

AE.HO2 Horticulture II

Essential Discipline Goals

- Develop knowledge of the Horticulture Industry and its relevance to the individual and society.
- Develop and apply through horticulture experience and examples, creative thinking and problem solving skills.
- Acquire and apply knowledge of the concepts, theories, principles and laws of science to interpret the world of horticulture.
- Utilize horticulture experiences in the planning and fulfillment of personal aspirations and career decisions.
- Develop a basic knowledge of the language used to interpret the fundamentals and applications of horticulture.

Standard

Indicators

- AE.HO2.05** Identify career opportunities in the horticulture industry 1.7.5
- AE.HO2.05.01** Develop a skill profile 1.7.5
 - AE.HO2.05.02** Research horticulture career areas 1.7.5
- AE.HO2.10** Identify the parts of plants and their functions 3.2.1
- AE.HO2.10.01** Review the process of photosynthesis 3.1.3
 - AE.HO2.10.02** Review the process of respiration 3.1.3
 - AE.HO2.10.02** Identify the process of water absorption, translation and transpiration 3.2.1
- AE.HO2.15** Develop an understanding of plant taxonomy 1.5.7
- AE.HO2.15.01** Identify 40% of the foliage and flowering house plants from the plant list 1.5.7
 - AE.HO2.15.02** Identify woody plant materials commonly used in this region 1.5.7
 - AE.HO2.15.03** Identify plant hardiness zones 3.2.2
- AE.HO2.20** Identify the cultural requirements for production of plants in the greenhouse 3.2.2
- AE.HO2.20.01** Develop an advertising campaign for a plant sale 1.5.4
 - AE.HO2.20.02** Explain type, location, and size of greenhouse structures 1.3.1
 - AE.HO2.20.03** Identify, explain, and use greenhouse environmental controls 1.3.4
 - AE.HO2.20.04** Construct a model greenhouse 1.3.4
- AE.HO2.25** Identify the principles and practices used in flower and vegetable gardening 1.3.4
- AE.HO2.25.01** Identify vegetable plants, insects, and diseases 1.5.7
- AE.HO2.30** Demonstrate a knowledge of plant propagation techniques as they relate to plant production 3.2.1
- AE.HO2.30.01** Transplant cuttings to pots 3.2.1
 - AE.HO2.30.02** Remove rooted cuttings to a permanent location 3.2.1
 - AE.HO2.30.03** Create a dish garden 3.2.1
 - AE.HO2.30.04** Propagate plants from leaf, bud and leaf bud cuttings 3.2.1
 - AE.HO2.30.05** Reproduce plants by separation, division and layering 3.2.1
- AE.HO2.35** Demonstrate a knowledge of floral design principles and techniques
- AE.HO2.35.01** Construct flower arrangements
 - AE.HO2.35.02** Display floral work at appropriate functions
 - AE.HO2.35.03** Conduct a floral arrangement sale
- AE.HO2.40** Demonstrate a knowledge of the principles and practices used in turf and landscape maintenance 1.3.4
- AE.HO2.40.01** Prepare a seed bed 1.3.4
 - AE.HO2.40.02** Prepare a mulch bed 1.3.4
 - AE.HO2.40.03** Perform a soil test and amend to appropriate levels 1.3.1
 - AE.HO2.40.04** Develop a maintenance plan for your home landscape 1.3.4
 - AE.HO2.40.05** Demonstrate proper pruning practices 1.3.4
- AE.HO2.45** Develop an understanding of how soils are important to plant growth 3.5.1
- AE.HO2.45.01** Utilize soil conservation resource experts 3.5.1
 - AE.HO2.45.02** Participate in regional land judging CDE 1.7.1
- AE.HO2.50** Identify emerging technologies in plant production 1.7.2
- AE.HO2.50.01** Utilize the Internet 1.5.1

- AE.HO2.50.02** Prepare a sale brochure using a computer 1.5.3
- AE.HO2.55** Identify the principles and practices used in landscape design 1.5.0
 - AE.HO2.55.01** Identify career and employment opportunities in landscaping 1.75
 - AE.HO2.55.02** Obtain and classify landscape needs 1.5.2
 - AE.HO2.55.03** Measure a site 1.5.1
 - AE.HO2.55.04** Draw a site analysis 1.5.4
 - AE.HO2.55.05** Explain the basic design principles 1.5.1
 - AE.HO2.55.06** Select plant material for planting plan 1.5.1
 - AE.HO2.55.07** Draw a planting plan to scale 1.5.4
 - AE.HO2.55.08** Interpret a planting plan 1.5.4
 - AE.HO2.55.09** Utilize a computer assisted landscape design program 1.5.5
- AE.HO2.60** Develop an understanding of the control of plant pests through natural, chemical, and biological means 1.3.1
 - AE.HO2.60.01** Explain pesticide safety measures 1.3.2
 - AE.HO2.60.02** Identify pests and their control 1.3.1
 - AE.HO2.60.03** Analyze the information on the pesticide label 1.3.3
 - AE.HO2.60.04** Demonstrate the practices and principles of IPM 1.3.3