CJ 3250
Issues in Criminal Justice
Administration and Management
The basic concepts of police, court, and correctional management, administration, planning, budgeting, coordination, and personnel effectiveness are examined. Interrelationships of roles and the impacts of role players in these systems are analyzed. Interface with the community is reviewed in detail. 3 hours Lecture and Discussion—3 credits

CJ 4220
Criminalistics
The scientific aspects of the investigation of crimes are the focus of this course. The major emphasis is placed upon the collection, analysis, preservation and processing of evidence. Advanced work is undertaken concerning criminal investigation utilizing fingerprints, genetic fingerprinting, firearms, hair, fibers, blood tools, paint and other potential clues. 3 hours Lecture and Discussion—3 credits

CJ 4240
Senior Seminar: Research Methods in Criminal Justice Administration
Utilizing the research methods and techniques employed in the criminal justice field, students examine current issues in criminal justice. Required: senior standing. 3 hours Discussion and Analysis—3 credits

Employment Program

CJ 2370
Employment Program
Each student in Criminal Justice Administration is required to work for 500 hours in approved jobs related to the major. Registration for each Employment Program must occur prior to the beginning of a relevant experience. Registration materials are available from the Office of Career and Life Education, located in Segal Hall.—4 credits

DAIRY SCIENCE

DS 1065
Principles of Dairy Science
This course is a study of the extent and importance of the dairy industry in the U.S. It is designed to develop an understanding of the principles of nutrition, breeding, selection, records, and improvement programs employed by the dairy industry. Attention is also given to milk quality and the spectrum of dairy products. 2 hours Lecture and 3 hours Lab—3 credits

DS 2213
Dairy Cattle Judging
The judging of dairy cattle for the purpose of understanding ideal dairy type and applying type as a measure of utility is considered. Introduction to oral reasons in defense of placing a class of dairy animals is discussed and how to deliver an effective set of oral reasons is presented. 3 hours Laboratory—1 credit

DS 2230
Physiology of Lactation
This course is a study of the anatomy and physiology of the mammary gland. Special emphasis is placed on the hormonal control of mammary growth and on the initiation and maintenance of lactation. Consideration is also given to the biochemistry of milk secretion and factors affecting milk yield and composition. 3 hours Lecture—3 credits

DS 3000, 4000
Selected Topics I and II
Special projects designed to meet individual needs of students in the specialized fields of agriculture. Projects will be arranged on a one-to-one basis with a department faculty member and with the approval of the Department Chairperson. Total Selected Topics credit accepted toward graduation is limited to 2 credits. 3 hours of student/faculty instruction per week—1 credit

DS 3010
Animal Feeding and Nutrition
A comprehensive study is presented of the principles of animal nutrition and how different kinds of feeds are used in the formulation of rations for farm animals. Attention is given to the methods that are used in feeding all large animals in relation to their different digestive systems. Major emphasis is placed on the practice of developing rations for farm animals. Prerequisite: Principles of Animal Nutrition or Permission of Instructor. 2 hours Lecture and 3 hours Laboratory—3 credits
Course Descriptions

DS 3029
Genetics of Livestock
The study of factors responsible for changes in the genetic composition of animal populations is presented. Using current concepts in genetics and statistics, the relationships of both heredity and environment to individual performance are considered. Various mating systems and their consequences on animal production are also studied. Prerequisite: Biological Science I and Introduction to Animal Science 2 hours Lecture 2 credits

DS 3118
Anatomy and Physiology of Animals
A comprehensive study of the functions of mammalian bodies with special emphasis on domestic animals. A detailed examination is provided concerning the principles of physiology at the cellular, tissue, and organ system levels. Emphasis is placed upon the correlation between anatomical structure and function. The laboratory centers on the practical application of the principles presented in the lecture. Prerequisites: Biology I and II or Biological Science I and II. 3 hours Lecture and three hours Laboratory—4 credits

DS 3120
Advanced Selection of Dairy Animals
Comprehensive judging and selection of dairy cattle using evaluative techniques as well as an in-depth study and presentation of oral reasons in defense of placings and subsequent decisions. Limited enrollment as field visits to various farms may be utilized. Prerequisite: Dairy Cattle Judging. 3 hours Laboratory—1 credit

DS 3211
Applied Dairy Cattle Genetics
This course is a study of current developments and programs associated with the major dairy breeds. The course also includes the current methods and technology used in evaluating sires. Considerable time will be spent on the selection of sires to use in a dairy herd mating program. Studies are made of breed classification programs, pedigree evaluation, sire summaries and prominent bloodlines. Prerequisite: Dairy Cattle Judging or Permission of Instructor. 1 hour Lecture and 3 hours Laboratory—2 credits

DS 4041
Senior Research
Selected seniors engage in this course in supervised investigations involving library work and laboratory or field experiments related to Dairy Science. Requirement: Permission of Department Chairperson. 1-3 credits

DS 4115
Seminar (Dairy Science)
A study of the technical and scientific literature in the field of Dairy Science with special emphasis on discussion of the literature reviewed. 1 hour Lecture and Discussion—1 credit

DS 4116
Advanced Dairy Judging
This course provides intensive training in selection of dairy cattle using subjective and objective measurements as well as the use of oral reasons to explain and defend decisions. An Intercollegiate Dairy Judging Team is selected from students taking this course. Due to considerable travel and time required, enrollment is limited and a 2.0 academic average is required. In addition, the course begins one week prior to the start of the Fall Semester. Prerequisite: Dairy Cattle Judging and Permission of Instructor. 3 hours Lab—1 credit

DS 4134
Physiology of Reproduction
This course covers the physiology of reproduction in farm animals. The sexual characteristics of the male and female, the physiology of the semen and ova, hormonal control of reproduction, and reproduction in each of the farm species are discussed. Prerequisite: Anatomy and Physiology of Animals. 2 hours Lecture and 3 hours Laboratory—3 credits

DS 4235
Dairy Systems and Management
A comprehensive study of the business of dairy farming and the dairy industry, including pertinent economic, nutritional, and environmental problems. Prerequisite: Animal Feeding and Nutrition. 2 hours Lecture and 3 hours Laboratory—3 credits

Specialized Methods and Techniques
Each major department offers a series of courses designed to acquaint the student with various applications of the professional specialty.
DS 3226
Dairy Husbandry Techniques I
This course covers the application of hormones, feed additives, chemicals and drugs in the feeding, breeding and management of dairy animals. The student works with various dairy improvement programs. Throughout the course, emphasis is placed on the general care and management of dairy animals. Co-requisite: Animal Feeding and Nutrition or Permission of Instructor. 1 hour Lecture and 3 hours Laboratory—2 credits

DS 4143
Dairy Husbandry Techniques II
This course is a continuation of DS 3226 and incorporates the practical aspects of dairy cattle management, mastitis control, feeding and breeding. Students are involved in heat detection, feeding and milking as well as the study of Dairy Herd Improvement proceedings. Prerequisite: Dairy Husbandry Techniques I or Permission of Instructor. 1 hour Lecture and 3 hours Laboratory—2 credits

Employment Program

DS 2370
Employment Program
Dairy Science students are required to spend 24 weeks (500 hours) in approved jobs related to the student’s major. Registration for each Employment Program must occur prior to the beginning of a relevant experience. Registration materials are available from Career Services, in Segal Hall. 24 wks of On-the-Job Training—4 credits

EDUCATION

ED 0015
College Reading
The needs of the students enrolled in this course will determine the techniques used to build skill in reading. Included among the reading skills to be developed will be recognizing stated and implied ideas, designating major and minor supporting details, identifying types of sequencing and appropriate ordering, restating questions, using contextual clues, and differentiating literal and inferential information. 3 hours Lecture and Discussion—3 credits

ED 0016
Learning Strategies
This course involves instruction and practice in techniques of time management, notetaking, reading for greater retention, test taking and memory. Students identify and use a range of campus and community resources, including the library. Effective listening techniques and communication skills are presented as well as ways to enhance creativity and stimulate critical thinking. Students explore their own styles of learning and personal value systems as they contribute to becoming successful students. 3 hours Lecture and Discussion—3 institutional credits (Institutional credit will not be applied to either required or elective credits, but will be counted toward determining full-time status.)

ED 0018
CHOICES Seminar
CHOICES students will continue to integrate skills gained in Learning Strategies and apply them across the curriculum through structured activities. Students will continue to clarify academic career and personal goals as well as develop skills in rational analysis and critical thinking. The seminar will maintain focus on the students’ selection of a major and assist in the transition process. This course is limited to CHOICES students. 2 hours Lecture and Discussion—2 institutional credits (Institutional credit will not be applied to either required or elective credits, but will be counted toward determining full-time status.)

ED 1010
American Education
An examination of American education with emphasis on history, aims, organization, and control of public schools. Emphasis is placed on the development of American educational ideas and institutions in a multicultural society. Study of the school curriculum/overview. Strongly recommended as the first Education course. 3 hours Lecture and Discussion—3 credits