

Bios 4974
General Entomology
Fall Semester 2004

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Lecture Syllabus

Date	Topic	Reading
Aug. 24	Introduction and evolution	Ch 1
26	Evolution, diversity and classification	Ch 7
31	Morphology: head and thorax	pp 28-40, 45-60
Sept. 2	Morphology: abdomen; Nutrition and digestion	pp 60-76
7	Circulation, respiration, musculature	pp 76-88
9	Excretion, nervous system	pp 88-94
14	Sense organs, reproduction	pp 40-46, 94-105
16	EXAM 1	
21	Egg and development	pp 107-126
23	Endocrine and exocrine systems	pp 126-137
28	Behavior mechanisms	
30	Learning and communication	
Oct. 5	Mating and oviposition	pp 182-193
7	MIDTERM BREAK	
12	Orientation, migration; Concepts of sociobiology	pp 216-221
14	The social insects	pp 221-242
19	EXAM 2	
21	Aquatic and terrestrial environments	pp 139-166
26	Population dynamics	pp 166-175
28	Predators, parasites, and pathogens; insect responses	pp 196-204
Nov. 2	Antipredator defense	pp 204-215
4	Insects as parasites	Ch 8
9	Insects as predators	Ch 9
11	Beneficial insects	pp 280-297
16	EXAM 3	
18	Medical entomology	pp 297-305
23	Herbivory: Insects on plants	pp 305-311; Ch 11
25	THANKSGIVING	
30	Herbivory: Plant responses	
Dec. 2	Insect biogeography and conservation	
Dec. 11	FINAL EXAM, 12:30-2:30 AM	

Course Notes

1) Required Texts: P. J. Gullan and P. S. Cranston, 2000. *The Insects: An outline of entomology*, 2nd edition. Blackwell Science, Oxford
Peterson Field Guide to the Insects. A.A. Knopf, New York.

2) Grading:	Exam 1:	100 points	
	Exam 2:	100	“
	Exam 3:	100	“
	<u>Final exam:</u>	100	“
	Lecture total:	300	
	<u>Insect collection:</u>	100	
	<u>COURSE TOTAL:</u>	400 points	

3) No make-up exams will be given. If you miss a lecture exam you must take the final.

4) Exams will include a variety of question formats, including definitions, multiple choice, diagrams, and essays. No less than 40% of the points on each exam will be given on essay questions.

5) You will be allowed to check out collecting supplies in laboratory. **Failure to return checked-out supplies at the end of the semester will result in a grade of F in the course.** For more information on the insect collection, see the lab handout.

6) Graduate students must complete an additional project for graduate credit. This may consist of an extra collection (see lab handout), a curation project aimed at identifying portions of the UNO collection or a personal collection to genus and species, or a research paper of at least 15 pages. Consult the instructor for ideas on graduate projects and for approval of your project.

7) Attendance is mandatory at all scheduled lectures. Attendance is expected at all laboratories, whether or not an activity is specifically scheduled. You may, however, use laboratory time for the purpose of collecting additional insects on your own. Please see the instructor for further information.

8) Readings may be posted on the course website. Please pay attention to announcements in class and check the website periodically for such documents.

9) Student Learning Objectives: After completing this course, students will be able to:

1. Identify common insect orders by sight.

2. Use a dichotomous key to identify common insect families.
3. Curate an insect collection.
4. Describe major features of insect anatomy, physiology, biochemistry, behavior, and ecology.
5. Analyze novel adaptive problems and, knowing the major features of insects, predict their responses to these problems.
6. Understand the role of insects in natural systems and their effects, both positive and negative, on human activities.

10) While you may work together on insect collection and curation, you are expected to turn in work that is uniquely your own. You may not purchase prepared materials for this class, and material submitted as part of your collection must be accurately labeled as to source. Using material from other sources without attribution is a form of cheating and is a violation of the UNO judicial code. Cheating of any kind will result in a grade of F for the assignment and will be referred to the Assistant Dean for Judicial and Student Assistance for disciplinary action. For more information on University policies regarding plagiarism and other forms of academic dishonesty, see the UNO Student Policy Manual at <http://www.uno.edu/~stlf/>.

10) **Final drop date is November 17, 2004.**

Special note on Disability Policy

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact their instructors to discuss their individual needs for accommodations.

This material is available in alternative formats upon request. Please contact: Coordinator, Disabled Student Services, 260 University Center, 286-6222 (voice/TDD) or 286-3975 (fax).