

AGRICULTURE

Agriculture is the single largest industry in the world and employs approximately 20% of people in the United States. Agriculture is no longer solely comprised of farming. This industry includes vast opportunities in not only the production, but also the processing, distribution, and marketing of various food stuffs; from animal science to agronomy to landscaping to the floor of the Board of Trade in Chicago. The Ventura College Agriculture Program is designed to maximize the potential of individuals to fulfill their personal and career goals by providing courses that prepare students for entrepreneurship or employment within the many fields of agriculture or agriculture business. Our program provides course work and direct, hands-on learning experiences emphasizing current, environmentally and economically sound, and sustainable principles and practices that develop the skills, knowledge, and abilities vital for agricultural industries as well as for a healthy, productive society.

Credit Courses

AG V01 Agriculture and Society: Agriculture as the Foundation for Modern Civilization 3 Units

In-Class Hours: 52.5 lecture

This course offers an introduction to the origins, evolution, and history of agriculture as the foundation of civilizations throughout history. It analyzes the influence of agriculture within the context of various civilizations and societies throughout history, including its integration in social, economic, and political institutions of those societies, through examination of historical artifacts such as literature, art, and social customs. The course includes evaluation of agriculture rooted in agrarian philosophy influencing economic and biological systems within present day societies, challenges such as global hunger, as well as the implications of future innovations in the production of food and fiber to meet the needs of growing populations. The development of agriculture and modern production systems from the colonization of the present day United States and California will be examined, with a focus on increasing awareness of the prevalence and importance of agriculture, and its impacts on nearly all aspects of modern daily life.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: B2, C2

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: D

IGETC: 4

AG V04 Introduction to Soil Science 3 Units

Formerly: ESRM V11; AG 4

In-Class Hours: 35.0 lecture, 52.5 laboratory

C-ID: AG-PS 128L

This course is an introduction to soil science. The physical, chemical, and biological aspects of soil are explored as a natural resource. Topics include erosion control, nutrient analysis and management, chemical transfer, and plant relationships. Soil morphology, soil moisture, mapping, and soil ecology are explored throughout the course.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: A1, A2

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B1, B3

IGETC: 5A, 5C

AG V05 Agricultural Farm Power: Operation and Maintenance 3 Units

In-Class Hours: 35 lecture, 52.5 laboratory

This course involves design principles, selection, maintenance, adjustment, and safe operation of wheel and track type tractors used in agriculture and in the construction industry. Safe operational practices, proper machine and implement inspection and set-up, and basic operational skills will be covered. The lab activities will include the operation of machinery in the field laboratory. Principles and application of safety will be stressed.

Grade Modes: Letter Graded

Field Trips: Will be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

AG V06 Introduction to Plant Science (with Laboratory) 3 Units

In-Class Hours: 35.0 lecture, 52.5 laboratory

C-ID: AG - PS 106L

This course is an introduction to plant science, including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, and ornamental plants.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: A1

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B2, B3

IGETC: 5B, 5C

AG V10 Introduction to Agriculture Business 3 Units*In-Class Hours:* 52.5 lecture

This course provides a basic understanding of the business and economics of the agricultural industry; an introduction to the economic aspects of agriculture and their implications to the agricultural producer, consumer and the food system; and management principles encountered in the day-to-day operations of an agricultural enterprise as they relate to the decision-making process.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V11 Agricultural Sales and Communication 3 Units***In-Class Hours:* 52.5 lecture

This course covers the study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Self-management, communication, and interpersonal skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector will be explored. Students will gain experience through role-play, formal sales presentations, and job shadowing. The course content is organized to give students an in-depth understanding of the factors and influences that affect the agribusiness industry on a day-to-day basis.

Grade Modes: Letter Graded**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** D2**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V12 Agriculture Economics 3 Units***In-Class Hours:* 52.5 lecture

This course covers the place of agriculture and farming in the economic system; basic economic concepts and problems of agriculture; pricing and marketing problems; and factors of production. State and federal farm programs affecting the farmer's economic position will also be included.

Grade Modes: Letter Graded**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** B2**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** D**IGETC:** 4**AG V13 Agricultural and Industrial Computer Applications 3 Units***In-Class Hours:* 52.5 lecture*C-ID:* AG - AB 108

This course covers computer use in the workplace with emphasis on agribusiness situations. Computer applications including word-processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design, and other software appropriate to agribusiness.

Grade Modes: Letter Graded**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V14 Agricultural Accounting 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory

This course covers the study of the principles of accounting systems and types of records, including their use, how to compute and use measures of earnings, and cost of production to improve agribusiness efficiency. Farm income tax, Social Security, and employee payroll records are included.

Grade Modes: Letter Graded**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V20 Principles of Pesticide Use 3 Units***In-Class Hours:* 52.5 lecture

This course is a study of common plant pests and their management utilizing pesticides, both synthetic and organic in origin. Analyses will include typical uses, modes of action, mechanisms of selectivity, environmental interactions, and user safety of pesticides. Emphasis is placed on safe and appropriate mixing and application of pesticides. Federal, state and local laws and regulations relating to pesticides, hazardous materials, and ground water protection are identified. This course is designed to prepare students for the state certifications in pesticide application, pest control, and crop advising.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None

AG V21 Introduction to Integrated Pest Management (IPM) 3 Units*Formerly:* ESRM V21*In-Class Hours:* 52.5 lecture

This course includes methods for integrating biological, cultural, physical, horticultural, and chemical strategies into an effective and sustainable pest management program. Current laws, regulations, and IPM (Integrated Pest Management) certification/licensing principles are discussed, focusing on ecologically sound practices. Emphasis is on safety, environmental issues, pest identification, chemicals, eradication and control methods, equipment use, and preparation for state licensing and certification examinations.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V22 Introduction to Plant Pathology: Insects and Diseases of Plants 3 Units***Formerly:* ESRM V22*In-Class Hours:* 35.0 lecture, 52.5 laboratory

This course is a comprehensive study of the nature and causes of disease in plants, with particular emphasis on agricultural commodities. The causes and effects of insect and microorganism attacks and disease in plants will be investigated, as well as the environmental, cultural, mechanical, and chemical mechanisms leading to plant disease. Students will learn how to diagnose and remedy plant disease, utilizing various mechanical, chemical, and biological controls, and manage growing conditions to minimize the impact of pathogenic agents.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** A1**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** B3**IGETC:** None**AG V30 Plant Propagation and Production 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory*C-ID:* AG-EH 116L

This course will review the principles and methods of propagating plants, sexual and asexual: field crops, fruits, vegetables, ornamentals, seeds, spores, cuttings, layering, grafting and budding. An emphasis will be placed on agricultural field crop, nursery, and controlled-environment operations including propagation media, rooting aids, planting, transplanting, fertilization, irrigation, plant growth regulators, pest and disease identification and control. The use and maintenance of common tools, equipment and materials will be covered.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** A1**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** B2, B3**IGETC:** None**AG V31 Food Safety - HACCP (Hazard Analysis and Critical Control Point) Training and Certification 1 Unit***In-Class Hours:* 17.5 lecture

This course is a general HACCP (Hazard Analysis and Critical Control Point) training designed for individuals working in the food industry who want to earn a HACCP certification. This HACCP training course teaches participants how to implement and manage the Hazard Analysis and Critical Control Point (HACCP) system, which was designed by the Food and Drug Administration (FDA) as a food safety management system for controlling food hazards. Upon successful completion of the course, students will earn a certificate of completion from the International HACCP Alliance. This HACCP Certificate will be recognized domestically and internationally by food safety inspectors and auditors.

Grade Modes: Letter Graded, Credit by exam, license etc.**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None**AG V32 Produce Safety Rule (PSR) Training 1 Unit***In-Class Hours:* 17.5 lecture

This course is a training in produce safety designed for individuals working in the produce industry. The course is especially relevant for fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA), Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety. The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement outlined in the Code of Federal Regulations § 112.22(c) which requires that at least one responsible party on a farm has completed food safety training recognized as adequate by the Food and Drug Administration.

Grade Modes: Pass/No Pass Grading, Credit by exam, license etc.**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None**AG V33 Food Safety Foreign Supplier Verification (FSVP) Program Training 1 Unit***In-Class Hours:* 17.5 lecture

This course will provide participants with the knowledge to implement the requirements of the Foreign Supplier Verification Programs (FSVP) for "Importers of Food for Humans and Animals" regulation of the U.S. Food and Drug Administration (FDA). This regulation is one of a number of regulations and guidance documents that implement the provisions of the 2011 Food Safety Modernization Act (FSMA), which focuses on safe food practices.

Grade Modes: Pass/No Pass Grading, Credit by exam, license etc.**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None

AG V34 Human Food PCQI (Preventive Controls Qualified Individual)**Training 2 Units***In-Class Hours:* 35.0 lecture

This course is intended for individuals working in the food industry seeking to meet the requirements for a human food Preventive Controls Qualified Individual certificate. The Current Good Manufacturing Practice, Hazard Analysis, and Risk-based Preventive Controls for Human Food regulation (referred to as the Preventive Controls for Human Food regulation) is intended to ensure safe manufacturing/processing, packing and holding of food products for human consumption in the United States. The regulation requires that certain activities must be completed by a Preventive Controls Qualified Individual who has successfully completed training in the development and application of risk-based preventive controls.

Grade Modes: Pass/No Pass Grading, Credit by exam, license etc.**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None**AG V35 Animal Food PCQI (Preventive Controls Qualified Individual)****Training 2 Units***In-Class Hours:* 35.0 lecture

This course is intended for individuals working in the food industry seeking to meet the requirements for an animal food Preventive Controls Qualified Individual (PCQI) certificate. The Current Good Manufacturing Practice and Hazard Analysis and Risk-based Preventive Controls for Food for Animals (referred to as the Preventive Controls for Animal Food regulation) is intended to ensure safe manufacturing/processing, packing, and holding of food products for animal consumption in the United States. The regulation requires that certain activities must be completed by a Preventive Controls Qualified Individual who has successfully completed training in the development and application of risk-based preventive controls.

Grade Modes: Pass/No Pass Grading, Credit by exam, license etc.**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None**AG V36 Introduction to Food Safety and Agricultural Practices for Food Safety 3 Units***In-Class Hours:* 52.5 lecture

This is an introductory course in food safety for those majoring in agriculture and/or working in food safety related careers or industries. The course covers conditions and practices that cause food borne illnesses, organisms responsible for food borne illnesses, elements of a food safety control system, and worker sanitation. The course focus is on establishing good agricultural practices (GAP) in food safety as they relate to the production of farm products, including specific guidelines for key agricultural commodities, state and federal regulations, and food safety monitoring. Students will learn to create standard operating procedures (SOP) associated with employee training and the safe production, transportation, and processing of food. Best practices in the retail and home kitchen environments will also be covered.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None**AG V37 Food Safety Management Practices: Field and Facility 3 Units***In-Class Hours:* 52.5 lecture

This course covers the creation and documentation of key elements in a food safety program, including: evaluating current practices, creating and implementing key aspects of a food safety program, and recognizing and documenting pathogen behavior. This course also covers food safety issues and concerns in processing and manufacturing facilities, including: facility sanitation, recognizing potential hazards, analysis of problems in the cold chain, developing improved practices, HACCP (Hazard Analysis and Critical Control Point) principles, employee training, and the inspection process.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** None**AG V38 Agricultural Laws and Regulations for Food Safety 3 Units***In-Class Hours:* 52.5 lecture*Prerequisites:* None*Corequisites:* None

This course is designed to give the student a better understanding of the issues involved in the regulation of foods and a general understanding of the full scope of food safety laws in the United States. The course covers the laws regulating the production, processing, manufacturing, distribution, and sale of food products in the United States. Topics include the regulation of labeling, food safety, genetic modification, FSMA (Food Safety Modernization Act), inspections, importation, enforcement, and many other issues of concern in the regulation of food in the United States.

Advisories/Rec Prep: None**Grade Modes:** Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V42 Plant Identification and Culture: Spring Specimens 3 Units***Formerly:* ESRM V23*In-Class Hours:* 35.0 lecture, 52.5 laboratory*C-ID:* AG-EH 108L

This course covers the identification, growth habits, cultural requirements, and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurseries & Garden Centers and National Association of Landscape Professionals Certification Tests Plant Lists. Selections include plants best observed and studied during the spring and/or summer seasons in California. Laboratory required.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** A1**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None

AG V43 Plant Identification and Culture: Fall Specimens 3 Units

Formerly: AG V42A

In-Class Hours: 35.0 lecture, 52.5 laboratory

C-ID: AG-EH 112L

This course covers the identification, growth habits, cultural requirements, and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurseries & Garden Centers and National Association of Landscape Professionals Certification Tests Plant Lists. Selections include plants best observed and studied during the fall and/or winter seasons in California. Laboratory required.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: A1

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

AG V61 Introduction to Animal Science 3 Units

In-Class Hours: 52.5 lecture

This course will provide a scientific approach to the livestock industry, encompassing aspects of animal anatomy, physiology, nutrition, genetics, and epidemiology. Topics will include a survey of the livestock industry and the supply of animal products and their uses; there will be a special emphasis on the origin, characteristics, adaptation, and contributions of livestock animals to the modern agriculture industry.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: A1

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B2

IGETC: None

AG V62 Orientation to Veterinary Science 1 Unit

In-Class Hours: 17.5 lecture

This course directs students in the exploration of veterinary medicine as a career choice, including education, job tasks, and employment options. This course will cover the development and facilitation of client care, client relations, filing of governmental reports, and legal responsibilities of registered veterinary technicians. Topics will include: client and staff communication, veterinary medical ethics, veterinary logs, and legalities. Resume writing and job interviewing skills will also be covered. Other key topics include an orientation to college veterinary science programs and degree/certification requirements.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

AG V63 Domestic Animal Care Experience and Handling 1.5 Units

In-Class Hours: 17.50 lecture, 26.25 laboratory

This introductory course provides students with theoretical and practical experience in the basic husbandry of many animal species. Students learn and practice "essential" and "recommended" tasks as required by the American Veterinary Medical Association and the California Veterinary Medical Board Knowledge, Skills and Abilities Tasks List. These tasks include methods of housing or caging, nutrition and feeding, sanitation and hygiene in an animal setting, and handling and restraint of the various species.

Grade Modes: Letter Graded

Field Trips: Will be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: None

AG V64 Veterinary Office Procedures 3 Units

In-Class Hours: 52.5 lecture

This course will cover the use of veterinary medical records, medical terminology, and Pharmacology. Topics will include: an introduction to medical terminology used in Veterinary Medicine, computer usage, the creation of medical records, an introduction to Pharmacology, medical math, and purchasing and inventory management in relationship to a veterinary establishment.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

AG V65 Animal Health and Disease Control 3 Units

In-Class Hours: 52.5 lecture

This course will cover the physiology of animals and how it relates to animal health. The focus will be on prevention and control of infectious diseases affecting domestic animals including basic disease concepts, transmission of infectious diseases, principles of sanitation, and fundamentals of immunology. Appropriate veterinary medical terminology will be included.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None

AG V66 Anatomy and Physiology of Animals 4 Units*In-Class Hours:* 52.5 lecture, 52.5 laboratory*Prerequisites:* CHEM V20-V20L or CHEM V30-V30L or 1 year high school chemistry with grade of "C" or better

This course consists of comparative normal anatomy and physiology of selected domestic animal species. It analyzes the body structures and systems, comparing domestic animals commonly found in veterinary medicine. The physiology section of the course will emphasize functions of internal organs and body systems. The relevant application of structure and function to clinical medical situations is addressed.

Appropriate veterinary medical terminology is included with each system.

Advisories/Rec Prep: BIOL V01-V01L and CHEM V01A-V01AL**Grade Modes:** Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** A1**Transfer Credit:** CSU, UC**UC Credit Limitations:** None**CSU GE-Breadth:** B2, B3**IGETC:** None**AG V67 Basic Small Animal Nursing 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory

This course is an introduction to concepts and common procedures used in the nursing care of small domestic animals. Components of routine physical exams and acquisition of various vital signs will be discussed. Wellness protocols for dogs and cats will also be addressed, with an emphasis on vaccine programs. The importance of the veterinary technician in providing care for patients with various conditions and common diseases will be covered in detail.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V68 Veterinary Diagnostic Imaging 2 Units***In-Class Hours:* 17.50 lecture, 52.5 laboratory

This course is designed to meet the needs of the veterinary technician who will be working for veterinarians in various medical settings. The course covers safety procedures, rules, regulations, x-ray production, and specific techniques associated with the use of radiographic equipment, including positioning techniques for various animal species, as well as radiograph developing techniques. Students will learn how to properly prepare and operate radiographic and darkroom equipment, computer radiographic equipment, and ultrasound equipment to safely and effectively produce diagnostic radiographs and ultrasonic images. Alternate imaging modalities will be introduced and their use in veterinary medicine will be described.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V69 Principles of Large Animal Nursing 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory

This course is an introduction to the concepts and common procedures used in the nursing care of large domestic animals, such as horses, cattle and swine. Components of routine physical exams and acquisition of various vital signs will be discussed. Emphasis will be on the role of the veterinary technician in providing care for large domestic animal patients with various conditions and common diseases.

Grade Modes: Letter Graded**Field Trips:** Will be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V70 Advanced Small Animal Nursing 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory*Prerequisites:* AG V67 with a grade of "C" or better

This course covers advanced procedures used in the nursing care of small domestic animals. Emphasis is on advanced components of emergency care, critical care, and triage. Advanced nursing techniques, as well as pharmacology, lab samples, neonatal care, and hematology will be discussed.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V71 Basic Veterinary Clinical Procedures 1.5 Units***In-Class Hours:* 17.50 lecture, 26.25 laboratory

This course is an introduction to basic clinical procedures used in veterinary practice, such as: anesthesia administration, minor surgery, and dental procedures. Instrumentation and equipment will be discussed, as well as practices in sanitation and aseptic techniques. Emphasis will be placed on performance of physical examinations, administration of medications and fluids, operation of general anesthesia and monitoring equipment, and application of operating room skills necessary for surgical assisting.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None

AG V72 Advanced Veterinary Clinical Procedures 3 Units*In-Class Hours:* 35.0 lecture, 52.5 laboratory*Prerequisites:* AG V71 with grade of "C" or better

This course covers advanced clinical procedures used in veterinary practice, with an emphasis on anesthesia and surgery. Elements of pharmacology and pain management will be discussed, as well as practices in surgical operations. Potential issues occurring during anesthesia, and other emergency situations, will also be addressed. Students will receive hands-on experience in the operation of general anesthesia and monitoring equipment while assisting in surgical procedures.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V73 Veterinary Dentistry 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory

This course will prepare students for all aspects of veterinary dental diagnostics and prophylaxis in domestic animals, such as canines and felines. Emphasis will be placed on tasks necessary for veterinary technicians to perform and assist with, such as dental charting, radiography, prophylaxis, and extractions. Students will also perform dental radiography and prophylaxis on anesthetized animals.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V74 Introduction to Laboratory Animal and Exotic Companion Animal Medicine 3 Units***In-Class Hours:* 52.5 lecture

This course covers the use of animals in biomedical research, with an emphasis on common laboratory species, animal welfare legislation, and the philosophy of laboratory animal management. This course includes topics such as handling, restraint, husbandry, care, and observation of laboratory species. Additionally, this course will discuss common exotic companion animal species such as reptiles, birds, and small mammals; the focus will be on husbandry, housing, nutrition, and common medical conditions.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V75 Veterinary Microbiology, Parasitology, and Laboratory Procedures 3 Units***In-Class Hours:* 35.0 lecture, 52.5 laboratory

This course will cover the basic clinical laboratory skills needed by Registered Veterinary Technicians. The course provides students with an introduction to the clinical examination of blood, urine, feces, dermal, and other commonly analyzed samples found in the veterinary field. Topics include: the safe and proper collection of diverse samples, the safe and proper handling of samples, the various methods of sample analysis, and the significance of normal and abnormal results. Emphasis will be placed on the areas of parasitology, cytology, urinalysis, microbiology, and hematology. Additionally, the identification, life cycle, and clinical importance of various parasites are discussed. Students will also gain hands-on experience in restraining animals for specimen collection procedures and in performing laboratory analyses.

Grade Modes: Letter Graded**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V95 Agriculture Internship I 1-4 Units***Prerequisites:* Successful completion of at least two courses in the discipline

Corequisites: Enrollment in a minimum of 6 units to include internship
This course offers students who are volunteers (unpaid) an opportunity to expand their work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal.

Grade Modes: Pass/No Pass Grading**Field Trips:** Will be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None

AG V95C Veterinary Clinical Internship I 4 Units*Prerequisites:* Instructor Approval

This course is designed to provide Veterinary Technician majors, who are volunteers (unpaid), with actual on-the-job experience at an approved work station which is related to classroom instruction. Clinical experiences should be useful in preparation for state board exams in veterinary technology. A minimum of 240 non-paid clock hours is required. It is recommended that the hours per week are equally distributed throughout the semester. Instructor approval is required.

The course provides students with opportunities to develop marketable skills in preparation for employment in their major field of study. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. Learning objectives, appropriate to the student's skill level, are established by the student and the employer.

Enrollment Limitations: Drug and alcohol clearance. No acrylic or long nails in clinical settings. Current negative TB test or chest x-ray. Current Tetanus vaccination required.

Grade Modes: Pass/No Pass Grading**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V96 Agriculture Internship II 1-4 Units***In-Class Hours:* 75-300 paid cooperative

Prerequisites: Successful completion of at least two courses in the discipline.

Corequisites: Enrolled in a minimum of 6 units to include internship. This course offers students who are employed in the field an opportunity to expand their work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal.

Grade Modes: Pass/No Pass Grading**Field Trips:** Will be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None**AG V96C Veterinary Clinical Internship II 4 Units***In-Class Hours:* 300 paid cooperative*Prerequisites:* Instructor Approval

This course is designed to provide Veterinary Technician majors, who are employed in the field, with actual on-the-job experience at an approved work station which is related to classroom instruction. Clinical experiences should be useful in preparation for state board exams in veterinary technology. A minimum of 300 paid clock hours is required. It is recommended that the hours per week are equally distributed

throughout the semester. Instructor approval is required. The course provides students with opportunities to develop marketable skills for advancement within their career. Course content includes understanding the application of education to the workforce; completion of required forms which document the student's progress and hours spent at the work site; and developing workplace skills and competencies.

Appropriate level learning objectives are established by the student and the employer.

Enrollment Limitations: Drug and alcohol clearance. No acrylic or long nails in clinical settings. Current negative TB test or chest x-ray. Current Tetanus vaccination required.

Grade Modes: Pass/No Pass Grading**Field Trips:** May be required**Degree Applicability:** Applies to Associate Degree**AA/AS GE:** None**Transfer Credit:** CSU**UC Credit Limitations:** None**CSU GE-Breadth:** None**IGETC:** None

Noncredit Courses

AG N131 Food Safety - HACCP (Hazard Analysis and Critical Control Point) Training and Certification (NC) 0 Units

This course is a general HACCP (Hazard Analysis and Critical Control Point) training designed for individuals working in the food industry who want to earn a HACCP certification. This HACCP training course teaches participants how to implement and manage the Hazard Analysis and Critical Control Point (HACCP) system, which was designed by the Food and Drug Administration (FDA) as a food safety management system for controlling food hazards. Upon successful completion of the course, students will earn a certificate of completion from the International HACCP Alliance. This HACCP Certificate will be recognized domestically and internationally by food safety inspectors and auditors.

Grade Modes: Pass/No Pass Grading**Repeatable for Credit:** Unlimited.**Degree Applicability:** Noncredit course; not applicable for degree credit**AA/AS GE:** None**Transfer Credit:** None

AG N132 Produce Safety Rule (PSR) Training (NC) 0 Units

This course is a training in produce safety designed for individuals working in the produce industry. The course is especially relevant for fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA), Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety. The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement outlined in the Code of Federal Regulations § 112.22(c) which requires that at least one responsible party on a farm has completed food safety training recognized as adequate by the Food and Drug Administration.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N133 Food Safety Foreign Supplier Verification (FSVP) Program Training (NC) 0 Units

This course will provide participants with the knowledge to implement the requirements of the Foreign Supplier Verification Programs (FSVP) for "Importers of Food for Humans and Animals" regulation of the U.S. Food and Drug Administration (FDA). This regulation is one of a number of regulations and guidance documents that implement the provisions of the 2011 Food Safety Modernization Act (FSMA), which focuses on safe food practices.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N134 Human Food PCQI (Preventive Controls Qualified Individual) Training (NC) 0 Units

This course is intended for individuals working in the food industry seeking to meet the requirements for a human food Preventive Controls Qualified Individual certificate. The Current Good Manufacturing Practice, Hazard Analysis, and Risk-based Preventive Controls for Human Food regulation (referred to as the Preventive Controls for Human Food regulation) is intended to ensure safe manufacturing/processing, packing and holding of food products for human consumption in the United States. The regulation requires that certain activities must be completed by a Preventive Controls Qualified Individual who has successfully completed training in the development and application of risk-based preventive controls.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N135 Animal Food PCQI (Preventive Controls Qualified Individual) Training (NC) 0 Units

This course is intended for individuals working in the food industry seeking to meet the requirements for an animal food Preventive Controls Qualified Individual (PCQI) certificate. The Current Good Manufacturing Practice and Hazard Analysis and Risk-based Preventive Controls for Food for Animals (referred to as the Preventive Controls for Animal Food regulation) is intended to ensure safe manufacturing/processing, packing, and holding of food products for animal consumption in the United States. The regulation requires that certain activities must be completed by a Preventive Controls Qualified Individual who has successfully completed training in the development and application of risk-based preventive controls.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N136 Introduction to Food Safety and Agricultural Practices for Food Safety (NC) 0 Units

This is an introductory course in food safety for those majoring in agriculture and/or working in food safety related careers or industries. The course covers conditions and practices that cause food borne illnesses, organisms responsible for food borne illnesses, elements of a food safety control system, and worker sanitation. The course focus is on establishing good agricultural practices (GAP) in food safety as they relate to the production of farm products, including specific guidelines for key agricultural commodities, state and federal regulations, and food safety monitoring. Students will learn to create standard operating procedures (SOP) associated with employee training and the safe production, transportation, and processing of food. Best practices in the retail and home kitchen environments will also be covered.

Grade Modes: Letter Graded, Student Option- Letter/Credit, Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Field Trips: May be required

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N137 Food Safety Management Practices: Field and Facility (NC) 0 Units

This course covers the creation and documentation of key elements in a food safety program, including: evaluating current practices, creating and implementing key aspects of a food safety program, and recognizing and documenting pathogen behavior. This course also covers food safety issues and concerns in processing and manufacturing facilities, including: facility sanitation, recognizing potential hazards, analysis of problems in the cold chain, developing improved practices, HACCP (Hazard Analysis and Critical Control Point) principles, employee training, and the inspection process.

Grade Modes: Letter Graded

Repeatable for Credit: Unlimited.

Field Trips: May be required

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N138 Agricultural Laws and Regulations for Food Safety (NC) 0 Units

This course is designed to give the student a better understanding of the issues involved in the regulation of foods and a general understanding of the full scope of food safety laws in the United States. The course covers the laws regulating the production, processing, manufacturing, distribution, and sale of food products in the United States. Topics include the regulation of labeling, food safety, genetic modification, FSMA (Food Safety Modernization Act), inspections, importation, enforcement, and many other issues of concern in the regulation of food in the United States.

Grade Modes: Letter Graded

Repeatable for Credit: Unlimited.

Field Trips: May be required

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N150 Human Resource Management for Agriculture Field Supervisors (NC) 0 Units

Corequisites: ESL N100A, ESL N100B, or ESL N100C

This course is taught primarily in Spanish and aimed at current agriculture laborers or those interested in becoming crew leaders in both agriculture field and facility settings. The course covers human resource management skills, laws regulating agricultural production, and the use of labor in agriculture. Topics include basic human resource management, hiring, required labor documentation, applicable labor laws, wages, and the rights of agricultural laborers. Likewise, effective communication, conflict resolution, negotiation and leadership strategies will be discussed. The course is designed especially for agricultural field supervisors to provide a better understanding of effective management and leadership practices for successful oversight of labor within the production setting.

Catalog Notes: This course is taught primarily in Spanish and therefore requires co-enrollment in an ESL course per Ed Code § 30.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Field Trips: May be required

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

AG N151 Agricultural Laws and Regulations for Agricultural Field Supervisors (NC) 0 Units

Corequisites: ESL N100B, ESL N100C, or ESL N100D

This course is taught primarily in Spanish and aimed at current agriculture laborers or those interested in becoming crew leaders in both agriculture field and facility settings. The course covers laws regulating agricultural production and the use of labor in agriculture. Topics include agricultural exemptions from labor laws, the Migrant and Seasonal Agricultural Worker Protection Act, and the rights of agricultural laborers. Likewise, specific regulations and laws governing agricultural production in California will be discussed. The course is designed especially for agricultural field supervisors to provide them with a better understanding of the issues involved in the regulation of agricultural production and labor within the production setting.

Catalog Notes: This course is taught primarily in Spanish and therefore requires co-enrollment in an ESL course per Ed Code § 30.

Grade Modes: Pass/No Pass Grading

Repeatable for Credit: Unlimited.

Field Trips: May be required

Degree Applicability: Noncredit course; not applicable for degree credit

AA/AS GE: None

Transfer Credit: None

- Agriculture Business, Associate in Science for Transfer (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/agriculture-business-ast/>)
- Agriculture Plant Science, Associate in Science for Transfer (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/agriculture-plant-science-ast/>)
- Food Safety, Associate in Science (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/food-safety-as/>)
- Veterinary Technology, Associate in Science (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/veterinary-technology-as/>)
- Agriculture Business, Certificate of Achievement (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/agriculture-business-coa/>)
- Agriculture Pest Control Adviser Preparation (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/agriculture-pest-control-adviser-preparation-coa/>)
- Food Safety, Certificate of Achievement (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/food-safety-ca/>)
- Plant Science, Certificate of Achievement (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/plant-science-coa/>)
- Veterinary Assistant, Certificate of Achievement (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/veterinary-assistant-coa/>)
- Agriculture Field Supervisor (Noncredit), Certificate of Completion (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/agriculture-field-supervisor-cocn/>)
- Food Safety (Noncredit), Certificate of Completion (<http://catalog.vcccd.edu/ventura/programs-courses/agriculture/food-safety-noncredit-coc/>)