

DAIRY SCIENCE • DARY

- 1048 Elements of Dairying (3) F,S** Fundamentals of dairy production and manufacturing.
- 2040 Techniques of Judging and Evaluating Dairy Cattle (2) F** Development of live animal evaluation techniques in a clinical setting; emphasis on visual evaluation, decision making, oral communication.
- 2049 Dairy Cattle Production Practices (3) S** Prereq.: DARY 1048. 2 hrs. lecture; 2 hrs. lab. Dairy cattle production practices; care, fitting, showing dairy cattle.
- 2072 Introductory Agricultural Genetics (3) S** Prereq.: BIOL 1002 or equivalent. Introduction to classical and modern genetic methodology used in agriculture including Mendelian principles, successful breeding techniques, assisted reproductive technology, genetic engineering and other biotechnological methods.
- 2075 Milk and Dairy Foods (3) F** Product processing techniques and related principles involved in market preparation of milk and dairy foods; emphasis on consumer and processor viewpoints relative to product composition, processing, marketing, sanitation, and related environmental aspects.
- 2085 Milk Quality Control Laboratory (2) S** Prereq.: permission of department. 4 hrs. lab. Public Health Service laboratory and inspection procedures for quality control on dairy farms and in milk plants.
- 2093 Dairy Products Judging (2) S** Development of sensory evaluation techniques in a clinical setting; emphasis on sensory evaluation, decision making, oral communication.
- 3010 Applied Animal Feed Formulation (3) S** Prereq.: ANSC 1011 or DARY 1048 or PLSC 1049 and MATH 1021 or equivalent. Formulation of feed for agricultural animals, including feed laws, feed stuffs, and requirements.
- 3049 Topics in Dairy Science (1-3) F,S,Su** Prereq.: consent of department head. May be taken for a max. of 6 hrs. credit. Topics from dairy production or dairy food manufacturing areas.
- 3050 Dairy Science Internship (3) Su** Prereq.: junior standing with an overall gpa of 2.20 and consent of department head. May be taken for a max. of 6 hrs. of credit. Forty hours of supervised work in the dairy industry.
- 4020 Dairy Foods Technology: Frozen and Cultured Dairy Products (4) F-O** 3 hrs. lecture; 3 hrs. lab. Principles and processes in the manufacture of ice cream and other frozen dairy products; concentrated milk products; cheese and fermented milk products.
- 4040 Quality Assurance in the Food Industry (4) S-E** Prereq.: BIOL 2051. 3 hrs. lecture; 2 hrs. lab. Also offered as ANSC 4040, FDSC 4040, and PLSC 4040. Laboratory functions, manufacturing processes, and microbiological, chemical, and statistical techniques used to provide complete quality assurance for the modern dairy food plant.
- 4043 Domestic Animal Endocrinology (3) F** Relation of endocrine system to reproduction, growth, and function of domestic animals.
- 4045 Reproductive Physiology of Farm Animals (3) F** Also offered as ANSC 4045. Reproductive anatomy and physiology of farm animals; factors affecting reproductive performance.
- 4046 Physiology of Lactation (2) S-E** Prereq.: BIOL 1002 and 1005; or equivalent. Anatomy and development of the mammary gland; physiological and biochemical regulation of mammary growth and milk secretion; emphasis on farm animals.
- 4047 Reproductive Management and Artificial Insemination (1) F** Prereq.: credit or registration in ANSC/DARY 4045. 3 hrs. lab. Management techniques and principles necessary for artificial insemination in cattle.
- 4051 Dairy Seminar (1) F** May be taken for a max. of 2 hrs. of credit. Required for all seniors in the Department of Dairy Science. Reports on current scientific investigations.
- 4054 Dairy Farm Management (4) S-O** Prereq.: DARY 2049 or consent of instructor. 3 hrs. lecture; 3 hrs. lab. Principles of managing dairy cattle; recommended farm practices for economical milk production.
- 4081 Dairy Microbiology (3) F** Prereq.: BIOL 2051. 1 hr. lecture; 4 hrs. lab. Application of specific bacteriological procedures used in quality control and processing of dairy products.
- 4118 Applied Animal Breeding and Genetics (2) F-E** Prereq.: DARY 2072 or BIOL 2153 and EXST 2201. Mating systems and methods of breeding for genetic improvement in farm livestock.
- 7004 Population Genetics in Animal and Plant Breeding (4) S** Prereq.: DARY 4118 and EXST 7004; or equivalent. 3 hrs. lecture; 2 hrs. lab. Genetic concepts concerning characteristics of populations.
- 7018 Rumen Physiology and Metabolism (3) F-O** Comparison of ruminants to other herbivora and nonruminant animals; factors associated with obtaining and utilizing feeds; fermentation products; symbiotic relationship between microflora and the host animal; host animal metabolism.
- 7020 Andrology (3) S-E** Prereq.: DARY/ANSC 4045 or equivalent. Male reproductive physiology and anatomy of avian, aquatic, and mammalian species.
- 7091 Advanced Dairy Seminar (1) F,S** May be taken 4 times for credit.
- 8000 Thesis Research (1-12 per sem.)** "S""U" grading.
- 8900 Research Procedure in Dairy Science (1-6)** Prereq.: consent of department. May be taken for a max. of 9 sem. hrs. credit. Research in dairy breeding and genetics, management, nutrition, and physiology; dairy manufacturing.
- 9000 Dissertation Research (1-12 per sem.)** "S""U" grading.
-