



**DEPARTMENT OF ANIMAL SCIENCES**

**COURSE OUTLINE – WINTER 2014**

**BK134 HIVE MANAGEMENT FOR HONEY PRODUCTION – 2.5(2-0-6) 72 HOURS**

**INSTRUCTOR:** Eric Stromgren

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**OFFICE:** PS104A

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**OFFICE HOURS:** As posted

**PREREQUISITE(S)/COREQUISITE:**

Admission to the beekeeping program

**REQUIRED TEXT/RESOURCE MATERIALS:**

Canadian Association of Professional Apiculturists. *Beekeeping in Western Canada*

**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 2.5 hours of lecture, and 6 hours of lab time per week for 9 weeks; 72 hours total

**DELIVERY MODES:**

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

**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

**GRADING CRITERIA:**

<b>GRANDE PRAIRIE REGIONAL COLLEGE</b>			
<b>GRADING CONVERSION CHART</b>			
<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>	<b>Designation</b>
<b>A<sup>+</sup></b>	<b>4.0</b>	<b>90 – 100</b>	<b>EXCELLENT</b>
<b>A</b>	<b>4.0</b>	<b>85 – 89</b>	
<b>A<sup>-</sup></b>	<b>3.7</b>	<b>80 – 84</b>	<b>FIRST CLASS STANDING</b>
<b>B<sup>+</sup></b>	<b>3.3</b>	<b>77 – 79</b>	
<b>B</b>	<b>3.0</b>	<b>73 – 76</b>	<b>GOOD</b>
<b>B<sup>-</sup></b>	<b>2.7</b>	<b>70 – 72</b>	
<b>C<sup>+</sup></b>	<b>2.3</b>	<b>67 – 69</b>	<b>SATISFACTORY</b>
<b>C</b>	<b>2.0</b>	<b>63 – 66</b>	
<b>C<sup>-</sup></b>	<b>1.7</b>	<b>60 – 62</b>	
<b>D<sup>+</sup></b>	<b>1.3</b>	<b>55 – 59</b>	<b>MINIMAL PASS</b>
<b>D</b>	<b>1.0</b>	<b>50 – 54</b>	
<b>F</b>	<b>0.0</b>	<b>0 – 49</b>	<b>FAIL</b>
<b>WF</b>	<b>0.0</b>	<b>0</b>	<b>FAIL, withdrawal after the deadline</b>

## EVALUATIONS:

Assignments/Quizzes	15 %
Beekeeper Profile	15 %
Quizzes	30 %
Final Exam	40 %

## STUDENT RESPONSIBILITIES:

Students are expected to be on-time and present to complete this course. Requests to reschedule assignments or assessments will only be granted under extraordinary circumstances.

Students must follow all safety guidelines and procedures.

Assignments must be submitted on time in order to be eligible for grading. Late submission due to illness must be documented with a doctor's note.

## STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at

<http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at [www.gprc.ab.ca/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

\*\*Note: all Academic and Administrative policies are available on the same page.

## COURSE SCHEDULE/TENTATIVE TIMELINE:

- Field trip tentatively scheduled to Edmonton IPM seminar January 23-25, in association with BK133
- Daily Quizzes
- Beekeeper Profiles due in seminar, dates TBA
- Final exam in week 9
- Details for quizzes and assignments will be announced in class

## COURSE CONTENT

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