

ANSCI 27 Course Outline as of Fall 2004**CATALOG INFORMATION**

Dept and Nbr: ANSCI 27 Title: BEEF CATTLE SCIENCE

Full Title: Beef Cattle Science

Last Reviewed: 1/25/2021

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: AG 62

Catalog Description:

A study of the principles of purebred and commercial beef cattle production throughout the World, United States and California. Emphasis to be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and recordkeeping to ensure scientifically based management decisions and consumer product acceptance as applied to beef cattle.

Prerequisites/Corequisites:**Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:**Schedule of Classes Information:**

Description: A study of the principles and practices of beef cattle production, with emphasis to be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and record-keeping. (Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;UC. (CAN AG20)

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 1981	Inactive:
UC Transfer:	Transferable	Effective: Fall 2001	Inactive:

CID:

CID Descriptor:AG - AS 108L Beef Cattle Science

SRJC Equivalent Course(s): ANSC27

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:

The student will:

- A. Discuss the history and development of the beef industry.
- B. Identify beef breeds and their adaptability to climatic conditions and types of operations.
- C. Describe the common systems of beef production.
- D. Explain the principles of genetics in terms of form and function in the beef industry.
- E. Define the relationship between the consumer, packer, and retailer in the commercial beef industry.
- F. Identify common diseases and parasites and the current methods of prevention and treatment.
- G. Explain the principles involved with ruminant nutrition in beef production.
- H. Demonstrate the use of computer management systems to efficiently manage beef cattle operations.
- I. Discuss animal welfare issues, environmental concerns and the beef cattle quality assurance program.
- J. Discuss career opportunities and requirements for successful employment.
- K. Identify cultural influences on the beef industry.
- L. Have reasonable accommodations made to perform all learning objectives regardless of physical and/or learning disabilities.

Topics and Scope:

1. Unit 1: The Beef Cattle Industry
 - a. Origin and importance of beef cattle
 - b. Breeds of cattle
 - c. Ethnic contributions
2. Unit 2: Systems of Production
 - a. Purebred enterprise
 - b. Cow/calf operations
 - c. Stocker operations
 - d. Feedlot operations
3. Unit 3: Establishing the Beef Herd
 - a. Selecting the breed and breeding system
 - b. Selecting and foundation stock
 1. Type and conformation
 2. Pedigrees
 3. Performance
4. Unit 4: Beef Cattle Management Practices
 - a. Care and management of the breeding herd
 - b. Beef animal preparation for seed stock sales
 - c. Buildings and equipment
5. Unit 5: Beef Cattle Genetics
 - a. Principles of beef cattle genetics
 - b. Percentage of heritability of beef traits
 - c. Economically important beef traits
6. Unit 6: Beef Cattle Nutrition
 - a. Digestion and utilization of feed
 - b. Nutrient requirements for beef cattle
 - c. Rations for beef cattle
 - d. Range management
7. Unit 7: Herd Health
 - a. Common diseases of cattle
 - b. Control of parasites
 - c. Poisonous plants that affect cattle
8. Unit 8: Marketing Beef Cattle
 - a. Marketing purebred and commercial cattle
 - b. USDA yield and quality grades
 - c. Beef cattle production cycles
9. Unit 9: Issues and Regulations in the Beef Cattle Industry
 - a. Animal/welfare issues
 - b. Quality assurance program
 - c. Environmental issues

Assignment:

Assignments will be taken from periodicals, handouts, and texts.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Lab reports, Essay exams, Term papers	Writing 10 - 30%
Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.	
Lab reports, Quizzes, Exams	Problem solving 20 - 30%
Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.	
Class performances, Performance exams	Skill Demonstrations 10 - 30%
Exams: All forms of formal testing, other than skill performance exams.	
Multiple choice, True/false, Matching items, Completion	Exams 30 - 60%
Other: Includes any assessment tools that do not logically fit into the above categories.	
None	Other Category 0 - 0%

Representative Textbooks and Materials:

Taylor, Robert Beef Production and Management Decisions,
 2nd edition, MacMillan Publishers
Cooperative Extension Cow-Calf Management
(Magazine) Drovers Journal
Ensminger, M.E. Beef Cattle Science, The Interstate
 Publishers