

Agriculture

AG 100 Introduction to Agricultural Studies and Careers

1.0 unit

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

This course provides guidance for the educational pathways leading to degrees and certificates in the agricultural sciences. Emphasis also provided in the exploration of agriculture careers and employment opportunities. Assists students in setting both educational and career goals. Students develop an educational plan based on the curriculum requirements of agriculture majors. Students will learn the skills necessary for success in obtaining, maintaining and advancing in agriculture careers. Current issues that affect agriculture will be discussed. (Fall, Spring, Summer) (Letter Grade or Pass/No Pass)

AG 116 Introduction to Precision Agriculture

3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: N/A

Advisories: GEOG 155 - Introduction to GIS with Lab

An introduction to the application of precision agricultural technologies with an emphasis on the collection and interpretation of field data to make appropriate management decisions. Topics will include remote sensing applications, variable rate technologies, automated equipment and software, and navigation using GIS/GPS in the field. (Summer) (Letter Grade or Pass/No Pass)

AG 125 Introduction to Soil Science

4.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: AG-PS 128

Advisories: CHEM 120 - Introductory Chemistry

A study of the physical, chemical, and biological properties of soils, including plant nutrition and factors affecting the availability of nutrients. Composition, value, use and application of fertilizer materials and soil amendments will be covered. The course is not open to students who are enrolled in or have received credit for VEN 125. (Fall) (Letter Grade or Pass/No Pass)

AG 126 Fertilizers and Plant Nutrition

4.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: N/A

Advisories: AG 125 - Introduction to Soil Science

This course will provide an introduction to fertilizers and plant nutrition. Essential nutrients for plant development will be studied as well as deficiency symptoms and methods of correcting for these deficiencies. Fertilizer and other soil amendments will be studied as well as the proper management and application methods for these products. This course is not open to students who have completed or are enrolled in VEN 126. (Spring) (Letter Grade or Pass/No Pass)

AG 130 Integrated Pest Management

4.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Prerequisite: VEN 102 - Introduction to Viticulture ; or AG 161 - Introduction to Plant Science

A study of the various pests and diseases found in California vineyard, fruit, vegetable, nut and grain crops - emphasizing pest and disease identification, sampling and monitoring techniques, and control methods. Integrated pest management approaches will be emphasized, including the latest bio-control strategies, biotechnological advances, and disease modeling for risk management. Students will visit local vineyards and farms providing "hands-on" learning opportunities. Two separate lab sections will be offered in order to provide students the appropriate option for their agricultural field of interest. Section I will be for the Viticulture focus, Section II will be for the Agriculture focus. (Spring) (Letter Grade or Pass/No Pass)

AG 134 Internship Seminar

1.0 unit

Acceptable for credit: *Transfers to CSU, limited to UC/crd detrmnd aftr trnsfr

Corequisite: Concurrent enrollment in AG 149, CWE 149 or CWE 302

Provides students with a seminar format to discuss, analyze, and critically evaluate their work-based learning experiences. This forum emphasizes job market information, attitudes, and abilities that facilitate job success; skills necessary for maintaining employment; and techniques for enhancing job advancement opportunities. (Fall, Spring) (Letter Grade Only)

AG 149 Cooperative Work Experience: Occupation

1.0 - 8.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Limitations on Enrollment: To participate in Cooperative Work Experience: (1) students must be working at a job within their major, (2) students must be able to become involved in new or expanded responsibilities on the job, (3) the employer must be willing to cooperate with the college in the supervision and evaluation of the student and (4) the student must attend all coordination/consultation meetings in addition to other work and class responsibilities. NUMBER OF TIMES COURSE CAN BE REPEATED: Students enrolled in CWE 149 may earn up to 8 units of credit per semester not to exceed 16 units in total. Any units earned in any other Cooperative Work Experience course will be included in the 16 unit maximum. CWE Units Unpaid Placement: 1 unit 60 hours 2 units 120 hours 3 units 180 hours 4 units 240 hours 5 units 300 hours 6 units 360 hours 7 units 420 hours 8 units 480 hours CWE Units Paid Placement: 1 unit 75 hours 2 units 150 hours 3 units 225 hours 4 units 300 hours 5 units 375 hours 6 units 450 hours 7 units 525 hours 8 units 600 hours

Supervised employment extending classroom-based learning to an on-the-job learning environment relating to the student's career and educational goals. In addition, these work experiences improve the student's basic work skills and professional

competencies by creating career awareness, improving work habits, and fostering positive workplace attitudes. (Fall, Spring, Summer) (Letter Grade or Pass/No Pass)

AG 150 Introduction to Agribusiness

3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: AB 104

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; management principles encountered in the day to day operation of an agricultural enterprise as they relate to the decision making process. (Fall) (Letter Grade or Pass/No Pass)

AG 152 Introduction to Animal Science

3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: AG-AS 104

Advisories: BIOL 100 - Introductory Biology

A scientific approach to the livestock industry encompassing aspects of animal anatomy, physiology, nutrition, genetics and epidemiology. Emphasis on the origin, characteristics, adaptations and contributions of livestock to the modern agriculture industry. Field trips may be required. (Spring) (Letter Grade or Pass/No Pass)

AG 153 Introduction to Sustainable Agriculture

3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Introduction to the history, definitions, concepts, principles and practices of sustainable agricultural systems. Includes an examination of case studies to connect sustainable agriculture principles to actual farming practices. (Spring) (Letter Grade or Pass/No Pass)

AG 154 Introduction to Fruit Science

3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

The botany, taxonomy, and development of major fruit, vine, and nut crops in California including variety selection, production practices including site selection establishment, fertilization, pollination, irrigation, harvest, storage, processing, marketing, pest management, and pruning. (Fall) (Letter Grade or Pass/No Pass)

AG 155 Introduction to Mechanized Agriculture

3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Basic mechanical skills in woodworking, cold metal, electricity, plumbing, concrete, and project construction skills as related to farm maintenance and repair. Development of hand and power tool skills as well as emphasis on safety practices for all mechanical areas. Shop safety. (Letter Grade or Pass/No Pass)

AG 156 Intro to Environmental Horticulture

3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: n/a

General course in environmental horticulture with emphasis on nursery operations, landscaping, turf management, and floral industries including: basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening and houseplants, floral design, plant identification, turfgrass installation and care, and survey of career opportunities. (Spring) (Letter Grade or Pass/No Pass)

AG 157 Agricultural Sales, Communication, and Leadership

3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: C-ID AG-AB 112

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. (Spring) (Letter Grade or Pass/No Pass)

AG 158 Agricultural Economics

3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: AG-AB 124

The place of agriculture and farming in the economic system; basic economic concepts and problems of agriculture; pricing and marketing problems, factors of production; and state and federal farm programs affecting the farmer's economic position. (Fall) (Letter Grade or Pass/No Pass)

AG 160 Plant Propagation and Production

3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: AG-EH 116L

Prerequisite: AG 161 - Introduction to Plant Science ; or BIOL 154 - General Botany

Plant propagation and production practices with emphasis on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, plant pest and disease control; structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment; regulations pertaining to plant production. Laboratory required. (Spring) (Letter Grade or Pass/No Pass)

AG 161 Introduction to Plant Science

4.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: AG-PS 104

Advisories: BIOL 100 - Introductory Biology

Introduction to plant science including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, and ornamental plants. (Fall) (Letter Grade or Pass/No Pass)

AG 162 Agricultural Plant Pathology

4.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: n/a

Corequisite: AG 161 - Introduction to Plant Science ; or BIOL 100 - Introductory Biology

A study of the nature and causes of disease in plants, with particular emphasis on agricultural commodities. This course will cover disease cycles, symptoms, host-parasite interactions, disease development in relation to the environment, methods of prevention, and methods of control such as cultural, chemical and biological. Industry-based field trips and/or guest speakers will be used to exemplify classroom knowledge. (Spring) (Letter Grade or Pass/No Pass)

AG 163 Economic Entomology

4.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Corequisite: BIOL 100 - Introductory Biology

Introduction to insects and mites of economic importance to agriculture. Covers the morphology, taxonomy, identification, life cycles, hosts, habitat relationships and control methods for insects of economic importance. Industry-based field trips and/or guest speakers will be used to exemplify classroom knowledge. (Spring) (Letter Grade or Pass/No Pass)

AG 164 Weed Science

4.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Corequisite: AG 161 - Introduction to Plant Science ; or BIOL 100 - Introductory Biology

Introduction to the classification, identification and life cycles of common and poisonous weeds in California which are detrimental to cultivated crops, grasslands, animals and humans. Management practices to prevent and control weed population establishment will be covered. Industry-based field trips and/or guest speakers will be used to exemplify classroom knowledge. (Fall) (Letter Grade or Pass/No Pass)

AG 165 Qualified Applicator Training

2.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

This course will prepare students to take the Qualified Applicator License (QAL) or Qualified Applicator Certificate (QAC) exam as given by the California Department of Pesticide Regulation. Students will study pest management, pesticide labels and applications, safety, equipment, laws and regulations. Additional emphasis will be placed on exam categories based on student need. (Fall, Summer) (Letter Grade or Pass/No Pass)

AG 189 Independent Projects in Agriculture

1.0 - 3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: N/A

Courses for students capable of independent work who demonstrate the need or desire for additional study beyond the regular curriculum. Enrollment allows students to pursue activities such as directed field experience, research, or development of skills and competencies under faculty advisement and supervision. Independent Projects may be earned in most disciplines. Students wishing to enroll in Independent Projects should contact the appropriate instructor identified in the class schedule. If the project proposed is acceptable to that instructor, a contract will be issued no later than the end of the second week of the semester. Units are awarded depending upon satisfactory performance and the amount of time committed by the student to the course. Allowable units vary according to discipline, and are based on the following formula: 1 unit - 48 hours per semester 2 units - 96 hours per semester 3 units - 144 hours per semester (Fall, Spring, Summer) (Letter Grade or Pass/No Pass)

AG 190 Agriculture Production Enterprise, Fall-Winter

2.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

This course provides an opportunity to examine and improve the Allan Hancock College On-Campus Student Farm. Students will gain the ability to design and implement basic farming techniques that can be used on either a small or medium-size farm during Fall-Winter crop seasons. Students will develop fundamental management, business, cultivation, and harvesting techniques throughout this course. At the end of the course, students can apply the necessary skills learned to start their own small-scale farm or apply them in the local agriculture industry. Produce safety will also be addressed. Outdoor labor is required. (Fall) (Letter Grade or Pass/No Pass)

AG 191 Agriculture Production Enterprise, Spring

2.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

This course provides an opportunity to examine and improve the Allan Hancock College On-Campus Student Farm. Students will gain the ability to design and implement basic farming techniques that can be used on either a small or medium-size farm during the spring crop season. Students will develop fundamental management, business, cultivation, and harvesting techniques throughout this course. At the end of the course, students can apply the necessary skills learned to start their own small-scale farm or apply them in the local agriculture industry. Produce safety will also be addressed. Outdoor labor is required. (Spring) (Letter Grade or Pass/No Pass)

AG 192 Agriculture Production Enterprise, Summer

2.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

This course provides an opportunity to examine and improve the Allan Hancock College On-Campus Student Farm. Students will gain the ability to design and implement basic farming techniques that can be used on either a small or medium-size farm during Summer crop season. Students will develop fundamental management, business, cultivation, and harvesting techniques throughout this course. At the end of the course, students can apply the necessary skills learned to start their own small-scale farm or apply them in the local agriculture industry. Produce safety will also be addressed. Outdoor labor is required. (Summer) (Letter Grade or Pass/No Pass)

AG 191 Agriculture Production Enterprise

2.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: n/a

Course Offered: Spring

Grading Method: Letter Grade or Pass/No Pass

This course provides an opportunity to examine and improve the Allan Hancock College On-Campus Student Farm. Students will gain the ability to design and implement basic farming techniques that can be used on either a small or medium-size farm during the spring crop season. Students will develop fundamental management, business, cultivation, and harvesting techniques throughout this course. At the end of the course, students can apply the necessary skills learned to start their own small-scale farm or apply them in the local agriculture industry. Produce safety will also be addressed. Outdoor labor is required.