

**ANSCI 29 Course Outline as of Fall 2004****CATALOG INFORMATION**

Dept and Nbr: ANSCI 29 Title: DAIRY CATTLE SCIENCE

Full Title: Dairy Cattle Industry/Dairy 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 64

**Catalog Description:**

History, development and projections of the dairy industry. General information on the economics of dairying, facts, trends, selection, culling, fitting, showing, judging, pedigrees, feeding and basic management skills; employment opportunities and requirements.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

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

Description: General information on the economics of dairying, facts, trends, selection, culling, fitting, showing, judging, pedigrees, feeding and basic management skills; employment opportunities and requirements. (Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;UC. (CAN AG28)

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: |
| <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 2001 | Inactive: |
|---------------------|--------------|------------|-----------|-----------|

### **CID:**

CID Descriptor:AG - AS 112L Dairy Cattle Industry / Dairy Cattle Science

SRJC Equivalent Course(s): ANSCI29

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

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The student will:

- A. Discuss the historical development of the dairy industry.
- B. Explain the importance of the dairy industry in California and the United States.
- C. Identify dairy breeds, origin, adaptation and production.
- D. Discuss the opportunities and requirements of the dairy business.
- E. Analyze production, breeding and management records.
- F. Identify the parts of the cow and their relationship to form and function.
- G. Define the nutritional needs and proper feeding techniques.
- H. Analyze pedigrees, linear scores, and production records.
- I. Demonstrate grooming, fitting and showmanship skills.
- J. Demonstrate management skills in dehorning, vaccinating, castrating, hoof trimming and teat removal.
- K. Identify cultural influences on the dairy industry.
- L. Have reasonable accommodations made to perform all learning objectives regardless of physical and/or learning disabilities.
- M. Practice selection and judging skills.
- N. Analyze the concern of animal rights and importance of educating the general public.
- O. Discuss career opportunities and requirements for successful employment.

### **Topics and Scope:**

1. Unit One: Introduction to the Dairy Industry
  - a. History of dairying including the contributions of ethnic groups

- b. Economic importance to agriculture
- c. Past, present and future trends in the dairy industry
- d. Milk and by-product consumption and trends
- e. Inventions and new discoveries
- 2. Unit Two: Opportunities and Careers in the Dairy Industry
  - a. Employment in production, processing and marketing
  - b. Degree and skill development requirement
- 3. Unit Three: Essentials of Success in the Dairy Business
  - a. Financial needs to operate a dairy
  - b. Sources of feed, animals and equipment
  - c. Selection and management of the labor force
  - d. Filing of numerous environmental and county reports
- 4. Unit Four: Dairy Breeds, Origin and Adaptation
  - a. Bos Taurus and Bos Indicus
  - b. Production of each breed
  - c. Rank in popularity and demand
  - d. Advantages and disadvantages of each breed
- 5. Unit Five: Development of a Dairy Herd
  - a. Developing a dairy enterprise
  - b. Selecting a breed
  - c. Locating a market for milk
  - d. Understanding quota, base and overbase milk
- 6. Unit Six: Managing a Dairy Herd
  - a. Selecting animals
  - b. Understanding pedigree and production records
  - c. Feeding dairy animals
  - d. Dehorning, vaccinating, castrating, teat removal and other treatment skills
- 7. Unit Seven: Reproductive Management
  - a. Advantages and limitations
  - b. Synchronizing cows and heifers
  - c. Using a bull in natural service
  - d. Embryo transfer
- 8. Unit Eight: Care and Management of Calves
  - a. Prenatal care
  - b. From birth to weaning
  - c. Feeding, vaccinating and general

### **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.

|  |
|--|
| Written homework, Lab reports, Essay exams |
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|                     |
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| Writing<br>10 - 30% |
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**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:**

Ensminger, M.E.          Dairy Cattle Science  
                                 The Interstate Publishers, Fourth Edition  
Beth, Dickinson, et.al.    Dairy Cattle: Principles, Practices,  
                                 Problems, Profits  
                                 Lea and Febiger