School of Agriculture
Trades & Environment

BK 134 HIVE MANAGEMENT FOR HONEY PRODUCTION
5(3-3.5-3) 8 WEEKS; 76 HOURS

COURSE OUTLINE – JANUARY 2012

INSTRUCTOR: TBA **PHONE:** TBA
OFFICE: TBA **E-MAIL:** TBA

OFFICE HOURS: TBA

POSSIBLE REQUIRED TEXT/RESOURCE MATERIALS:

To be determined by the course instructor; possibly 'Beekeeping in Western Canada' available from Alberta Agriculture, 2001.

CALENDAR DESCRIPTION:

This course is a 'nuts & bolts' practical introduction to all phases of beekeeping and honey production through the annual beekeeping cycle.

CREDIT/CONTACT HOURS:

Course has 2 hours of lecture and 7.5 hours of lab time per week for 8 weeks; 75 hours total.

DELIVERY MODES:

The course work includes lecture, demonstrations and hands-on lab activities, class participation, and assignments as set by instructor.

COURSE OBJECTIVES:

1. Provide an overview of the annual beekeeping cycle
2. Provide students with fundamentals of getting started in beekeeping
3. Ensure students understand components of seasonal management
4. Develop basic understanding of honey, honey production, and hive management
5. Provide an introduction to annual planning for commercial beekeeping

PROPSED **COURSE TOPICS**

1. Getting Started in Beekeeping
    - Purchasing bees; bulk and package bees
    - Basic beekeeping equipment
    - The Bee Act
2. Supplementary Feeding
    - Carbohydrate supplements
    - Protein supplements
3. Spring Management:
    - Selection and layout of an Apiary site; Apiary maintenance
    - Field records
    - Wintered colonies: checking, feeding & re-queening wintered colonies
    - Evaluating and equalizing colony strength; dividing colonies; uniting colonies; reversing colonies
    - Hive space requirements
    - Drawing plastic or wax foundation
    - Queens: purchasing, introducing queen cells
    - Swarm management
    - Moving to Summer Apiary sites
4. Summer Management: Honey and Production
    - Adding honey supers
        - Use of queen excluders
        - When to add
        - Supering: bottom or top
    - Removing Honey from the Hive
        - When to remove honey
        - Robbing
        - Removing bees from honey supers
        - Loading & moving honey supers
    - Disease monitoring and maintaining hive hygiene
5. Fall Management
    - Colony assessment
    - Feeding
    - Treatment
    - Preparation for over-wintering
6. Annual Planning for a Commercial Bee Operation
    - Key seasonal activities; time lines and timing
    - Planning for labor
    - Scenarios for good & bad years

Skills

Lecture portion

- Lectures to work through BIWC as related to current topics in course.
- Link theory from Biology, Botany, Diseases and Pests to practical application

Lab portion

- Preparing brood chambers/honey supers for the coming season
- Hive inspection (approach, smoking, opening, frame manipulation, closing)
- Sterilize a hive tool (link to BK 133, 361)
- Inspecting/sorting stored equipment
- Frame cycle (honey, brood, cull) Link to BK133, 361
- Application of basic knowledge from BK122, 132, 133 to management of colonies
- Focus of breadth of management strategies
    - Emphasize honey production but introduce diversity of operation strategies (further development of these alternatives in advanced management options)
- Some lab hours to be dedicated to field trip to IPM workshop
- Include field trip to BRF

Seminar portion

- Students exposed to diversity of beekeeping practices
- Major synthesis project and presentation
    - Beekeeper profile
    - Preferably with work placements
    - Present 3 – 4 beekeeper profiles to begin the year (guest speakers?)

This course will consist of 2 x 1.5-h lectures, +1 x 3 h lab, +1 x 3.5-h seminar weekly.