



CourseID:	NR 22	Discipline:	
TOP:	114.00 - Forestry	CB21:	Y = Not Applicable
CC Approval:	10/30/2014	Effective Date:	08/17/2015
BOT Approval:	12/09/2014	Degree/Transfer Status:	B = Transfer CSU
State Approval:		State ID:	CCC000559733
C-ID #:			

COURSE OUTLINE OF RECORD

Course Numbering:	
1-99 Associate degree applicable, transferable	200-299 Non-degree, non-transferable
100-199 Associate degree applicable, non-transferable	300-399 Noncredit

I. CATALOG INFORMATION

CourseID: NR 22 Title: Forest Protection Effective Term: Fall 2015

Discipline:

Catalog Description:

This course will cover major forest disease and insect problems, with an emphasis on their recognition and management. It will also include wildland fire prevention and management.

Pedagogical Course Cap: 25

Unit(s): 3

Weekly Lecture Hours: 3.00

Lecture Homework Hours:

Weekly Lab Hours:

Lab Homework Hours:

Total Contact hours: 54.00

Grading Basis: Graded only (A-F) Pass/No Pass option Pass/No Pass only

Advisories: English 125 and English 126

Open entry/exit: Yes No

Repeatable Course: Yes No

Only courses that meet one of the three following criteria are repeatable, select appropriate area:

- Repeatability necessary to meet lower division major requirements at a CSU / UC (Music, Performing Arts must provide appropriate documentation)
- Intercollegiate athletics course
- Academic or Vocational competition course

Meets RC GE, Graduation, or Competency requirements: Yes No

Area A Area B Area B1 Area B2

Area C Area D Area D1 Area D2

Competence in writing

Competence in reading

Competence in oral communication

Competence in mathematics

Computer Familiarity

Awareness of lifetime physical and mental wellness

Physical Education

Included in a degree or certificate program: Yes No

Noncredit Category: Y-Not Applicable

II. COURSE CONTENT

Student Learning Outcomes:

Upon completion of this course, students will be able to:

1. Explain basic forest health concepts, such as the characteristics of a healthy forest and the possible causes of forest health problems
2. Identify different management treatments for major forest disease and insect problems.
3. Explain the basics of wildland fire prevention and management in relation to forest protection.

Objectives:

In the process of completing this course, students will:

1. Identify different forest diseases(fungus, bacteria and virus).
2. Identify different forest insect pests.
3. Analyze case studies about different disease/pests and management strategies
4. Mechanisms and genetics of resistance to diseases.
5. Interactions among the various organisms sharing woody plant hosts.

Lecture Content:

1. The Concept of Forest Health
2. Fire Ecology and Fire Regime
3. Organizing for Fire Management
4. Fire Strategies for Forest Health
5. Wind and Forest Health
6. Abiotic and Animal-Caused Injuries
7. Introduction to Diseases
8. Disease-Causing Organisms
9. Nursery Diseases and Mycorrhizae
10. Root Diseases
11. Foliage Disease and Rusts
12. Stem and Branch Diseases
13. Management of Forest Diseases and Deterioration of Wood Products
14. Introduction to Forest Entomology
15. Principles of Forest Insect Management
16. Insect Defoliators
17. Bark and Ambrosia Beetles and Their Management
18. Wood Products Insects
19. Insects of Seed Orchards, Nurseries and Young Plantations

III. METHODS OF DELIVERY

- | | |
|---|--|
| <input checked="" type="checkbox"/> Lecture | <input type="checkbox"/> Hybrid |
| <input type="checkbox"/> Laboratory | <input type="checkbox"/> Live Interactive Two-Way Presentation |
| <input type="checkbox"/> Online | |

IV. METHODS OF INSTRUCTION

May include but not limited to:

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Demonstrations | <input checked="" type="checkbox"/> Discussion | <input checked="" type="checkbox"/> Guest Presenters | <input type="checkbox"/> Role Playing |
| <input type="checkbox"/> Guided Practice | <input checked="" type="checkbox"/> Guided Research | <input type="checkbox"/> Guided Writing | <input type="checkbox"/> Media/Audiovisual |
| <input checked="" type="checkbox"/> Small Group | | | |
| <input type="checkbox"/> Other (Specify) | | | |

V. SPECIAL FACILITIES Yes No

VI. SAMPLE HOMEWORK/OUT OF CLASS ASSIGNMENTS

- Reading Assignments
- Writing Assignments
 - Essays
 - Journals
- Projects
- Research
- Reading Reports
- Lab Reports
- Problem Solving
 - Computational
 - Non Computational
- Other

VII. METHODS OF EVALUATION/GRADING

Indicate percentage:

- | | |
|--|---|
| <input type="checkbox"/> Case Studies | <input checked="" type="checkbox"/> <u>20 %</u> Presentations |
| <input type="checkbox"/> Computational Problem Solving | <input type="checkbox"/> Project(s) |
| <input type="checkbox"/> Field Work | <input checked="" type="checkbox"/> <u>10 %</u> Quizzes |
| <input checked="" type="checkbox"/> <u>20 %</u> Final Exam | <input type="checkbox"/> Research |
| <input type="checkbox"/> Laboratory Exams | <input type="checkbox"/> Skill Demonstration(s) |
| <input type="checkbox"/> Laboratory Reports | <input type="checkbox"/> Essays |
| <input checked="" type="checkbox"/> <u>30 %</u> Exams | <input checked="" type="checkbox"/> <u>10 %</u> Class Participation |

- Non Computational Problem Solving
- Other, please specify

10 % Written assignments

VIII. RECOMMENDED MATERIALS OF INSTRUCTION

- Credit, degree applicable course, textbooks are college level
- Credit, non-degree applicable course

A. Textbooks:

1. Recommended Edmonds, R., Agee, J., & Gara, R.. Forest Health and Protection, 2 ed. Long Grove, IL: Waveland Press, Inc., 2011

B. Materials Other than textbooks:

IX. ATTACHED FILES

X. ADVISORY/PREREQUISITE/COREQUISITE JUSTIFICATION CONTENT
CONTENT REVIEW FOR ALL COURSES IN ADDITION TO BASIC SKILLS COURSES

REQUISITES	
Advisory -- ENGL 125 Writing Skills for College	
1. Write short papers with an introduction that includes a thesis statement, multiple body paragraphs with topic sentences, and a conclusion. 2. Write specific examples to support ideas within each body paragraph. 3. Make essays unified. 4. Use transitions appropriately within the essay. 5. Practice using the writing process when composing essays. 6. Develop an understanding of basic writing conventions, including parts of sentences, usage, spelling, vocabulary, etc. 7. Identify parts of speech and correct basic sentence errors, including fragments, fused sentences, and comma splices. 8. Evaluate and analyze ideas at a rudimentary level. 9. Select the appropriate audience, paying attention to word choice and using descriptive vocabulary while avoiding slang and instant messaging abbreviations.	1. In writing assignments or exams, the student must be able to organize concepts coherently and present ideas in a logical and methodical fashion. 2. Students must be able to compare, contrast and evaluate forest health and protection concepts in writing.
Advisory -- ENGL 126 Reading Skills for College	
1. Apply a variety of vocabulary skills for increased comprehension during reading. 2. Apply pre-reading and active reading strategies to increase success with and comprehension of unfamiliar texts. 3. Analyze expository texts to determine explicit/implicit main ideas and logical support, leading to author's intended meaning. 4. Determine basic organizational writing patterns to increase comprehension of expository texts. 5. Distinguish between fact and opinion and determine author's tone and purpose in non-fiction writings.	1. Apply a variety of vocabulary skills for increased comprehension during reading of Forest Health and Protection topics. 2. Apply pre-reading and active reading strategies to increase success with and comprehension of Forest Health and Protection. 3. Analyze Wilderness Navigation texts to determine explicit/implicit main ideas and logical support.