

ENY 5006: Graduate Survey in Entomology

In-person class

Fall 2023



(Updated 7/12/2023)

Professor:

Dr. Christine W. Miller (she/her)
Office: 2101 Entomology Building
E-mail: cwmiller@ufl.edu.

Lectures: Tues. & Thurs. Period 3 (9:35 - 10:25am); Room 1031 Entomology Building

Dr. Miller's office hours: 10:25 to 11:00 am Tuesdays and Thursdays (after class), and by appointment.

Course Teaching Assistant: Yichen Li, yli10@ufl.edu. Yichen will help you with course-related questions, grading, and study sessions. You can expect her to respond to emails within 48 hours during the weekdays.

ENY 3005/5006 UF E-Learning on CANVAS: <https://ufl.instructure.com/courses/486137>

Your final exam: 12/11/2023 @ 3:00 PM - 5:00 PM in our classroom

Purpose and Teaching Objectives

ENY 5006 is a combined course with ENY 3005. This course provides a framework for understanding the world of insects, their evolutionary history, ecological significance and conservation, and ways in which they come into conflict with humans. The graduate student project will allow advanced training in entomological research, beyond what is expected for undergraduate students.

Overall course objectives

- 1) Increased awareness and understanding of the natural world.
- 2) Ability to explain how insects function internally and externally.
- 3) Knowledge of the insect orders and some important families.
- 4) Recognition of the ecological and evolutionary importance of insects.
- 5) Appreciation for applied topics in entomology including medical & veterinary entomology, insect pest management, and insect conservation perspectives.
- 6) Ability to analyze the primary scientific literature and then make it understandable to your peers.



Textbook (recommended, not required): Daly and Doyen's Introduction to Insect Biology and Diversity by Whitfield and Purcell, 4th Edition. I also recommend checking out Insects: Evolutionary Success, Unrivaled Diversity, and World Domination, by David B. Rivers (published 2017).

Video: Students are expected to watch the Life in the Undergrowth series, which is described here: <http://www.bbc.co.uk/sn/tvradio/programmes/lifeintheundergrowth/>. Students are responsible for viewing these videos outside of class time. The videos can be rented through Amazon Prime Video and may be available elsewhere online.

Study guides, lecture slides, reading, and other materials: Available on or through Canvas. All exam questions will be based on these study guides, reading, and the lecture materials.

Grading: Grades are a measure of the quality of student work, not a measure of personal worth.

ENY 5006 graduate student grades will be computed as follows:

13 Canvas quizzes due 11:55pm Monday evenings (10 pts each)	130 points
Short exercises to do during class (attendance necessary; 5 to 10 pts each)	50 points
Hexapod order quiz	25 points
Two assignments (25pts each; note that undergrads have one additional assignment)	50 points
Graduate student semester project (multiple parts of this)	160 points
Two Mid-Semester Examinations (100pts each)	200 points
Comprehensive Final Examination (12/11 at 3pm in our classroom)	<u>140 points</u>
Total Points Available	<u>755 points</u>

Final grades are based on percentages of total points possible. The exam and quiz scores are not curved. You will have a few opportunities to gain bonus points – see the class schedule below and watch Canvas for opportunities. Wondering how to get a good grade? It starts with keeping up with the materials.

Grade and associated percent ranges %

A	93-100	A-	90-92	B+	87-89
B	83-86	B-	80-82	C+	77-79
C	73-76	C-	70-72	D	60-69
E	<60				



Absences are fine: Study guides and lecture slides from each class are posted on Canvas. There may be some small additions or changes to the lecture slides for the class period to reflect updated information, so make sure to check with classmates (not the instructor) to get these notes.

If you miss an exam there will be no make-up available unless you contact the instructor by 11:30am on the day of the exam. Students will be allowed to take an **oral** make-up examination in the instructor's office.

Late work: The scores on late coursework are reduced by 5 points per day. Once the graded work is returned to the class, late assignments will no longer be accepted.

Final exam: If you have a conflict with the scheduled time (listed in the course schedule below), you should email Dr. Miller by October 1st; otherwise the exam time is not negotiable.

Disability status: Please inform Dr. Miller as soon as you can if you have disability status so we can start making accommodations.

Learning Strategy: This is an upper division course at a major university. Thus, students have important responsibilities in the learning process. You will be expected to review the concepts of each topic BEFORE class time. Study guide questions and quizzes are provided to help you keep on track. On occasion, students will be required to watch lectures in advance so that class time is freed up for activities designed to aid learning. Please feel free to ask questions in class, email, or come to office hours as you prepare for exams. If you do not, the instructor will assume you have read and fully understand classroom material.

Photos used here and Canvas include those by Alex Wild, <http://www.alexanderwild.com/> and your professor, Dr. Miller, www.millerlab.net.

Approximate Graduate Student Schedule, Fall 2023: Prepare for each class period by reviewing Canvas materials. As we go through the semester, the schedule may need to change to accommodate opportunities and disruptions. Such changes, communicated clearly via Canvas, should be expected. **Check Canvas regularly.**

Week and Dates	Topic	Important events	Canvas quiz due?	Optional textbook reading (<i>always review study guides</i>)
Week 1 Aug 24	Significance and Diversity of Insects		none	Text: Chapter 1
Week 2 Aug 29 & 31	Continued from last week, and... What is an insect?		Mon 11:55pm	Text: Chapters 15 & 16
Week 3 Sep 5 & 7	Insect macro-evolution	Quiz on hexapod orders Thurs. in class	Mon 11:55pm	Text: Chapter 16
Week 4 Sep 12 & 14	External morphology & insect families	Part I of the Graduate Student Project is due Monday at 11:59pm	Mon 11:55pm	Text: Chapters 2 & 3
Week 5 Sep 19 & 21	Internal anatomy, physiology, and development Virtual Exchange Guest lecture from French entomologist, Dr. Abderrahman Khila	Assignment #1 due Wed. 11:55pm Thursday: 5 bonus points for those who arrive (9:35am) with a written question for Dr. Khila that clearly reflects knowledge of his research	Mon 11:55pm	Recorded lecture modules on Canvas Text: Chapter 2
Week 6 Sep 26 & 28	Internal anatomy, physiology, and development Thursday: undergraduate research (graduate students may skip class)	Part II of the Graduate Student Project due Monday at 11:59pm Thursday: guests to speak on undergraduate research opportunities. [Graduate students may skip this class]	Mon 11:55pm	Recorded lecture modules on Canvas Text: Chapter 2
Week 7 Oct 3 & 5	Sensory systems and behavior	Exam 1 on Thursday in class	Mon 11:55pm	Text: Chapters 5 & 6
Week 8 Oct 10 & 12	Insect micro-evolution	Part III of the Graduate Student Project due Monday at 11:59pm	Mon 11:55pm	Text: Chapter 8
Week 9 Oct 17 & 19	Insect reproduction & sexual selection	Assignment #2 due Wed. 11:55pm	Mon 11:55pm	Text: Chapter 4
Week 10 Oct 24 & 26	Insects and plants	Part IV of the Graduate Student Project due Monday at 11:59pm Galls or leaf mines (for 5 bonus points) due on <u>Tuesday, in class</u>	Mon 11:55pm	Text: Chapter 9
Week 11 Oct 31 & Nov 2	Insects & microbes Predation, parasitism, defense	Part V of the Graduate Student Project due Monday at 11:59pm	Mon 11:55pm	Text: Chapter 11 Text: Chapter 10
Week 12 Nov 7 & 9	Social insects	Assignment #3 due Wed. 11:55pm.	Mon 11:55pm	Text: Chapter 7
Week 13 Nov 14 & 16	Applications I: Pest management	Exam 2 on Tuesday in class	None	Text: Chapter 13
Week 14 Nov 21	Pest management, continued	Part VI of the Graduate Student Project due Monday at 11:59pm	Mon 11:55pm	
Week 15 Nov 28 & Nov 30	Applications II: Medical and veterinary entomology Applications III: Insect conservation		Mon 11:55pm	Text: Chapters 12 & 14
Week 16 Dec 5	Finish up all topics Course evaluations		Mon 11:55pm	

Week 17 Dec 11	Comprehensive Final Exam 12/11/2023 @ 3:00 PM - 5:00 PM	Location: 1031 Steinmetz, our classroom	None	
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UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code. Please let us know in advance of turning in your assignments if you do not understand what constitutes plagiarism or academic misconduct. Plagiarism will not be tolerated in this course or the lab sections.

HONOR PLEDGE: 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 TA in this class.

It is assumed that you will complete all work *independently* in this course unless the instructor provides explicit permission for you to collaborate on course tasks. 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.

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

NETIQUETTE, COMMUNICATION COURTESY, LECTURE RECORDING: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. Please try to arrive on time to class; when you are late, it can be disruptive and distracting to others.

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

CAMPUS RESOURCES:

Health and Wellness

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress. Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services. Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website. University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies). UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website. GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

Academic Resources

- E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.
- Library Support: cms.uflib.ufl.edu/ask various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420.
- General study skills and tutoring. teachingcenter.ufl.edu/
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/
- Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-codestudent-conduct-code/ On-Line Students Complaints: distance.ufl.edu/student-complaint-p

