Syllabus version: 1/7/2025 (details are subject to change)
Course number: BSC 4930, section 4310, class ID 24780
Credit hours: 3
Instructor: Jeremy Lichstein
Office hours: After class meetings or by appointment
Course Website: Canvas (elearning.ufl.edu/)
Canvas Mail is preferred for all course-related e-mails.

Course description
In this course, we will learn to do field ecological research, with an emphasis on collecting and analyzing field data. We will spend most of our time on field trips in and around the Gainesville area, including the Natural Area Teaching Laboratory (NATL) on the main UF campus, Sweetwater Wetlands Park, and UF's Ordway-Swisher Biological Station (OSBS). On these field trips, we will learn about natural history and collect field data. Zoom meetings will focus on developing data analysis skills using R software, the most widely-used toolset for statistics and other quantitative analyses in ecology and many other fields of science.

Meeting times
- Field trips will be every Tuesday, starting no earlier than 9:35AM (period 3) and ending no later than 1:40PM (period 6). The meeting time will depend on the destination and will be posted on the course website for each Tuesday.
- Virtual classroom meetings (Zoom): day/time TBD.

Meeting locations
The meeting location for field trips will either be NATL or the Bartram Hall loading zone. Please see the schedule on the course website. Details:
- Some field trips will be at the Natural Area Teaching Laboratory (NATL) on the UF main campus (natl.ifas.ufl.edu/). You must provide your own transportation to NATL. We will meet at the Pavilion near the Academic Entrance on Natural Area Drive. Navigating to the following location in Google Maps should get you to the right place: NATL Pavilion, Natural Area Drive, Gainesville, FL.
- Van transportation is provided for off-campus field trips. For these trips, we will meet at the loading zone behind Bartram Hall, which can be accessed from the Bartram basement.

Logistics, health, and safety
- If you feel ill or you think are likely to become ill due to an exposure, please stay at home. You will not be penalized for missing class due to illness.
- Field attire: You must wear clothed-toe shoes (no flip-flops or sandals). Check the weather report and be prepared for cold/rain. We will work off-trail, sometimes in thick, thorny vegetation. Wear long pants that are comfortable and durable.
- Bring water and snacks.
- Be prepared to take notes on all field trips. A notebook and pencil are recommended. 'Rite in the Rain' notebooks are recommended (not required), as they are more durable than standard paper notebooks. They come in different sizes and different line patterns. The 4 5/8 by 7 inch size is a popular choice among field ecologists. You do not need a weatherproof pen. A normal pencil is fine (ball-point pens do not work well on 'Rite in the Rain' paper).

Required Materials
- Computer. You will need access to a computer for our Zoom meetings and to complete assignments.
- R Studio. Instructions to install this free software will be provided through the course website. You do not need to install the software until instructions are provided.
- Microsoft Word. Free to UF students. Contact the UF Computing Help Desk (helpdesk.ufl.edu/) if you need help.
- Compass for navigating in the field and mapping trees. A compass app on your phone will suffice. Or you can use a magnetic compass (you can learn to use it on our field trips if you don't already know how). You can get a magnetic compass for about $10 from online stores. Compasses with mirrors or other siting mechanisms typically cost $40 or more; these are not needed for our course. A simple compass (marketed for 'orienteering' or 'backpacking') will suffice. It should have a rotating bezel that allows you to align the north arrow with a specified bearing.

Recommended Materials
Field guides to identifying trees and birds of the eastern (or southeastern) US are recommended. Field guides that use drawings are usually easier to interpret than those based on photos. Books in the Peterson Field Guide series have good drawings, are relatively inexpensive, and are a good size to carry in the field. You may be able to find used copies. Recommended tree and bird guides:
- Peterson Field Guide to Eastern Trees (ISBN 0395904552). Peterson also publishes a "Trees and Shrubs" guide, but that guide is harder to use than the "Trees" guide.
- Peterson Field Guide to Eastern Birds (ISBN 039526619X).

The Sibley guides are excellent, but they are more expensive and bigger/heavier than the Peterson guides.

Time commitment
UF assumes students will devote 3-4 hours per week per credit-hour, including in-class and out-of-class time. For our 3-credit course, this means 9-12 hours/week, on average.

Policies/suggestions for assignments
You are encouraged to discuss and work with other students, but the work you turn in should be your own work and should reflect your own understanding of the material. Avoid direct quotes. It is almost always better to write in your own words. If you feel you must quote from a source, be sure to use quotation marks and to cite your source.

You should not rely on ChatGPT or other AI tools to write R code for you. AI tools can be very helpful for writing code, and many experienced coders use AI tools. However, these tools can also prevent you from learning how to code, because they can allow you to complete an assignment without you understanding what you are doing. In previous offerings of this class, students who relied on AI tools to write their R code struggled towards the end of the semester, because they had not actually learned how to write R code. If you use an AI tool, use it to help you learn, rather than asking it to do your work for you.

Missed/late assignments
If you know ahead of time that you will not be able to submit an assignment on time, contact the instructor. Homework can be submitted late without penalty if you have a documented illness or other circumstance for which the instructor grants an extension. Without an acceptable excuse for missing an

assignment, some homework assignments can be submitted late with a penalty (10% penalty per day for 5 days, 50% penalty thereafter); however, late submissions will not be available for all assignments (it depends on the nature of the assignment).

Grade distribution
Your final semester percent grade will be the percentage of points earned out of the total possible. Points are distributed roughly as follows:
- **Class participation (~250 total points):** Most field trips and Zoom meetings are worth 10 participation points; the point value may vary depending on the meeting length or effort required. Points are deducted for being late, unprepared, lack of full participation, failure to keep track of data, etc. Unexcused absences earn 0 zero points. For excused absences, there will either be a makeup assignment or the grade will be dropped, depending on the circumstances.
- **Assignments (~200 total points):** The point value for each assignment will be stated in the instructions. Assignments may include R data-analysis and visualization activities, reading assignments, and student presentations.

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. Unexcused absences will result in a zero participation grade. Absences will be excused according to standard UF policies (illness, religious holidays, etc.) and for academic and career-related reasons (attending conferences, job interviews, etc.). You are welcome to discuss an absence with the instructor, but this is not required. ***You should always send a written explanation by e-mail to document an excused absence***.

UF POLICIES AND RESOURCES
In addition to the course-specific information provided above, UF policies and resources are described below. If you feel that any of the course-specific information above is inconsistent with UF policies, please contact the instructor. The resources described below include resources related to student health and well-being. Please familiarize yourself with these resources. Doing well in this class, and in college in general, will require that you take care of your mental and physical well-being.

Attendance and make-ups
Course policies on attending class and submitting assignments should be consistent with university policies: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Accommodations
Students who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting 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.

Course Evaluations
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: 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 ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/.

Academic Integrity
UF students are bound by The Honor Pledge:
> *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 *Orange Book* (sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-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.

Counseling and Wellness Center
The UF Counseling and Wellness Center (CWC; counseling.ufl.edu/) offers a variety of mental health services.
- 24/7 support for crisis situations is available at 352-392-1575. Or, when UF is open, you can walk in without an appointment to the 4th floor of Peabody Hall (8AM-4PM is ideal, because they close at 5pm) and ask to speak to an on-call Counselor. See counseling.ufl.edu/services/crisis/ for more info on crisis services.
- For non-crisis situations, schedule an appointment at counseling.ufl.edu/services/online-scheduling/. A first assessment (20-30 min Zoom meeting) should be available within a few days. Based on this assessment, CWC will suggest a plan for you.

Health, Wellness, and Safety
- U Matter, We Care: umatter.ufl.edu/
- Sexual violence response: umatter.ufl.edu/helping-students/sexual-violence-response/
- University Police Department: police.ufl.edu/; 352-392-1111 (911 for emergencies)

Computing
- UF Computing Help Desk: 352-392-HELP (4357); helpdesk@ufl.edu; helpdesk.ufl.edu/