

Home Horticulture (Master)

Teacher: Julie Read

September 2020

Content	Skills	Learning Targets	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> <i>What are the benefits of home gardening.</i> <p>UEQ:</p> <ul style="list-style-type: none"> <i>What is the importance of horticulture.</i> <i>What are the different career opportunities in the horticulture industry.</i> <p>A: Horticulture Industry A1: Definition A2: Careers in horticulture</p>	<p>A: Horticulture Industry A1: Define horticulture industry A2: Describe careers in horticulture A2: Survey local jobs in horticulture</p>	<p>Course Learning Targets:</p> <p>CLT: I will work to maintain a positive and respectful lab group environment.</p> <p>A: Horticulture Industry: ALT1: I can define horticulture. ALT2: I can describe horticultural careers ALT3: I can survey local resources for horticultural jobs.</p>	<p>A: Horticulture Industry: A1: The importance of horticulture A2: Career Project</p>	<p>A: Horticulture Industry:</p>

<p>UEQ:</p> <ul style="list-style-type: none"> • <i>What is propagation?</i> • <i>How are plants propagated for home use?</i> <p>A:Propagation/reproduction A1: Plant Reproduction A2: Seed Propagation A3: Vegetative propagation</p>	<p>A:Propagation/reproduction A1: Label plant reproductive parts & functions. A1: Explain the difference between sexual and asexual reproduction. A2: Identify major parts of a seed and the functions of each. A2: Differentiate between indirect and direct seeding methods. A3: Describe various vegetative propagation methods.</p>	<p>A: Propagation/reproduction ALT1: I can label the reproductive parts of a plant and describe the functions. ALT2: I know the differences between sexual and asexual reproduction. ALT3: I can identify the major parts and functions of seeds. ALT4: I can seed using indirect and direct seeding techniques. ALT5: I can use different types of plant cuttings to grow plants.</p>	<p>A: Propagation/reproduction A1: Label the parts of plants and seeds A2-3: Propagate plants using seeds, plant cuttings, bulbs, rhizomes and other methods. A1-3: Start plants using various methods.</p>	<p>A: Propagation/reproduction A1-3: Chap 2,3,& 4 "Home Horticulture"</p> <p>Vocabulary: caryopsis gene dehiscent Drupe homozygote nut endocarp inbred exocarp mesocarp F₁ hybrid perfect gamete pericarp indehiscent zygote open-pollinated seeds pollen sac self-incompatible self-sterile tube nucleus cotyledon damping off direct-seeding emergence</p>
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				harden-off hybrid open-pollination pasteurization prothallus radicle scarification stratification viability Adventitious root bench grafting bridge grafting cleft grafting clone hardwood cutting herbaceous stem cutting in vitro leaf-bud cutting leaf cutting root cutting rootstock semi-hardwood cutting side grafting softwood cutting splice grafting whip-and-tongue grafting.
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UEQ: <ul style="list-style-type: none"> <i>What are the environmental</i> 				

<p><i>requirements for good plant growth.</i></p> <p>A: Soils A1: Explain the basic needs of plants. A2: Explain the factors that make up the plant's environment.</p> <p>B: Soil amendments B1: Growth regulators</p> <p>C: Weather and Climate C1: Effect on plant growth.</p>	<p>A: Soils A1: Describe different types of soil. A1: Explain ways to improve soil moisture and drainage. A2: Compose a balanced fertilizer program. A2; List major and minor plant food elements</p> <p>B: Soil amendments B1: List substances that stimulate plant growth B1: Identify and describe plant retardants B1: Explain the use of rooting hormones B1: Define biostimulants</p> <p>C: Weather and climate C1: Understand the effect of weather on plants C1: Understand the effect of climate on propagation, growth and harvest.</p>	<p>A: Soils ALT1: I can identify different soil types in a garden site. ALT2: I can improve soil moisture and drainage in a garden site. ALT3: I can describe different plant food elements ALT4: I can create a fertilizing program for a garden site.</p> <p>B: Soil amendments: BLT1: I know how to use products that help plants grow. BLT2: I can explain how plant retardants work. BLT3: I can successfully use rooting hormones. BLT4; I can define biostimulants.</p> <p>C: Weather and climate CLT1: I can maintain a garden site by monitoring the weather and climate.</p>	<p>A: Soils A1-2: students will study and describe the requirements for good plant growth in a written report A1-2: Student will take a soil sample for testing.</p> <p>B: Soil amendments B1-2: students will explain why chemical retardants are applied to floral crops and name two commonly used retardants. B1-2: Students will use root compounds to propagate plants. B1-2: Define biostimulants.</p> <p>C: Weather and climate C1: students will research what the local growing zone is. C1: Using weather information students will write a proposal for crops to grow and when to plant for a garden site.</p>	<p>A: Soils B' Soil Amendments A1-2 & B1-2: Chap 5 & 6 "Home Horticulture"</p> <p>Vocabulary: A horizon Adsorption aggregate anion B horizon C horizon cation cation exchange capacity composite sample compost E horizon eluviation hardpan horizon O horizon organic matter parent material ped R horizon soil profile soil structure soil texture subsoil tilth topsoil broadcast chelate chlorosis</p>
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UEQ:				constant feed fertigation interveinal macronutrient micronutrient needle-feeding post-plant preplant side-dressing C: Weather and climate C1: Chap 7 "Home Horticulture" Vocabulary: bolting frost-sensitive frost-tender frost-tolerant growing degree days lake effect macroclimate microclimate phototropism phytochrome vernalization
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<ul style="list-style-type: none"> • <i>How do you grow and maintain healthy plants?</i> • <i>What is the importance of integrated pest management to plant growth and health?</i> • <i>What safety precautions should be taken when using pesticides, herbicides and other chemicals</i> • <i>What insecticides may be used effectively for insect controls?</i> • <i>How do you identify fungus diseases, mollusks, nematodes and control infestations in plants?</i> • <i>How do you use herbicides effectively?</i> <p>A Plant Health A1: Pest identification A2: Understand the control of plant pests</p>	<p>A:Plant Health A1: Identify different types of pests A2: Explain biological control. A1-2: Determine how to deal with pests A1-2: Discuss integrated pest management. B: Pesticides: B1: Identify major classifications of pesticides. B1; Identify biological methods of pest control. B2: Determine the effects of pesticide exposure.</p>	<p>A:Plant Health ALT1: I can identify different types of pests. ALT2: I can explain how to control pests using a variety of methods. ALT3: I can define integrated pest management. B: Pesticides BLT1: I can explain various types of pesticides. BLT2: I can explain how to use pesticides and the effects of exposure.</p>	<p>A: Plant Health A1-2: Identify common indoor and outdoor garden pests. A1-2: Explain how common pests affect plant growth. B: Pesticides B1-2: Based on identification, recommend a control plan. C; Insecticides C1-2: Select various</p>	<p>A: Plant Health B: Pesticides & C: Insecticides B1-2 C1-2: Chap 9 "Home Horticulture"</p> <p>Vocabulary: contact pesticide degree day gradual honeydew host plant instar metamorphosis molt non selective pesticide pheromone trap selective pesticide systemic pesticide vector</p>
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<p>through natural biological and chemical means.</p> <p>B: Pesticides B1: Biological and chemical methods B2: Safety precautions</p> <p>C: Insecticides C1: Biological and chemical methods. C2: Safety precautions</p> <p>D: Infestations D1: Fungus diseases, nematodes and mollusks. D2: Biological and chemical control methods D3: Safety precautions.</p> <p>E: Herbicides E1: weed types E2: Biological and chemical herbicides</p>	<p>C: Insecticides C1: Identify major classifications of insecticides. C2: Select appropriate insecticide for identified insect.</p> <p>D: Infestation D1: Identify fungus diseases, nematodes, and mollusks. D2: Identify major classifications of chemical control D2: Identify biological methods of control. D3; Select appropriate insecticide for identified insect.</p> <p>E: Herbicides E1: Identify a weed problem and select a herbicide to control the problem. E2: Define and differentiate between selective and nonselective herbicides. E2; Describe how herbicides destroy weeds. E2: List possible reasons for failure of a herbicide.</p>	<p>C: Insecticides CLT1: I can identify various insecticides CLT2: I can select the appropriate insecticide for the identified pest.</p> <p>D: Infestation DLT1: I can identify fungus disease, nematodes and mollusks. DLT2: I can use the appropriate methods of chemical/biological control for the identified infestation.</p> <p>E: Herbicides ELT1: I can identify a weed problem and select an appropriate herbicide to control it. ELT2: I can explain what selective and nonselective herbicides.</p> <p>ELT3: I can explain how herbicides destroy weeds. ELT4: I can list reasons for the failure of a herbicide. ELT5: I will apply a herbicide correctly.</p>	<p>insecticides for different insect infestations</p> <p>D: Infestations D1-2: Determine the correct control methods for various infestations.</p> <p>E: Herbicides E1: Weed identification E2: selective and nonselective herbicide worksheet. E3: Diagnose why herbicides didn't work. B2,C2,D3,E3: Demonstrate the safe way to use pesticides, insecticides, fungicides and herbicides.</p>	<p>D: Infestations: D1-3: Chap 8 "Home Horticulture"</p> <p>Vocabulary: bacteria bactericide dew point fungal pathogen fungicide genetically modified organism necrotic pathogen pesticide plant pathologist sign symptom vector virus</p> <p>E: Herbicides E1-2 Chap 10 "Home Horticulture"</p> <p>Vocabulary: contact herbicide fumigation herbicide invasive nonselective herbicide noxious weed post-emergence herbicide pre-emergence herbicide selective herbicide</p>
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	E3: Properly apply a herbicide.			solarization systemic herbicide
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June 2019

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<p>UEQ:</p> <ul style="list-style-type: none"> • <i>How are vegetable and herb gardens planned, prepared, planted and cared for?</i> • <i>What are favorite garden vegetables?</i> • <i>How do you grow and maintain container grown plants?</i> • <i>What is the importance of the small fruit garden?</i> • <i>Why are flower gardens important in home gardening?</i> • <i>How do you grow and maintain healthy indoor plants?</i> <p>Home Gardening A: Vegetable and herb gardening A1: Select and prepare a</p>	<p>A: Vegetable and Herb Gardening. A1: List four items to consider when choosing a garden location A1: Identify soil type and make recommendations. A2: Identify the best varieties of 10 vegetables for local planting. A2: Show planting</p>	<p>A: Vegetable and Herb Gardening. ALT1: I can list what to consider when choosing a garden location. ALT2: I can plan a vegetable and herb garden. ALT3: I can plant seeds and transplants using a variety of techniques. ALT4: I can grow, harvest</p>	<p>A: Vegetable and Herb Gardening A1: Draw to scale a garden plan that includes at least 4 vegetables. A1; Know how to take a soil sample A2; Develop a vegetable garden plan where the plants are selected for the local growing conditions.</p>	<p>A: Vegetable and herb Gardening A1-4: Chap 13 "Home Horticulture" Vocabulary: Acclimate Allelochemical Allomone Annual Biennial</p>

<p>vegetable garden. A2: Demonstrate techniques for the planting of a small vegetable garden. A3; Care for a vegetable garden, producing a marketable-quality crop. A4: Cultivate,harvest and use vegetables commonly grown locally. B: Container garden B1: Plan container crops that can be grown locally. C: Fruits, nuts and berries. C1: Growing fruits, nuts and berries that will grow locally. D: Flower Gardening D1: Perennial plants D2: Annual plants E: Indoor gardening</p> <p>E1: Grow and maintain healthy indoor landscape plants.</p>	<p>techniques for seeds, and transplants. A3: Determine watering needs of vegetable plants. A3; List three ways in which water is applied A4; Select and grow herbs that complement vegetables. B: Container garden B1: List advantages and disadvantages to container gardening B1: Describe the characteristics of a good growing site. B1: Outline a winter storage plan for your container garden. C: Fruits, nuts and berries. C1; Identify the various fruits, nuts and berries that can be grown locally. C2: List the requirements for planting, fertilizing, harvesting, storing and using berry crops. D: Flower Gardening D1: Learn to design, plant and maintain perennial plants. D2: Learn to design and</p>	<p>and use plants and herbs in my vegetable garden. B: Container garden. BLT1: I can plan, plant and maintain a container garden. C: Fruits, nuts and berries. CLT1: I can plan and maintain a berry garden. D: Flower Gardening DLT1: I can use perennial and annual plants in my flower garden. E: Indoor gardening E1: I can plan, plant and maintain an indoor garden.</p>	<p>A2: Vegetables will be direct seeded and transplanted explaining the steps for both. A3: Develop a watering plan A4; Grow vegetables and herbs for use. B: Container Gardening B1; Prepare a container for growing various vegetables or herbs. C: Fruits, nuts and berries. C1: Develop a berry garden of plants that will grow locally. C2; Develop a fertilizing and water plan for the berry garden. D: Flower Gardening D1-2: Plan a garden using perennial and annual plants. E: Indoor gardening E1: Plan an indoor garden, growing medium, watering and fertilizing schedule.</p>	<p>Boilt Companion planting cool season crop Frost free period Frost sensitive Frost tender Frost tolerant harden off Heat hardy Perennial Semi hardy Very Hardy Pheromone</p> <p>B: Container Gardening Vocabulary: Aeration Balling Durability Insulation value pot in pot windbreak</p> <p>C: Fruit, Nuts and Berries; C1-2: Chap 14 'Home Horticulture" Vocabulary: Chilling Dripline Pollinizer Pomology Subtropical fruit</p>
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<p>UEQ:</p> <ul style="list-style-type: none"> • <i>What are the different principles in landscape maintenance?</i> 	<p>maintain annual flowers in the landscape. E: Indoor gardening E1: List the major concerns in caring for indoor plants. E1: Describe the best cultural conditions for a selected list of indoor plants.</p> <p>A: Landscaping</p>			<p>Subtropical nut Temperate fruit Temperate nut Tropical fruit Tropical nut</p> <p>D: Flower Garden D1-2: Chap 16 "Home Horticulture" Vocabulary: Annual biennial bedding plant border deadheading floriculture forcing Island bed Monocarp Perennial</p> <p>E: Indoor Gardening E1-2 Chap 12 "Home Horticulture" Vocabulary: Forcing Interiorscaping understory</p>
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<p>A: Landscaping</p>	<p>A: Identify the principles of landscaping, maintenance and xeriscaping. A: Describe the goals of the landscape profession.</p>	<p>A: Landscaping ALT1: I can identify the principles of landscaping, maintenance and xeriscaping. ALT2: I can make a landscaping plan.</p>	<p>A: Landscaping A: List the main objectives of good residential landscape A: Plan a landscape</p>	<p>A: Landscaping A: Chap 18 "Home Horticulture" Vocabulary: Deadman Elevation view final plan hardscape family area recreation area functional drawing perspective plan view preliminary drawing private area public area service area site analysis sleeper specimen plant</p>
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