湖北工業大學
HUBEI UNIVERSITY OF TECHNOLOGY

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| **Course Title** | Environmental Economics |
| **Course Code** | ECON 2241 |
| **Semester** | Spring 2027 |
| **Course Length** | 4 Weeks, 60 Contact Hours |
| **Credits** | 4 |
| **Instructor** | TBA |
| **Office** | TBA |
| **Email** | TBA |
| **Prerequisite** | ECON 1111 Microeconomics |

**Course Description**:

Environmental economics is concerned with the impact of the economy on the environment, the significance of the environment to the economy, and the appropriate way of regulating economic activity so that a balance is achieved among environmental, economic, and other social goals. The course serves as an introduction to the economics of the environment and natural resources, with an emphasis on environmental management and policy from an economic perspective. We will explore general resource and environmental issues and problems, such as those involving energy, water, agriculture, forests, biodiversity, and fisheries, and address pollution and environmental degradation.

**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 creative and/or innovative thinking, and/or inquiry, analysis, evaluation, synthesis of information, organizing concepts, and constructing solutions.
- **Communication skills** – Students will demonstrate effective written, oral, and visual communication.
- **Teamwork** – Students will demonstrate the ability to work effectively with others to support a shared purpose or goal and consider different points of view.
- **Social responsibility** – Students will demonstrate intercultural competency and civic knowledge by engaging effectively in local, regional, national, and global communities.

**Student Learning Outcomes:**

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

- demonstrate an understanding of environmental responsibility and natural resource scarcity, and its role within economic science and economic growth;
- demonstrate a basic understanding of the interdependent relationship between the economy and the environment, and the long-term thinking necessary to grow the world economy while simultaneously protecting environmental resources;
- evaluate the marginal benefits and marginal costs of environmental cleanup and contrast the optimal solution of the free market versus competing views of valuing the environment.

**Textbooks/Supplies/Materials/Equipment/ Technology or Technical Requirements**:

Tom Tietenberg & Lynne Lewis. 2020. *Environmental Economics and Policy*, 7th ed.

**Course Requirements**:

**Homework**
Over the semester there will be several problem sets and multiple reading assignments. No late assignments will be accepted and no assignment will be dropped from your grade. Grading will be done on a completion basis (note that quality can still be considered).

**Midterm Exam**
The midterm will cover all material (readings, problem sets, lectures) covered up to the exam date. The format will be short essay questions.

**Final Exam**
The final exam will cover all material (readings, problem sets, lectures) covered after the midterm and up to the exam date. The format will be short essay questions.

**Paper / Proposal**
The final portion of your grade will be a paper or proposal. It may be completed with one partner if you wish to team up. I expect the paper to be 3-6 single-spaced pages. The subject matter is up to you, so long as it is related to environmental economics. You may choose to either analyze a current or historical issue in environmental economics using the tools and models from class or create a proposal for a research project on an environmental issue. Further details will be provided concerning my expectations of the project.

| **Assessments: Activity** | **Percent Contribution** |
|---|---|
| Homework | 20% |
| Midterm Exam | 25% |
| Final Exam | 30% |
| Paper/Proposal | 25% |

**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 |

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|---|---|
| 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 2241 Schedule**

| Lecture | Topic | Readings |
|---|---|---|
| L1 | Introduction / Course Overview | Chapter 1 |
| L2 | The Role of Economics in Formulating and Implementing Policy<br>The Sustainability Problem and Economics | Chapter 1 |
| L3 | Property Rights | Chapter 2 |
| L4 | Negative Externalities, and Environmental Problems | Chapter 2 |
| L5 | The Role of Policy Instrument Choice in Efficient Environmental Management | Chapter 3 |
| L6 | Evaluating Trade-Offs: Benefit-Cost Analysis | Chapter 4 |
| L7 | Other Decision-Making Metrics | Chapter 4 |
| L8 | Sustainable Development: Defining the concept | Chapter 5 |
| L9 | Valuing the Environment: Methods and Examples | Chapter 5 |
| L10 | Ecosystem Goods and Services: Nature's Threatened Bounty | Chapter 6 |
| L11 | The Population Challenge<br>Food Security | Chapter 6 |
| L12 | Fisheries | Chapter 7 |
| L13 | Forests | Chapter 7 |
| L14 | **Midterm Exam** | --- |
| L15 | Climate Change I: The Nature of the Challenge | Chapter 8 |
| L16 | Climate Change II: The Role of Energy Policy<br>Fossil Fuels and Climate Change | Chapter 9 |
| L17 | Climate Change III: Carbon Pricing | Chapter 10 |
| L18 | Climate Change IV: Adaptation | Chapter 11 |
| L19 | Agriculture | Chapter 11 |
| L20 | Transportation: Managing Congestion and Local Pollution | Chapter 12 |
| L21 | Stationary-Source Local Air Pollution | Chapter 12 |
| L22 | Water: Managing Water Quality for Rivers, Lakes and Oceans | Chapter 13 |
| L23 | Toxics Policy and Environmental Justice | Chapter 14 |
| L24 | Meeting the Challenges: The Role of Economics<br>*Paper/Project Submission | Chapter 15 |
| L25 | **Final Exam** | --- |

**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.