

ORIGINAL COURSE IMPLEMENTATION DATE: REVISED COURSE IMPLEMENTATION DATE: COURSE TO BE REVIEWED (six years after UEC approval): Course outline form version: 09/08/2021

## **OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM**

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

| Course Code and Number: AGRI 239                                                                                                                                                                                                                             |                                                                  | Number of Credits: 3 Course credit policy (105) |                                                                                                         |                                                                        |                |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------|--|--|
| Course Full Title: Management and Production of Beef, Sheep, and Goats                                                                                                                                                                                       |                                                                  |                                                 |                                                                                                         |                                                                        |                |  |  |
| Course Short Title: Mgmt & Prod: Beef/Sheep/Goats                                                                                                                                                                                                            |                                                                  |                                                 |                                                                                                         |                                                                        |                |  |  |
| Faculty: Faculty of Science                                                                                                                                                                                                                                  | Department (or program if no department): Agriculture Technology |                                                 |                                                                                                         |                                                                        |                |  |  |
| Calendar Description:                                                                                                                                                                                                                                        |                                                                  |                                                 |                                                                                                         |                                                                        |                |  |  |
| Focuses on nutrition, genetics, welfare, comr<br>marketing will be explored for these unregula<br>CEP Demonstration Barn, both during and ou                                                                                                                 | ted commoditie<br>utside schedule                                | es. Theory wi<br>ed class time.                 | l be comb                                                                                               | ined with hands-on anim                                                |                |  |  |
| Note: Field trips outside of class time will be                                                                                                                                                                                                              | required. Pleas                                                  | e check with                                    | the depart                                                                                              | tment for details.                                                     |                |  |  |
| Prerequisites (or NONE):                                                                                                                                                                                                                                     | None.                                                            |                                                 |                                                                                                         |                                                                        |                |  |  |
| Corequisites (if applicable, or NONE):                                                                                                                                                                                                                       |                                                                  |                                                 |                                                                                                         |                                                                        |                |  |  |
| Pre/corequisites (if applicable, or NONE):                                                                                                                                                                                                                   |                                                                  |                                                 |                                                                                                         |                                                                        |                |  |  |
| Antirequisite Courses (Cannot be taken for                                                                                                                                                                                                                   | additional crea                                                  | dit.)                                           | Course Details                                                                                          |                                                                        |                |  |  |
| Former course code/number:                                                                                                                                                                                                                                   |                                                                  |                                                 | Special Topics course: <b>No</b>                                                                        |                                                                        |                |  |  |
| Cross-listed with:                                                                                                                                                                                                                                           |                                                                  |                                                 | (If yes, the course will be offered under different letter designations representing different topics.) |                                                                        |                |  |  |
| Equivalent course(s):<br>(If offered in the previous five years, antirequisite course(s) will be<br>included in the calendar description as a note that students with credit<br>for the antirequisite course(s) cannot take this course for further credit.) |                                                                  |                                                 | Directed Study course: <b>No</b>                                                                        |                                                                        |                |  |  |
|                                                                                                                                                                                                                                                              |                                                                  |                                                 | (See <u>policy 207</u> for more information.)                                                           |                                                                        |                |  |  |
|                                                                                                                                                                                                                                                              |                                                                  |                                                 | Grading System: Letter grades                                                                           |                                                                        |                |  |  |
|                                                                                                                                                                                                                                                              |                                                                  |                                                 | Delivery Mode: Face-to-face only                                                                        |                                                                        |                |  |  |
| Typical Structure of Instructional Hours                                                                                                                                                                                                                     |                                                                  |                                                 | Expected frequency: Every other year                                                                    |                                                                        |                |  |  |
| Lecture/seminar 25                                                                                                                                                                                                                                           |                                                                  |                                                 | Maximum enrolment (for information only): 25                                                            |                                                                        |                |  |  |
| Experiential (cultural/elder learning or partic                                                                                                                                                                                                              | pation)                                                          | 20                                              |                                                                                                         | · · · · · · · · · · · · · · · · · · ·                                  |                |  |  |
|                                                                                                                                                                                                                                                              |                                                                  |                                                 |                                                                                                         | earning Assessment an                                                  |                |  |  |
|                                                                                                                                                                                                                                                              |                                                                  |                                                 |                                                                                                         | s available for this course                                            |                |  |  |
|                                                                                                                                                                                                                                                              |                                                                  |                                                 | Examin                                                                                                  | ation(s), Articulated agree                                            | ements         |  |  |
| Total hours 45                                                                                                                                                                                                                                               |                                                                  |                                                 | Transfer Credit (See <u>bctransferguide.ca</u> .)                                                       |                                                                        |                |  |  |
| Scheduled Laboratory Hours                                                                                                                                                                                                                                   |                                                                  |                                                 | Transfe                                                                                                 | Transfer credit already exists: <b>No</b>                              |                |  |  |
| Labs to be scheduled independent of lecture hours:                                                                                                                                                                                                           |                                                                  |                                                 |                                                                                                         | outline for (re)articulation<br>s, fill in <u>transfer credit forn</u> |                |  |  |
| Department approval                                                                                                                                                                                                                                          |                                                                  |                                                 |                                                                                                         | Date of meeting:                                                       | September 2022 |  |  |
| Faculty Council approval                                                                                                                                                                                                                                     |                                                                  |                                                 | Date of meeting:                                                                                        | October 7, 2022                                                        |                |  |  |
| Undergraduate Education Committee (UEC) approval                                                                                                                                                                                                             |                                                                  |                                                 | Date of meeting:                                                                                        | February 24, 2023                                                      |                |  |  |

Learning Outcomes (These should contribute to students' ability to meet program outcomes and thus Institutional Learning Outcomes.)

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

- 1. Describe the challenges and opportunities in the Canadian beef/sheep/goat industry in comparison to regulated livestock sectors (i.e. poultry and dairy).
- 2. Identify breeds of cattle/sheep/goats.
- 3. Explain the principles of genetic herd improvement.
- 4. Explain the female reproductive cycle of the cow/sheep/goat.
- 5. Develop a feeding program for beef/sheep/goat at various life stages.
- 6. Develop an on-farm biosecurity program with standard operating procedures (SOPs).
- 7. Develop a replacement animal management plan.
- 8. Describe the management needs of beef/sheep/goats in terms of management of bull/ram/buck, calf/lamb/kid management.
- 9. Explain maternity challenges of beef/sheep/goat.
- 10. Apply animal welfare principles to develop safe animal handling and housing procedures.
- 11. Identify the clinical signs of common diseases of beef/sheep and goat.

| Recommended Evaluation Methods and Weighting (Evaluation should align to learning outcomes.) |     |                |     |             |     |  |  |  |
|----------------------------------------------------------------------------------------------|-----|----------------|-----|-------------|-----|--|--|--|
| Assignments:                                                                                 | 40% | Quizzes/tests: | 20% | Final exam: | 40% |  |  |  |
|                                                                                              | %   |                | %   |             | %   |  |  |  |

## Details:

One of the assignment is an Animal Care Log - Students will develop a reflective log documenting their days and hours spent doing animal care and barn chores in the UFV Demonstration Barn (worth 20%).

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

**Texts and Resource Materials** (Include online resources and Indigenous knowledge sources. <u>Open Educational Resources</u> (OER) should be included whenever possible. If more space is required, use the <u>Supplemental Texts and Resource Materials form</u>.)

|    | Туре            | Author or description                | Title and publication/access details                                     | Year |
|----|-----------------|--------------------------------------|--------------------------------------------------------------------------|------|
| 1. | Online resource | National Farm Animal Care<br>Council | Codes of Practice for Beef Cattle, Goats and Sheep https://www.nfacc.ca/ |      |
| 2. | Online resource |                                      | Merck Veterinary Manual: https://www.merckvetmanual.com                  |      |
| 3. | Textbook        | Herren                               | The Science of Animal Agriculture                                        |      |
| 4. | Textbook        |                                      | Modern Livestock and Poultry Production                                  |      |
| 5. | Textbook        |                                      | Raising Sheep the Modern Way                                             |      |

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

Coveralls, boots, calculator, notebook, transportation to field trips.

## **Course Content and Topics**

- Sheep introduction to breeds and behavior
- In-barn introduction to principles of beef, sheep and goat care and welfare including global and Indigenous perspectives on care – e.g., European standards of welfare versus Canadian, and Indigenous concepts of Animal Personhood, and Animals as Ancestors.
- Sheep parasites and anthelminthic resistance
- Sheep lameness control and reproduction
- Sheep pregnancy and parturition
- Sheep nutrition principles
- Goat introduction Breeds and behaviour
- Goat health issues
- Goat nutrition
- Field trip to goat farm
- Markets for goat dairy and meat products
- Field trip to beef farm
- Beef introduction to breeds and behaviour
- Guest speaker from BC Cattlemen's Association
- Beef animal reproduction
- Beef animal health and issues
- Beef animal calf care and nutrition