ENTM 3040 – General Entomology Syllabus 2025

Instructors

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*Email is the best way to reach us. We'll usually answer within one working day. To schedule a meeting, send an email or to speak with us before or after class.

General Course Information

Canvas URL: https://auburn.instructure.com/courses/1664605
Lectures: Funchess Hall 336, Tuesday and Thursday, 8-9:15am
Labs: Funchess Hall 354, Wednesday

Course Description

This is an introduction to the physiology, ecology, and diversity of insects.

Student Learning Outcomes:

This course will help you do the following:

- **SLO 1.** Solve basic insect classification problems by analyzing and evaluating morphological data.
- **SLO 2.** Interpret and explain the structure and function of insect bodies.
- **SLO 3.** Interpret and explain patterns and processes in insect populations and communities
- **SLO 4.** Connect basic knowledge about insect biology to real-world problems relating to climate change, public health, land use intensification.

Course Materials

Books:

- **Lab textbook:** *How to Know the Insects*. 3rd Edition. R.G. Bland and H.E. Jaques. 2010. ISBN 1577666844. The 2nd or 3rd editions should be suitable. Please purchase this book since it will be used for almost every lab session.
- **Optional lecture textbook:** *The Insects: An Outline of Entomology* 4th Edition. P.J. Gullan and P.S. Cranston. 2010. ISBN 978-1-4443-3036-6. (The third edition should also work). There are no readings assigned from this book for this course, but it could be a valuable reference.

Collection kits: These can be purchased from the Auburn University F.S. Arant Club. The Arant Club (not us) sets the price (usually $20-30) and availability of the collection kits and supplies. Sales support Arant Club functions. Payment can be by cash, check, or Venmo. The TA is an Arant Club member and can provide more information.

Provided supplies: All students will be assigned a pinning block, aerial net, and killing bottle for the semester. Students should return these items at the end of the semester.

Portable magnifier: Anyone that intends to engage in pest management or even casual insect identification should have a hand lens or portable magnifier. A good hand lens should have at least 10x magnification. A 20x or greater is even better. The most portable design is a loop (Links to an external site.), with a hand lens/magnifier (Links to an external site.) being slightly more bulky.

Assessments

The course grade is based on overall point total in the semester. Lab grades and lectures grades are combined. Each assignment has the following point value:

- Lecture midterm exams (2).....200 points (combined)
- Lab practical exams (2)….....200 points (combined)
- Weekly lecture quizzes.....50 points (take 7, keep best 5)
- Final Lecture exam…….....100 points
- Lab Quizzes.....50 (take 7, keep best 5)
- Insect Collection.....200 points
- TOTAL.....800

Grading system: Your grade for this course is based on an accumulation of points through the semester. All points are equal. There are 800 available points on assignments, not including bonus points. The letter grade scheme is conventional:

- 90%-100% A
- 80-89 B
- 70-79 C
- 60-69 D
- Below 60 F

No curve will be applied to the grades on individual assignments or to overall grades for the course. But there are in-class activities that provide you with a chance to earn course currency, that you can then use to repair poor assessment scores, or avoid some assessments altogether. See the course Canvas site for more details.

Lab practical exams are assessments of your ability to identify insect taxa, done in-person during a scheduled lab session. Lecture exams will be taken using a lockdown browser on your personal computer during a regularly scheduled lecture time. If you do not have a personal laptop, please contact the instructors for access to a laptop for exams.

Make-up and late-assignment policy: You need to complete assignments on time as outlined in the syllabus and Canvas course calendar. Make-up lecture exams will be given if the student has (1) an appropriate written excuse or documentation from a doctor, and (2) has emailed the instructor before or shortly after the test (within 1 day). No make-up exams will be given once the corrected exams are returned (usually within 1 week of the exam). Since only the five best quiz grades are used, no make-up quizzes will be given. Because of lab practical exams are laborious to offer, no make-ups will be given.

Course Policies

Health and Well-Being Resources: Academic and personal stress affect people in different ways. Please take care of yourself. If you need additional support, there are some resources on campus that might be useful:

- Student Counseling and Psychological Services - http://wp.auburn.edu/scs/ (Links to an external site.)
- AU Medical Clinic -https://cws.auburn.edu/aumc/ (Links to an external site.)
- If you or someone you know are experiencing food, housing or financial insecurity, please visit the Auburn Cares Office -http://aucares.auburn.edu/ (Links to an external site.)Links to an external site.

Academic Honesty: Do not cheat or plagiarize. All portions of the Auburn University Student Academic Honesty code (Title XII) found in the Student Policy eHandbook (Links to an external site) apply. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee:

- A statement concerning Classroom Behavior: The Auburn University Classroom Behavior Policy is strictly followed in the course; please refer to the Student Policy eHandbook (Links to an external site) for details of this policy. When in class, students will provide the professional respect due to other students, TA's, and instructors.
- An Emergency Contingency statement: If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation, the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.

Use of AI: In this course, students may be permitted to use Generative AI Tools, such as ChatGPT, for specific assignments as designated by the instructor. To maintain academic integrity, students must disclose any use of AI-generated material. As always, students must properly use attributions, including in-text citations, quotations, and references. Students should exercise caution and avoid sharing any sensitive or private information when using these tools.

A student should include the following statement in assignments to indicate use of a Generative AI Tool: "The author(s) acknowledge the use of [Generative AI Tool Name], a model developed by [Generative AI Tool Provider], in the preparation of this assignment. The [Generative AI Tool Name] was used in the following way(s) in this assignment [e.g., brainstorming, grammatical correction, citation, which portion of the assignment]."

Participation: On-time attendance and participation in lectures is expected. Attendance is positively correlated with class performance. All students are required to attend a lab session.

Bonus points: For the sake of fairness, outside of what is described in this syllabus, no additional assignments will be given, and there will be no expectation or opportunity for students to do extra to earn bonus points. That being said, in the final third of the semester, all students will do in-class learning activities that can earn them course currency that can be spent to either buy back points, or buy a lighting of the load of some late-term assessments. For details, consult the Course Shop page on Canvas.

Schedule

Week	Date		Topic
Module 1: Do you: Insect Individuals			
	8/19	Lecture	Introduction – What is a Bug?
1	8/21	Lecture	Importance and diversity of insects
		Lab	Hexapods and specimen preservation.
	8/26	Lecture	Origins and evolution of insects
2	8/28	Lecture	External anatomy I: Cuticle
		Lab	Collecting insects. (Trapping field trip)
	9/2	Lecture	External anatomy II: Segments and appendages
3	9/4	Lecture	Internal anatomy and physiology I: Tracheal System
		Lab	Apterygota and Palaeoptera
	9/9	Lecture	Internal anatomy and physiology II: Circulatory system
4	9/11	Lecture	Internal anatomy and physiology III: Nervous system
		Lab	Insect anatomy
	9/16	Lecture	Insect development and hormones
5	9/18	Lecture	Exam 1
		Lab	Orthopteroidea

Module 2: You and yours: Insect Populations and Societies			
6	9/23	Lecture	Reproductive biology I: Courtship
	9/25	Lecture	Reproductive biology II: Copulation
		Lab	Hemipteroidea I
	9/30	Lecture	Reproductive biology III: Parental Care
7	10/2	Lecture	Life histories
		Lab	Hemipteroidea II
	10/7	Lecture	Behavior: Cognition
8	10/9	Lecture	No class – Fall Break
		Lab	Hemipteroids III
	10/14	Lecture	Social insects I: Evolution of sociality
9	10/16	Lecture	Social insects II: Communication
		Lab	Neuroptera and Coleaoptera
	10/21	Lecture	Pollinators
10	10/23	Lecture	Exam 2
		Lab	Stepsiptera, Mecoptera and Diptera
Module 3: Come together: Insect Communities			
	10/28	Lecture	Overview of between-species interactions
11	10/30	Lecture	Insect competitors
		Lab	Trichoptera and Lepidoptera
	11/4	Lecture	More insect competitors (and co-existers)
12	11/6	Lecture	Mutualists
		Lab	Hymenoptera
	11/11	Lecture	No class – Entomology National Meeting
13	11/13	Lecture	Insect consumers and resources
		Lab	No lab (ESA meeting)
	11/18	Lecture	Hosts, herbivores and other parasites
14	11/20	Lecture	Insect community assembly
		Lab	Flex
	11/24-28		No class – Thanksgiving Holiday
	12/2	Lecture	Insect community structure and function
15	12/4	Lecture	Insect Diversity
		Lab	Final Lab Practical
	12/9	Final	8-10am, Exam 3

*This schedule is subject to change at the discretion of the instructor.