

Syllabus ENTO 4682/5682, Spring 2011

Lecture: Room 22 Agriculture, MWF from 9:00 – 9:50

Laboratory: Room 4022 Agriculture, W from 2:10 – 5:00

Instructor: David Legg

Instructor's office: Room 64, Agriculture

Instructor's phone, e-mail: 766 – 3369; dlegg@uwyo.edu (*e-mail is the best way to contact instructor*)

Office hours: Mondays 10:00–11:00; Tuesdays and Thursdays from 11:00 to 12:00; *else by appointment.*

General information, Lecture:

- First lecture of each week will be the *principal lecture*.
- Second lecture of each week will be the *supplemental lecture*.
- On most Fridays, there will be a 10–point quiz over material presented in both the principal and supplemental lectures. Quiz format will be short answer.
- There will be NO EXAMS.
- There will, however, be 13 quizzes.
- You may drop your lowest quiz score.
- If you miss a quiz and have a University Approved Absence, you will not be held responsible for that quiz. *University Approved absences may be obtained from the Office of Student Life, 128 Knight Hall.*
- Students enrolled in ENTO 5682 must write a 5 to 10 page paper regarding one topic of insect anatomy and physiology, and then make a 20 minute presentation on their chosen topic during the final week of class. The paper + presentation is worth 30 points.
- Total *lecture* points possible; students enrolled in ENTO 4682 = 120; students enrolled in ENTO 5682 = 150.

General information, Laboratory:

- There will be a total of 12 dissections.
- Each dissection is worth 10 points.
- Dissections will be graded based on completeness and accuracy of submitted sketches.
- It is recommended that undergraduates work with a partner in laboratory while performing the dissections *but each student must make her or his own sketches*. Graduate students must perform their own dissections.
- Total points possible for the laboratory = 120.

Grading Scale

A = 90% or more of total points

B = 80% to 90% of total points

C = 70% to 80% of total points

D = 60% to 70% of total points
F = less than 60% of total points

Schedule of Lectures, Laboratories, Due Dates, and Quizzes

Date	Topic
Week 1	
10 January	Overview
12 January	<i>No lecture, no laboratory.</i>
14 January	Principal lecture, <i>the cuticle</i> (Chapman chapter 16)
Week 2	
17 January	Martin Luther King Jr., Wyoming Equality Day Holiday; <i>classes excused.</i>
19 January	Supplementary lecture, <i>the thorax and legs</i> (Chapman chapters 7, 8); laboratory dissection #1 (<i>musculature of the head</i>).
21 January	Quiz #1.
Week 3	
24 January	Principal lecture, <i>muscles</i> (Chapman chapter 10); sketches from dissection #1 are due at the beginning of class.
26 January	Supplemental lecture, <i>the basic wing and flight</i> (Chapman chapter 9); laboratory dissection #2 (<i>musculature of the thorax and abdomen</i>).
28 January	Quiz #2.
Week 4	
31 January	Principal lecture, <i>the circulatory system</i> (Chapman chapter 5); sketches from dissection #2 due at the beginning of class.
2 February	Supplemental lecture, <i>the insect immune system</i> ; laboratory dissection #3 (<i>circulation</i>).
4 February	Quiz #3.
Week 5	
7 February	Principal lecture, <i>the tracheal system</i> (Chapman chapter 17); sketches from dissection #3 due at the beginning of class.
9 February	Supplemental lecture, <i>respiration</i> ; laboratory dissection #4 (<i>respiration</i>).
11 February	Quiz #4.

Date	Topic
Week 6	
14 February	Principal lecture, <i>head, antennae, & mouthparts</i> (Chapman chapters 1, 2); sketches from dissection #4 due at the beginning of class.
16 February	Supplemental lecture, <i>the alimentary canal</i> (Chapman chapter 3) and, perhaps, <i>termites and their digestion</i> ; laboratory dissection #5 (<i>exterior anatomy of the head</i>).
18 February	Quiz #5.
Week 7	
21 February	Principal lecture, <i>insect nutrition, the fat body, & digestion & absorption</i> (Chapman chapters 4, 3, 6); sketches from dissection #5 are due at the beginning of class.
23 February	Supplemental lecture, <i>insect nutrition, fat body, & digestion & absorption-cont. -</i> ; dissection #6 (<i>mandibulate and haustellate mouthparts</i>).
25 February	Quiz #6.
Week 8	
28 February	Principal lecture, <i>the abdomen, excretion, and water regulation</i> (Chapman chapters 11, 18); sketches from dissection #6 are due at the beginning of class.
2 March	Supplemental lecture, <i>color</i> (Chapman chapter 25); dissection #7 (<i>alimentary tract</i>).
4 March	Quiz #7.
Week 9	
7 March	Principal lecture, <i>the insect nervous system</i> (Chapman chapter 20); sketches from dissection #7 are due at the beginning of class.
9 March	Supplemental lecture, <i>insect vision, the production of sound</i> (Chapman chapters 22, 26); dissection #8 (<i>generalized insect central nervous system</i>).
11 March	Quiz #8.

Date	Topic
(phantom week 10)	
14 March	Spring break – <i>classes excused.</i>
16 March	Spring break – <i>classes excused.</i>
18 March	Spring break – <i>classes excused.</i>
Week 10	
21 March	Principal lecture, <i>mechanoreception and chemoreception</i> (Chapman chapters 23, 24); sketches from dissection #8 are due at the beginning of class.
23 March	Supplemental lecture, <i>endocrine organs</i> (Chapman chapter 21); dissection # 9 (<i>a highly specialized insect central nervous system</i>).
25 March	Quiz # 9.
Week 11	
28 March	Principal lecture, <i>some hormones</i> (Chapman chapter 21); sketches from dissection #9 are due at the beginning of class.
30 March	Supplemental lecture, <i>hormone transport</i> ; dissection #10 (<i>the generalized male reproductive system</i>).
1 April	Quiz # 10.
Week 12	
4 April	Principal lecture, <i>generalized reproduction</i> (Chapman chapters 12, 13); sketches from dissection #10 are due at the beginning of class.
6 April	Supplemental lecture, <i>unusual 'methods' of mating</i> ; dissection #11 (<i>the generalized female reproductive system</i>).
8 April	Quiz #11
Week 13	
11 April	Principal lecture, <i>embryology I</i> (Chapman chapter 14); sketches from dissection #11 are due at the beginning of class.
13 April	Supplemental lecture, <i>embryology II</i> ; dissection # 12 (<i>the wing</i>).
15 April	Quiz #12.

Date	Topic
Week 14	
18 April	Principal lecture, <i>postembryonic development</i> (Chapman chapter 15); sketches from dissection #12 are due at the beginning of class.
20 April	Supplemental lecture, <i>insect bioluminescence</i> ; no laboratory.
22 April	Easter break – <i>classes excused</i> .
Week 15	
25 April	Quiz #13.
27 April	Student presentations.
29 April	Student presentations.