

# Horticultural Science (One Credit) (2015)

The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to: [130.23.C.1](#)

**A** identify career development and entrepreneurship opportunities in the field of horticulture [130.23.C.1A](#)

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**B** apply competencies related to resources, information, interpersonal skills, and systems of operation in horticulture; [130.23.C.1B](#)

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**C** demonstrate knowledge of personal and occupational safety practices in the workplace; [130.23.C.1C](#)

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**D** identify employer expectations and appropriate work habits; and [130.23.C.1D](#)

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**E** demonstrate characteristics of good citizenship, including advocacy, stewardship, and community leadership [130.23.C.1E](#)

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The student develops a supervised agriculture experience program. The student is expected to: [130.23.C.2](#)

**A** plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity; [130.23.C.2A](#)

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**B** apply proper record-keeping skills as they relate to the supervised agriculture experience; [130.23.C.2B](#)

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**C** participate in youth leadership opportunities to create a well-rounded experience program; and [130.23.C.2C](#)

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**D** produce and participate in a local program of activities using a strategic planning process. [130.23.C.2D](#)

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The student develops technical skills associated with the management and production of horticultural plants. The student is expected to: [130.23.C.3](#)

**A** classify horticultural plants based on physiology for taxonomic and other classifications; [130.23.C.3A](#)

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**B** manage the horticultural production environment; [130.23.C.3B](#)

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**C** propagate and grow horticultural plants; [130.23.C.3C](#)

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**D** create a design using plants that demonstrates an application of design elements and principles; [130.23.C.3D](#)

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**E** design and establish landscapes; [130.23.C.3E](#)

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**F describe the processes of fruit, nut, and vegetable production; and** 130.23.C.3F

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**G demonstrate proper pruning techniques.** 130.23.C.3G

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The student identifies structures and physiological processes used in plant production. The student is expected to: 130.23.C.4

**A examine unique plant properties to identify and describe functional differences in plant structures, including roots, stems, flowers, leaves, and fruit;** 130.23.C.4A

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**B differentiate between monocots and dicots and male and female plants;** 130.23.C.4B

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**C germinate seeds and transplant seedlings; and** 130.23.C.4C

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**D demonstrate asexual propagation techniques** 130.23.C.4D

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The student manages and controls common pests of horticultural plants. The student is expected to: 130.23.C.5

**A identify common horticultural pests and pathogens;** 130.23.C.5A

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**B demonstrate safe practices in selecting, applying, storing, and disposing of chemicals; and** 130.23.C.5B

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**C explain parts of a pesticide label.** 130.23.C.5C

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The student demonstrates marketing and management skills used in the operation of horticultural businesses. The student is expected to: 130.23.C.6

**A identify and maintain hand and power tools and equipment;** 130.23.C.6A

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**B select appropriate tools and equipment;** 130.23.C.6B

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**C demonstrate safe use of tools and equipment;** 130.23.C.6C

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**D identify options and opportunities for business ownership; and** 130.23.C.6D

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**E analyze the role of small business in free enterprise** 130.23.C.6E

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