

Discipline: Agriculture	Sub-discipline: Viticulture
General Course Title: <b>Vineyard Propagation</b>	Min. Units: <b>1 Semester</b>
Proposed Suffix:	
<p>Course Description:  Introduction to the theory and practice of grapevine propagation. Topics include field budding, T-budding, side-whip grafting, root cuttings, and grafting to change varieties. Demonstrations will stress practical application of propagation theory.</p>	
Required Prerequisites or Co-Requisites <sup>1</sup>	
Advisories/Recommended Preparation <sup>2</sup>	
<p>Course Objectives: <i>At the conclusion of this course, the student should be able to:</i></p> <ul style="list-style-type: none"> <li>• Explain the reasons for budding and the types of grape propagation.</li> <li>• Understand basic grapevine anatomy and its relationship to propagation</li> <li>• Understand the principles of grapevine propagation.</li> <li>• Sharpen a knife correctly.</li> <li>• Demonstrate the essential requirements and procedures of budding.</li> <li>• Consistently cut good buds and place them on the rootstock properly.</li> <li>• Understand the nature of wood and select good budwood.</li> <li>• Demonstrate knowledge of the importance of correct variety selection.</li> <li>• Understand how to care for the vine after budding</li> </ul>	
<p>Course Content:</p> <ol style="list-style-type: none"> <li>1. Principles of Grapewine Propagation <ol style="list-style-type: none"> <li>A. Basics</li> <li>B. Micro-propagation</li> <li>C. Shoot tip propagation</li> </ol> </li> <li>2. Basic Vine Anatomy <ol style="list-style-type: none"> <li>A. Terminology</li> <li>B. Cambium</li> <li>C. Callus development</li> <li>D. Internal and external structures</li> </ol> </li> <li>3. Tool Selection and Care <ol style="list-style-type: none"> <li>A. Selection of proper propagation tools</li> <li>B. Sharpening and tool care</li> </ol> </li> <li>4. Propagation Techniques <ol style="list-style-type: none"> <li>A. Field budding</li> <li>B. T-budding</li> <li>C. Side-whip grafting</li> <li>D. Root cuttings</li> <li>E. Grafting</li> </ol> </li> <li>5. Nature of Wood <ol style="list-style-type: none"> <li>A. Types of wood</li> <li>B. Budwood selection</li> </ol> </li> </ol> <p><b>Vineyard Propagation (Content Continued)</b></p>	

<sup>1</sup> Prerequisite or co-requisite course need to be validated at the CCC level in accordance with Title 5 regulations; co-requisites for CCCs are the linked courses that must be taken at the same time as the primary or target course.

<sup>2</sup> Advisories or recommended preparation will not require validation but are recommendations to be considered by the student prior to enrolling.

6. Propagation A. Bud selection B. Bud placement C. Vine care after budding	
7. Certification Program A. Virus Free B. Certified versus non-certified	
Laboratory Activities: Individual Laboratory Activities are designed to support course objectives.	
Methods of Evaluation: Lecture Comprehensive Quizzes and Exams Written Critical Thinking Scenarios Problem Analysis and Solution Research and Term Papers	Methods of Evaluation: Laboratory Laboratory Skill Validation by Observation Laboratory Projects and Reports Laboratory Research Projects and Reports Laboratory Skill Practicum Exams
Typical Textbooks, Manuals, or Other Support Materials Plant Propagation, Hartman & Kester.	
<b>Statewide Articulation: Transfers as lower division elective</b>	
FDRG Lead Signature: _____ Date: _____	
Mark E. Bender, PhD CSU Stanislaus	
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