Syllabus version: 8/22/2022 (details are subject to change)

Instructor: Jeremy Lichstein **Location:** 521 Carr Hall

Time: Wednesday periods 4-5 (10:40-12:35) and Friday period 4 (10:40-11:30)

Credit hours: 3, graded

Office hours: By appointment (in-person in 317 Carr Hall or via Zoom).

Course Website: Canvas (https://elearning.ufl.edu/)
Please use Canvas Mail for all course-related e-mails.

Course Description

We will learn about the basic principles that govern the structure and function of ecosystems, with an emphasis on carbon and nutrient cycling in the context of climate change and other global change drivers (e.g., nitrogen deposition, land use change, and altered disturbance regimes). Examples of the questions we will address include: How is ecosystem carbon storage responding to climate change? How do ecosystem-atmosphere feedbacks affect climate? How does biodiversity affect ecosystem function? We will cover both fundamental principles and recent, cutting-edge research. We will cover terrestrial, freshwater, and marine systems to gain a holistic and global perspective on ecosystem ecology.

Format

- This is an in-person class. Attendance and participation are required.
- Roughly 1/3 of class time will be lecture, and 2/3 will be small-group and whole-class discussions.
- Each student will lead one journal article discussion during the semester.
- For most reading assignments, there will also be a written homework assignment due before class.
- There will be three take-home exams.

Textbook

The textbook, in pdf format, is available for free through UF. Please follow the link below, and download Principles of Terrestrial Ecosystem Ecology, Second Edition by Chapin et al. You need to be on the UF network (either on campus, or via VPN) to download the book: https://link.springer.com/book/10.1007%2F978-1-4419-9504-9

Reading assignments

Please come to class prepared to discuss each assignment. Most assignments will require at least one hour of careful reading and thinking. Often, you will need to spend several hours to get a good grasp of a reading assignment, including time spent looking up unfamiliar terms or concepts. You are not expected to understand every detail of every assigned reading, but you should aim to understand the context and main points. You do not need to read supplementary sections of papers (Appendices, Supplementary Material, etc.) unless these are specifically assigned.

Homework

Most readings are paired with a homework assignment. These assignments are intended to help you learn more from the reading and to prepare you to participate in class discussions. You are encouraged to discuss readings with other students outside of class, but homework should be written in your own words and should reflect your own understanding of the material. **Homework should always be written in your own words. Please do not include direct quotes.** Some assignments include a 25-word summary

according to the instructions and rubric explained here: http://peterdoolittle.org/strategies/25-Word-Summary.pdf.

Homework grading and submission policies

Homework is graded based on your effort. Your lowest 3 homework grades of the semester will be dropped. Homework is due at the time posted on the course website (typically 10:00AM on the day of class). If you are unable to submit a homework assignment on time due to illness, schedule conflict, etc., contact the instructor. Otherwise, the following policies apply: Homework submitted after the due time and prior to the beginning of class will be penalized 25%. Homework submitted after class begins will receive 0 credit.

Class participation

You are expected to arrive to class on time and to be prepared to participate in class discussions. Creating an engaging, inclusive, and safe learning environment is a team effort. Each student should reflect on how they can make a positive contribution to discussions and the learning environment. If you are shy by nature, push yourself to speak up. Becoming comfortable with public speaking is an important career skill, and the classroom is one opportunity to practice this skill. If you are an extrovert or someone who tends to dominate class discussions, consider holding back. Are you monopolizing too much of the discussion? Should you give your quieter classmates a chance to let their voices be heard?

Leading a discussion

Each student will lead one discussion during the semester, either alone or in collaboration with another student. Typically, about 45 minutes will be allocated for these discussions. Each discussion will target one full-length paper or two shorter papers. Additional guidance will be provided on the course website prior to the discussion sign-up period.

Exams

There will be three take-home exams that cover lectures and readings. Exams are cumulative but will emphasize material since the previous exam. We will adopt a two-stage test strategy, which has been shown to improve student learning outcomes.

- Stage 1 (individual): Each student will complete the take-home exam on their own. During this stage, you cannot work with other students, but you can consult any other resources (your own notes, articles, websites, etc.).
- Stage 2 (collaborative): This stage includes: (i) reading answers submitted by your peers (identities will be anonymous); (ii) in-class group discussion of the questions/answers; and (iii) the option to submit revised answers following the in-class discussion.

Each stage will count equally towards your semester grade. For both stages, your answers must be written in your own words. Please do not include direct quotes from any sources. To learn more about two-stage collaborative assessments, check out this podcast:

https://podcasts.apple.com/us/podcast/two-stage-collaborative-assessment/id1275179298?i=1000418589527

Late exam policy

If you know ahead of time that you will not be able to turn in your exam by the submission deadline, contact the instructor in advance. If you miss the submission deadline for an unexpected reason, contact the instructor as soon as you can. Without a documented and acceptable excuse, late exams are subject to a 10% grade penalty per day (up to a maximum of 7 days). If you do not submit your exam on time,

you may forfeit your opportunity to participate in the collaborative exam stage (in which case your original exam score will be duplicated for the Stage 2 grade).

Grade distribution

Your final semester percent grade will be the percent of points earned out of the total possible. Points are distributed as follows:

- Homework: Typically 10-20 points per assignment; roughly 300 total points
- Class participation: 5 points per period (2 periods on Wednesday, 1 on Friday); roughly 200 total points
- Leading a discussion: 50 points
- Exams: 100 points per exam (50 points per stage); 300 total points

Grade scale

A ≥ 92.5%; A− ≥ 89.5%; B+ ≥ 86.5%; B ≥ 82.5%; B− ≥ 79.5%; C+ ≥ 76.5%; C ≥ 72.5%; C− ≥ 69.5%; D+ ≥ 66.5%; D ≥ 59.5%; D− ≥ 56.5%; E < 56.5% Grades will not be rounded; e.g., 89.50 is an A−, and 89.49 is a B+.

Absences

Please notify the instructor ahead of time if you plan to miss class. Absences will be excused according to UF policies (https://gradcatalog.ufl.edu/graduate/regulations/), including Title-IX related situations, and for academic and career-related reasons (attending conferences, job interviews, etc.). You are welcome to schedule a meeting with the instructor to discuss excused absences. But you should always send a written explanation by e-mail to document an excused absence. Missed participation points due an excused absence will not affect your grade (these points will simply not be part of your "total points possible" for the semester.

The remaining information in this Syllabus is copied from a UF Graduate School template. Please familiarize yourself with these policies and resources. Please notify the instructor if you believe that any course policies are inconsistent with UF Graduate School policies.

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the <u>Disability Resource Center</u>. 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.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. 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 ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

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 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.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the <u>Notification to Students of FERPA Rights</u>.

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

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

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

<u>Career Resource Center</u>, Reitz Union, 392-1601. Career assistance and counseling.

<u>Library Support</u>, Various ways to receive assistance with respect to using the libraries or finding resources.

<u>Teaching Center</u>, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus

On-Line Students Complaints