

Syllabus version: 12/23/2022 (details are subject to change)

Course numbers (cross-listed):

BSC4930 (section 1007, 28474)

BOT4935 (section 4310, 22739)

ZOO4926 (section 100B, 28319)

Credit hours: 3

Instructor: Jeremy Lichstein

Office hours/location: After classroom meetings or by appointment; 317 Carr Hall

Course Website: Canvas (<https://elearning.ufl.edu/>)

Please use Canvas Mail 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. Most weeks will include a classroom meeting focused on data analysis and a field trip to a local field site. Research topics will include: (1) forests dynamics at the Natural Area Teaching Laboratory (NATL) on the main UF campus; (2) bird-habitat associations at the Sweetwater Wetlands Park (SWP); and (3) gopher tortoise burrow dynamics at the Ordway-Swisher Biological Station (OSBS). An important learning objective of this course is to develop 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.

Classroom meeting times and location:

Tuesdays, periods 4-5 (10:40 AM - 12:35 PM), 227 Bartram Hall (BAR)

Field trip meeting times and locations:

Thursdays, period 4-9 (10:40 AM - 4:55 PM)

- Field trips to NATL: Meet at 11:30 AM (not 10:40) at the Academic Entrance (see details below). You must provide your own transportation to and from NATL. Class activities will end by 4:00 PM.
- Field trips to SWP and OSBS: meet at 10:40 AM in the parking lot behind (to south of) Bartram Hall. We will drive together in a van to these field sites, and we will return to Bartram Hall by 4:55 PM. [**As of December 2022, access to the Bartram Hall parking lot is blocked by construction. The meeting location will be clarified on the course website.**]

Information about NATL (<https://natl.ifas.ufl.edu/>):

- The Academic Entrance is located near the NATL Pavilion on the west side of Natural Area Drive, across from the Entomology (Steinmetz Hall) greenhouses. The Academic Entrance and Pavilion are shown on this map: https://natl.ifas.ufl.edu/i/NATLmap_2021.jpg. You can get to the Pavilion using **Google Maps** by navigating to: "NATL Pavilion, Natural Area Drive, Gainesville, FL"
- Visitor info (parking and buses): <https://natl.ifas.ufl.edu/docs/NATLvisitorinformation.pdf>
- **There are no restrooms at NATL.** Use the restroom before you arrive. The nearest restrooms are at the FL Museum of Natural History and at Steinmetz Hall.

Logistics, health, and safety

- If you feel ill or have COVID-19 symptoms or exposure, please stay at home. Do not come to class or attend field trips. You will not be penalized for missing class due to illness or potential COVID exposure.

- Field attire: You must wear clothed-toe shoes (no flip-flops). 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 food on longer field trips as needed.
- Be prepared to take notes on all field trips. A notebook and pencil are recommended. 'Rite in the Rain' notebooks are much 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

- 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 Office. Free to UF students. Make sure Word and Excel work. Contact the UF Computing Help Desk (<https://helpdesk.ufl.edu/>) if you have problems.
- Compass for navigating in the field and locating mapped trees. A compass app on your phone will suffice, although a magnetic compass is recommended. You can get one for about \$10 from online stores. Compasses with mirrors or other sighting mechanisms typically cost \$40 or more; these are not needed for our course. A simple compass (marketed for 'orienteeing' 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 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 make 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 College of Liberal Arts and Sciences expects students to devote 3-4 hours per week per credit-hour, including in-class and out-of-class time. For a 3-credit course, this equates to 9-12 hours per week, on average. In this course, we will meet in class and in the field 6-8 hours per week, with the remaining time spent on homework and other out-of-class commitments.

Assignments (homework and in-class)

Unless stated otherwise: (1) homework is due before class; and (2) 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 are expected to submit all homework and in-class assignments. If you know ahead of time that you will not be able to submit a homework assignment on time, contact the instructor. Homework

cannot be submitted late except under special circumstances, such as a documented illness or other circumstance for which the instructor grants an extension.

Grade distribution

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

- **Class participation (~200 total points):** Field trips are typically worth 10 participation points, and class meetings are typically worth 5 participation points. Fully participation points are earned by arriving on time and being prepared for and engaging in the activity, including organizing and entering data. 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 for that assignment.

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.). If you like, you are welcome to schedule a meeting with the instructor to discuss absences. But 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

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <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 <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.

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 is available

at 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 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 or TAs in this class.

Resources Available to Students

Health and Wellness

- *U Matter, We Care*: umatter@ufl.edu; 392-1575
- *Counseling and Wellness Center*: <http://www.counseling.ufl.edu/cwc/Default.aspx>; 392-1575
- *Sexual Assault Recovery Services (SARS)*: Student Health Care Center; 392-1161
- *University Police Department*: <http://www.police.ufl.edu/>; 392-1111 (911 for emergencies)

Academic Resources

- *E-learning technical support*: Learningsupport@ufl.edu; <https://lss.at.ufl.edu/help.shtml>; 352-392-4357 (opt. 2)
- *Career Resource Center*: Reitz Union; <http://www.crc.ufl.edu/>; 392-1601
- *Library Support*: <http://cms.uflib.ufl.edu/ask>
- *Teaching Center*: Broward Hall; 392-2010 or 392-6420
- *Writing Studio*: 302 Tigert Hall; <http://writing.ufl.edu/writing-studio/>; 846-1138

Procedure for Conflict Resolution

Any classroom issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact the Undergraduate Coordinator or the Department Chair. Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (<http://www.ombuds.ufl.edu>; 392-1308) or the Dean of Students Office (<http://www.dso.ufl.edu>; 392-1261). For further information refer to https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf (for residential classes) or <http://www.distance.ufl.edu/student-complaintprocess> (for online classes).