

Syllabus: Community Ecology, PCB 6447C (section 23BG)

Spring 2026

Instructors: Todd Palmer, 411 Carr Hall, 392-6357, tmp@ufl.edu

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Lab manager: Mrs. Vitrell Sherif, vitrell@ufl.edu

Office Hours: By appointment

Overview

Class time and place: Tuesdays & Thursdays 12:50-2:45 (periods 6-7), Room 521 Carr Hall

Credit hours: 4 credits

Text: Community Ecology, Gary G. Mittelbach and Brian J. McGill, 2019, ISBN: 9780198835851 (paperbound). Also a helpful resource, but not required: A Primer of Ecology, 4th Ed., Nicholas J. Gotelli, 2008, ISBN: 978-0-87893-318-1. The Reitz Union bookstore has copies of the text. If they run out, more can be ordered. Also, one can order directly from the publisher, with a discounted price and free shipping (<http://www.sinauer.com/>). *Additional readings from the primary literature will be assigned, as the class proceeds.*

Prerequisites: Instructor's permission, intellectual curiosity, and enthusiasm. It is expected that you will have had instruction in ecology and related disciplines, such as evolution, statistics and biomathematics. This is a graduate course, and so we expect a high level of intellectual engagement with the material.

Course objectives: The overall goal is to help students achieve a rigorous understanding of contemporary community ecology, and how current understanding has arisen from key historical precedents. The basic objective of community ecology is to understand patterns in community assemblages, across time and space. These properties might include species diversity and composition, patterns of interspecific abundance, historical patterns of assembly – and disassembly – and the grounding of all these patterns in the dynamics of interactions among species and their evolutionary histories and ecosystem contexts. We will deal both with theoretical and empirical issues. We hope to make graduate students more literate in the basic concepts of theoretical ecology that are important in community ecology. Although this is not specifically a course on the mechanics of modeling, or computer simulation, or dynamical systems, we will necessarily deal with much abstract, mathematical and computational material.

The course will comprise: lectures; readings of a synthetic textbook and primary publications in the historical and contemporary literature; discussions; periodic written assignments, including a term paper. Details about these will be provided during the first weeks of the course.

Grades: Grades will be assigned per UF policy*. Your final grade will be determined on the basis of the following: a) Participation 20%, b) short written assignments 20%, c) literature presentation and discussion 30%, d) term paper 30%.

(*see <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html> for full details).

Class attendance and etiquette policy. You are expected to come to class and participate in each class period, and to have read and digested the assigned reading material. All absences require a valid reason, and without such a reason, points will be deducted from your class grade. You will be

responsible for any material missed in class, and to make up for your absence, you will need to write short essays demonstrating that you have covered the reading assignments so missed. Likewise, points will be deducted from your grade for turning in assignments late. Our policy is to deduct 10% from the grade, per late day, for late assignments.

We expect that in class you will be paying close attention and engage with lectures and discussions. This means that you should not be checking your email, surfing the web, or otherwise electronically (dis)engaged. Keep cellphones turned off, please.

How the course is structured: We aim to foster interaction and engagement by students in the class. The course consists of a combination of traditional lectures, group discussions, and peer review of student writing. On each topic indicated in the schedule below as a "student-led discussion", there will be one to two hours focused on 2 to 4 papers from the primary literature. Pairs of students will present papers on those days, with each student in a pair taking primary responsibility for 1 to 2 of these. The quality of those presentations will be critical to the quality of the class. But each of you have to closely and carefully read, digest and think about the material, in order for a class discussion to work. To facilitate this, each pair will have a designated Discussion leader, who will give a 10-15 minute detailed overview of the paper at the start of the discussion, and a written summary of the basic concept and findings of the paper, along with questions to be brought up in the class discussion. This needs to be turned in to our lab manager, Mrs. Vitrell Sherif (vitrell@ufl.edu), to be distributed to the class, by the morning of the day preceding the day of the discussion. Additionally **each of you** will be required to write a one-paragraph summary of the main points of the papers, and 3 (or more) questions based on each week's readings, and bring this to the class discussion. You will be required to turn these summaries and questions in to the instructors **prior** to the start of discussion, so please keep a second copy for yourself so that you have the opportunity to raise these questions during the class.

Class Schedule

*Student-led discussion classes are highlighted below in gray.

January

1	13 th , T	What is community ecology? (Preface, and <i>Chapter 1</i>) – Palmer
2	15 th , Th	Patterns of Biological Diversity (<i>Chapter 2</i>) – Palmer
3	20 th , T	Grounding community ecology in population dynamics (<i>Chapter 4</i>) – Holt
4	22 nd , Th	Interspecific competition -- theory (<i>Chapter 7</i>) – Holt
5	27 th , T	Interspecific competition in nature (<i>Chapter 8</i>) – Palmer
6	29 th , Th	Interspecific competition – (student-led discussion) – Palmer

February

7	3 rd , T	Positive interactions in communities (<i>Chapter 9</i>) – Palmer
8	5 th , Th	Mutualisms, from simple to complex (student-led discussion) – Palmer
9	10 th , T	Fundamentals of predator-prey interactions (<i>Chapter 5</i>) – Holt

10	12 th , Th	Behavioral ecology of predation (<i>Chapter 6</i>) – Holt
11	17 th , T	Predator-prey interactions (student-led discussion) – Holt
12	19 th , Th	Infectious disease ecology (<i>Chapter 5</i>) – Jason
13	24 th , T	Guest lecture – Dr. Mark Boyce, Wolf reintroduction in Yellowstone NP
14	26 th , Th	Food chains and food webs (<i>Chapter 11</i>) – Holt

March

16	3 rd , T	Species interactions in ecological networks I (<i>Chapter 10</i>) – Palmer
17	5 th , Th	Species interactions in ecological networks II (student-led discussion) – Palmer
18	10 th , T	Ecosystem engineering and zoogeochemistry – Amanda Subalusky, guest **Prospectus for Term Paper Due**
19	12 th , Th	Community assembly, succession and transient dynamics (<i>Chapter 12</i>) – Holt
	17 th , T	Spring break
	19 th , Th	Spring break
20	24 th , T	Community assembly, etc. (student-led discussion) – Holt
21	26 th , Th	Spatial community ecology (<i>Chapter 13</i>) – Holt
22	31 st , T	Biodiversity and ecosystem function, (<i>Chapter 3</i>) – Palmer

April

23	2 nd , Th	Biodiversity and ecosystem function (student-led discussion) – Palmer
24	7 th , T	Metacommunities and Neutral theory (<i>Chapter 14</i>) – Mathew Leibold guest
25	9 th , Th	Species coexistence in variable environments (<i>Chapter 15</i>) – Dr. Kortessis guest
26	14 th , T	Species coexistence (student-led discussion) – Palmer
27	16 th , Th	Evolutionary community ecology (<i>Chapter 16</i>) – Holt -- Claire, Bob's postdoc.
28	21 st , T	Guest lecture: Guppy ecology and evolution, Joe Travis Concluding thoughts (<i>Chapter 17</i>) – Palmer, Holt **Term Paper Due**

Required Policies

1. Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible

in the semester.

2. UF Evaluations Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

3. University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

4. Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: <https://counseling.ufl.edu/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

5. The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at <http://writing.ufl.edu/writing-studio/> or in 2215 Turlington Hall for one-on-one consultations and workshops.

6. Policy on Recordings

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited. UF students are bound by **The Honor Pledge** which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honorcode/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are

obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

Additional Resources:

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student.

Sexual Assault Recovery Services: Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). [http://www.police.ufl.edu/E-learning technical support](http://www.police.ufl.edu/E-learning%20technical%20support), 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>. Career Connections Center, Reitz Union, 392- 1601. Career assistance and counseling. <https://career.ufl.edu/>

Library Support: <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

<http://teachingcenter.ufl.edu/> Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>

Basic Needs: Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support –see <http://www.umatter.ufl.edu>. Please notify the professor if you are comfortable in doing so, and visit The **Field and Fork Pantry** <https://pantry.fieldandfork.ufl.edu> for additional resources. The **Molm Family Gator Career Closet** (link) alleviates the financial strain of purchasing professional clothing for career fairs, interviews, and the workplace. This service is available to all University of Florida students with a valid UF ID and UF alumni up to one year after graduation.