



Commercial Beekeeping Program Description

This series of courses is designed to prepare beekeepers for entry into the commercial beekeeping profession. The intent is to introduce and train beekeepers in the skills needed for large-scale beekeeping. Students will be introduced to year-round managing of bees, including over-wintering, production of honey and wax, transport, rental, and placement of colonies for pollination, cultivating of queen bees, package, and nuc production for commercial purposes and retail sales, as well as required record keeping, forms, and permits required for interstate transport of bees and large-scale bee management.

This program aims to train beekeepers to meet the challenges regarding commercial-level honey production and crop pollination needs. The course modules are designed to introduce beekeepers to the knowledge and skills needed to enter commercial beekeeping fields as either managers or employees or to set up their own beekeeping businesses.

Course Description: Commercial Pollination

Most commercial beekeeping businesses in the United States are migratory. Beekeepers and their bees follow the seasonal bloom cycles of various croplands and orchards. Truckers move bees nationally (east to the west coast), regionally (across states), and locally (within a state or county).

Insect pollinators play a crucial role in crop production, contributing billions of dollars to the industry every year. Among them, honey bees are America's primary commercial pollinators, owing to their large population and ease of management and transportation. The purpose of this course is to equip students with the necessary skills and knowledge to succeed in the demanding field of commercial pollination.

The Commercial Pollination course is equivalent to 50 hours of instruction. Participants should allow 7-10 hours per week for participation in the class, study time, and reading.

Instructors

Dr. Scott Debnam (primary)

Dr. Jerry Bromenshenk

Prerequisite

Registration is open to those who have previously completed and received a Certificate of Completion for UM's Apprentice Level Beekeeping course, or tested out of the Apprentice Level.

Location

UM's Commercial Beekeeping courses are offered through Canvas, the University of Montana's online learning system.

Required Textbooks

The Hive and the Honey Bee, Dadant and Sons, 2015 version.

Edited by Joe M. Graham

ISBN 978-0-915698-16-5

Available through [Dadant](#)

Beekeeping in Western Canada

John Gruszka Editor, ISBN 0-7732-6139-7 The 2010 Reprint or the 1998 original is required.

Available through [Alberta Agriculture and Rural Development](#).

Free, electronic version available through [Biodiversity Heritage Library](#).

Grading Method

All participants must earn 70% or higher overall to receive a certificate of completion for the course and 5 CEUs.

Each week will end with an exam or assigned work in order to assess each student's understanding of course materials. Students are also graded on overall participation in forums. Forums provide everyone with the opportunity to engage in in-depth, open discussions about each topic with their classmates and instructors.

Course Totals

Activity	Percent
Overall Forum Participation	33.3%
Assignments & Exams	33.3%
Final Exam	33.3%
<hr/> Total:	100%

Forum Participation

To get the most out of the course, students should participate in the forums regularly and thoroughly. Simply replying on one day will not suffice. You must engage with your classmates throughout the week, read the forum daily, and provide thoughtful responses a couple of times throughout the week. The forums are a critical component of the learning experience and should not be treated as a mere check-off item.

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 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

The University of Montana assures equal access to instruction. All videos include the option to turn on Closed Captions. Students with disabilities may request reasonable modifications by contacting an instructor or calling Student Support Services at 406.243.6495 before or at the beginning of a Class Module. By "reasonable," the University means that no fundamental alterations of academic standards or retroactive modifications will occur.

Course Schedule

The course schedule is subject to change. Due dates for assignments and exams will be announced in Canvas.

Week 1: Insect Pollination

- Introduction to the Pollination Syndrome
- Overview of migratory beekeeping
- Introduction to indoor pollination techniques
- Overview of almond pollination
- Participate in Forum Discussions
- Exam on insect pollination

Week 2: Preparing Colonies for Pollination

- Wintering sheds
- What goes on inside the hive over winter
- Emerging hive monitoring technologies
- Participate in Forum Discussions
- Exam on Preparing Colonies for Pollination

Week 3: Interstate Transport and Inspection of Honey Bee Colonies

- Loading and transport of palletized hives
- Border inspections
- Holding yards
- Participate in Forum Discussions
- No exam or assignment

Week 4: Bee Brokering and Pollination Contracts

- Introduction to brokering services
- Preparing colonies and hives for pollination and brokering services
- Pollination contracts
- Participate in Forum Discussions
- Mock Pollination Contract Assignment

Week 5: Economics of Commercial Pollination

- Overview of private insurance
- Noninsured Crop Disaster Assistance Program (NAP) overview
- Farm Loan Programs
- Participate in Forum Discussions
- Risk Management Assignment

Week 6: Final Exam

- Exam review forum
- Final exam (Comprehensive)