湖北工業大學
HUBEI UNIVERSITY OF TECHNOLOGY

Course Title	Resource Economics
Course Code	ECON 3711
Semester	Spring 2027
Course Length	4 Weeks, 60 Contact Hours
Credits	4
Instructor	TBA
Office	TBA
Email	TBA
Prerequisite	ECON 2211 Intermediate Microeconomics

Course Description:

This course explores the economic principles and policies governing the utilization and conservation of natural resources. Students will explore topics such as land valuation, water resource management, extraction of minerals and energy resources, forest and fishery economics, and sustainability practices. Emphasis will be placed on dynamic modeling techniques to analyze decision-making over time, equipping students with the tools to address contemporary resource management challenges.

Course Goals:

Students who successfully complete this course will demonstrate competency in the following general education core goals:

- **Critical Thinking Skills** – Students will engage in analytical thinking, demonstrating the ability to critically evaluate, synthesize, and apply knowledge to complex problems, and construct well-reasoned solutions and arguments.
- **Independent Research and Inquiry** – Students will conduct independent research, utilizing academic resources to explore relevant topics, formulating research questions, analyzing data, and presenting findings in a coherent, scholarly manner.
- **Problem-Solving and Application** – Students will apply theoretical concepts and methodologies learned in the course to real-world problems, demonstrating the ability to develop practical solutions informed by academic inquiry.
- **Global and Cultural Awareness** – Students will gain awareness of the global and cultural contexts relevant to the course, appreciating diverse perspectives and considering the implications of their studies in a broader, international context.

Student Learning Outcomes:

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

- analyze the economic principles underlying the use and management of natural resources;
- apply economic models to assess the sustainability of resource use and the effectiveness of policy interventions;
- critique current resource management policies and propose alternative solutions based on economic theory;
- conduct cost-benefit analysis for resource-based projects and policies;
- assess the economic and environmental trade-offs in managing renewable and nonrenewable resources.

Textbooks/Supplies/Materials/Equipment/ Technology or Technical Requirements:
Barry C. Field, *Natural Resource Economics: An Introduction*, Second edition, Waveland Press Inc.

Course Requirements:

Participation and Attendance
Active participation in class discussions and attendance is crucial for success in this course. Participation will be assessed based on your engagement in discussions, asking questions, and contributing to group activities. Attendance will be recorded, and excessive absences may result in a lower participation grade.

Quizzes
There will be four quizzes during the semester, each worth 5% of the final grade. The quizzes will assess your understanding of the key concepts, theories, and models covered in the readings and lectures. The quizzes will be held during class time and will cover material from the preceding weeks.

Midterm Exam
The midterm exam will cover all material from Lectures 1-12. The exam will consist of multiple-choice questions, short-answer questions, and problem-solving exercises. The midterm is designed to test your ability to apply economic theories to real-world resource management problems.

Research Paper
Students will be required to write a research paper on a topic related to resource economics. The paper should be 5-8 pages long and include a critical analysis of a specific resource management issue, supported by economic theories and empirical evidence. Topics must be approved by the instructor, and the final paper is due in the last week.

Final Exam
The final exam will be cumulative and will cover all material from the course. It will be held during the university's final exam period and will consist of essay questions, problem-solving exercises, and case study analysis. The final exam will assess your ability to synthesize and critically evaluate the economic principles and policies discussed throughout the course.

Assessments: Activity	Percent Contribution
Participation and Attendance	10%
Quizzes	20%
Midterm Exam	20%
Research Paper	20%
Final Exam	30%

Grading:

Final grades will be based on the sum of all possible course points as noted above.

Grade	Percentage of available points
A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D	64-69
D-	60-63
F	0-59

Course Schedule:
The schedule of activities is subject to change at the reasonable discretion of the instructor. Minor changes will be announced in class, major ones provided in writing.

ECON 3711 Schedule		
Lecture	Topic	Readings
L1	Introduction to Resource Economics	Chapter 1
L2	Historical Perspectives on Resource Use	Chapter 1
L3	Property Rights and Externalities	Chapter 1&6
L4	Market Failures in Resource Economics	Chapter 6&7
L5	Benefit-Cost Analysis	Chapter 8
	Quiz 1	
L6	Environmental Valuation Methods	Chapter 9
L7	Dynamic Efficiency	Chapter 5
L8	Sustainable Development Concepts	Chapter 1
L9	Depletable Resources: Allocation	Chapter 9
L10	Extraction Costs and Resource Depletion	Chapter 10
L11	Transition to Renewable Energy	Chapter 2&10
	Quiz 2	
L12	Energy Economics: Fossil Fuels	Chapter 11
L13	**Midterm Exam**	/
L14	Renewable Resources: Forests	Chapter 12
L15	Renewable Resources: Fisheries	Chapter 13
L16	Land Economics	Chapter 14
L17	Water Resources: Scarcity	Chapter 15
L18	Water Management Policies	Chapter 15

L19	Climate Change: Economic Impacts	Chapter 16
	Quiz 3	
L20	Climate Change Mitigation Policies	Chapter 16
L21	Pollution Control: Theory	Chapter 19
L22	Pollution Control: Policy Instruments	Chapter 19
L23	Sustainable Development: Theory	Chapter 20
L24	Sustainable Development: Case Studies	Chapter 20
	Quiz 4	
L25	Case Study: Mineral Resources; Ecosystem Services	/
	Research Paper Submission	
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Accommodation Statement:

Academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow.

Academic Integrity Statement

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in coursework may receive a reduced or failing grade for the work in question and/or for the course.

Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Other Items:

Attendance and Expectations

All students are required to attend every class, except in cases of illness, serious family concerns, or other major problems. We expect that students will arrive on time, be prepared to listen and participate as appropriate, and stay for the duration of a meeting rather than drift in or out casually. In short, we anticipate that students will show professors and fellow students maximum consideration by minimizing the disturbances that cause interruptions in the learning process. This means that punctuality is a must, that cellular phones be turned off, and that courtesy is the guiding principle in all exchanges among students and faculty. You will be responsible for the materials and ideas presented in the lecture.

Assignment Due Dates

All written assignments must be turned in at the time specified. Late assignments will not be accepted unless prior information has been obtained from the instructor. If you

believe you have extenuating circumstances, please contact the instructor as soon as possible.

Make-Up Work
The instructor will not provide students with class information or make-up assignments/quizzes/exams missed due to an unexcused absence. Absences will be excused and assignments/quizzes/exams may be made up only with written documentation of an authorized absence. Every effort should be made to avoid scheduling appointments during class. An excused student is responsible for requesting any missed information from the instructor and setting up any necessary appointments outside of class.

Access, Special Needs, and Disabilities
Please notify the instructor at the start of the semester if you have any documented disabilities, a medical issue, or any special circumstances that require attention, and the school will be happy to assist.