will be absent, prior to the class in which the absence occurs. Other absences may require documentation to be excused at the instructor's discretion. In any of these cases, please contact me ahead of time to notify me of upcoming needs.

Consult the latest Undergraduate or Graduate catalog [Links to an external site.](#) for regulations and procedures regarding grading such as Incomplete grades, grade changes, and grade forgiveness.

### Course Schedule

See the complete Course Schedule for dates and deadlines.

Date	Module #	Lecture Topic	Book Chapter	Quizzes
8/23/2021	0, 1	Syllabus, Introduction to Ecology	1	Academic Activity Quiz Opens (due Friday, August 27th, 5 pm)
8/25/2021		The Physical Environment	2	
8/30/2021	2	The Biosphere_Part 1	3	Quiz 1 opens
9/1/2021		The Biosphere_Part 2	3	
<b>9/6/2021</b>	<b>3</b>	<b>No Classes: Labor Day</b>		<b>Quiz 2 opens</b>
9/8/2021		Water and Temperature	4	
9/13/2021	4	Energy	5	Quiz 3 opens
9/15/2021		Evolution and Ecology	6	
<b>9/20/2021</b>		<b>Exam 1</b>	<b>Chapters 1-6</b>	<b>No quiz this week</b>
9/22/2021	5	Life History	7	
9/27/2021	6	Behavioral Ecology	8	Quiz 4 opens
9/29/2021		Population Distribution and Abundance	9	
10/4/2021	7	Population Growth, Regulation, Dynamics	10, 11	Quiz 5 opens

10/6/2021		Population Growth, Regulation, Dynamics	10, 11	
<b>10/11/2021</b>		<b>Exam 2</b>	<b>Chapters 7-11</b>	<b>No quiz this week</b>
10/13/2021	8	Competition	12	
10/18/2021	Module 8 Cont.	Predation	13,14	Quiz 6 opens
10/20/2021		Mutualism and Commensalism	15	
10/25/2021	9	The Nature of Communities	16	Quiz 7 opens
10/27/2021		Change in Communities	17	
11/1/2021	10	Biogeography	18	Quiz 8 opens
11/3/2021		Species Diversity in Communities	19	
<b>11/8/2021</b>		<b>Exam 3</b>	<b>Chapters 12-19</b>	<b>No quiz this week</b>
11/10/2021	11	Flow of Energy	20,21	
11/15/2021		Flow of Nutrients	22	Quiz 9 opens
11/17/2021	12	Landscape Ecology	24	
11/22/2021		Ecosystem Management	24	No quiz this week
<b>11/24/2021</b>		<b>No Classes: Thanksgiving Break</b>		
11/29/2021	13	Conservation Biology	23	Quiz 10 opens
12/1/2021		Global Ecology *Last Day of Classes	25	
<b>Wednesday, 12/8/2021</b>		<b>Exam 4 (1:00PM to 3:50 PM)</b>	<b>Chapters 20-25</b>	

Weekly modules will open on Mondays and include lecture files and links to on-line resources associated with the topics included in the textbook chapters listed below. The modules are designed for you to complete at your own pace over the course of the week. On all weeks except exam weeks, quizzes will open on Monday with the module information and be due by 11:59 pm on the following Friday. Quizzes will test knowledge of material presented in the weekly module and associated textbook readings.

Any changes to the schedule will be announced to the class through Webcourses.

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:

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 of class.

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!

### **COVID-19 and Illness Notification**

Based on current CDC guidelines, UCF recommends all individuals to wear masks when indoors on campus, including attending lectures and office hours, for the protection of yourselves and those around you.

Vaccinations are available from UCF Student Health Services and many other local pharmacies. For more vaccine information, visit the UCF Vaccination Information ([Links to an external site](#)) page.

Students who believe they may have a COVID-19 should seek medical assistance and testing and contact UCF Student Health Services (407-823-2509) so proper contact tracing procedures can take place. Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in their residence has tested positive or is sick with COVID-

19 symptoms. CDC guidance for COVID-19 symptoms is located here: (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html> (Links to an external site.))

Students should contact their instructor(s) as soon as possible if they miss class for any illness reason to discuss reasonable adjustments that might need to be made.

COVID-19 guidelines can change based on CDC and governmental public health announcements and course adjustments may be needed in order to meet safety guidelines. All course changes will be announced through Webcourses.

#### In Case of Faculty Illness

If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in [Webcourses@UCF](mailto:Webcourses@UCF) or Knights email for any alterations to this course.

#### **University Services and Resources**

##### Academic Services and Resources

A list of available academic support and learning services is available at UCF Student Services [Links to an external site.](#). Click on "Academic Support and Learning Services" on the right-hand side to filter.

##### Non-Academic Services and Resources

A list of non-academic support and services is also available at UCF Student Services [Links to an external site.](#) Click on "Support" on the right-hand side to filter.

If you are a UCF Online student, please consult the UCF Online Student Guidelines [Links to an external site.](#) for more information about your access to non-academic services.

#### **Policy Statements**

The University of Central Florida considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. UCF expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. Dimensions of diversity can include sex, race, age, national origin, ethnicity, gender identity and expression, intellectual and physical ability, sexual orientation, income, faith and non-faith perspectives, socio-economic class, political ideology, education, primary language, family status, military experience, cognitive style, and communication style. The individual intersection of these experiences and characteristics must be valued in our community.

#### **Academic Integrity**

Students should familiarize themselves with UCF's Rules of Conduct. According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

**Unauthorized assistance:** Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.

**Communication to another through written, visual, electronic, or oral means:** The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.

**Commercial Use of Academic Material:** Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.

**Falsifying or misrepresenting the student's own academic work.**

**Plagiarism:** Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.

**Multiple Submissions:** Submitting the same academic work for credit more than once without the express written permission of the instructor.

**Helping another violate academic behavior standards.**

For more information about Academic Integrity, students may consult The Center for Academic Integrity.

For more information about plagiarism and misuse of sources, see "Defining and Avoiding Plagiarism: The WPA Statement on Best Practices".

### Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, The Golden Rule. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see <http://goldenrule.sdes.ucf.edu/zgrade>.

## **Course Accessibility Statement**

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact the professor as soon as possible to discuss various access options. Students should also connect with Student Accessibility Services (Ferrell Commons, 7F, Room 185, [sas@ucf.edu](mailto:sas@ucf.edu), phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

Accommodations may need to be added or adjusted should this course shift from an on-campus to a remote format due to changes in COVID-19 guidelines. Students with disabilities should speak with their instructor and should contact [sas@ucf.edu](mailto:sas@ucf.edu) to discuss specific accommodations for this or other courses.

## **Campus Safety Statement**

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

In case of an emergency, dial 911 for assistance.

Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide's physical location and review the online version at [http://emergency.ucf.edu/emergency\\_guide.html](http://emergency.ucf.edu/emergency_guide.html).

Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.

If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <https://ehs.ucf.edu/automated-external-defibrillator-aed-locations>.

To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <https://my.ucf.edu> and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information" heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."

Students with special needs related to emergency situations should speak with their instructors outside of class.

To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<<https://youtu.be/NIKYajEx4pk>>).

### **Deployed Active Duty Military Students**

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

### **Copyright**

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

### **Third-Party Software and FERPA**

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.