Lassen Community College Course Outline

FOR 1 Introduction to Forestry

3.0 Units

I. Catalog Description

This course provides a general overview of forestry and enviornmental issues associated with sustainable natural resource management. Topics include: forest ecology, biology, dendrology, hydrology, forest succession, silviculture, forest terms, classification, natural resource conservation and management, and the role of resource management practices in fire suppression. Students will explore relationship between ecosystems and investigate the role of forests in climate change and other ecological functions of forests. This course has been approved for hybrid and online delivery.

Recommended Preparation: Successful completion of ENGL105 or equivalent multiple measures placement.

Transfers to CSU 51 Hours Lecture, 102 Expected Outside Class Hours, 153 Total Student Learning Hours Scheduled: Fall, Spring

II. Coding Information

Repeatability: Not Repeatable, Take 1 Time Grading Option: Graded Credit Type: Credit – Degree Applicable TOP Code: 0114.00

III. Course Objectives

A. Course Student Learning Outcomes

Upon completion of this course the student will be able to:

- 1. Describe major forest ecosystems and their characteristics
- 2. Demonstrate an understanding of physical and biological threats for forested lands.
- 3. Determine techniques and procedures used to manage forests and their ecosystems.
- 4. Apply the scientific method, ecological concepts and forestry principles to make informed forest management decisions.

B. Course Objectives

Upon completion of this course the student will be able to:

- 1. Describe major forest ecosystems and their characteristics
- 2. Demonstrate an understanding of physical and biological threats for forested lands.
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- 4. Apply the scientific method, ecological concepts and forestry principles to make informed forest management decisions.

IV. Course Content

A. Introduction to Forestry

- 1. Definition of Forestry
- 2. Types of Forestry
- 3. History of Forestry as a field of study
- B. Forest Biology
 - A. Tree biology
 - B. Dendrology
 - C. Biological diversity of forests
- C. Forest Ecology
 - 1. Ecology of the Sierra Nevada
 - 2. Geology and Soils
 - 3. Hydrology
 - 4. Wildlife
 - 5. Wildfire
 - 6. Climate
- D. Ecosystems
 - 1. Biodiversity
 - 2. Value to forest in society
 - 3. Protecting forest ecosystems
 - 4. Human and ecological interactions
- E. Siliviculture
 - 1. Concepts
 - 2. Forest Management
 - 3. Models of sustainable Forestry
- F. Forestry Issues
 - 1. Forest Health
 - 2. Climate Change
 - 3. Drought
 - 4. Development in the wild-urban interface
 - 5. Fire

V. Assignments

A. Appropriate Readings

Required reading assignments will be made from the textbook on a regular basis. In addition, journal and articles from outside resources including video, newspapers, magazines, internet, etc. pertaining to course topics will be incorporated in the class lectures and assignments.

B. Writing Assignments

Students will be required to complete short answer written assignments, quizzes and/or submit a research paper on a forestry topic as assigned by the instructor.

C. Expected Outside Assignments

Outside assignments may include take home short answer written assignments, required reading of supplementary literature, term paper(s), and group research and reports.

D. Specific Assignments that Demonstrate Critical Thinking

Critical thinking, writing assignments as listed above. Individual and group presentations of the course topics.

VI. Methods of Evaluation

Traditional Classroom Evaluation

Comprehensive Quizzes and Exams Written Critical Thinking Scenarios Problem Analysis and Solution Research and Term Papers

Online Evaluation

Same as face-to-face instruction including a variety of evaluation methods such as: research papers, asynchronous and synchronous discussions (chat/forum), exercises/assignments, online quizzes and exams, and postings to online website.

Hybrid Evaluation

All quizzes and exams will be administered during the in-person class time. Students will be expected to complete online assignments and activities equivalent to in class assignments and activities for the online portion of the course. Electronic communication, both synchronous and asynchronous (chat/forum) will be evaluated for participation and to maintain effective communication between instructor and students.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery Online Delivery

Tradition Classroom Delivery

Methods of instruction may include, but are not limited to: lecture (including guest speakers), PowerPoint, and other media presentations, discussions, scenarios, and group presentations.

Online Delivery

Online instruction will be utilized. 51 hours will be instructed online through the technology platform adopted by the District. Online delivery will consist of participation in forum-based discussions and posts, web links, email communications, lecture posts, exams and online lectures. Adding extra resources and other media sources as appropriate.

Hybrid Delivery

A combination of traditional classroom and online instruction will be utilized. Each semester a minimum of 17 hours, or 1/3 of the lecture hours, will be taught face-to face by the instructor and the remaining hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of exercises/assignments, lectures, visual aids, and practice exercises. Online delivery will consist of exercises/assignments, lecture posts, discussions, adding extra resources and other media sources as appropriate.

VIII. Representative Texts and Supplies

Donald Grebner, Pete Bettinger, Jack Siry, Kevin Boston, Introduction to Forestry and

Natural Resources, 2nd Edition, (2021) ISBN 978-012890029

Discipline/s Assignment IX. Forestry

X. **Course Status**

Current Status: Active Original Approval Date: 02/07/2023 Board approved 03/14/2023 Revised By: Curriculum/Academic Standards Committee Revision Date: