

AN315
Beef Production

3 Credits

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AN315 Version: 1



Beef Production

Calendar Description

This course is designed to provide the student with a working knowledge of the beef industry in Canada. The main focus of the course is on beef cow-calf and feedlot operations. Topics include cattle types, animal handling facilities, feeding management, seasonal activities, genetics and breeding programs, economics, and marketing. Emphasis is placed on knowledge for employment and enterprise management decision-making.

Rationale

This is a required course for the Beef Science major for the first year students and in the Livestock and also the Equine Science majors of the Animal Science Technology program for second year students.

This is a required course for students in the Western Ranch and Cow Horse program. It is important for students planning a career in the beef industry to understand the beef production industry in Western Canada, and how it is integrated in the North American and world markets.

Prerequisites

None

Co-Requisites

None

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. contrast the economic impact of the beef industry in the various regions of Canada.
2. recommend efficient cattle handling and housing facilities for various types of operations.
3. demonstrate the ability to implement proper husbandry skills related to pre-parturition and post-parturition cows and their calves.
4. describe typical production and health management practices in the cow-calf, backgrounding, and feedlot industries.

5. discuss the use of body condition scoring as an aid in nutrition management of the cow-calf herd.
6. discuss the types of grazing and feeding programs used in cow-calf operations.
7. describe the types of rations and ration management practices used in feedlot operations.
8. list the characteristics of the breeds of beef cattle common in North America.
9. discuss the essential factors in sire evaluation and selection.
10. apply knowledge of genetics in making breeding program selections for a cow-calf operation.
11. discuss the elements governing beef carcass quality and safety standards.
12. discuss the marketing choices available to managers of cow-calf and feedlot enterprises.
13. apply economic principles in creating a cash flow enterprise budget spreadsheet.

Resource Materials

Required Text:

Alberta Agriculture and Food. (2008). *Beef cow-calf manual*. Edmonton, AB: Alberta

Agriculture and Food.

Reference Text:

None

Conduct of Course

This course involves approximately 42 hours of lecture and 14 hours of laboratory and practical work sessions. The principles of beef management are taught in the context of a variety of different management systems.

Laboratory and practical work sessions reinforce concepts in production practices, calving management, and economics of beef enterprises. Students are required to complete assigned duties while assisting with the calving of cows on the College Farm. Students failing to perform assigned duties may be asked to withdraw from the course. All reports and assignments must be handed in or the course is considered incomplete and a failing grade is awarded.

Guest lectures and field trips may occur as time and opportunity permit.

Evaluation Procedures

The final grade is an aggregate of the following components:

Mid-term Exam	20%
Quizzes & Assignments	30%
Laboratory and Practical Work	20%
Final Exam	<u>30%</u>
Total	100%

Grade Equivalents and Course Pass Requirements

A minimum grade of D (50%) (1.00) is required to pass this course.

Letter	F	D	D+	C-	C	C+	B-	B	B+	A-	A	A+
Percent Range	0-49	50-52	53-56	57-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-100
Points	0.00	1.00	1.30	1.70	2.00	2.30	2.70	3.00	3.30	3.70	4.00	4.00

Students must maintain a cumulative grade of C (GPA - Grade Point Average of 2.00) in order to qualify to graduate.

Attendance

Classroom and laboratory attendance is considered vital to the learning process and as significant to the students' evaluation as examinations and reports.

- a. Students having a combination of excused and/or unexcused absence of 20 percent or higher for the scheduled course hours will be required to withdraw and will automatically receive a "RW" (required withdrawal) for the course, regardless of any other evaluation results. (RW is a failing grade.)
- b. An excused absence is one that is verified with your Instructor. Verification should be prior to the absence or the next class day following the absence. Verification of the absence may take the form of a note from your doctor/College nurse regarding illness, or a note from another Instructor regarding a field trip or other activity, or authorization by your Instructor. An unexcused absence is anything NOT verified by the instructor prior to the absence or the next class day following the absence.

NOTE: Any exceptions to the above attendance policy (e.g. timetable conflicts, work-related issues) must be approved in writing by the Department Chair prior to the beginning of the course.

It is the students' responsibility to know their own absentee record.

Normal hours are 8:30 a.m. to 6:30 p.m., with potential for evening courses, exams or extended field trips. Students are expected to be available for classes during these times.

Course Units/Topics

1. Beef Industry Overview
2. Animal Handling, Facilities and Equipment
3. Calving and Health Management

4. Body Condition Scoring
5. Feeding and Grazing Management
6. Genetics, Breeding Programs, Sire Selection
7. Beef Carcass Quality and Value
8. Marketing of Beef Cattle
9. Feedlot Management
10. Economics and Budgeting in a Cow-calf operation



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