

Agriculture

Agriculture Degrees and Certificates

- Pathway for Agribusiness
- Pathway for General Agriculture
- Pathway for Horticulture and Tree Fruit Production
- Pathway for Sustainable and Organic Agriculture
- Viticulture Sustainability
- Pathway for General Agriculture
- Pathway for Horticulture and Tree Fruit Production
- Pathway for Sustainable and Organic Agriculture
- Pathway for General Agriculture
- Pathway for Horticulture and Tree Fruit Production
- Pathway for Sustainable and Organic Agriculture

Agriculture Classes

AGRI 101: Introduction to Agriculture

Introduction to modern agricultural industries, history, management philosophies, and challenges. Course topics include: food crop production, sustainable resource management, global food demands, and economics. Students will be provided an opportunity to research and explore their career interests and create a strategy for their professional future in agriculture.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
General Elective

AGRI 105: Agricultural Mechanics

Introduction and exploration of the theory and practice of safe operation, maintenance, service and repair of most small engines for agricultural applications. Instruction will also include employment and careers in agricultural mechanics.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
Restricted Elective

AGRI 108: Introduction to Horticulture

Introduction to horticulture studies. Instruction includes: its history and philosophy and core topics in pomology, olericulture, floriculture, viticulture, propagation, growing systems management and strategies. Course will provide students the necessary skills and experiences to explore meaningful career paths in horticulture.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
General Elective

AGRI 120: Hispanic Orchard Employee Education Program I

Designed for Latino orchard employees at a supervisory level. Includes basic instruction in Spanish emphasizing technical terminology in English in many facets of tree fruit production; basic math, practice in reading, writing, speaking and listening in English based in horticultural topics; and presentations of subjects concerning everyday life and citizenship. (previously offered as AGRI 5)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For

Restricted Elective

AGRI 121: Hispanic Orchard Employee Education Program II

Designed for Latino employees who have satisfied all the requirements of the first-year program (AGRI 5 or AGRI 120). Offers in-depth instruction in tree fruit production, applied English terminology and math. Includes presentations of subjects concerning everyday life and citizenship. (previously offered as AGRI 6)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For

Restricted Elective

Prerequisites

[AGRI 5](#) or AGRI 120

AGRI 122: Hispanic Orchard Employee Education Program III / Integrated Pest Management Tech

Intensive IPM program prepares Latino orchard employees as pest management scouts. Instruction, mostly in Spanish, emphasizes English terminology. Includes study of pests, field sampling techniques, pest management basics and record keeping. Includes basic math, reading, writing, speaking and listening in English, and discussion of everyday life and citizenship. (previously offered as AGRI 15)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For

Restricted Elective

AGRI 123: Hoeep IV / Farm Management

Taught in Spanish, this course introduces the principles and practices of farm management, including goal setting, developing a record-keeping system, cash flow, farm financial statements, balance sheets, budgets, personnel management, laws and regulations, legal forms, and food safety. (previously offered as AGRI 16)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For

Restricted Elective

AGRI 124: Hispanic Orchard Education Level V / Introduction to Viticulture

Taught in Spanish, this course introduces the production and management of wine grapes and their juices. Includes plant physiology, canopy management, soils, irrigation, plant nutrition, thinning, harvest, storage, marketing and vineyard financial management. (previously offered as AGRI 17)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For
Restricted Elective

AGRI 125: Hispanic Orchard Employee Education Program VI / Advanced Viticulture

Taught in Spanish. Offers more in-depth information about the production systems and management of wine grapes and their juices. Includes site selection and vineyard establishment, soils, pests and irrigation management, human resources, vineyard business plan, marketing and whole farm ecosystems. (previously offered as AGRI 18)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For
Restricted Elective

AGRI 126: HOEEP VII / Integrated Pest Management Tech / Vineyard Management

Intensive technical instruction to prepare Latino vineyard employees as pest management scouts and to introduce them to basic vineyard economics and management. Instruction is mostly in Spanish, emphasizing terminology in English. The purpose of this course is to prepare students for mid-management and management positions. (previously offered as AGRI 19)

Credits 19

Weekly Contact Hours 19

Meets Degree Requirements For
Restricted Elective

AGRI 130: Agricultural Technologies

Explores the significant aspects of modern agricultural systems, mechanization and sustainable technology industries. Instruction will include such topics as cropping and food processing, power and delivery, mechanics, maintenance and repair, soil, water, air conservation and employment and careers in agricultural technologies and related industries.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
Restricted Elective

AGRI 161: Introduction to Plant Science

Provides a comprehensive introduction to the agricultural disciplines of the plant science world. Instruction includes plant classification, plant anatomy, physiology, and propagation; the interactions of soil, water and temperature; and dynamic plant science subjects such as genetic engineering and biotechnology.

Credits 2

Weekly Contact Hours 2.5

Meets Degree Requirements For
Restricted Elective

AGRI 162: Introduction to Soils

This course is designed to introduce students to soil science, the formation of soils, its classification, physical and chemical properties, soil fertility, life in the soil and plant nutrition. Instruction will introduce students to the impact healthy soils have on plant and animal communities and the ecosystems of our state.

Credits 3

Weekly Contact Hours 3.5

Meets Degree Requirements For
Restricted Elective

AGRI 189: Agricultural Leadership

Schedule and participate in industry-related activities that enhance leadership capabilities. With guidance from an instructor, students develop a written plan outlining the anticipated leadership experience and complete a portfolio detailing the completed experiences with a self-assessment of the leadership qualities gained. Out-of-pocket fees/expenses may be required.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For
Restricted Elective

AGRI 196: Cooperative Work Experience

Intended to provide authentic experiences in the world of work by applying knowledge and skills learned in the classroom to working environment. An expanded portfolio of learned experiences will document the specific abilities gained through working cooperatively in a business.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For
Restricted Elective

AGRI 254: Integrated Pest Management

Classification, morphology, anatomy, growth and development, ecology and management of arthropod, weed, disease and vertebrate pests and their natural enemies. History of pest management that includes development of IPM strategies and tactics and how they are utilized in ecologically-based pest management programs.

Credits 5

Weekly Contact Hours 6

Meets Degree Requirements For
Restricted Elective

AGRI 255: Field Based Integrated Pest Mgmt

Lecture and lab oriented class emphasizing the use of integrated pest management (IPM) in horticulture situations of the Pacific Northwest. Identification and biology of insects, mites, diseases, and weed pests that affect plants. Hands-on experience with current methods for monitoring and managing major pests.

Credits 5

Weekly Contact Hours 6

Meets Degree Requirements For
Restricted Elective

AGRI 261: Introduction to Plant Science

Develops an understanding of basic plant morphology and physiology emphasizing horticultural science and fruit tree crops. Topics include form and function of plants, plant metabolism, plant growth and development, reproduction, techniques of fruit tree improvement, and plant/environment interaction.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

AGRI 262: Introduction to Pomology

Introduction to the horticultural principles and practices used in deciduous tree fruit production and orchard management. Topics include cultivars, root stocks, climate and environment, orchard systems, orchard establishment, pruning and training, flowering, pollination, fruit set, fruit growth and thinning, fruit maturation, harvest and storage, hardiness, and acclimation.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

AGRI 263: Soils

Introduction to basic concepts of soil science, plant nutrition and water management. Topics include soil formation and development, soil structure and composition, physical properties of soils, soils mineralogy, soil chemistry, soil fertility, fertilizers, irrigation management, and plant, soil and water relationships.

Credits 5

Weekly Contact Hours 6

Meets Degree Requirements For
Restricted Elective

AGRI 264: Post Harvest Technology

In-depth studies of principles and practices of deciduous tree fruit production in the Northwest, including: fruit maturation and ripening, indexes of maturity, harvesting, fruit tree acclimation, hardiness, fruit anatomy, cultivar identification, rodent control, and orchard floor management.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

AGRI 265: Crop Growth & Development

Principles and practices of deciduous tree fruit production in the Northwest, including pruning, formation and renovation of bearing trees, care of non-bearing trees, rootstocks, inter-stems, dwarf fruit trees, tree structure, growth, orchard systems, orchard establishment in new and old sites.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

AGRI 266: Crop Production Management

In-depth studies of principles and practices of deciduous tree fruit production in the Northwest. Includes flower bud initiation and development, pollination, fertilization, pollenizers, fruit set and development, thinning and alternate bearing, frost control, fruit tree propagation, and summer pruning.

Credits 5
Weekly Contact Hours 5
Meets Degree Requirements For
Restricted Elective

AGRI 268: Organic Agricultural Production

In this course, learn to grow and harvest vegetables, fruits and herbs organically. Learn to prepare and sell produce to local organic markets.

Credits 5
Weekly Contact Hours 5
Meets Degree Requirements For
Restricted Elective

AGRI 269: Organic Plant Nutrition

In-depth study of organic plant nutrition. Emphasis will be on how essential nutrients affect plant growth and development and food production, including the inter-relationships between organic nutrients and soil fertility. Composting and soil building practices will be emphasized.

Credits 5
Weekly Contact Hours 5
Meets Degree Requirements For
Restricted Elective

AGRI 289: Sustainable Agriculture & Food Systems

Examination of social, economic and ecological consequences of the modern, industrial agriculture paradigm. Topics include history of agriculture, worldviews, the sustainability concept, alternative agriculture systems, world food systems, agroecology, ecological economics, biotechnology, local food systems and the geography of hunger.

Credits 5
Weekly Contact Hours 5
Meets Degree Requirements For
Restricted Elective

AGRI 296: Cooperative Work Experience

The second level of Cooperative Work Experience is intended to continue providing authentic experiences in the world of work by applying knowledge and skills learned in the classroom to a working environment. An expanded portfolio of learned experiences will document the specific abilities gained through working cooperatively in a business.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For
Restricted Elective