UCFV
UNIVERSITY COLLEGE of the FRASER VALLEY

OFFICIAL UNDERGRADUATE COURSE OUTLINE (page 1)

COURSE IMPLEMENTATION DATE: September 2008
COURSE REVISED IMPLEMENTATION DATE:
COURSE TO BE REVIEWED: February 2012
(four years after UPAC approval) *(month, year)*

OFFICIAL UNDERGRADUATE COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.
Shaded headings are subject to change at the discretion of the department – see course syllabus available from instructor

AGRI 239	Trades and Technology - Agriculture Technology	3
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UCFV CREDITS

Management and Production of Beef, Sheep, and Goats
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

The feeding, breeding, and management of beef, sheep, and goats will be covered. Specific topics will include production, genetics, and health, as well as marketing of these animals. Facilities and equipment will also be discussed. Students will be required to participate in the care of departmental livestock outside of regular class hours. Field trips are required. This course is only offered in odd-numbered years.

PREREQUISITES: None
COREQUISITES: None
PRE or COREQUISITES:

SYNONYMOUS COURSE(S):
(a) Replaces:
(b) Cross-listed with:
(c) Cannot take: for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: 70

STRUCTURE OF HOURS:

Lectures:	40	Hrs
Seminar:		Hrs
Laboratory:	20	Hrs
Field experience:	10	Hrs
Student directed learning:		Hrs
Other (specify):		Hrs

TRAINING DAY-BASED INSTRUCTION:
Length of course:
Hours per day:

OTHER:
Maximum enrolment: 25
Expected frequency of course offerings: Every other year
(every semester, annually, every other year, etc.)

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	☒ Yes	☐ No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	☐ Yes	☐ No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	☐ Yes	☐ No

Course designer(s): **Paul Gumprich**
Department Head: **Rose Morrison** Date approved: **January 2008**
Supporting area consultation (UPACA1) Date of meeting: **January 18, 2008**
Curriculum Committee chair: **Rose Morrison** Date approved: **January 2008**
Dean/Associate VP: **Harv McCullough** Date approved: **March 6, 2008**
Undergraduate Program Advisory Committee (UPAC) approval Date of meeting: **February 1, 2008**

LEARNING OUTCOMES:

Upon successful completion of this course, students will be able to:
- describe the Canadian and North American beef/sheep/goat industry

- describe the cattle cycle

- explain the different ways to market cattle/sheep/goat and decide which is best based on the market situation

- describe the breeding and selection of beef cattle/sheep/goats
  - know and identify different main breeds of cattle/sheep/goats
  - describe the principles of genetic improvement
  - describe the different mating systems of beef/sheep/goat
  - understand and explain the female reproductive cycle of the cow/sheep/goat

- explain the basic concepts of nutrition
  - describe the ruminant digestive system
  - explain and produce practical rations
  - produce practical feeding programs

- describe beef/sheep/goat management
  - brood cow/ewe/nanny management
  - replacement animal management
  - bull/ram/buck management
  - calf/lamb/kid management
  - feedlot management

- explain beef/sheep/goat health and disease by explaining:
  - common reproductive diseases
  - common diseases of calves/lambs/kids
  - common feedlot diseases
  - herd health programs

METHODS: *(Guest lecturers, presentations, online instruction, field trips, etc.)*

Lectures, field trips to farms and agribusinesses related to beef/sheep/goat production
Class participation/barn duties include:
- looking after department animals: feeding, cleaning, and observation
- participating in livestock handling (processing the animals) during class hours
- asking questions on field trips and during guest lectures
- introducing and thanking guest speakers and field trip hosts

METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

☒ Examination(s) ☐ Portfolio assessment ☐ Interview(s)

☒ Other (specify): Articulated agreements

☐ PLAR cannot be awarded for this course for the following reason(s):

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

References:
Factors Affecting Calf Crop - Fields and Sand
Beef Cattle - Neumann and Snapp
The Science of Animal Agriculture - Herren
Modern Livestock and Poultry Production
Raising Sheep the Modern Way
Sheep Production and Management
Scientific Farm Animal Production

SUPPLIES / MATERIALS:

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

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

Assignments	50%
Midterm exam	15%
Final exam	15%
Class participation/barn duties	20%

Application of course principles through the assigned and mentored care of departmental livestock. Attendance will be taken.

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

Introduction to the beef/sheep/goat industry
- Background of:
  - The cattle cycle
  - Marketing cattle/sheep/goats
  - Principles of profitable beef/sheep/goat production

Breeding and Selection
- Beef/Sheep/Goats breeds review
- Breeding terms
- Principles of genetic improvement
- Mating systems
- Herd improvement programs
- Record keeping
- Reproduction in the cow/ewe/nanny and bull/ram/buck
- Estrous cycle
- Fertilization, gestation, parturition, lactation, and fertility

Nutrition
- Basic concepts
- Digestion and absorption of nutrients
- Major nutrients
- Sources of nutrients
- Formulating practical rations

Facilities
- Housing and handling

Management
- Brood cow/ewe/nanny management
- Female replacement management
- Bull/ram/buck management
- Calf/lamb/kid management
- Feedlot management

Health and Diseases
- Reproductive diseases
- Diseases of young stock
- Non-infectious diseases
- Infectious diseases
- Feedlot diseases
- Insect pests
- Herd health programs