I. Course Information

Course Number:	PCB 4043C
Course Name:	General Ecology
Credit hours:	4
Course website:	Canvas (https://elearning.ufl.edu/)
Announcements:	Students are responsible for all announcements made in class and/or posted on the course website.
Lecture:	Tuesday and Thursday, periods 3-4 (9:35 to 11:30); course will be taught synchronously online
Lab:	Section times are posted on the course website; labs will be taught synchronously online and will involve individual lab and field work

Details of the Syllabus are subject to change. Any changes will be announced in class and on the course website.

II. Required Materials

Readings	There is no required textbook. All readings for lecture and lab can be downloaded from the course website. Students interested in using a textbook for optional reading are encouraged to use Ecology: Economy of Nature by R. Ricklefs and R. Relyea.
Software:	R and R-studio (free software available through https://cran.r-project.org/). Installation instructions will be provided prior to the first R activity (see Schedule).

III. Catalog Description

Ecological processes and organization in terrestrial and aquatic habitats. Laboratory and field exercises emphasize techniques of ecological analysis.

IV. Pre-requisites and Co-requisites

BSC 2011, 2011L or equivalent, with minimum grades of C.

You need not major in one of the biological sciences to succeed in the course, but you must have previous training in biology to perform well. Thus, college-level biology is a prerequisite. If you are in doubt about your readiness for this course, please contact your instructor as soon as possible.

V. Instructors

Dr. Mathew Leibold, Department of Biology, 627 Bartram Hall

Dr. Amanda Subalusky, Department of Biology, 518a Carr Hall

Teaching Assistants:

Tyler Bowling, Department of Biology, Florida Museum of Natural History

Ian Ausprey, Department of Biology

Nathan Catlin, Department of Biology

VI. Course Recordings

Our class sessions will be audio-visually recorded for enrolled students who are unable to attend synchronously and will be available upon request. 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 verbally 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.

VII. Email Communication

Please use Canvas Mail for all email correspondence for this course. Correspondence regarding the lecture and the overall course should be directed to the instructors. Questions about the laboratory should be directed to your TA.

VIII. Course Design and Objectives

We will study the basic principles of ecology, emphasizing population, community and ecosystem ecology. We will rely on a variety of approaches to learn about ecology and the way ecologists study natural and human-modified systems. Lecture will emphasize general principles and models that underlie ecological theory and practice. The laboratory offers students hands-on experience collecting, analyzing, and interpreting data. Students will also conduct independent research projects of their own design. Oral presentations and written reports will help develop communication skills. By the end of the term, students should:

- understand the conceptual foundations of ecology;
- be able to apply quantitative tools (simple mathematical models, statistics, computer simulations) to ecological problems;
- be able to conduct independent research;
- be able to engage in intelligent discussions, and make informed decisions, about ecological and environmental issues;
- be prepared to pursue advanced study in ecology (e.g., at the graduate level), if you choose.

IX. Course Overview and Schedule

A rough schedule of lecture topics is below. Details of the lecture and lab schedules are on the course website. This schedule is tentative and may change as the course progresses.

Week	*Lecture Topic*
1	Introduction to ecology
2	Population dynamics; Disease ecology
3	Species interactions
4	Indirect effects and food webs
5	Invasions and extinctions; Biodiversity regulation
6	Behavioral ecology; Evolutionary ecology
7	Biodiversity and ecosystem function
8	Landscape ecology
9	Energy and biomass pyramids
10	Nutrient dynamics and ecological stoichiometry
11	Global biomes and climate
12	Carbon and nutrient cycles
13	Climate change
14	Conservation and ecosystem management

X. Expectations and Philosophy

Commitment to excellence: As in most areas of biology, the amount of information related to ecology has recently exploded. At the same time, ecologists are taking on increasingly important roles in society as we grapple with how to protect biodiversity and maintain ecosystem services in a rapidly changing world. Our principle goals are to provide you with the background and tools you need to be a responsible citizen and to pursue advanced studies in ecology, and to illustrate the diverse approaches to research used in ecology.

Our Responsibilities: We (the instructors and teaching assistants) will endeavor to help you succeed in accomplishing the above objectives. We will do our best to address your concerns and questions regarding the course materials, policies, and grading. You are encouraged to ask questions during lectures and labs. You are also welcome to speak with us during office hours, make an appointment, or contact us by e-mail.

Your Responsibilities: Your thoughtful participation and scholarship are essential to the success of this course. We recognize that the virtual nature of the class this semester will make interpersonal engagement more challenging to achieve, but also more important to the success of the class. A significant portion of lecture and laboratory time will be devoted to open discussion and exchange of ideas. To facilitate this, you are expected to:

- Read and follow the instructions and schedules in this Syllabus and posted on the course website.
- Attend lectures. If you have to miss a lecture, obtain notes from a classmate and request a link to the lecture recording. The instructor's PowerPoint slides alone may not explain all of the important information discussed in class.
- Complete all assignments on time.
- Attend the labs and participate fully. Notify your TA beforehand if you anticipate missing lab for an *acceptable reason*, as described in the Attendance section below.
- Arrive to your lab section on time. You will receive a zero grade for any quizzes or other activities you miss as a result of being late or absent.
- Follow the UF Student Honor Code and Student Conduct Code.

XI. Assessments and Grading

A. Assignments and Grading:

Exams (lecture): There will be four exams throughout the semester. Each will emphasize the material covered since the last exam. All material discussed in lecture and assigned as homework for the lecture portion of the course is fair game for exams. Exams will be conducted using Honorlock online proctoring. All students will need a government issued photo ID or student ID, working camera and microphone, stable internet connection, and Google Chrome browser to take exams. Please read the Honorlock Student Exam Preparation Information sheet found here: https://dce.ufl.edu/services/online-proctoring/

Exam Curve: Each exam will be curved according to a normal distribution with a mean of 83% and a standard deviation of 10%, truncated at 100% (i.e., if your curved score is greater than 100%, it will be rounded down to 100%). The following table shows the proportion of students whose curved score will be greater than or equal to the percent grade indicated in the right column:

Proportion of students	whose grade is greater than or equal to:
0.903	70%
0.618	80%
0.242	90%
0.115	95%

For example, the top row indicates that 90.3% of students will receive a curved grade of 70% or higher. Note that **your curved exam score may be higher or lower than your raw exam score**. For example, if the class mean is higher than the mean of the curved distribution (83%), then your curved score will likely be lower than your raw score. **Your final score for each exam will be the maximum of your raw and curved scores for that exam.** Each exam will be curved separately. Curves will be applied only to exams, not to final semester grades or any other grades in the course.

Makeup Exam Policy: Makeup exams will be administered in place of in-class exams that are missed due to unavoidable *schedule conflicts* or extraordinary *unforeseen circumstances* (see below). The format of each make-up exam will be at the instructor's discretion, and will typically be an essay exam.

- *Schedule conflict*: If you cannot take the in-class exam due to an unavoidable schedule conflict, you should notify your instructor at least two weeks prior to the in-class exam, or as soon as possible.
- *Unforeseen circumstances*: If you miss an in-class exam due to extraordinary unforeseen

circumstances (e.g., medical emergencies), you should notify your instructor as soon as possible, and you must provide documentation of the circumstances that prevented you from taking the exam.

Reading Assignments (lecture): Reading assignments should be completed prior to class on the date posted on the course website.

Homework (lecture): Due dates for lecture homework assignments will be posted on the course website. Lecture homeworks cannot be submitted late unless there are unforeseen circumstances (as explained above for makeup exams). If you know you will miss class (or be late to class) due to a schedule conflict, be sure to submit your homework on Canvas prior to class.

In-class Activities (lecture): There may be quizzes or other in-class activities that require your participation. These activities may be unannounced and may be graded for participation and/or correctness. If you miss in-class points due to an excused absence (which must be documented), contact your instructor. There will be no makeup opportunities for in-class work that is missed due to unexcused absences.

Laboratory: Lab points are part of the overall course grade. Lab points come from quizzes, homework, in-lab assignments, lab reports, and your independent project. Due dates and point values for lab assignments are listed on the Lab Schedule on the course website. **Unless stated otherwise, lab assignments are due one hour before your lab section meets.** Lab assignments can be submitted up to 1 week late, with a 10% grade penalty per day. For example, if you submit an assignment 2 days late, and the quality of the work merits a 90% grade, your grade for this assignment would be 70% (20% reduction from 90%). Makeup assignments are available for labs missed due to excused absence (see Attendance policies below). **Whenever possible, let your TA know ahead of time if you will miss lab due to an excused absence**, so that a makeup lab can be scheduled if possible.

Semester Grade Calculations:
Your final semester grade is the percent of points you earn out of the total possible points for the semester. Each exam is worth 100 points, and there will be four exams. The other point categories below are only approximate, because homework assignments, quizzes, etc. are not completely pre-determined at the beginning of the semester. The **approximate** point breakdown is:

Exams (4; 100 points each)	400 (40% of semester grade)
Homework (lecture)	50 (5% of semester grade)
In-class activities (lecture)	100 (10% of semester grade)
Laboratory	450 (45% of semester grade)
Total	1000

The grade scale is:

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%

The above cutoffs are rigid. Grades will not be rounded; e.g., 89.50 is an A–, and 89.49 is a B+. Note that a C– is not a qualifying grade for critical tracking courses (e.g., Major, Minor, or Gen Ed). In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). A C– average is equivalent to a GPA of 1.67, and therefore does not satisfy this graduation requirement. More information on grades policies is at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

B. Special Treatment
Please do not request individual special treatment regarding grading at the end of the semester. We do not adjust individual grades. Plan to do well on all exams and other assessments from the beginning of the semester. If you have ongoing challenges with the material, or health or other personal issues, please see your instructor or TA as soon as possible so that we can help you.

XII. Attendance and Excused Absence

You are expected to attend all lectures and labs, and you are responsible for all material covered. The Makeup Exam Policy is discussed above. If you miss a lab, you will receive a zero grade for any quizzes or other activities unless the absence is excused. An absence is **excused** if there is an **acceptable reason** according to UF policy (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx). Examples of acceptable reasons are medical illness, religious holidays, military obligation, and the twelve-day rule. For religious holidays, please notify your instructor (for exam conflicts) or TA (for lab conflicts) prior to the absence, but documentation of the religious holiday is not required. In all other cases, it is your responsibility to provide documentation of an acceptable reason; otherwise, the absence will be considered *unexcused* and will result in a zero grade for any missed activities.

XIII. Conduct in Class

Please be courteous to your instructors and colleagues. Here are a few guidelines to follow to help synchronous online learning work better for everyone.

- Keep your video camera turned on if possible and mute your microphone unless you are actively speaking to the class.
- Raise your hand in the "Participants" link if you want to ask a question during lecture or lab, or use the chat feature.
- Only use the chat feature to ask questions directly to the instructor.
- Avoid any side conversations or activities with others outside the session to minimize distraction to remote participants.

XIV. Academic Honesty and the Honor Code

Each student is responsible for reviewing and adhering to the UF Student Honor Code and Student Conduct Code: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.

We encourage students to work together and to help each other learn. Some lab activities require you to work in groups to collect data or perform other tasks. However, unless stated otherwise, any work that you submit must be your own.

No discussion is permitted during exams; nor should any student discuss an exam given in class with a student who is planning to take a makeup exam.

XV. Accommodations for Students with Disabilities

Your instructors and TAs are committed to accommodating students with disabilities. Students who require accommodations must contact the UF Disability Resource Center (https://www.dso.ufl.edu/drc) to request an Accommodation Letter. Please give the letter to your instructor. Once your instructor receives your letter, your instructor and TA will be happy to work with you to arrange the necessary accommodations.

XVI. UF Counseling, Self-Help, and Career Services

Your well-being is important to the University of Florida and to us. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Resources are available on-campus for students with personal problems or lacking clear career and academic goals. The resources include:

- The UF Counseling & Wellness Center (http://www.counseling.ufl.edu/cwc/, 352-392-1575) offers counseling services for depression, anxiety, and other mental health concerns.
- The UF Career Connections Center (https://career.ufl.edu/, Reitz Union, 392-1601) offers career and job search services.

XVII. Software Use

All faculty, staff and student of the University are required and expected to obey laws and legal agreements governing software use.