BIOL 3388 - Honey Bee Biology
Fall 2014

Course Information

BIOL 3388 – Honey Bee Biology Section 001 (CRN 86325)
Monday/Friday 10am -11:15am Room SLC 2.304

Professor Contact Information

Dr. Scott Rippel

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Course Pre-requisites or their equivalents

BIOL 2281 – Introductory Biology Laboratory
BIOL 2311 – Introduction to Modern Biology I
BIOL 2312 – Introduction to Modern Biology II

Course Description

This survey course explores the biology of honey bees at the colony, organism, and molecular levels. Topics include honey bee anatomy, nest architecture, caste development and social organization, reproduction and genetic diversity, pheromones and communication, foraging behavior, colony reproduction, pest and disease management, and basic beekeeping.

Required Textbooks and Materials

Caron, Dewey M. and Lawrence Connor. *Honey Bee Biology and Beekeeping, Revised Edition.* Michigan: Wicwas Press, 2013. Print

Additional lecture notes will be made available as handouts or down loads from the eLearning course website.

Academic Calendar and Major Assignments

Lecture	Day	Date	Topic	Assignment
1	Mon	25 Aug	History and Evolutionary Relationships	Chapter 1-3
2	Fri	29 Aug	Honey Bee Anatomy - Form and Function	Chapter 5
-----	**Mon**	**01 Sept**	**Labor Day Holiday**	-----
3	Fri	05 Sept	Honey Bee Anatomy - Form and Function **Project Proposal Due**	Chapter 5
4	Mon	08 Sept	Colony organization and Nest Architecture	Chapter 6
5	Fri	12 Sept	Nutrition and Development	Chapter 4
6	Mon	15 Sept	Nutrition and Development	Chapter 4
Exam 1	**Fri**	**19 Sept**	**Exam 1 - Lecture 1-6**	**Exam 1**
7	Mon	22 Sept	Behaviors	eLearning file
8	Fri	26 Sept	Behaviors	eLearning file
9	Mon	29 Sept	Colony Reproduction: Swarming	Chapter 9
10	Fri	03 Oct	Queen Mating	Chapter 9
11	Mon	06 Oct	Communication	Chapter 7
12	Fri	10 Oct	Communication	Chapter 7
Exam 2	**Mon**	**13 Oct**	**Exam 2 - Lecture 7-12**	**Exam 2**
13	Fri	17 Oct	Forging and Pollination	Chapter 10
14	Mon	20 Oct	Forging and Pollination	Chapter 10
15	Fri	24 Oct	Beekeeping equipment and Apiary Sites	Chapter 11
16	Mon	27 Oct	The Products of Bees	Chapter 16
17	Fri	31 Oct	Honey Production and Processing	Chapter 15
18	Mon	03 Nov	Economics and Commercial Beekeeping	Chapter 18
Exam 3	**Fri**	**07 Nov**	**Exam 3 - Lecture 13-18**	**Exam 3**
19	Mon	10 Nov	Diseases, pests, and pesticides	Chapter 19
20	**Fri**	**14 Nov**	**Written Paper and Documentation Due** Colony Collapse Disorder	**Term Project** Chapter 20
-----	**Sun**	**16 Nov**	**Electronic Presentations Due via email**	**Term Project**
21	Mon	17 Nov	Oral Student Presentations	Handout
22	Fri	21 Nov	Oral Student Presentations	Handout
-----	**Mon**	**24 Nov**	**Thanksgiving Holidays**	-----
-----	**Fri**	**28 Nov**	**Thanksgiving Holidays**	-----
23	Mon	01 Dec	Oral Student Presentations	Handout
24	Fri	05 Dec	Oral Student Presentations/Reading Day?	Handout
Exam 4	Mon	08 Dec	**Exam 4 - Lecture 19-26**	**Exam 4**

Grading Policy

Course Assignments

Assignment	Course %	Points
Exam 1	15%	90
Exam 2	15%	90
Exam 3	15%	90
Exam 4	15%	90
Quizzes	15%	90
Term project	15%	90
Apiary visit	10%	60
	100%	**600**

Course Grading Scale

Final Letter Grade	Total Points Earned
A+	582
A	564
A-	540
B+	522
B	504
B-	480

Final Letter Grade	Total Points Earned
C+	462
C	444
C-	420
D+	402
D	384
D-	360

Weekly on-line quizzes will be conducted through the eLearning website. Quizzes will cover material from the course textbook and additional short essays that will be posted on the eLearning website.

The term project will involve both a written essay and an oral presentation with handouts. See additional course handout for specific instructions and grading criteria.

A visit (approximately 1 hour) to the UTD apiary to perform some basic hive maintenance is *highly encouraged*. However, an alternative assignment will be made available on a case-by-case basis.

Course & Instructor Policies

I will consider rescheduling Exams/Quizzes only with appropriate documentation for major issues (hospitalization, accidents, medical school interviews, etc…).

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.