

ANSCI 29 Course Outline as of Fall 2009**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: 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. (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: |
| 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:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:

Upon completion of the course, students will be able to:

- 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. Practice selection and judging skills.
- M. Analyze the concern of animal rights and importance of educating the general public.
- N. Discuss career opportunities and requirements for successful employment.

Topics and Scope:

1. 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. Opportunities and Careers in the Dairy Industry
 - a. Employment in production, processing and marketing
 - b. Degree and skill development requirement
3. 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. 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. 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. 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. Reproductive Management
 - a. Advantages and limitations
 - b. Synchronizing cows and heifers
 - c. Using a bull in natural service
 - d. Embryo transfer
8. Care and Management of Calves
 - a. Prenatal care
 - b. From birth to weaning
 - c. Feeding, vaccinating and general

Assignment:

Read periodicals, handouts, and textbooks (20 pages).

Lab reports (16--one per week).

Livestock showing.

Term paper (6 to 8 pages).

One Midterm.

Final Exam

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 |
|-------------------------------|

| |
|---------------------|
| Writing 10 - 30% |
|---------------------|

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

Lab reports

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.

Quizzes, tests, exams

Exams
30 - 60%

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

Attendance and participation

Other Category
0 - 10%

Representative Textbooks and Materials:

Ensminger, M.E. Dairy Cattle Science, 2005, The Interstate Publishers

Bath, Dickinson, et.al. Dairy Cattle: Principles, Practices, Problems, Profits Lea and Febiger, 1978 (Classic in the field)