

CATALOG INFORMATION

Dept and Nbr: AG 20

Title: BASIC ANIMAL SCI

Full Title: Basic Animal Science

Last Reviewed: 2/13/2023

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

Total Out of Class Hours: 105.00

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 60

**Catalog Description:**  
A survey of the livestock industry, supply of animal products and their uses. A special emphasis on the origin, characteristics, adaptation and contributions of farm animals to the agriculture industry. Analyze the economic trends and career opportunities in animal agriculture.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Eligibility for ENGL 100A or ENGL 100.

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: A survey of the livestock industry, supply of animal products and their uses. A special emphasis on the origin, characteristics, adaptation and contributions of farm animals to the ag industry. Analyze the economic trends and career opportunities in animal agriculture. (Grade Only)  
Prerequisites/Corequisites:  
Recommended: Eligibility for ENGL 100A or ENGL 100.

Limits on Enrollment:

Transfer Credit: CSU;UC. (CAN AG6)

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

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>		Effective:	Inactive:
	C	Natural Sciences	Fall 2018	
<b>CSU GE:</b>	<b>Transfer Area</b>		Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>		Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:
<b>UC Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:

### **CID:**

CID Descriptor: AG - AS 104 Introduction to Animal Science

SRJC Equivalent Course(s): ANSCI20

### **Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The student will:

- A. Identify animal contributions to human needs.
- B. List economically significant beef cattle, sheep, and swine breeds and areas of production.
- C. Identify livestock body conformation and how it relates to function.
- D. Identify life cycles and biotechnological principles of animal production.
- E. Understand basic nutritional needs and feeding practices of scientific livestock production.
- F. Name marketing strategies and market classification of livestock.
- G. Demonstrate and understand animal behavior as it relates to health and performance.
- H. In a group setting, discuss issues affecting consumer awareness to animal welfare, food safety and the environment.
- I. Have reasonable accommodations made to perform all learning objectives regardless of physical and/or learning disabilities.
- J. Collect and calculate data used to ensure scientifically-based management decisions.
- K. Identify cultural contributions and ethnic influences to the animal industry.
- L. Identify career opportunities and requirements for successful employment.

### **Topics and Scope:**

1. Unit One: Introduction to Animal Agriculture

- a. Importance of livestock to the World and United States
- b. Economic importance to agriculture
- c. Animal contribution to human needs
- d. Industry issues and challenges
- e. Ethnic contributions
2. Unit Two: Careers and Career Preparation in the Animal Sciences
  - a. Career preparation
  - b. Employment opportunities in animal production and management
  - c. Employment opportunities in international agriculture
  - d. Future opportunities
3. Unit Three: Overview of the Livestock Industry
  - a. The beef cattle and dairy industry
  - b. The swine industry
  - c. The sheep and wool industry
  - d. The poultry industry
  - e. The horse industry
4. Unit Four: Evaluation and Performance Livestock
  - a. Identifying external anatomy
  - b. Evaluating type and conformation
  - c. Perspective of carcass composition to the live animal
  - d. Understanding carcass and performance data
5. Unit Five: The Animal Food Industry
  - a. Food products and processing
  - b. Consumption and marketing strategies
  - c. Trends and future outlook
  - d. Health and nutritional considerations
6. Unit Six: Reproduction
  - a. Reproductive organs and their functions
  - b. Animal breeding
  - c. Mating systems
  - d. Fertility
7. Unit Seven: Genetics
  - a. Fertilization
  - b. Gene modification and interactions
  - c. Genetic improvement and variation
  - d. DNA and RNA
8. Unit Eight: Nutrition
  - a. Nutrients
  - b. Feeds and feed composition
  - c. Digestive systems
  - d. Growth and development
9. Unit Nine: Animal Health
  - a. Prevention and the environment
  - b. Major diseases of farm animals
  - c. Detecting unhealthy animals
  - d. Treatment and care
10. Unit Ten: Issues Affecting the Animal Industry
  - a. Animal behavior
  - b. Animal welfare
  - c. Advances in biotechnology
  - d. Government and environmental concerns
  - e. Food safety and consumer awareness

## Assignment:

Students will be required to:

1. Reading assignments that will average minimum 30 pages per week.
2. Writing assignments, worksheet, study guide, class notes, and written essay exams.

## 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.

Written homework, Reading reports, Essay exams

Writing  
20 - 30%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Quizzes, Exams, WORKSHEETS

Problem solving  
10 - 10%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams

Skill Demonstrations  
20 - 40%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion

Exams  
40 - 60%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category  
0 - 0%

## Representative Textbooks and Materials:

"Scientific Farm Production," Robert E. Taylor, 5th Edition,  
ISBN 0-02-41921-0, Prentice Hall

"Livestock and Poultry Production," James R. Gillespie

"Animal Science and Industry," Acker, Cunningham