Catalog Course Description: Prerequisite: ECON. 2102. Economic issues of both energy and environment. Energy issues include the historical development of energy resources, supply and demand considerations and projections of the future energy balance. Environmental issues are externalities, common property resources and government regulation. Policy considerations include environmental standards, pollution charges and property rights. Cost-benefit analysis and microeconomic theory are applied.

Course Objectives: This course addresses energy, other natural resources, and environmental issues, building primarily upon applied microeconomics with a focus on environmental market failures and market-based solutions. Tools include valuation of environmental goods, cost-benefit analysis, and the theory of non-renewable (e.g. oil) and renewable (e.g. fisheries) resources. Issues include global warming, running out of oil and other natural resources, and sustainability.


Additional Reading: *Commentaries*, Resources for the Future, especially:


I. Theory and Tools of Environmental and Resource Economics

<table>
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<tr>
<th>Date</th>
<th>Session</th>
<th>Topic</th>
<th>Chapter(s)</th>
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<tbody>
<tr>
<td>1/10, 1/15</td>
<td></td>
<td><strong>Introduction</strong></td>
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<tr>
<td>1/17, 1/22</td>
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<td><strong>Economic Efficiency and Environmental Protection</strong></td>
<td>2, <em>Martin Luther King Day 1/21</em></td>
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<td>1/24, 1/29</td>
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<td><strong>The Benefits and Costs of Environmental Protection</strong></td>
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<td>1/31, 2/5</td>
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<td><strong>The Efficiency of Markets, Review Ch’s 1-5</strong></td>
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<td>2/7</td>
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<td><strong>Exam I</strong></td>
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<td>2/12, 2/14</td>
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<td><strong>Market Failures in the Environmental Realm</strong></td>
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II. Non-Renewable and Renewable Resources: Energy and Other Natural Resources

2/19, 2/21  Managing Stocks: Natural Resources as Capital Assets
Chapter 6

2/26, 2/28  Stocks that Grow: The Economics of Renewable Resource Management
Chapter 7

Spring Break March 4-8

3/12, 3/14  Review Ch’s 5-7, Exam II

III. Market-Based Environmental Policies

3/19, 3/21  Principles of Market-Based Environmental Policy
Chapter 8  March 21 (11:59 PM): Last day to withdraw from course

3/26, 3/28  The Case for Market-Based Instruments in the Real World
Chapter 9

4/2  Market-Based Instruments in Practice
Chapter 10

IV. Sustainability and Economic Growth

4/4, 4/9  Chapter 11
Guest Speaker: Dr. Denis Arnold will discuss environmental sustainability (I will be in Taiwan April 3-15)

4/11  Guest Speaker: Dr. Craig Depken will present his environmental research.

4/16, 4/18  I will discuss sustainability (Ch. 11 and possibly other materials)

4/23, 4/25  Undergraduate Class Presentations from Resources for the Future (Energy Commentaries)

4/30  Graduate Class Presentations and Conclusion
Chapter 12

5/1 Reading Day

Th 5/9  8-10:30 AM  FINAL EXAM: Covers Class Presentations, Chapters 8, 9, 10, 11, 12
Course Grade: A = 90+; B = 80-89; C = 70-79; D = 60-69; F = <60

Exams I, II (20% each) Final Exam (30%)

Presentation on Energy Policy (10%): Class Presentation: Two-member teams will select one of the 16 issues in Part 2 (Energy) of 100 Issues or an energy issue Commentary written in 2010 to the present and do a 10-minute presentation. Post the issue you select on the Issues Discussion Board on Moodle with the names of the two team members. Only one team can select a given issue; first-come, first served. If you have a concern with your team member, let me know as soon as possible and if necessary, each of the team members will do an individual 5-minute presentation on the selected topic or a different topic. The presentation grade will depend on the quality of the presentation and the ability to respond to questions from the class and from me.

Class participation (10%): If you do not miss more than 2 classes, the minimum grade is 80% and the maximum grade is 100%. A higher grade will depend upon the quantity and quality of your participation. Each additional absence reduces the minimum and maximum grade by 10%. For example, if you miss 5 classes, the minimum grade is 50% and the maximum grade is 70%. In the event of close calls, e.g., You have a 79 average, the attendance/class participation grade is likely to determine whether you get a B or a C.

Homework (10%): Students will volunteer when homework is assigned to present solutions in the following class. Presentations should take no more than two minutes. Those students who do not volunteer will be selected (in advance) randomly. There may also be assignments that students turn in for a grade. Students who have an unexcused absence will receive a 0 for not presenting or turning in a solution when the homework is due.

I recommend strongly that you to do an initial reading before the material is to be discussed if at all possible. An initial reading will greatly improve your ability to make useful contributions to class discussions. Then, re-read more carefully after class. Tests will cover class notes, the text, and current events.

In the event of one missed exam due to documented illness or a death in the family, a make-up exam will take place on Reading Day, W May 1, at a time to be determined, unless another time can be arranged. A student missing two exams will need to withdraw from the course or else receive a grade of F in the course.

The syllabus is intended to serve as the daily schedule, but the instructor reserves the right to make alterations. Changes in daily coverage will be made at least one class in advance, while changes in exam dates or class presentations will be announced at least two classes (one week) in advance.
The Belk College of Business Diversity Statement

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

THE UNC CHARLOTTE CODE OF STUDENT ACADEMIC INTEGRITY

The UNC Charlotte Code of Student Academic Integrity governs the responsibility of students to maintain integrity in academic work, defines violations of the standards, describes procedures for handling alleged violations of the standards, and lists applicable penalties. The following conduct is prohibited in that Code as violating those standards:

A. Cheating. Intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices in any academic exercise. This definition includes unauthorized communication of information during an academic exercise.

B. Fabrication and Falsification. Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of altering information, while fabrication is a matter of inventing or counterfeiting information for use in any academic exercise.

C. Multiple Submission. The submission of substantial portions of the same academic work (including oral reports) for credit more than once without authorization.

D. Plagiarism. Intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgment of the source). The sole exception to the requirement of acknowledging sources is when the ideas, information, etc., are common knowledge.

E. Abuse of Academic Materials. Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource material.

F. Complicity in Academic Dishonesty. Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

A full explanation of these definitions, and a description of procedures used in cases where student violations are alleged, is found in the complete text of The UNC Charlotte Code of Student Academic Integrity. This Code may be modified from time to time. Students are advised to contact the Office of the Dean of Students or go to www.legal.uncc.edu/policies/ps-105.html to ensure they consult the most recent edition.