Insect Ecology Lab
ENY 6203L, Fall 2020, 1 credit

Lab: Wednesday, 1:55-3:50pm, Room 3118
Zoom: https://ufl.zoom.us/j/94610101861?pwd=VlVvZEpJRmRkZE9vb1QzaE1peHVWZz09

Instructor: Phil Hahn, **office:** Steinmetz 2109, **phone:** (352) 273-3960, **email:** hahnp@ufl.edu

Office Hours: One hour after lecture or email to arrange a time. All meetings will occur in via Zoom.

Meetings: If you are on campus in Gainesville you are expected to attend in person or synchronously online (see schedule for meeting details). We will meet in-person at the Natural Areas Teaching Lab Pavilion five weeks; the rest of the meetings will meet synchronously via zoom (see schedule). **WHEN MEETING IN PERSON, PLEASE FOLLOW THE COVID SAFTEY PLAN (see schedule below).** Online students can join synchronously via zoom (when available) or will complete the lab asynchronously.

Course Description: This course is an introduction to ecological concepts with emphasis on insects. The relationships of insects with their biotic and physical environments, along with the roles of insects in nature, will be emphasized. The basics of ecological research will be covered.

Course Objectives:
By the end of this course, students will be able to:
- Explain fundamental ecological principles in population, community, landscape, and ecosystem ecology using insects as examples
- Describe the theoretical underpinning for understanding the causes and consequences of how insects interact with other species
- Employ quantitative techniques commonly used by ecologists
- Translate ecological literature into lay public-accessible scientific news
- Apply fundamental ecological principles underlying the development and application of insect pest management and insect conservation
- Evaluate and critique primary ecological literature for content and scientific quality

Prerequisites:
ENY 3005C, Principles of Entomology, or equivalent

Required Materials:
- R software: available for free download at r-project.org
- R Studio: helpful alternative to the default R graphical user interface
- Tidyverse: a collection of user-friendly R packages designed for data science that share an underlying design philosophy, grammar, and data structures.

Attendance and Make-Up Work: Students are expected to attend all sessions either in person or via zoom. Please contact the instructor in advance if you plan to miss a class. Requirements for class attendance and make-up exams, assignments and other work are

consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Structure of the Course
Lab sections will typically be spent using techniques and quantitative tools to apply concepts covered in lecture. We will use a combination of quantitative models in the coding program R, collecting insects and data in the field, entering and analyzing ecological data, and presenting the findings to peers through writing and presenting.

Assessment & Evaluation
Critique of scientific paper- During the first week we will read and discuss a scientific paper. Students will write a short critique of the paper.

Worksheets- Several lab activities will have worksheet assignments to complete and submit via canvas.

Herbivory lab- The herbivory lab will have three assignments, 1) an initial proposal that will be in the form of a short video shot from the field where you measure herbivory, 2) a write-up in the form of a scientific paper, and 3) a revised paper that addresses the instructors comments in the form of a peer-reviewed article.

Community ecology lab- There will be online group presentations based on the results of sampling of insect communities.

Available Points

Category	Points	Due date
Critique scientific paper	50	Sept 8th
Worksheet 1	50	Sept 11th
Worksheet 2	50	Sept 18th
Worksheet 3	50	Oct 23rd
Herbivory lab proposal	50	Sept 25th
Herbivory lab write-up (final)	100	Oct 30th
Herbivory lab write-up (revisions)	50	Nov 25th
Community ecology lab presentation (group)	100	Dec 2-11
Total	**500**	

Final Grade - Lab

Scale: percentage	Letter grade	Minimum points required
90-100	A	448
80-89	B	398
70-79	C	348
60-69	D	298
0-59	E	≤ 297

Weekly Course Schedule

Week	Date	Lab Module	Lab Topic	Lab Assessment	Lab activity
1	2-Sep	1	Critique scientific paper	Critique write-up	Scientific paper
2	9-Sep	2	Population modeling	Worksheet 1	Exponential growth
3	16-Sep	2	Population modeling	Worksheet 2	Logistic growth
4	**23-Sep**	**3**	**Herbivory lab**	**Proposal**	**Herbivory planning**
5	**30-Sep**	**3**	**Herbivory lab**		**Herbivory surveys**
6	**7-Oct**	**3**	**Herbivory lab**		**Herbivory surveys/data entry**
7	14-Oct	3	Herbivory lab		Herbivory data analysis
8	21-Oct	4	Predator prey lab	Worksheet 3	Functional responses
9	**28-Oct**	**5**	**Community lab**	**Herbivory paper**	**Community lab prep/samplings**
10	**4-Nov**	**5**	**Community lab**		**Community lab sampling**
11	11-Nov	5	Community lab		Community lab data processing
12	18-Nov		NO LAB - ESA		
13	25-Nov		NO LAB - holiday	Paper revisions	
14	2-Dec	5		Present	Community group presentations
15	9-Dec	5		Present	Community group presentations

Weeks bolded in purple indicate we will meet at the Natural Areas Teaching Lab Pavilion on campus. PLEASE FOLLOW THE COVID SAFTEY PLAN:

COVID Safety Plan

Insect Ecology Lab (ENY6203L) will meet in-person outdoors at the Natural Areas Teaching Lab five times during the semester (23-Sep, 30-Sep, 7-Oct, 28-Oct, and 4-Nov of 2020). Students and instructors will be required to bring and wear a mask at all times. The instructor will provide extra masks. When we meet as a group to discuss lab procedures, students will wear masks and sit >6ft from other students. We will not be entering buildings, so we do not have an ingress/egress plan or plan to limit seating. The instructor will provide hand sanitizer and sanitizing wipes for use by students and instructors. Students and the instructor will be asked to use hand sanitizer frequently and especially after touching any shared equipment. The instructor will sanitize equipment using sanitizing wipes prior to use during the lab. The students will sanitize equipment after they are done using it. Shared equipment will be sanitized prior to use by another student.

This course has online sections for students at REC's and remote students that fully meet the course objectives. If the instructor becomes ill, all Gainesville students will follow the online procedures for completing the labs remotely. If a student becomes ill or chooses not to participate in the in-person labs, they will have the option of completing the online version of the labs. If inclement weather prevents the class from meeting outside, all students will complete the online version of the lab exercise. If the university has to cancel in-person instruction, all students will complete the online version of the labs.

Grades and Grade Points: For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Online Course Evaluation Process: Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

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.

Statement of diversity, equity, and inclusion: It is my goal that students from diverse backgrounds, as well as differences in learning styles and personality, will be welcomed and well served in this course. My definition of diversity includes race, ethnicity, gender, sexual orientation, physical ability, cultural, academic or economic background. I plan to present the material in such a way that it is accessible and relatable to all students. I encourage you to contact me if you have suggestions for how I can improve upon this goal. It is also expected that students will treat each other with respect and no harassment of any kind will be allowed. To report harassment, inappropriate behavior, or discuss issues with a neutral party, please contact the UF RESPECT Team.

Services for Students with Disabilities: The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive

computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation
0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.
  • University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching
  • U Matter We Care, www.umatter.ufl.edu/
  • Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/.

Student Feedback and Complaints:
I am always interested to hear feedback from students on how to improve this course. The goal, overall, is for students to get as much out of this course as possible. Please contact me with any thoughts or comments you have that might improve the course. When possible, I will incorporate this feedback immediately. Other times, changes may be implemented to improve future versions of this course. To register formal complaints, please refer to the following:
• Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/
• Online Course: http://www.distance.ufl.edu/student-complaint-process