ANSCI 20 Course Outline as of Fall 2015

CATALOG INFORMATION

Dept and Nbr: ANSCI 20   Title: BASIC ANIMAL SCIENCE
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 20

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. Analysis of economic trends and career opportunities in animal agriculture.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 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 agriculture industry. Analysis of economic trends and career opportunities in animal agriculture. (Grade Only)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:
Transfer Credit: CSU;UC.
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

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

CID:
CID Descriptor:AG - AS 104   Introduction to Animal Science
SRJC Equivalent Course(s):   ANSCI20

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon successful completion of this course, the student will be able to:
1. Identify animal contributions to human needs.
2. List economically significant beef cattle, sheep, and swine breeds and areas of production.
3. Evaluate livestock body conformation and how it relates to function.
4. Identify life cycles and biotechnological principles of animal production.
5. Summarize basic nutritional needs and feeding practices for scientific livestock production.
6. Outline marketing strategies and determine market classification of livestock.
7. Analyze animal behavior as it relates to health and performance.
8. Discuss issues affecting consumer awareness of animal welfare, food safety and the environment.
9. Collect and calculate data used to ensure scientifically-based management decisions.
10. Identify cultural contributions to and ethnic influences on the animal industry.
11. Identify career opportunities and requirements for successful employment.

Topics and Scope:

1. 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. 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. 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. 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. The Animal Food Industry
   a. Food products and processing
   b. Marketing classification
   c. Consumption and marketing strategies
   d. Trends and future outlook
   e. Health and nutritional considerations
   f. Data used for management decisions
6. Reproduction
   a. Reproductive organs and their functions
   b. Animal breeding
   c. Mating systems
   d. Fertility
7. Genetics
   a. Fertilization
   b. Gene modification and interactions
   c. Genetic improvement and variation
   d. DNA and RNA
8. Nutrition
   a. Nutrients
   b. Feeds and feed composition
   c. Digestive systems
   d. Growth and development
9. Animal Health
   a. Prevention and the environment
   b. Major diseases of farm animals
   c. Detecting unhealthy animals
   d. Treatment and care
10. 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:

1. Reading assignments average minimum 30 pages per week.
2. Writing assignments: reports, worksheets, and written essay exams.
3. Quizzes, midterm and final.
4. Term paper of 5 to 7 pages.

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, reports, essay exams	Writing 30 - 40%

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

Homework problems, worksheets	Problem solving 10 - 20%

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

None	Skill Demonstrations 0 - 0%

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 Animal Production. Taylor, Robert E. Prentice Hall, 10th edition 2011.
Modern Livestock and Poultry Production. Gillespie, James R. Delmar, 8th edition 2009.
Animal Science and Industry. Cunningham, Merle and Acker Diane. Prentice Hall 7th edition 2004. (classic)