

Animal Science 4613
Spring 2009
Cow-Calf and Purebred Beef Cattle Management

Course Syllabus

Class Meeting: Lecture - Tuesday and Thursday (9:00 am – 9:50 am)
Laboratory - alternate Tuesdays – starting with the odd weeks (2:00 pm - 5:20 pm)

Laboratory will alternate weeks with AnSi 4423 – Horse Science. However, in some situations, we may meet laboratory on consecutive weeks and be off for consecutive weeks due to class scheduling issues with AnSi 4423 and 4613.

Classroom: AnSi 124

Faculty: Dr. Bob Kropp
212C Animal Science
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Secretary: Diana Bateson
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Office Hours: Please schedule appointments with secretary

Teaching Assistant: Rodney Mills
211 Animal Science
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Course Objectives:

- A. To determine the requirements for capital, land, labor, facilities, equipment and cattle for a commercial cow-calf and/or registered seedstock cattle enterprise.
- B. To develop the necessary budgets and financial strategies to operate a cow based cattle enterprise successfully.
- C. To apply the principles of animal breeding, animal nutrition, animal physiology and reproduction, animal health, ranch management and marketing to solve commercial cow-calf and/or registered seedstock operational problems.
- D. To gain expertise, knowledge and critical thinking ability necessary to make management decisions relating to the commercial cow- calf and registered seedstock cattle industries.
- E. To enhance each student's perspective and knowledge of the commercial cow-calf and registered seedstock cattle industries.

Style and Mode of Teaching:

- A. The class format will consist of lecture, ranch case studies and laboratory sessions. Lecture sessions will be used to provide technical information useful and important in solving ranch management problems. Ranch case studies will be used to place the student into the "real world" by presenting a description of ranch problems that must be solved by management. The students will be asked to assume the role of ranch management, performing analyses and making the necessary decisions to resolve the problems. Laboratory sessions will consists of exercises, ranch case studies, "hands-on" beef management activities and field trips to supplement the lecture material.

Fees in addition to tuition:

- A. Field trips, one or more, may be taken during the semester. The field trips will be used to supplement lecture material and are important to the class. Therefore, questions on exams will cover material discussed during field trips. A field trip fee to cover transportation expenses will be assessed on each field trip taken during the semester. The fee will be determined by the actual cost of the trip divided by the number of students attending. Each student's prorated portion will be assessed to the student's university account. The total fee will not exceed \$50.

Grading:

- A. Exams: There will be five exams administered during the Spring 2009 semester. The point totals for each exam may vary, but a percentage value will be calculated and recorded for grading purposes. Exams missed due to an excused absence (judging trips, equestrian team, class activities, illness, etc.) must be made up within one week of the missed exam date. Consent of instructor is required to make up an exam. The exam average will constitute 65% of the final grade.

Study questions will be provided in class prior to each exam.

- B. Exercise assignments and case studies will be used to supplement the lecture material. All assignments will be due on the assigned date. Late exercises without an excused absence approved by the instructor will receive a 20% penalty. **Assignments and/or case studies turned in after a key has been posted or the assignment or case study has been discussed in class will receive no credit.** The exercises and case studies will constitute 35% of the semester grade.

Academic dishonesty will not be condoned in this class. Any evidence of copying of another individual's work will NOT be tolerated. Situations dealing with academic dishonesty will be dealt with through university channels.

- C. Grading Summary:

1. Exams	65%
2. Exercises and Case Studies	35%

- D. Grading Scale:

A = 90% +
B = 80 - 89%
C = 70 - 79%
D = 60 - 69%
F = < 60%

**Lecture Notes: Cow-calf and Purebred Beef Management
(May be purchased in Student Union Bookstore or Hall of Fame
Booktrader)**

Course Topics

- I. Introduction to the beef cattle industry
- II. Types of cattle operations
- III. Management and Total Ranch Management Planning
- IV. Personnel management
- V. Selection and acquisition of ranch property
- VI. Ranch carrying capacity and stocking rates
- VII. Breeds of cattle
- EXAM 1**
- VIII. The commercial cow-calf enterprise
- IX. U.S.D.A. Feeder Calf and Slaughter Cattle Grading System
- X. Factors affecting the price of weaned calves
- XI. Target carcass values – Premiums and Discounts
- XII. Marketing alternatives for the commercial cattle industry
- XIII. Marketing alliances
- EXAM 2**
- XIV. Breeding programs for commercial beef cattle operations
- XV. Environmental issues related to cow size and level of milk production
- XVI. Selection and acquisition of females for a commercial cow-calf operation
- XVII. Selection and acquisition of herd bulls for a commercial cow-calf operation
- XVIII. Expected Progeny Differences and DNA-Assisted Marker Selection
- XIX. Bull management
- EXAM 3**
- XX. Nutrition management of the commercial cow-calf program
- XXI. Health management of the commercial cow-calf program
- XXII. Reproduction management of the commercial cow-calf program
- XXIII. Parturition
- XXIV. Life cycle management of the calf from birth to the bank
- XXV. Replacement female selection, acquisition and development
- EXAM 4**
- XXVI. The registered seedstock enterprise
- XXVII. Selection and acquisition of females for a registered cattle operation
- XXVIII. Selection and acquisition of herd bulls for a registered cattle operation
- XXIX. Performance programs for registered cattle operations
- XXX. Selection and culling for herd improvement
- XXXI. Embryo transfer and cloning
- XXXII. Marketing the registered seedstock program
- XXXIII. Local, state and national beef organizations
- XXXIV. Keeping current in the beef industry
- EXAM 5**

Schedule

WEEK 1

January 13

Lecture:

January 15

Lecture:

WEEK 2

January 20

Lecture:

Laboratory:

January 22

Lecture:

WEEK 3

January 27

Lecture:

January 29

Lecture:

WEEK 4

February 3

Lecture:

Laboratory:

February 5

Lecture:

WEEK 5

February 10

Lecture:

February 12

Lecture:

WEEK 6

February 17

Lecture:

Laboratory:

February 19

Lecture:

Week 7

February 24

Lecture:

February 26

Lecture:

Week 8

March 3

Lecture:

Laboratory:

March 5

Lecture:

Week 9

March 10

Lecture:

March 12

Lecture:

Week 10

March 17

SPRING BREAK

March 19

SPRING BREAK

Lecture:

Week 11

March 24

Lecture:

Laboratory:

March 26

OBI SALE (No Class)

Week 12

March 31

Lecture:

April 2

Lecture:

Week 13

April 7

Lecture:

Laboratory:

April 9

Lecture:

Week 14

April 14

Lecture:

April 16

Lecture:

Week 15

April 21

Lecture:

Laboratory:

April 23

Lecture:

Week 16

April 28

Lecture:

April 30

Lecture:

Week 17

May 7, Thursday

EXAM 5

(8:00 am – 9:50 am)