

Course Outline of Record

1. Course Code: NR-004
2.
  - a. Long Course Title: Introduction to Ecosystem Management
  - b. Short Course Title: INTRO ECOSYSTEM MGMT
3.
  - a. Catalog Course Description:
 

This course covers ecological, socioeconomic, and institutional factors involved in the management of ecosystems. The history of ecosystem management, terminology, examples of successful and unsuccessful techniques, applications towards forest, chaparral, desert, and grassland management, and the interfacing of science, people, and governments for successful programs, along with job opportunities in public and private natural resources management agencies are discussed.
  - b. Class Schedule Course Description:
 

This course covers the history and management of natural ecosystems.
  - c. Semester Cycle (if applicable): Fall
  - d. Name of Approved Program(s):
    - NATURAL RESOURCES AS Degree for Employment Preparation
4. Total Units: 3.00      Total Semester Hrs: 54.00  
 Lecture Units: 3      Semester Lecture Hrs: 54.00  
 Lab Units: 0      Semester Lab Hrs: 0  
 Class Size Maximum: 36      Allow Audit: Yes  
 Repeatability No Repeats Allowed  
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:
 

*Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)*

 Advisory: NR 001
6. Textbooks, Required Reading or Software: *(List in APA or MLA format.)*
  - a. Meffe, G.K. (2013). *Ecosystem Management* WA Island Press. ISBN: 9781610914888  
 College Level: Yes  
 Flesch-Kincaid reading level: 12
7. Entrance Skills: *Before entering the course students must be able:*

**Advisory Skills**

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  - a. Demonstrate an understanding of several fundamental concepts of ecology, environmental problems and conservation.
    - NR 001 - Demonstrate an understanding of several fundamental concepts of ecology, environmental problems and conservation.
  - b. Explain several basic ecological principles.
    - NR 001 - Explain several basic ecological principles.
  - c. Formulate solutions to reduce several major environmental problems.
    - NR 001 - Formulate solutions to reduce several major environmental problems.
  - d. Demonstrate an understanding of the selection and implementation of natural resource management procedures based on ecological and economic criteria.
    - NR 001 - Demonstrate an understanding of the selection and implementation of natural resource management procedures based on ecological and economic criteria.
8. Course Content and Scope:

Lecture:

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| <ol style="list-style-type: none"><li>1. Study landscape and ecosystem management scenarios.<ol style="list-style-type: none"><li>1. Concepts of landscape and scenarios</li><li>2. Evolution and history of natural resource management</li><li>3. Complexity, variations, and uncertainty in ecosystem management</li></ol></li><li>2. Ecological and biological factors important to ecosystem management<ol style="list-style-type: none"><li>1. Roles of genetics, species, and populations</li><li>2. Managing species, populations, or communities</li><li>3. Management for biodiversity</li></ol></li><li>3. The role of human communities in ecosystem management<ol style="list-style-type: none"><li>1. Principles for successful community involvement</li><li>2. Strategic approaches to ecosystem management</li></ol></li></ol> |
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Lab: (if the "Lab Hours" is greater than zero this is required)

9. Course Student Learning Outcomes:

1. Examine the basic skills and techniques involved in ecosystem management.
2. Examine the ecological, socioeconomic and institutional factors involved in the management of ecosystems.
3. Examine potential career opportunities in the field of ecosystem management.

10. Course Objectives: *Upon completion of this course, students will be able to:*

- a. Understand and apply the fundamental aspects of society's seeking of a balance between important ecosystem components and human impacts upon the environment.
- b. Recognize and describe the various components comprising ecosystem.
- c. Understand and explain basic theories involved in ecosystem management.
- d. Recognize various public agencies' involvement and mandates in the management of natural ecosystems in the United States.
- e. Define and articulate their career objectives.

11. Methods of Instruction: (*Integration: Elements should validate parallel course outline elements*)

- a. Discussion
- b. Individualized Study
- c. Lecture

Other Methods:

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| <ol style="list-style-type: none"><li>a. Lecture – introduce students to subject material</li><li>b. Class discussion – stress importance of public interaction in management plans</li><li>c. Computer graphics – enhance presentations</li><li>d. Subject based videos – highlight important factors of subject material during lecture</li><li>e. CD ROM/video presentations – introduce students to technologies available for ecosystem management</li><li>f. Guest speakers – introduce students to current land management programs</li></ol> |
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12. Assignments: (*List samples of specific activities/assignments students are expected to complete both in and outside of class.*)

In Class Hours: 54.00

Outside Class Hours: 108.00

a. In-class Assignments

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| <ol style="list-style-type: none"><li>1. Attend and participate in class lectures and discussions as well as group activities.</li><li>2. Viewing of video presentations, including the taking of notes thereon.</li></ol> |
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b. Out-of-class Assignments

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| <ol style="list-style-type: none"><li>1. Reading textbook assignments</li><li>2. Reading assigned materials</li><li>3. Writing a short paper describing interview or field exercise with a resource management professional.</li></ol> |
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13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- College level or pre-collegiate essays
- Written homework
- Term or research papers
- Reading reports
- Presentations/student demonstration observations
- True/false/multiple choice examinations
- Mid-term and final evaluations
- Oral and practical examination

14. Methods of Evaluating: Additional Assessment Information:

a. Attendance b. Class participation c. Quizzes: multiple choice, True – False, single paragraph to page long essay d. Final Exam: multiple choice, True – False, single paragraph to page long essay e. Term paper; 3 – 5 pages on special activity

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO - Career and Technical Education

Fulfill the requirements for an entry- level position in their field.

IO - Critical Thinking and Communication

Apply standard conventions in grammar, mechanics, usage and punctuation.

16. Comparable Transfer Course

<b>University System</b>	<b>Campus</b>	<b>Course Number</b>	<b>Course Title</b>	<b>Catalog Year</b>
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17. Special Materials and/or Equipment Required of Students:

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18. Materials Fees:  Required Material?

<b>Material or Item</b>	<b>Cost Per Unit</b>	<b>Total Cost</b>
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19. Provide Reasons for the Substantial Modifications or New Course:

need to update one word in an SLO

20. a. Cross-Listed Course (*Enter Course Code*): *N/A*  
 b. Replacement Course (*Enter original Course Code*): *N/A*

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000446032
- b. T.O.P. Code [CB03]: 11500.00 - Natural Resources
- c. Credit Status [CB04]: D - Credit - Degree Applicable
- d. Course Transfer Status [CB05]: B = Transfer CSU
- e. Basic Skills Status [CB08]: 2N = Not basic skills course
- f. Vocational Status [CB09]: Possibly Occupational
- g. Course Classification [CB11]: Y - Credit Course
- h. Special Class Status [CB13]: N - Not Special
- i. Course CAN Code [CB14]: *N/A*
- j. Course Prior to College Level [CB21]: Y = Not Applicable
- k. Course Noncredit Category [CB22]: Y - Not Applicable

# NR 004-Introduction to Ecosystem Management

l. Funding Agency Category [CB23]: Y = Not Applicable

m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (if program-applicable): NATURAL RESOURCES

*Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)*

23. Enrollment - Estimate Enrollment

First Year: 0

Third Year: 0

24. Resources - Faculty - Discipline and Other Qualifications:

a. Sufficient Faculty Resources: Yes

b. If No, list number of FTE needed to offer this course: N/A

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (Explain:)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

28. Originator Kurt Leuschner Origination Date 08/25/17