Apprentice-Level Beekeeping

Available for 1 undergraduate credit through the University of Montana Division of Biological Sciences as BIOB 191 Apprentice Level Beekeeping.

Instructors

Dr. Jerry Bromenshenk
Scott Debnam
Phillip Welch

Location

The course is taught online through Moodle, the University of Montana's online learning system.

Course Description

The goal of this course is to teach basic beekeeping of honey bees. Participants will gain a general knowledge of honey bee biology as well as how to care for honey bees throughout the year. Students will be taught how to recognize common honey bee ailments and pests, as well as the methods for treating them. This course also covers the history of bees, and state and federal bee laws. After completion students will know how to manage honey bee colonies for maximum bee health and honey production.

The course is equivalent to 20 hours of instruction. Participants should allow 3-4 hours per week for participation in the course, study time, and reading.

Required Textbooks & Equipment

Storey's Guide to Keeping Honey Bees, 2nd Edition: Honey Production, Pollination, Health
Malcom T. Sanford and Richard E. Bonney, Storey Publishing 2018
ISBN: 9781612129785 (Paperback)

The textbook is available at Amazon.com or BarnesandNoble.com or other retailers.

Other materials will be provided in class as needed.

Grading Method

All participants must earn 80% or higher overall to receive a certificate of completion for the course and 2.0 CEUs. Students are graded on overall participation in the weekly discussion forums, four exams, one written assignment, a comprehensive final exam, and a final video practicum.

Activity	Points
Forum Participation (5 @ 20 pts)	100
Weekly Exams (4 @ 19 pts)	76
Writing Assignment	100
Final Comprehensive Exam	100
Final Video Practicum	100
	476

Academic credit students will be assigned traditional letter grades using the following scale:

>93%	A
92-90%	A-
89-87%	B+
86-83%	B
82-80%	B-
79-77%	C+
76-73%	C
72-70%	C-
69-67%	D+
66-60%	D
<60%	F

Intellectual Property and Copyright

This course is protected by copyright and is the intellectual property of the University of Montana and the beekeeping faculty. These materials are not to be distributed or disseminated without their express written permission.

Academic Honesty

Plagiarism is defined as misrepresenting another's work, words, or ideas as one's own. Be aware that submitting plagiarized work is subject to an academic penalty by the course instructor as described in the UM Student Conduct Code.

Accessibility

This course was designed to be fully accessible and meets the requirements of the University of Montana Electronic and Information Technology Accessibility Policy. The University of Montana assures equal access to instruction. Students with disabilities may request reasonable modifications by contacting an instructor or by calling Student Support Services at 406.243.6495. By "reasonable," the University means that no fundamental alterations of academic standards or retroactive modifications will take place.

Course Schedule

Course schedule is subject to change. Due dates for assignments and exams will be announced in class.

Week 1:

Honey Bee History/State and City Regulations

- Egyptian use of hives and Honeybees
- European expansion
- Move to the Americas
- Langstroth and his hive
- Montana State regulations

Phillip Welch is the primary forum facilitator.

Montana Laws and Regulations Exam
Writing Assignment on bee history or bee laws and regulations

Week 2

Honey Bee Biology

- Types of bees in the hive
- Jobs of the workers
- Parts of the Honey bee

Scott Debnam is the primary forum facilitator.

Honey Bee Biology Exam

Week 3

Beekeeping Tools and Equipment/Introduction to the Langstroth Hive

- Tools that manipulate the various parts of the hive
- Smoker
- Suits
- Langstroth hive history and overview

Phillip Welch is the primary forum facilitator.

Tools and Equipment Exam

Week 4

Colony Dynamics

- Honey production
- Year in the apiary outlined
- Winter clustering and overwintering honey requirements
- Temperature regulation
- Frame counts
- Pollen use

Scott Debnam is the primary forum facilitator.

Colony Dynamics Exam

Week 5

Introduction to Diseases, Pests, and Predators

- Varroa and Tracheal Mite life cycle and treatments
- Foul Brood and treatments
- Nosema species and treatments

Scott Debnam is the primary forum facilitator.

Week 6

Working the Hive

- Opening the hive
- Removing frames
- Locating brood frames and queens
- Assessing honey production
- Working with your bees

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Review

Final Comprehensive Exam

Final Video Practicum