

# Principles of Ecology – Summer D 2024

PCB 3044 – 24Summer Section D001 (3 Credits)

\* All Lectures and Exams are synchronous/in-person. If you are not available to attend face-to-face lectures and exams during the scheduled class times, please register for PCB 3044 in a different semester when you can participate during the scheduled class time.

**Instructor:** Dr. Geoffrey Cook

**Office:** Virtual Office Hours using zoom

**E-mail:** Official UCF email (\*NOTE\* BEFORE emailing, read the email policies below).

**Phone:** The best way to contact Dr. Cook is via email

**Office Hours:** TBD, by appointment

**Class Meeting Times:** Mondays and Wednesdays, 11:00 am - 1:50 pm in HS1 Room 119

**Undergraduate Teaching Assistant:** Juliette Rodrigue

**Office:** Remote Office Hours TBD

**e-mail:** Use Official UCF email address provided in class

**Office Hours:** Tuesdays, TBD (online; Zoom links in Google Drive). During this hour the TA will not be monitoring or responding to EcoTA2 email questions.

**Class Google Drive (contains zoom meetings, powerpoint reviews, and groupme link):** provided on first day of class

**Weekly Review Sessions:** Thursdays, TBD (online; Zoom links and review documents in Google Drive).

**NOTE:** If no students “arrive” at weekly review sessions within 15 minutes of the designated start time, the remainder of the review session will be cancelled.

## Email Policies:

- \* **ALL questions regarding the class should first be sent to the TA at official UCF email address provided in class.**
- \* If the TA cannot answer the question, it will be forwarded by the TA to the instructor. Due to the number of students in class, I will spend time answering questions directed to me by the TA before I begin to read and respond to emails sent directly to me from students.
- \* Please include your (1) full name, (2) course title (i.e. Ecology) and (3) section number (0001 - Cook)
- \* The TA will try to respond within 48 hours however, response time may be greater. Please plan accordingly by not waiting to the last minute to contact us with questions or concerns.
- \* Due to confidentiality, grades must be discussed in person with the instructor and not via email.
- \* UCF E-Mail - We will only be able to send e-mail communications to official UCF E-mail addresses (i.e. we will not respond to emails sent from gmail, etc.)

**Intended Audience:** This course is designed for Biological Science majors & minors, Environmental Science majors, Science Education majors and Pre-professional students

**Course Description:** This 3 credit hour course will examine the structure and function of ecological systems, including populations, communities, and ecosystems. Students are expected: (a) to 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 Goals for Students:

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 Text and Resources:**

**Textbook:** Bowman, W.D. and S.D. Hacker. Ecology, **6<sup>th</sup> ed.** Oxford University Press/Sinauer Associates, Sunderland, MA. (the 5<sup>th</sup> edition covers most of the material in the 6<sup>th</sup> edition if its all you can find).

To enhance your learning experience and **provide discounted access to the right course material**, your course is part of an inclusive access model called First Day®. You can access the digital materials for class through the **Course Materials tab in Webcourses**.

UCF will bill your student account at the discounted price as a course charge for this course.

**You have the option to opt-in/opt-out of this program in Webcourses.**

<https://customercare.bncollege.com/hc/en-us/articles/360001655667-How-do-I-Opt-In-to-my-Inclusive-Access-courseware-materials-Florida-Only>

If you want to opt-in/out, you need to opt-in/out by **05/19/2024**. If you choose to opt-out, you will be responsible for purchasing your course materials elsewhere. The latest edition should be available online, through the UCF Book Store, or if you prefer, a digital version is available at <http://ebooks.sinauer.com>.

For more information and FAQs visit this website: [customercare.bncollege.com](http://customercare.bncollege.com)

**Internet Access and Webcourses** – Ecology in Summer 2024 is a face to face class (i.e. synchronous) with synchronous exams. **On exam days, students are required to attend class during the scheduled exam time (11:00am-12:15pm).** **Exam 4 (the final exam) will also occur during the normally scheduled class time (from 11:00am – 12:15pm).** Announcements, lecture notes, quizzes, grades, study tips, and relevant web links will be made available on webcourses. Use your NID and myUCF password to log in. Before emailing, please check the syllabus for answers to frequently asked questions!

**Performance Evaluation:**

Exams: 20% (Exam 1), 22.5% (Exam 2), 22.5% (Exam 3), 25% (Final Exam)	90.0%
Quizzes:	10.0%
	100%

**Grading Scale**

A	90 - 100%	B+	87 - 89%	C+	77- 79%	D+	67 - 69%	F	0 - 59%
		B	80 – 86%	C	70 - 76%	D	60 - 66		

**Grading and Evaluation:**

Students will be graded and evaluated based on exam scores, and web quizzes (average of 10 best). The overall semester grade will be rounded to the nearest whole number. For example, a 79.49999 and below will round down to 79, while a 79.5000 and above will round up to 80). No matter where we set the limit, there will ALWAYS be someone who is close to the next grade. As there are many students in this class we strive for consistency and fairness. For this reason, there will be no exceptions to this policy and no other adjustments will be made to final grades.

**Readings:**

You will be responsible for both lecture material and assigned readings in the text. This class will closely follow the required text, but **some required material will be presented in lecture, but not in the assigned reading.** To succeed, students must read and understand materials presented in the textbook and lecture. Relevant chapters are included on the class schedule and readings need to complete **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 front and side 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. PDF copies of the lectures will be provided on webcourses.

### Exams:

There will be four exams given during the scheduled class time (11:00am – 1:50pm). The final exam (exam 4) is NOT comprehensive and will include the material covered since the previous exam. The schedule for exams is listed in the class schedule below. The questions will be primarily multiple choice but may also include matching, fill-in, true/false, and/or short answer. All questions will pertain to concepts and material covered in lectures and textbook readings.

Exam 1 – Wednesday, May 22, 2024 – 11:00am

Exam 2 – Monday, June 10, 2024 – 11:00am

Exam 3 – Monday, June 24, 2023– 11:00am

Exam 4 (Final Exam) – Wednesday, July 10, 2024 – 11:00am

### Exam Policies:

1. **All exam grades count towards your semester grade. No exam grades will be dropped. Therefore, if you know you can't make all four exams now, you should not take this class in Summer semester.**
2. All exams will be based on both lecture material and text reading assignments.
3. Exams will begin promptly at the beginning of the scheduled class time and are designed to take 50 minutes, but 75 minutes will be given to complete the exams. The final exam will occur at the same time/within normally scheduled class hours (see above and class schedule below).
4. 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 nongraphing, 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.
5. Scantrons will be supplied. You do not need to bring your own.
6. Exams 1-3 will begin promptly at the beginning of class and will require the full 80 minutes to complete. The final exam will occur at the scheduled time during finals week (see above and class schedule below).
7. The final exam is not comprehensive and will only include the material covered since the previous exam.
8. **Do not arrive late.** A late student will not be allowed to access the exam after the first student has finished the exam. As soon as the first student finishes the exam, no students will be admitted to that exam. Under no circumstances will extra time be allowed.
9. Prior to the exam, all books, notes and bags must be stowed under your seat, all sunglasses removed, and all hat removed or turned backward.
10. Cell phones must be turned OFF and stowed during the exam period.
11. You will NOT be allowed to leave the exam. Make sure you have everything you need (pencil, ID, tissues, etc.) and use the restroom before the exam starts.
12. **You must print your PID number on the scantron and question sheet. Be sure you know it!**
13. **You must attend the exam at the correct time and for your correct section.** This includes midterm exams and the final exam. There will be no exceptions to this policy. Failure to take the exam at the assigned date and time will result in a grade of zero (0%) for the exam.
14. Grades will be posted on WebCourses as soon as possible; we will inform the class when they are posted.
15. **REVIEW OF EXAMS** - Scantrons will not be returned to students. Instead, you may review your exam virtually during the TA office hours or by appointment (email class TA for an 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). ). Since the exams are not cumulative, reviewing your exam only allows you to see what you got wrong, but will not help you on the following exam. **Considering the extremely fast pace of Summer semester classes, if you did poorly on one exam, your time will be better spent studying for the**

next exam, than spending time reviewing what you got wrong on the previous exam.

### Missed Exam Policy:

1. All students are required to take the final exam during the scheduled class time, and there will be **no make-up exams for the Final Exam**.
2. Non-official absences with prior knowledge: Make-up exams for exams 1, 2, and 3 *will not* be provided to students who must miss an exam due to a prior planned event that conflicts with an exam (including but not limited to: work schedule, family vacations, work trips, presenting at a conference, etc.). **If you already know you can't make all four exams, you should not take this class in Summer semester.**
3. Official university business and religious holidays: Make-up exams for exams 1, 2, and 3 will be provided 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) or absences related to a recognized religious holiday. The student is expected to inform the instructor of the scheduling conflict at the beginning of the semester, and absolutely **no later than 2 weeks prior to the scheduled exam**. Additionally, **documentation must be provided by 5:00pm the Wednesday before the scheduled exam** from the appropriate university body for the student to be eligible for a make-up exam.
4. Emergencies: Make-up exams for exams 1, 2, and 3 will be provided for students who must miss the exam as a result of 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.). The student **must contact the professor promptly (within 24 hours or less)** after missing the scheduled exam and provide hard-copy documentation (e.g., a signed document from a doctor, police officer, judge, etc. – not by email) **within 72 hours** of the scheduled exam for the student to be eligible for a make-up exam.
5. All unexcused absences from an exam or failure to comply with the deadlines outlined above will result in a zero for the missed exam.
6. **All make-up exams will be written/essay format. All makeup exams will be completed within ~1 week of the missed exam, and must be completed before the next in-class exam.**
7. All students are required to take the final exam on the scheduled day and time of the final exam. There will be **no make-up or early exams for the Final Exam**.

### Quizzes:

There will be 11 multiple choice online quizzes to be accessed and completed **on WebCourses**. **Quizzes will be available on Webcourses beginning at 2:00pm on the day material is covered in class (Monday or Wednesday) and are due by 11:00am the following Monday, with the exception of the academic activity quiz in week 1. Quiz 1 is available at 2:00pm on Monday, May 13<sup>th</sup>, and is due by 11:30pm on Friday, May 17<sup>th</sup>.** Quizzes are designed to take 10-15 minutes, but 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. As questions are drawn randomly, the two quizzes will not consist of the same set of questions. If you take all eleven quizzes, the lowest quiz grade will be dropped and 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 remembering to complete the on-line quizzes on time. The first quiz is due by 11:30pm on Friday, May 17<sup>th</sup>.

### 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.

**Extra Credit:** No forms of extra credit are accepted.

### Final Grade Rounding Policy:

To re-iterate, students will be graded and evaluated based on exam scores and web quizzes (using best 10 (of 11) quiz scores). The overall semester grade will be rounded to the nearest whole number. For example, a 79.49999 will round down to 79, while a 79.50000 will round up to 80. As there are many students in this class we strive for consistency and fairness. For this reason, there will be no exceptions to this policy and no other adjustments will be made to final grades.

### Study suggestions:

This is a fast paced class covering ~24 chapters in the semester. 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 viewing lectures and reading their notes several times are unlikely to succeed on the exams. 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! For methods on how to most effectively write questions and use these questions, be sure to consult the study tips section on Webcourses.

### Ethics and Academic Conduct:

Students are expected to follow UCF's standards for personal and academic conduct as defined and outlined in the Golden Rule (see: <http://goldenrule.sdes.ucf.edu>). Academic dishonesty in any form will not be tolerated. If you are uncertain as to what constitutes academic dishonesty, please consult The Golden Rule, the University of Central Florida's Student Handbook (<http://www.goldenrule.sdes.ucf.edu/>) for further details. As in all University courses, The Golden Rule Rules of Conduct will be applied. Violations of these rules will result in a record of the infraction being placed in your file and receiving a zero on the work in question AT A MINIMUM. At the instructor's discretion, you may also receive a failing grade for the course. Confirmation of such incidents can also result in expulsion from the University.

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.

**ZDesignation:** 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 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. If you are guilty of committing academic dishonesty, and it is determined that a "Z designation" will be applied, you will be assigned a zero for the assignment, and your final grade will be preceded by the letter Z on your permanent UCF transcript. For more information about the Z Designation, see <http://z.ucf.edu/>.

The current UCF 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. Your 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.

As of Fall 2014, all faculty members are required to document students' academic activity at the beginning of each course. In order to document that you began this course, we will document attendance during at least the first couple weeks of class. Failure to attend class will result in a delay in the disbursement of your financial aid and incur

the wrath of the administrative bean counters.

**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 who need accommodations must be registered with Student Disability Services, Ferrell Commons Room 185, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

**- SEE NEXT PAGE FOR THE LECTURE, READING AND EXAM SCHEDULE -**



## Lecture, Reading and Exam Schedule (Subject to change):

Week	Date	Lecture Topic <sup>1</sup>	Chapter (in 5 <sup>th</sup> edition)	Quiz due (11:00 am) <sup>2</sup>
1	May 13, May 15	Intro/The Web of Life The Physical Environment/ The Biosphere	1, 2, 3	(1*) 5/17 (Ch 1 & syllabus) (2) 5/20 (Chs 2 & 3)
2	May 20, May 22	Coping with Environmental Variation (temperature, water) Coping with Environmental Variation (energy)  Wednesday, May 22 = <b>EXAM 1</b> (Chs 1, 2, 3, 4, 5)	4,5	(3) <b>5/27</b> (Chs 4, 5)
3	May 27, May 29	<b>Monday May 27<sup>th</sup> = Memorial Day – no class</b>  Evolution and Ecology/ Life History	6, 7	(4) 6/3 (Chs 6 & 7)
4	June 03, June 05	Behavioral Ecology/ Population Distribution and Abundance Population Growth and Regulation/ Population Dynamics	8,9  11,10	(5) 6/10 (Ch 8 & 9) (6) 6/10 (Chs 10 & 11)
5	June 10, June 12	<b>Monday, June 10 = EXAM 2 (Chs 6, 7, 8, 9, 10, 11)</b>  Competition/ Predation and Herbivory	12, 14	(7) 6/17 (Chs 12 & 14)
6	June 17, June 19	Mutualism and Commensalism, The Nature of Communities/ Change in Communities	15, 16 17	(8) 6/24 (Chs 15, 16)
7	June 24, June 26	<b>Monday, June 24 = EXAM 3 (Chs 12, 14, 15, 16, 17)</b>  Biogeography/ Species Diversity in Communities	18, 19	(9) 7/1 (Chs 18, 19)
8	July 01, July 03	Production/ Energy Flow and Food Webs Conservation Biology/ Landscape Ecology and Ecosystem Management	20, 21 23, 24	(10) 7/8 (Chs 20, 21)
<b>9 Final Exam</b>	July 8, July 10	July 8 <sup>th</sup> = Final exam study day  Wednesday, July 10 = <b>Exam 4</b> (Chs 18, 19, 20, 21, 23, 24)		(11*) 7/8 (Chs 23, 24)

<sup>1</sup>The dates of these topics serve as a guideline and are subject to change.

<sup>2</sup>Quizzes are available beginning at 2:00pm on the day material is covered in class, and are due by 11:00am the following Monday.

**\*Exception: During the first week of classes only, Quiz 1 is due by the add/drop deadline (11:30pm on May 17, 2024).** See “Quizzes” section for more details.