ORIGINAL COURSE IMPLEMENTATION DATE: September 2009
REVISED COURSE IMPLEMENTATION DATE: January 2022
COURSE TO BE REVIEWED (six years after UEC approval)**:** February 2027
Course outline form version: 05/18/2018

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: AGRI 254	**Number of Credits:** 3 Course credit policy (105)

Course Full Title: Ruminant Animal Health
Course Short Title:
(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)

Faculty: Faculty of Applied and Technical Studies	**Department (or program if no department):** Agriculture

Calendar Description:

The principles of disease infection, treatment, and prevention in ruminant livestock are introduced. Topics also include animal physiology, the principles of ruminant nutrition, reproduction and obstetrics, the incidence of respiratory ailments, nutritional and infectious disease, and health management of dairy and beef cattle and small ruminants.

Note: Field trips will be required.

Prerequisites (or NONE):	AGRI 237.
Corequisites (if applicable, or NONE):	
Pre/corequisites (if applicable, or NONE):	

Antirequisite Courses *(Cannot be taken for additional credit.)*
Former course code/number: **AGRI 134**
Cross-listed with:
Dual-listed with:
Equivalent course(s):
(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar hours	40
Tutorials/workshops	
Supervised laboratory hours	
Experiential (field experience, practicum, internship, etc.)	5
Supervised online activities	
Other contact hours:	
Total hours	**45**

Labs to be scheduled independent of lecture hours: ☐ No ☐ Yes

Special Topics *(Double-click on boxes to select.)*
This course is offered with different topics:
☒ No ☐ Yes *(If yes, topic will be recorded when offered.)*

Independent Study
If offered as an Independent Study course, this course may be repeated for further credit: *(If yes, topic will be recorded.)*
☐ No ☐ Yes, repeat(s) ☐ Yes, no limit

Transfer Credit
Transfer credit already exists: *(See **bctransferguide.ca**.)*
☒ No ☐ Yes
Submit outline for (re)articulation:
☐ No ☐ Yes *(If yes, fill in transfer credit form.)*

Grading System
☒ Letter Grades ☐ Credit/No Credit

Maximum enrolment (for information only): 25

Expected Frequency of Course Offerings:
Annually *(Every semester, Fall only, annually, etc.)*

Department / Program Head or Director:	**Date approved:**	December 2020
Faculty Council approval	**Date approved:**	December 18, 2020
Dean/Associate VP:	**Date approved:**	December 18, 2020
Campus-Wide Consultation (CWC)	**Date of posting:**	February 5, 2021
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	February 26, 2021

Learning Outcomes:

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

- Describe the key processes of ruminant reproduction.
- Identify and manage mastitis and related milk quality issues.
- Describe management of the health of young stock and replacement animals.
- Communicate appropriate protocols for ruminant management in all life stages and situations including when to call a veterinarian.
- Recognize the elements of ruminant digestive physiology.
- Discuss the relationship between basic ruminant nutrition and production and health of livestock.
- Recognize digestive ailments and appropriate course of action.
- Describe principles, requirements, recommendations and best practices of ruminant management.
- Summarize the key criteria for managing the health care of ruminants including disease control, injury prevention, and housing.

Prior Learning Assessment and Recognition (PLAR)

☒ Yes ☐ No, PLAR cannot be awarded for this course because

Typical Instructional Methods *(Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)*

Lectures, demonstration labs, practical livestock care in UFV barn, field trips, in-class assignments. One full day attendance at the Fraser Valley Dairy Short Course is mandatory.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials *(If more space is required, download Supplemental Texts and Resource Materials form.)*

	Author	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.	NFACC	Code of Practice: Dairy Cattle	☒	NFACC	
2.	NFACC	Code of Practice: Beef Cattle	☒	NFACC	
3.	NFACC	Code of Practice: Sheep	☒	NFACC	
4.	NFACC	Code of Practice: Goats	☒	NFACC	
5.	Hulsen	Cow Signals: A Practical Guide for Dairy Farm Management	☒	NFACC	

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Commercial handouts, course pack, calculator, coveralls, safety boots, transportation to field trips.

Typical Evaluation Methods and Weighting

Final exam:	40%	Assignments:	30%	Field experience:	%	Portfolio:	%
Midterm exam:	20%	Participation	10%	Practicum:	%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

Section 1: Dairy Cattle

- Dairy cattle behavior
- Housing and cow comfort
- NFACC: The code of Practice for the care of dairy cattle
- Ruminant gastro intestinal tract physiology
- Basic ruminant nutrition principles and relationship to production
- Nutritional diseases in the dairy cow
- Reproductive health – estrous, pregnancy, parturition and transition from dry period
- Ruminant diseases – infectious, non-infectious, zoonotic and reportable
- Herd Health Protocols for vaccination and reproductive health

Section 2: Beef Cattle

- Beef breeds and Canadian beef industry
- Beef production units – cow calf, backgrounding and feedlot units
- Reproduction and related diseases
- Beef cattle nutrition and nutritional diseases
- Infectious diseases, non-infectious diseases, zoonose and reportable diseases
- Animal welfare and verified beef production
- Biosecurity, vaccination protocols and parasite control

Section 3: Small Ruminant

- Introduction to history and current market for small breed production
- Nutrition and digestive physiology of sheep and goats-estrous, breeding, reproduction, and reproductive diseases of sheep and goats
- Biosecurity, flock/herd health and diseases of sheep and goats