SCHOOL OF AGRICULTURE

COURSE NUMBER: AGR 311  CREDIT HOURS: 3

I. TITLE:

Beef Science

II. CATALOG DESCRIPTION:

A study of the history and importance of the beef cattle industry; phases of beef production, selection, breeding, feeding, and management of beef cattle. Prerequisite: AGR 100 (Animal Science).

III. PURPOSE:

To acquaint the student with management techniques that can be used to improve reproductive efficiency and production of cow-calf systems.

IV. COURSE OBJECTIVES:

To teach the student the following techniques:

A. Cow-calf management
B. Bull management
C. Herd health practices
D. Recordkeeping
E. Breeding systems
F. Breeding management
G. Beef cattle nutrition

V. CONTENT OUTLINE:

A. Lecture
   1. Cow-calf management
      a. Replacement heifers
      b. Controlled breeding season
      c. Nutritional cycle
      d. Post-partum rest period
      e. Herd health
      f. Bull management
      g. Artificial insemination
      h. Heat synchronization
i. Pregnancy checking  
j. Calving problems  
k. Crossbreeding  
l. Beef management calendar  
2. Stocker programs  
a. Preconditioning  
b. Creep feeding  
c. Weaning management  
d. Growth implants  
e. Pasture management  
f. Marketing  

B. Laboratory  
1. Production management  
2. Recordkeeping and performance testing  
3. Artificial insemination and semen handling  
4. Embryo transfer  
5. Pelvic measurement techniques  
6. Certified preconditioning program  
7. Beef cattle facilities  
8. Breeds of beef cattle  
9. Special topics in beef production  

VI. INSTRUCTIONAL ACTIVITIES:  
A. Lectures  
B. Class discussion  
C. Homework  
D. Visuals  
E. Visiting lecturers  
F. Field trips  
G. Demonstrations at University farms.  

VII. FIELD AND CLINICAL EXPERIENCES:  
A. Visits to beef operations  
B. Farm laboratory demonstrations  
C. Visiting lecturers  

VIII. RESOURCES:  
A. University Beef Herd  
B. Area beef producers  

IX. GRADING PROCEDURES:  
A. Letter grades
A = 90 – 100
B = 80 – 89
C = 70 – 79
D = 60 – 69
E = Below 60

B. Exams:
  Lecture (2/3)
  3 – 1 hour exams 300 points
  1 – final exam 100 points
  Lab (1/3)
  Homework 100 points
  Lab exams 100 points
  Total 600 points

C. Make-up exams and homework will be permitted with a reasonable excuse for the absence. All make-up work must be completed prior to exam week.

X. ATTENDANCE POLICY:

Please refer to the most current copy of the Murray State University’s Undergraduate Bulletin and Graduate Bulletin.

XI. ACADEMIC HONESTY POLICY:

(Adopted by the MSU Board of Regents)
Cheating, plagiarism (submitting another person’s material as one’s own), or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, term papers, or the presentation or unacknowledged material as if it were the student’s own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

NOTE: The School of Agriculture Faculty have adopted and implemented an Academic Honesty Policy in addition to the University Honesty Policy, which can be found in the current Undergraduate Bulletin and Graduate Bulletin. The policy sets guidelines regarding acts of dishonesty and the procedure to follow should an event occur. It is each Agriculture student’s responsibility to obtain and read a copy of this document. The School’s Academic Honesty Policy can be obtained by asking for a copy from any Agriculture Faculty member or the Secretary.
XII. TEXT AND REFERENCES:

A. Agricultural extension beef materials  
B. Prepared handouts  
C. Beef cattle bulletins

XIII. PREREQUISITES:

AGR 100 (Animal Science)

XIV. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact Sabrina Y. Dial, Director of Equal Opportunity, Murray State University, 103 Wells Hall, Murray, KY 42071-3318. Telephone: 270-809-3155 (voice), 270-809-3361 (TDD).

XV. MSU SCHOOL OF AGRICULTURE CELL PHONE POLICY

The School of Agriculture recognizes that in today’s world cell phones are a familiar and often necessary form of communication for students.

It shall be the policy of the School that no cell phone usage shall be allowed in class and/or labs without the prior consent of the course instructor. This shall include verbal calling, incoming calls, email, text messaging, and use of cell phone calculators on tests and quizzes.

Cell phones must be kept off and out of sight (i.e. secured to a person’s belt or kept in a bag or purse away from desks and lab counters).

Should a student’s cell phone be visible, ring, or other form of unauthorized usage that is interruptive to the class or lab, the student may be asked to leave class and not return for that class/lab period.

Upon prior consent of the instructor, a student may obtain permission to have their phone on in case of an emergency or in critical family situations.
This policy also includes pagers and other electronic equipment such as blackberries and/or computers/laptops.