

Course Syllabus

Department: Conservation

Date: October 3, 2012

I. Course Prefix and Number: CON 256

Course Name: Fire Ecology

Credit Hours and Contact Hours: 3 credit hours and 3 contact hours

Catalog Description including pre- and co-requisites: *supporting data required for grade prerequisite of 'C' or higher.*

This course is designed to give students an appreciation and understanding of the ecological role of fire in a variety of North American ecosystems. Advantageous adaptations of species inhabiting fire prone ecosystems will be discussed. The effects of fire on plants and animals will be discussed within the context of ecological time scales. The effect of past state and federal policies concerning wild fire will be examined using various case studies. Students will also be introduced to the use of prescribed burning as a habitat restoration technique. (Also listed as WFS 256).

Relationship to Academic Programs and Curriculum including SUNY Gen Ed designation if applicable:

This is a required course for the Wildland Fire Suppression Certificate and can be used as an elective for Conservation degrees or Certificates.

II. Course Student Learning Outcomes:

Students will:

1. Describe the ecological role of fire in a variety of ecosystems. (professional competency)
2. Explain the importance of climate and weather on fire frequency and intensity. (professional competency)
3. Describe the physical and chemical adaptations of plants that require fire to regenerate. (professional competency)
4. Describe the use of prescribed burning to restore ecosystems. (professional competency)
5. Interpret the effects of past federal and state policies concerning wildland fire suppression. (professional competency)

College Learning Outcomes Addressed by the Course:

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|--------------------------------------|--|
| <input type="checkbox"/> writing | X computer literacy |
| X oral communications | <input type="checkbox"/> ethics/values |
| <input type="checkbox"/> reading | <input type="checkbox"/> citizenship |
| <input type="checkbox"/> mathematics | <input type="checkbox"/> global concerns |

critical thinking

information resources

III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed): *For each identified outcome checked, please provide the specific assessment measure.*

List identified College Learning Outcomes(s)	Specific assessment measure(s)
Oral Communication	Interactive poster presentation
Computer Literacy	Display of computer generated poster
Information Resources	Primary and secondary literature research for poster content

IV. Instructional Materials and Methods

Types of Course Materials:

Assigned readings

Methods of Instruction (e.g. Lecture, Lab, Seminar ...):

Lecture, group discussion, independent research, video

V. General Outline of Topics Covered:

1. Introduction/ Objectives
2. Pertinent Ecological concepts
3. Adaptations of plants
4. Regional Fire Ecology
5. North East
6. Appalachians
7. South East
8. Midwest
9. Rockies
10. Coastal Range
11. Fire and Restoration Ecology
12. Past and present Federal and State fire policies.