

# HORTICULTURE, CERTIFICATE

**Program Code:** CC.HORT

The Horticulture Department provides quality education and training for industry and community members. Greenhouse, nursery, landscape, arboriculture, and organic farming courses integrate technical knowledge, critical thinking, and environmental stewardship.

Horticulture is a hands-on, project-based curriculum with a variety of lecture-lab style classes where students practice industry-related skills and experience growing and caring for plants in all seasons throughout the year. Learning activities involve students in the day-to-day operation of a wide range of power and hand tools used in the trade, including: mowers, rototillers, tractors, skid steer loader, pruning tools, and greenhouse equipment. Students cultivate plants in CCC's extensive farm, ornamental gardens, and greenhouse facilities. This degree sets a foundation for general horticulture while allowing students to "choose their own adventure" with a wide selection of elective courses that meet their interests.

Students may begin this program any term, although a fall start is recommended. Degree options include a one-year certificate program or a two-year **Horticulture AAS**. Following the course offerings in the order listed will allow for completion in the one or two-year period.

For information contact April Chastain, Horticulture Department advisor, 503-594-3055 or [april.chastain@clackamas.edu](mailto:april.chastain@clackamas.edu).

## Outcomes

### Related Instruction Outcomes

#### Computation

- 1 course - MTH-050 Technical Mathematics I or MTH-065 Algebra II or higher
- Use appropriate mathematics to solve problems.

#### Communication

- 1 course - WR-101 Workplace Writing or WR-121Z Composition I
- Read actively, think critically, and write purposefully and capably for professional audiences.

#### Human Relations

- 1 course - BA-285 Human Relations in Business or COMM-100Z Introduction to Communication
- Engage in ethical communication processes that accomplish goals.

## Program Outcomes

Upon successful completion of this program, students should be able to:

- demonstrate a broad range of skills in the production and maintenance of plants, including: safe use of tools and equipment, propagation from seeds and cuttings, landscape maintenance activities, growing in a greenhouse environment, and vegetable bed preparation;
- identify common woody plants in the landscape;
- implement IPM strategies in the horticulture industry;
- use a basic understanding of plant biology and soil science to make sound decisions in the production and maintenance of plants;

- communicate effectively with co-workers and customers through speaking, writing, and computer technology.

## Requirements

Fall Term		Credits
HOR-111	Horticulture Practicum/Fall	2.00
HOR-115	Horticulture Safety	1.00
HOR-223	Applied Plant Science	4.00
HOR-226	Plant Identification/Fall	4.00
Select one of the following:		4.00-5.00
MTH-050	Technical Mathematics I	
MTH-065	Algebra II	
Higher Level Math or Statistics		
<b>Credits</b>		<b>15-16</b>
Winter Term		Credits
HOR-133	Horticulture Practicum/Winter	2.00
HOR-216	Integrated Pest Management	3.00
HOR-222	Horticultural Computer Applications	2.00
HOR-227	Plant Identification/Winter	4.00
HOR-230	Equipment Operation & Maintenance	2.00
<b>Credits</b>		<b>13</b>
Spring Term		Credits
BA-285 or COMM-100Z	Human Relations in Business or Introduction to Communication	4.00
HOR-112	Horticulture Career Exploration	2.00
HOR-120	Pesticide Laws & Safety	1.00
HOR-140	Soils	3.00
HOR-143	Horticulture Practicum/Spring	2.00
HOR-228	Plant Identification/Spring	4.00
<b>Credits</b>		<b>16</b>
Summer Term		Credits
HOR-280	Horticulture/CWE	3.00
WR-101 or WR-121Z	Workplace Writing or Composition I	4.00
<b>Credits</b>		<b>7</b>
<b>Total Credits</b>		<b>51-52</b>

## Careers

Career opportunities include:

- nursery and garden center assistant manager and associate
- nursery production
- greenhouse assistant grower
- organic food production
- supply and equipment sales
- landscape design, installation and maintenance worker
- parks department personnel
- groundskeeper