

Discipline: Agriculture	Sub-discipline: Forestry/Natural Resources
General Course Title: Silviculture	Min. Units: 3 Semester
Proposed Suffix: L	
<p>Course Description: Concepts of managing forests to provide continuing benefits to people including the basic concepts related to silvicultural systems, growth and value, timber stand improvement practices, harvesting and regeneration methods, and controlling forest pests. Both even-age and uneven-aged Silvicultural practices are covered. Laboratory required.</p>	
Required Prerequisites or Co-Requisites ¹	
Advisories/Recommended Preparation ²	
<p>Course Objectives: <i>At the conclusion of this course, the student should be able to:</i></p> <ul style="list-style-type: none"> • Understand the language of silviculture, including important terms that define the methods and practices; • Learn the characteristics and application of methods that comprise the practice of silviculture; • Understand basic concepts of economics, management, and landowner objectives that have a bearing on Silvicultural evaluations and decisions; • Demonstrate and develop treatment prescriptions based on specific long-term land objectives. 	
<p>Course Content:</p> <ol style="list-style-type: none"> 1. Introduction <ol style="list-style-type: none"> a. Silviculture as an orderly discipline b. The Silvicultural system c. Harvesting as a Tool 2. Regeneration <ol style="list-style-type: none"> a. Concepts b. Site Preparation c. Artificial regeneration d. Nursery and planting operations e. Seeding 3. Silvicultural Systems <ol style="list-style-type: none"> a. Uneven-aged Reproduction methods b. Selection System c. Growth and Development in Selection systems d. Even-aged Stand Development and Reproduction Methods <ol style="list-style-type: none"> (1) Clearcutting (2) Shelterwood (3) Seedtree (4) Early stand development 4. Thinning and its effects on stand development <ol style="list-style-type: none"> a. Effects of Thinning b. Thinning Methods c. Thinning regimes <p>Silviculture (Content Continued)</p>	

¹ 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.

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

<p>5. Improvement Cuttings</p> <ul style="list-style-type: none"> a. Salvage b. Sanitation c. Coppice d. Biomass e. Cut-to Length <p>6. Managing Quality Forests</p> <ul style="list-style-type: none"> a. Stand Protection & Health b. Site Classification <p>7. Forest Management</p> <ul style="list-style-type: none"> a. Timber Harvest Plans and the role of an RPF b. Economics in Forestry c. The Future of Forest Management <p>Laboratory Activities: Individual Laboratory Activities are designed to support course objectives.</p>	
<p>Methods of Evaluation: Lecture Comprehensive Quizzes and Exams Written Critical Thinking Scenarios Problem Analysis and Solution Research and Term Papers</p>	<p>Methods of Evaluation: Laboratory Laboratory Skill Validation by Observation Laboratory Reports Laboratory Research Projects and Reports Laboratory Skill Practicum Exams</p>
<p>Typical Textbooks, Manuals, or Other Support Materials</p> <p><u>Silviculture, Concepts and Applications</u>, 2nd ed., Nyland, R.D., McGraw Hill New York, 1996</p> <p><u>Silviculture Systems for the Major Forest Types In the United States</u>, Burns, R.M., U.S.D.A. Handbook 445 Rev. (H) (R), 1983</p> <p><u>Silvics of North America. Vol 1-Conifers Vol. 2- Hardwoods</u>, Burns, R.M. and Honkala, B.H., U.S.D.A. Handbook, 654 (H)(R), 1990.</p> <p><u>Principles of Silviculture</u>, Daniel, TW, Helms, JA, Baker FS, McGraw Hill, Inc., New York, (H)(R), 1979.</p> <p><u>Silvicultural Systems</u>, Matthews, J.D., Claredon Press Oxford, (H)(R), 1989.</p> <p><u>Choices in Silviculture for American Forests</u>, Society of American Foresters, Washington, D.C., (R), 1981</p> <p><u>The Practice of Silviculture</u>, 8th ed., Smith, D.M., John Wiley and Sons, Inc., New York. (H)(R), 1986.</p>	
<p>Statewide Articulation: CPSLO-FNR 365, articulated to other universities as specific equivalent by individual community colleges, additional statewide course equivalency articulation currently underway, also currently transfers as lower division elective</p>	
<p>FDRG Lead Signature:</p> <p>Mark E. Bender, PhD CSU Stanislaus</p>	<p>Date:</p>
<p>[For Office Use Only]</p>	<p>Internal Tracking Number</p>
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