

VE 160
Animal Production and Genetics
3 Credits

Instructor: TBA

Phone:

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Created: 16/05/2007

Revised: 28/08/2020

Approval: 09/09/2020

Alternate Delivery: No

The Implementation Date for this Outline is 01/09/2020

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VE 160 Version: 11



Animal Production and Genetics

Calendar Description

This course provides an overview of the livestock industry in Canada which primarily consists of horse, dairy, beef, and sheep with a quick introduction to swine and poultry industries. We will look into the various production systems, genetic components and current issues in different livestock commodities.

Rationale

This is a required course for students in the Veterinary Medical Assistant program. A clear understanding of the livestock industry in Canada is important for those working with livestock producers. Students in these programs require an understanding of all aspects of animal production, including genetic selection and controlled breeding in livestock industries, animal welfare and ethics, and proper animal handling. This course is intended to provide those not specializing in animal production with a basic understanding of how the industries function, and of the animals that make it up.

Prerequisites

None

Co-Requisites

None

Course Learning Outcomes

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

1. successfully handle, restrain and be comfortable working with large animals (sheep, horse, beef, dairy).
2. describe on-farm procedures involved with successful animal production.
3. recognize common terminology used within animal production systems.
4. describe the importance of animal welfare and ethical treatment of animals in current livestock production systems.

5. identify and have an understanding of the breeds and genetic traits of economic importance for the major contributing species within Canada.
6. explain and discuss classical Mendelian genetics and inheritance by identifying its role and effect on large animal production.
7. discuss current issues affecting livestock producers.
8. observe and interpret animal behaviours.
9. use of different types of livestock handling facilities.

Resource Materials

Required Text(s):

Grandin, T. (2017). *Temple Grandin's guide to working with farm animals: Safe, humane livestock handling practices for the small farm*. Storey Publishing.

<https://catalogue.neoslibraries.ca/catalog/8141119?lib=lakeland>

National Farm Animal Care Council. (n.d.). *Codes of practice for the care and*

handling of farm animals. <https://catalogue.neoslibraries.ca/catalog/8045268?lib=lakeland>

Alberta Farm Animal Care. (n.d.). Producer Info. *Note: Look under "Producer Info" for resources on humane handling for Beef, Dairy, Pork, Poultry, Sheep, Equine, Veal and Other. Links will open PDF documents. Retrieved from: <http://www.afac.ab.ca>*

Reference Text(s):

None

Conduct of Course

This course consists of 42 hours of lecture. Classroom instruction includes lectures, videos and guest speakers to enhance the lecture material when appropriate. Field trips may also be scheduled to various animal production facilities. Laboratory instruction is all on the college farm, learning and practicing large animal handling. Masks, gloves, coveralls and steel toed boots are mandatory for all labs. Students must be prepared to be outside during lab periods - appropriate clothing is required.

Evaluation Procedures

The final grade is an aggregate of the following components:

Term Exams	20%
Final Exam (Comprehensive)	25%
Quizzes/Assignments	15%
Lab	30%
Projects	10%

Assignments/Makeup Exams/Quizzes:

- Assignments/projects are due by 4:30 pm on the day the assignment/project is due.
- Makeup exams are given only in the case of a previously discussed and excused absence. Student is expected to make it up as soon as possible (prior to the next class period if possible).
- The instructor reserves the ability to hold pop quizzes throughout the semester with no prior notification.

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.

This course must be successfully competed to continue on to 2nd semester courses.

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. Livestock Behaviour and Safety
2. Biosecurity
3. Animal Husbandry/Animal Welfare and Ethics
4. Slaughter Industry Standards
5. Basics of Genetics Relating to Livestock
6. Specific Species Production Systems
 1. Sheep
 2. Equine
 3. Beef
 4. Dairy
 5. Swine
 6. Poultry
 7. Diversified Livestock
7. CFIA / Livestock Transportation



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