

PRINCIPLES OF ENTOMOLOGY LAB SYLLABUS

ENY 5006L—1 CREDIT

Room 2216

Steinmetz Hall

Entomology & Nematology Department

University of Florida

SUPERVISORY TA: JAMES BOOTHROYD

ZOOM: <https://ufl.zoom.us/j/4655019071>

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COURSE SUPERVISOR: DR. ANTHONY AULETTA

OFFICE: 3102 Entomology and Nematology

Steinmetz Hall, Natural Area Drive

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CLASS DESCRIPTION: The labs associated with ENY 5006 are designed to provide practical experience working with insects. You will learn how to use some basic, essential laboratory equipment, dissect insects to see their external and internal morphology and structure, and make an insect collection. These activities are designed to support what you learn in lecture. Some of you are in the lecture course for 5006, and some of you are in the web course. Understand that the laboratory sequence will NOT track precisely with the lecture or web sequence. The laboratory exercises should be viewed as supplemental to lecture material. You will be required to understand topics to a greater degree than the undergraduates in the course, and your assignments will differ somewhat from those enrolled in 3005L. Be sure to check the graduate student page on the Canvas site and make sure you understand the specific differences.

COURSE AIMS

1. Understand how to collect and curate insects, and produce and insect collection
2. Learn how to identify insects to order, both by a dichotomous key, and in the field by sight
3. Learn to identify some common insect families both by a dichotomous key, and in the field by sight
4. Gain a working understanding of insect anatomy, physiology, ecology and behavior, upon which students can build
5. Understand the scientific method and learn how to test a hypothesis using effective experimental design
6. Become familiar with the diversity of fields that study insects

COVID-19

In response to COVID-19, the following practices are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones. It may be helpful to think of PPE like an umbrella, that you use when case numbers rise, and shed when they are down!

- If you haven't been vaccinated or received a booster, please visit ONE.UF to make an appointment or visit UF Health's webpage for a list of community vaccination sites. Flu vaccines are also widely available and can be administered at the same time as a COVID-19 vaccine or booster shot.
- Wearing masks when indoors, hand washing and other healthy habits continue to be encouraged. UF Health is recommending that people wear N95 or KN95 masks in public settings rather than cloth or surgical masks, which don't fit as closely to the face.
 - Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
 - Hand sanitizing stations will be in every classroom.
- If you receive a positive COVID test, please stay home and self-quarantine. Be sure to email your TA, and you will be excused from lab until you have quarantined appropriately, and received a negative COVID test
 - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.
 - All positive COVID-19 cases, including positive at home tests, should call 352-273-9790 for further guidance.
- Continue to regularly visit coronavirus.UFHealth.org and coronavirus.ufl.edu for up-to-date information about COVID-19 and vaccination.
- Students who do not follow these guidelines will be dismissed from class and considered absent for that day, and may also be reported to the Dean of Students Office for misconduct.

In addition to these policies, we will be holding class outside at the NATL pavilion as often as we can. When outside, you are still encouraged to wear a mask, to limit the spread of COVID-19 as much as possible.

Despite these measures, there is still risk of transmission. Students with at-risk members of their household are encouraged to withdraw before the Drop/Add deadline. If you feel that adequate measures to prevent the spread of COVID-19 are not being properly taken, please contact course instructors.

Remember, these are lab safety procedures similar to wearing closed toe shoes, or wearing a lab coat. They are in place solely to keep you and your fellow students safe.

TA SECTION TIMES AND CONTACT INFORMATION

TA	Section Time
<i>Marice Lopez</i>	Tuesday
<u>mlopez90@ufl.edu</u>	10:40 AM - 12:35 PM
<i>James Boothroyd</i>	Tuesday
<u>James.boothroyd@ufl.edu</u>	12:50 PM - 2:45 PM
<i>Dianshu Zhao</i>	Wednesday
<u>dianshu.zhao@ufl.edu</u>	10:40 AM - 12:35 PM
<i>Samantha Pryer</i>	Thursday
<u>spryer@ufl.edu</u>	10:40 AM - 12:35 PM
<i>Purity Muthomi</i>	Thursday
<u>pmuthomi@ufl.edu</u>	12:50 PM - 2:45 PM

*Please be advised, TAs may not answer emails outside of work hours, or on weekends

LAND ACKNOWLEDGEMENT: We acknowledge that the land on which we gather is the traditional territory of the Seminole and Timucua tribes. The Seminole Tribe, despite attempts of ethnic cleansing and forced removal continues to thrive here to this day. The Timucua tribe, faced with introduced disease, the slave trade, and cultural genocide, was exterminated in the 1800s, but remains an important facet of the cultural history of north central Florida. In this course, we will endeavor to study the land and ecosystem to which these nations are and were inexorably connected, and in doing so, gain an understanding of this place. Students are reminded that taking insects from this land is no small act, and should be done with humility, respect and gratitude. For more information on the Seminole Tribe, visit their website: <https://www.semtribe.com/STOF>

LABORATORY TEXTBOOK: There is no required textbook for this course. Descriptions of each lab, along with any required readings or files may be found on the relevant Canvas Pages. Students are required to review the relevant Canvas page each week before each lab.

OFFICE HOURS: The office hours of each individual TA will be announced the second week of class. *Office hours may be held over Zoom or in person. You are asked to respect the wishes of your TA regarding masks and social distancing when office hours are held in person.* Students are welcome to email individual TA's at their convenience. All the TA's of this course have a goal of prompt responses, typically within 24 hours on weekdays. *Be advised, this does not include weekends!*

COURSE POLICIES

Please thoroughly read and understand the following policies, as they apply to all students!

STUDENT ACCOMMODATIONS: 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.

Disability Resource Center

001 Reid Hall

(352) 392-8565 | <https://disability.ufl.edu/>

It is important that every student has their needs met in this course, so if you have a letter of accommodation, please speak with the supervisory TA and course supervisor by the end of the second week of classes, or as soon as possible, to set up a meeting. In this meeting you will not be required to give any specifics about the reason behind the accommodation, instead, the meeting will focus on how best to accommodate your specific needs in a frequently outdoor laboratory setting.

LABORATORY CONDUCT: Closed-toed shoes are required for all class periods and food and beverages except water are not permitted in the laboratory. Students are encouraged to bring water in a reusable water bottle, and to wear sunscreen, hats, sunglasses and bug spray, as lab will frequently move outdoors. We may be outside on days when it is quite hot and humid! Ensure you have done what you need to stay happy, healthy and hydrated! Electronic devices (including but not limited to cell phones, tablets, and laptops) are not necessary for this course and should not be used during the lab period unless specified to do so by your TA or your TA has given you express permission to use this technology.

ATTENDANCE POLICY: As a laboratory class, this course focuses on practical learning, and so it is not possible to satisfactorily make up missed attendance. Therefore, unless students attain the proper paperwork, they will not be allowed to make up missed attendance points. Further, as classes meet only 11 times in a semester, students are required to attend at minimum eight classes in order to finish the course, regardless of whether the absences are excused or not. Students who miss more than 3 classes will receive an E on their transcripts. In the event a student must miss four or more classes, with or without a university excuse, obtained via the Dean of Students Office, they are required to contact the supervisory TA and the course supervisor to discuss the most appropriate options.

IF YOU HAVE A MAJOR DISRUPTION IN YOUR LIFE, PLEASE REACH OUT TO U MATTER, WE CARE (DEAN OF STUDENTS OFFICE) AND THEY WILL HELP YOU. ONE WAY THEY CAN HELP IS THAT THEY CAN CONTACT PROFESSORS TO REQUEST THAT YOU RECEIVE EXTENSIONS ON YOUR WORK. INFORMATION ABOUT CAMPUS HELPING RESOURCES MAY BE FOUND BELOW

Requirements for class attendance, 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>.

LATE WORK: All work is due on the dates listed on the schedule, an update version of which may be found on the Canvas page for this lab. Assignments turned in after the due date will be docked a minimum of 10%, and will not be accepted after the assignment has been returned to the rest of the students. Coursework that is graded for *credit* will be docked 10% *per day* for a maximum of 3 days, at which point it will not longer be accepted. Collection materials (I.e. the mini collection and final collection) will not be accepted late *no exceptions*.

Emailed or paper submissions for Canvas assignments will not be accepted. You are responsible for ensuring that all your work is uploaded correctly and completely by the deadline. Corrupted files will be treated as missing work (= 0 grade) until they are reuploaded correctly and late penalties will apply if your resubmission is past the deadline. So, please always double check your files right after you upload them! If you experience technical problems when submitting your work in Canvas, contact the UF Computing Help Desk for assistance: <https://helpdesk.ufl.edu>.

COLLECTING EQUIPMENT: Each student will be issued insect collecting and curation equipment in lab. Collections will NOT be graded unless 100% of the student's collecting equipment is returned at the time designated on the schedule or by the class TA. You will receive a 0 on your final collection and a minimum two letter grade reduction in your lab grade if you do not turn in your equipment. There will be no acceptable excuses for not following this policy.

FIELD TRIPS/COLLECTING TRIPS: Entomological research often takes place in the field, and we will go on several field trips and collecting trips throughout the course of this lab. These trips will be within walking distance, and are *required for this course*. Locations of field trips will be given the first week of classes, and if you have concerns about walking the required distances, you are welcome to arrange personal transport. We are happy to

come up with alternatives if you have limited physical mobility. Field trips are an important part of this course, and if you foresee consistent problems with attending them, you may wish to request a transfer to the online portion. *Closed-toed shoes are required for all trips.*

PLAGIARISM: 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>.

Plagiarism will not be tolerated in this course. This includes self-plagiarism ("borrowing" from previous work you have completed, **including pervious insect collections**), copying from internet sources word-for-word or not giving a citation, and copying from other students (**including putting your own name on traded insects**). We strictly enforce this policy and will take disciplinary action if students submit material that is found to be plagiarized.

**YOU WILL BE HELD TO THIS PLEDGE ON ALL EXAMINATIONS AND SUBMITTED WORK IN
ENY 3005L/5006L.**

EXAMPLES OF VIOLATIONS OF THE ACADEMIC HONESTY GUIDELINES:

Cheating Plagiarism Bribery Misrepresentation Conspiracy Fabrication

PLEASE BE ADVISED THAT YOU ARE REQUIRED TO TAKE A PLAGIARISM AND ETHICS QUIZ WITH A PASSING GRADE (100%) BEFORE ANY MATERIAL IN THIS COURSE IS GRADED. THIS QUIZ CAN BE ACCESSED ON THE FIRST DAY OF CLASS.

CAMPUS HELPING RESOURCES

University can be a stressful, isolating time for many people under average circumstances. Given the COVID-19 pandemic, it is understandable, and expected to be experiencing more fear, worry, or depression that one would usually face. Students experiencing crises or other emotional or personal issues that interfere with their general

well-being are encouraged to reach out, and contact 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.

HEALTH AND WELLNESS U MATTER, WE CARE: If you or a friend is in distress, please contact umatter@ufl.edu or 352-392-1575 so that a team member can reach out to the student.

COUNSELING AND WELLNESS CENTER: <http://www.counseling.ufl.edu/>

SEXUAL ASSAULT RECOVERY SERVICES (SARS) STUDENT HEALTH CARE CENTER: 392-1161.

CAREER RESOURCE CENTER: Reitz Union, 392-1601.

CAREER ASSISTANCE AND COUNSELING: <http://www.crc.ufl.edu/>

LIBRARY SUPPORT: <http://cms.uflib.ufl.edu/ask>

UNIVERSITY POLICE DEPARTMENT: 392-1111 or 9-1-1 for emergencies. <http://www.police.ufl.edu/>

MENTAL HEALTH INFORMATION FROM THE WHO: <https://www.who.int/teams/mental-health-and-substance-use/covid-19>

COURSE ASSIGNMENTS

FINAL PRACTICAL: This will be an opportunity to evaluate how much practical knowledge of insects you have acquired over the semester. It consists of assessment of specimens, a practical pinning portion, and it will encompass the breath of information covered by the lab. Efforts have been made to make sure this assessment is as practical and hands on as possible. More details will be provided to you by your TA before the practical.

INSECT COLLECTIONS: This course requires students to assemble a professional insect collection in which students identify insects to order and family. **This requires insects be properly pinned and labeled with both a locality and identification label.** Students will turn in a small "mini collection" and a final collection. Collections should be made in the current semester. Some trading is allowed, only during class collection time and open lab, when a TA is present. Specimens from previous semesters will not be allowed and are strictly prohibited. For more information regarding the insect collection, please refer to the assignment in Canvas.

PLEASE BE AWARE THAT COLLECTING IS ILLEGAL IN STATE PARKS UNLESS A RESEARCH PERMIT HAS BEEN ISSUED. COLLECTING IS PERMITTED IN NATIONAL FORESTS (I.E., OCALA NATIONAL FOREST) WITHOUT A PERMIT!

PREPARATORY VIDEOS: This lab will be carried out in a “flipped class” style, where students will watch a short, recorded lecture at home, and take a quiz to receive points.

ONLINE QUIZZES: There will be 11 quizzes provided via Canvas. Quizzes are worth 10 points and will have questions about the material covered in the weekly lecture. Quizzes for modules are due before lab begins that week. If you do not complete the quiz you will be given a zero.

EXTRA CREDIT: There is one extra credit assignment offered in this lab, worth 10 points. In order to receive these points, students will be required to write one to two pages on an insect family of your choice. Details on this assignment, as well as a grading rubric may be found on the Canvas page.

GRADING: *TA’s are not permitted to send grades over email under any circumstances.* You’ll need to meet with them over Zoom or in person if you’d like to discuss your grade.

GRADES AND GRADE POINTS: For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

POINTS AND POINT TOTALS:

<i>Laboratory Quizzes (10 pts each)</i>	110 pts
<i>Lab Assignments (10 pts each)</i>	60 pts
<i>Experimental Design Lab Packet</i>	60 pts
<i>Water Quality Assignment</i>	30 pts
<i>Insect Mini Collection</i>	40 pts
<i>Insect Collection</i>	250 pts
<i>Final Practical</i>	200 pts
<i>Attendance</i>	120 pts
<i>Total Points</i>	750 pts

Grading Scale

A	93% - 100%	C	73% - 76.9%
A-	90% - 92.9%	C-	70% - 72.9%
B+	87% - 89.9%	D+	67% - 69.9%
B	83% - 86.9%	D	63% - 66.9%
B-	80% - 82.9%	D-	60% - 62.9%
C+	77% - 79.9%	E	<59.9

PLEASE NOTE THAT THE INSTRUCTORS DO NOT ROUND UP GRADES— REQUESTS TO DO SO WILL NOT BE CONSIDERED.

DISPUTING A GRADE: If you wish to dispute a grade for any exam/assignment, you must contact the instructors in writing within two days (48 hours) after the assignment has been returned. In your message, you must include a specific explanation for why you think the grade is incorrect and how you think it should be changed. An instructor will then arrange a meeting with you to discuss the issue and determine whether or not the grade should be changed. The grade assigned following this meeting will be final.

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>.

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.

POLICY STATEMENT: It is your responsibility to ensure that you fully understand the policies outlined in this syllabus as well as the policies of the university as they relate to this course. By remaining enrolled in this course,

you agree that you have read and understood all of these policies and that you agree to be held accountable to them.

At their discretion, the instructors may change aspects of the course during the semester to accommodate new opportunities, unforeseen disruptions, or other circumstances. These changes will be communicated clearly in class and through Canvas. The current version of the syllabus will always be available on our course's Canvas website. It is your responsibility to ensure that you are following the most recent version of the syllabus.

If you have any questions, please contact the instructors as soon as possible (preferably at the beginning of the course)!

COURSE SCHEDULE

Find below a tentative schedule for this course. The instructors may be required to change this throughout the semester, so *please refer to the schedule on the Canvas site for the most up-to date schedule.*

Week	Topic	Pre-Lab	What's Due?
Week 1: Aug 22 – Aug 26	Lab Policy/Collecting Equipment	Plagiarism Quiz	
Week 2: Aug 29 – Sep 2	Collection and Curation	Collection and Curation Quiz	Collection and Curation Activity
Week 3: Sep 5 - Sep 9	External Morphology	External Morphology Quiz	External Activity
Week 4: Sep 12 – Sep 16	Insect Orders	Insect Orders Quiz	Orders Activity
Week 5: Sep 19 – Sep 23	Internal Anatomy	Internal Anatomy and Physiology Quiz	Mini Collection Due at Beginning of Lab Internal Anatomy Activity

Week 6: Sep 26 – Sep 30	Insect Behavior	Insect Behavior Quiz	
Week 7: Oct 3 – Oct 7	Insect Ecology	Insect Ecology Quiz	Ecology Activity
Week 8: Oct 10 – Oct 14	No Lab		
Week 9: Oct 17 – Oct 21	Aquatic Entomology	Aquatic Entomology Quiz	Packet Due at Beginning of Lab
Week 10: Oct 24 – Oct 28	Med/Vet Entomology	Medical and Veterinary Quiz	Water Quality Assignment Med/Vet Activity
Week 11: Oct 31 – Nov 4	Social Insects	Social Insects Quiz	
Week 12: Nov 7 – Nov 11	Pest Management	Pest Management Quiz	
Week 13: Nov 14 – Nov 18	Insect Conservation	Insect Conservation Quiz	
Week 14: Nov 21 – Nov 25	THANKSGIVING NO LAB		

Week 15: Nov 28 – Dec 2	Final Practical		Final Collection Due at Beginning of Lab
Week 16: Dec 5 – Dec 9			
Week 17: Dec 12 – Dec 16			