

General Entomology EEB 4250
Fall 2008
Room 313 Torrey Life Science

Lecture 12:30-1:20 TR; Lab 1:30-3:30 TR

Website: <http://hydrodictyon.eeb.uconn.edu/courses/entomology/> or simply go to EBB webpage and navigate to course EEB 4250 (General entomology)

Instructor: Dr. David L. Wagner, Life Sciences Rm 471, 486-2139
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Required Texts:

Gullan, P. J. and P. S. Cranston. 2004. *The Insects: An Outline of Entomology*. 3rd ed. Blackwell Science, Oxford, England. 624 pp.

Borror, D. J. and R. E. White. 1970. *A Field Guide to the Insects*. Houghton Mifflin Co., Boston, MA. 404 pp.

Grading: 1000 points

Midterms (100 pts each)	200 pts
Final	175 pts
Collection	300 pts
7 lab quizzes (25 pts), attendance (25 pts), and participation points (25 pts)	225 pts
Lab practicum	75 pts
Current events (2 articles)	25 pts
Total	1000 pts

The collection grade will be based on taxonomic and ecological representation, specimen data and quality, and level (quality) of curation.

DATE	TOPIC
26 Aug	Course overview Lab: making an insect collection; museum visit
28 Aug.	Lecture: importance of insects; introduction to insect diversity Lab: insect walk and introduction to the laboratory; handling insects
2 Sept	Lecture: insect body I: external anatomy

	Lab Quiz 1: making an insect collection Lab: Overview of insect orders
4 Sept	Lecture: insect body II: external anatomy Lab: external grasshopper anatomy
9 Sept	Lecture: insect body III: internal anatomy; Lab Quiz 2: insect orders Lab: internal anatomy dissection
11 Sept	Lecture: non-insect arthropods Lab: non-insect arthropods; aquatic insect field trip
12-14 Sept	Weekend Field Trip to Great Mountain Forest, Norfolk, Connecticut
16 Sept	Lecture: geologic history; higher classification of insects Lab Quiz 3: insect anatomy Lab: Entognatha, Apterygota, Ephemeroptera, Odonata
18 Sept	Lecture: reproduction Lab: Blattodea, Mantodea, Phasmatodea, Orthoptera
23 Sept	Lecture: development and life histories Lab Quiz 4: primitive insect orders Lab: Dermaptera, Plecoptera, Embioptera, Pscoptera
25 Sept	First Midterm Lab: Phthiraptera, Thysanoptera, Hemiptera (aquatic)
30 Sept	Lecture: nervous system and sensory organs Lab: Hemiptera II
2 Octo	Lecture: nervous system and sensory organs II Lab: Hemiptera III, Homoptera I
7 Octo	Lecture: insect behavior Lab: Homoptera II
9 Octo	Lecture: social insects Lab: Megaloptera, Neuroptera, Strepsiptera Lab Quiz 5: Hemimetabola
14 Octo	Lecture: social insects; phytophagous insects Lab: Strepsiptera, Coleoptera I
16 Octo	Lecture: phytophagous insects Lab: Coleoptera II Special Lab Topic: Plant secondary compounds & insect herbivory
21 Octo	Lecture: Microcosmos Lab: Coleoptera III Special Lab Topic: Insect-plant pollination syndromes
23 Octo	Lecture: Movie: forensic entomology (Dr. William Krinsky) Lab: Coleoptera IV Special Lab Topic: Ghost moths and other scary insects
28 Octo	Second Midterm Lab Quiz 6: Coleoptera Lab: Trichoptera, Lepidoptera I

30 Octo	Lecture: insects and plants: herbivory and plant defense Lab: Lepidoptera II Special Lab Topic: silk
4 Nov	Lecture: entomophagous insects Lab: Mecoptera, Siphonaptera, Diptera I Special Lab Topic: insect defenses
6 Nov	Lecture: insects--the hunted and their defenses Lab: Diptera II
11 Nov	Lecture: medical & veterinary entomology Open Lab: work on collections
14 Nov	Lecture: insect ecology Lab: Diptera III
18 Nov	Lecture: chemical ecology (Scott Smedley) Lab Quiz 7: Mecopteroidea Lab: Hymenoptera I
20 Nov	Lecture: pest management Lab: Hymenoptera II
	Thanksgiving Recess
2 Dec	Lecture: biological control Lab: Lab practicum; work on collection
4 Dec	Lecture: insect conservation Lab: open class period

Our Supplemental Texts;

- Conniff, R. 1996. *Spineless Wonders. Strange Tales from the Invertebrate World*. Henry Holt and Company, NY.
- Evans, H. E. 1984. *Insect Biology*. Addison, Wesley Publishing Co., Reading, MA. 436
- Eisner, T. E. 2003. *For Love of Insects*. Harvard University Press, Cambridge, MA. 448 pp
- Judson, O. 2002. *Dr. Tatiana's Sex Advice to All Creation*. Henry Holt and Company, NY. 308 pp.

Supplemental Laboratory Texts:

- Castner, J. L. 2000. Photographic atlas of Entomology and Guide to Insect Identification. Feline Press, Gainesville, FL 174 pp.
- Kaufman, K. and E. R. Eaton. 2007. Field Guide to Insects of North America. Houghton Mifflin, Boston, MA 392 pp.
- Johnson, N. and C. A. Triplehorn. 2004. *Borror and DeLong's Introduction to the Study of Insects*. 7th Brooks-Cole, Pacific Grove, CA. 864 pp. [Taxonomically comprehensive text, with keys to all North American families. Information on physiology, behavior, and ecology sparse.]
- Marshall, S.A. 2006. *Insects. Their Natural History and Diversity*. With a photographic guide to insects of eastern North America. Firefly Books. 718pp.
- Naskrecki, P. 2005. *The Smaller Majority*. Harvard University Press, 278pp.