

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:
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CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:
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UC Transfer:	Transferable	Effective:	Fall 2001	Inactive:
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CID:

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

SRJC Equivalent Course(s): ANSCI29

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)