

University of Arkansas – Fort Smith
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General Syllabus

ECON 4223 Natural Resource Economics

Credit Hours: 3 Lecture Hours: 3 Laboratory or other types of Hours: 0

Prerequisite (s): Admission to the business program or consent of instructor.

Effective Catalog: 2024-2025

I. Course Information

A. Catalog Description

Explores relevant issues in the area of natural resource economics. Analytical tools such as willingness-to-pay, static and dynamic efficiency, direct controls, market-based regulation, impact analysis, cost-effectiveness analysis, and benefit-cost analysis are introduced. Analysis methods are then applied to current issues related to energy, forestry, marine resources, land, water, outdoor recreation, wildlife management, and biodiversity preservation.

II. Student Learning Outcomes

A. Subject Matter

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

1. Evaluate important natural resource issues facing both the United States and other nations
2. Define the role of property rights in the management of natural resources
3. Explain the consumption needs our natural resource base satisfies
4. Identify and apply the fundamental techniques used to analyze resource related issues such as willingness-to-pay, costs, and efficiency/sustainability
5. Understand and apply the criteria used to assess outcomes of resource related issues such as efficient markets, social and intertemporal efficiency, discounting and intergenerational equity
6. Discuss and evaluate various forms of public policy used to manage natural resources, along with their strengths and weaknesses
7. Use and interpret the tools used to analyze resource related decisions such as impact analysis, cost-effectiveness analysis, and benefit-cost analysis
8. Explain the unique challenge of identifying the benefits derived from natural resources and the methods used to value them
9. Understand the history and idiosyncratic issues surrounding the management and use of minerals, energy, forests, water, outdoor recreation, and wildlife

B. University Learning Outcomes

This course enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills - Students will identify a problem or issue. Students will generate solutions/analysis of problems/issues evaluated and will assess and justify the solutions and/or analysis.

Communication Skills (written and oral)

Students will compose coherent documents appropriate to the intended audience and will effectively communicate orally in a public setting.

III. Major Course Topics

- A. Introduction to resource related issues/terminology
- B. Resources and how they relate to the economy
- C. Willingness to pay/demand
- D. Costs/supply
- E. Efficiency and sustainability
- F. Markets and their outcomes
- G. Public policy options directed towards natural resources
- H. Principles of analysis of resource related issues
- I. Valuation of natural resources
- J. Minerals
- K. Energy
- L. Forests
- M. Water
- N. Outdoor Recreation
- O. Wildlife management
- P. Other topics as needs and interests dictate