SYLLABUS

Entomology 750 - Systematic Entomology
Fall Semester - 2021

Instructor and other information

Instructors: David A. Rider, Hultz 268
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Meeting Times and Places: Lecture: 9:30-10:20 Tu, Th, F, Hultz 205
Laboratory: 10:30-12:15 Tu, Th, Hultz 205

Text: Triplehorn, C. A. & N. F. Johnson, 1989. Borror and Delong's Introduction to the Study of Insects. Seventh Edition. Thomson Brooks/Cole Publishing. 864 pp.

Course objectives:

To teach students to identify insects to order, family and sometimes to subfamily. Instructions are given for collecting, killing, preserving, labeling, storing, and shipping insects. The course emphasizes the morphological characters used in keys and those used for sight identification, the problems encountered in the use of keys, and the habits and/or habitats of the families covered. The basic rules of classification and nomenclature are discussed. A collection of properly prepared and identified insects is required. Laboratories are used for insect identification and work on the collections.

TENTATIVE SCHEDULE

Week:	**Lecture**	**Laboratory**
1 - Aug. 23-27	Introduction, History, Classification & Nomenclature	Insect Collection; Keys; Field Work
2 - Aug. 30-Sept. 3	Evolution of Arthropoda, Other Arthropods	Field Work
3 - Sept. 6-10	Apterygota: Protura, Collembola, Diplura, Microcoryphia, Thysanura	Other Arthropods; Field Work
4 - Sept. 13-17	Ephemeroptera, Odonata, Orthoptera, Phasmatodea	Apterygota, Ephemeroptera, Odonata
5 - Sept. 20-24	Grylloblattodea, Mantophasmatodea, Dermaptera; **EXAM I** (through Apterygota)	Field Work **EXAM I** (through Apterygota)
6 - Sept. 27-Oct.1	Plecoptera, Embiidina, Zoraptera, Isoptera, Mantodea, Blattodea	Orthopteroids
7 - Oct. 4-8	Hemiptera (Heteroptera)	Hemiptera (Heteroptera)
8 - Oct. 11-15	Hemiptera (Homoptera) **EXAM II** (through Blattodea)	Hemiptera (Homoptera) **EXAM II** (through Blattodea)
9 - Oct. 18-22	Thysanoptera, Psocoptera, Phthiraptera, Coleoptera (Adephaga)	Thysanoptera, Psocoptera, Phthiraptera, Coleoptera
10 - Oct. 25-29	Coleoptera (Polyphaga) **EXAM III** (through Phthiraptera)	Coleoptera **EXAM III** (through Phthiraptera)
11 - Nov. 1-5	Neuroptera, Hymenoptera	Neuroptera, Hymenoptera

12 - Nov. 8-12	Hymenoptera **EXAM IV** (through Neuroptera)	Hymenoptera **EXAM IV** (through Neuroptera)
13 - Nov. 15-19	Trichoptera, Lepidoptera	Trichoptera, Lepidoptera
14 - Nov. 22-26	Lepidoptera	Lepidoptera
15 - Nov. 29-Dec. 3	Siphonaptera, Mecoptera, Strepsiptera **EXAM V** (through Lepidoptera)	Siphonaptera, Mecoptera, Strepsiptera **EXAM V** (through Lepidoptera)
16 - Dec. 6-10	Diptera	Diptera
17 - Finals Week	**EXAM VI** (through Diptera)	**EXAM VI** (through Diptera)

Assessment:

6 Lecture/Lab Exams @ 100 pts. each	600 pts.
Collection	250
Total	850
765-850	A
680-764	B
595-679	C
510-594	D
0-509	F

There will be 6 lecture/laboratory combination exams, each worth 100 points (50 pts. for the lecture portion and 50 points for the laboratory portion). The last exam will be given during finals week. The laboratory portion of each exam will be in the form of a lab practical in which you will be expected to identify by sight insects covered in class; you will also be expected to occasionally key out insects not seen in class. All lecture and laboratory exams are comprehensive, but the more recent material will be stressed. You will be expected to know how to differentiate newly covered material from material covered on a previous exam.

The insect collection required for this class is described in detail in another handout. You will be provided with the materials needed to make this collection. Certain items such as nets and kill jars will be available for loan for short periods of time.

Due to low enrollment in this course, we will begin teaching this course as an independent study-style course; that is, all lecture notes, handouts, and audio recordings of lectures will be placed on the internet. It will be the student's responsibility each week to listen to the audio lectures while reading along with the lecture notes and handouts. I would still like to meet with the student approximately once a week to answer any questions, and to make sure the student(s) are keeping up with the material. We will evaluate this process, and make adjustments as needed. The course materials can be accessed at this website:

https://www.ndsu.edu/faculty/rider/Pentatomoidea/Teaching%20Systematics/Teaching_Systematics.htm