

Month	Subject/Chapter	State Standard	Objectives
August	Unit 1 Introduction to Horticulture	<p>Biology Process Standard 2.1 HORTICULTURE</p> <p>Biology 2.2 Biology Process Standards 5.3 Biology Process Standard 1.1, 1.2 Environmental Science Process Standard 1.1, 1.2, 1.3</p>	<ul style="list-style-type: none"> <li>a. Trace the history of the horticultural industry.</li> <li>b. Classify plants using nomenclature and taxonomic terms.</li> <li>c. Organize the branches of the horticultural tree.</li> <li>d. Write the basic formulas for surface area, area of a triangle, and volume.</li> <li>e. Calculate mix ratios.</li> <li>f. Calculate slope ratios</li> </ul>
September	Unit 2 Safety Fundamentals	<p>Biology Process 3.5 Environmental Science Process Standard 3.5</p>	<ul style="list-style-type: none"> <li>a. Summarize the major causes of accidents.</li> <li>b. Discuss general job-safety rules. Determine appropriate use of personal protective equipment.</li> <li>c. Distinguish among federal safety code colors.</li> <li>d. Compare the types of fire extinguishers.</li> </ul>
October	Unit 6 Plant Functions	<p>Biology Process Standard 1.1, 1.2, 2.1, 2.2</p> <p>Biology 1.1.a</p>	<ul style="list-style-type: none"> <li>a. Discuss the function of plant cells.</li> <li>b. Analyze the role of vegetative structures on a plant.</li> <li>c. Compare the parts of monocot and dicot vascular</li> </ul>

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			<p>systems.</p> <p>f. Differentiate between the reproductive parts of a plant.</p> <p>g. reproductive parts of a plant.</p>
November	Unit 7 Plant Functions	Biology 1.1.a, 1.2,1.3, 5.1, 5.2	<p>a. Outline the major plant processes.</p> <p>b. Distinguish between plant growth regulators.</p> <p>c. Analyze plant responses to stimuli.</p> <p>d. Describe cultural and environmental factors affecting plant growth.</p>
December	Unit 8 Plant Growth Media	Biology 5.2, 5.3 Environmental Science 4.2 Environmental Science 4.1.c	<p>a. Discuss how soil is formed.</p> <p>b. Describe the composition ratios of an average soil.</p> <p>c. Distinguish among types of soil particles and textures.</p> <p>d. Explain how water moves through soil.</p> <p>e. Relate the importance of soil pH values.</p> <p>f. Describe requirements for a good plant medium.</p> <p>g. Discuss the variety of soil media materials.</p> <p>h. Describe the advantages of a soilless mixture.</p>
January	Unit 9 Fertilizers and Nutrients	Biology 5.2 Environmental Science 2.4 Biology Process Standard 3.5	<p>a. Determine required nutrients and deficiency</p>

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		Biology 5.2 Chemistry 4.2	<p>symptoms related to plant growth and development.</p> <ul style="list-style-type: none"> <li>b. Describe the types of commercial fertilizers.</li> <li>c. Compare manual indoor and outdoor application methods.</li> <li>d. Discuss rules for storing and handling fertilizers.</li> <li>e. Identify information required on fertilizer bags.</li> <li>f. Label components of a complete fertilizer formula (guaranteed analysis).</li> </ul>
February	Unit 11 Plant Propagation	Biology 1.1.a, 1.1.b, 1.1.c, 1.2, 3.3 Biology 3.3 Environmental Science 3.3	<ul style="list-style-type: none"> <li>a. Distinguish between sexual and asexual propagation methods. Describe factors that affect seed germination.</li> <li>b. Explain the methods of seeding.</li> <li>c. List types of seeds available.</li> <li>d. Define methods of promoting rooting.</li> <li>e. Explore the methods of asexual propagation.</li> </ul>
March	Unit 10 Greenhouse Watering Systems	Biology 1.1.a, 5.2 Environmental Science 2.2	<ul style="list-style-type: none"> <li>a. Compare types of watering and irrigation fertilizing</li> </ul>

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			<p>equipment.</p> <ul style="list-style-type: none"> <li>b. Identify environmental factors that affect watering.</li> <li>c. Discuss methods for irrigating greenhouse crops.</li> <li>d. Identify the proper procedure for using a greenhouse watering system for fertilization.</li> </ul>
April	Unit 12 Deciduous and Evergreen Plants	Biology 1.1.b, 3.1 Environmental Science 2.1	<ul style="list-style-type: none"> <li>a. Describe features used to identify deciduous and evergreen plants.</li> <li>b. Explain deciduous and evergreen plant forms.</li> <li>c. Discuss landscape uses for deciduous and evergreen trees and shrubs.</li> <li>d. Determine the qualities to consider when selecting a plant for a landscape.</li> </ul>
May	Unit 17 Floral Design	High School Visual Art 1.1, 1.2, 2.1, 2.3,3.3,3.4	<ul style="list-style-type: none"> <li>a. Discuss the history of floral design.</li> <li>b. Identify tools and materials used in floral design.</li> <li>c. Determine the purpose of common wire and ribbon sizes.</li> <li>d. Describe uses for common types of floral containers.</li> <li>e. Select from a list guidelines for using color in floral design.</li> </ul>

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