Course Name: Natural Resource Economics and Policy
Course Number: AEC 351
Credits: 3 Credits

Course Description
Application of principles of economics to identify the causes, consequences, and ways of dealing with natural resource problems, including problems associated with fisheries, forests, water problems, and land. Conceptual topics and policy applications are presented with emphasis is on developing students' skills in applying "economic way of thinking" about natural resource management. (Bacc Core Course) Prerequisites: (AREC 250 or AEC 250 or ECON 201 or ECON 201H) and MTH 111.

Course Catalog: AEC 351. NATURAL RESOURCE ECONOMICS AND POLICY (3). Application of principles of economics to identify the causes, consequences, and ways of dealing with natural resource problems, including problems associated with fisheries, forests, water resources, and land. Conceptual topics and policy applications. Emphasis is on developing students' skill in applying an economic way of thinking about natural resource management. (Bacc Core Course) PREREQS: (AEC 250 [D-] or AREC 250 [D-] or ECON 201 [D-] or ECON 201H [D-] ) and MTH 111

Baccalaureate Core Course Attributes: Core, synth, Global Issues

This course combines approximately 90 hours of instruction, online activities, and assignments for 3 credits.

Technical Assistance
This course will be delivered via Canvas where you will interact with classmates and the instructor. In Canvas you can access the learning materials, such as the syllabus, class discussions, assignments, projects, and quizzes. To preview how an online course works, visit the Ecampus Course Demo. For technical assistance, please visit Ecampus Technical Help. For 24/7 support for courses offered in Canvas, click the Help link in the upper right corner of any Canvas course site. Or, call the Canvas Support Hotline at 844-329-3084. You may also find helpful answers in the Canvas Student Guide.

GETTING STARTED

Canvas Login Information - http://ecampus.oregonstate.edu/services/start/canvas-login.htm?expand=yes

If you experience computer difficulties (e.g., downloading a browser or logging into the course) contact the OSU Computer Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.
Communication
Please post all course-related questions in the Discussions section (tab on left hand side of the Canvas course) so that the whole class may benefit from our conversation. Please email your instructor for personal matters. The instructor will respond within 24 hours to course related inquiries received Monday-Thursday, and will respond within 48 hours for course related inquiries received Friday-Sunday.

Learning Resources
- Additional Videos (Cadillac Desert Series and TED Talks): links provided in the Canvas site.
NOTE: For textbook accuracy, please always check the textbook list at the OSU Bookstore website. Sample syllabi may not have the most up-to-date information.

Measurable Student Learning Outcomes
1. Develop critical thinking skills and apply them to the evaluation of resource management decisions.
2. Develop an understanding of the role and application of economics in natural resource management.
3. Develop an understanding of the diversity of perspectives toward resources management.
4. Develop knowledge of the variety of resource issues in the past, present and future.
5. Analyze resources management issues and their relationship to: property rights, externalities, market structure, discount rates, and equity.
6. Gain a basic understanding of the economic analysis tools and valuation techniques used in natural resource economics and management.
7. Gain experience in preparing different types of writing.

This course meets the following outcomes for the OSU Baccalaureate Core requirements of Contemporary Global Issues:
1. Analyze the origins, historical contexts, and implications of contemporary global issues.
2. Explain the complex nature and interdependence of contemporary global issues using a multi-disciplinary approach.
3. Articulate in writing critical perspectives on contemporary global issues using supporting evidence.

Learning Activities and Outcomes
- **Self-Assessments and Practice Problems:** For some weeks you will have the opportunity to assess your learning by completing self-assessments and practice problems. Answer keys are provided. These are ungraded; do not submit them to the instructor.
- **Written Assignments:** Instructions for assignments are in the weekly folders in the Modules section of the Canvas site. Assignments should be posted for peer review before they are submitted to the instructor. In the Modules section of the Canvas site, there are links in the weekly folders, which should be used to submit these assignments. You can check the status of assignments (and other graded work) using the Grades section in the Canvas site.
- **Peer Reviews:** You will assist your peers (and they will assist you) by giving feedback on the written assignments in the discussion board (also, there are links to the Peer Review in the weekly folders in the Modules section). You will have the opportunity to incorporate that feedback into your written assignments before submitting assignments to the instructor for grading. You must submit relevant and thoughtful feedback before the closing date to receive credit. Feedback after the closing date is welcome but does not count toward your grade.
- **Discussions:** For some weeks you are asked to participate in graded discussions. These discussions are available in the Discussions section (and through links in the weekly folders in the Modules section). I monitor the site for content as well as participation. You must submit relevant and thoughtful contributions for each forum before its closing date to receive credit. Entries after the closing date are welcome but do not count toward your grade.
- **Quizzes**: A proctor is not required. Quizzes are online and timed. Quizzes will cover readings, lectures, notes, and self-assessment/practice problems. Questions may include short answer/essay, graphing, math, and definition of terms. Students will have a choice of which questions to answer. Each quiz mainly covers course content since the previous quiz.

- **Final Exam**: A proctor is not required. The final is online and timed. For the first part of the final, questions may include short answer/essay, graphing, math, and definition of terms. Students will have a choice of which questions to answer. For the second part of the final, students will read a short article and write a response. The final is comprehensive; it covers all course content.

- **Extra Credit Survey**: This survey is given in week 1 to gather information about students' opinions on in-person office hours. I use responses to determine my policy for offering in-person office hours.

- **Extra Credit Discussions**: The goal of these discussions is to provoke thought and communication about natural resource economics and policy. Students earn 0.5 points extra credit for participating in each weekly discussion (five total). Participation requires meaningful contribution to the discussion about natural resource economics and policy. A meaningful contribution could be a well-thought question, explanation, sharing information (from inside and outside of class), exploring ideas, etc.

**Grading and Exam Policies**

**Final Course Grade**

<table>
<thead>
<tr>
<th>A 92-100</th>
<th>B+ 88-89.9</th>
<th>C+ 78-79.9</th>
<th>D+ 68-69.9</th>
<th>F 59.9 and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- 90-91.9</td>
<td>B 82-87.9</td>
<td>C 72-77.9</td>
<td>D 62-67.9</td>
<td></td>
</tr>
<tr>
<td>B- 80-81.9</td>
<td>C- 70-71.9</td>
<td>D- 60-61.9</td>
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I reserve the right to adjust/curve the final grades upward if deemed necessary.

**Evaluation of Student Performance**

- **Written Assignments**  
  (2 @ 8 points)  16 points
- **Peer Reviews**  
  (2 @ 3 points)  6 points
- **Discussions**  
  (3 @ 6 points)  18 points
- **Quizzes**  
  (3 @ 10 points)  30 points
- **Final Exam**  
  (1 @ 30 points)  30 points

**Total**  
100 points

- **Extra Credit Survey**  
  (1 @ 1 point)  1 point
- **Extra Credit Discussions**  
  (5 @ 0.5 points)  2.5 points

**Pre-grading**

The instructor will not review and comment on students' work (e.g., written assignments) before the due date, because there is not enough time to do this for all students. Of course, the instructor welcomes questions and discussions about the course material.

**Incompletes**

**Students are responsible for requesting an incomplete (I) grade.** Incomplete grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child), and if the student has turned in 80% of the points possible (in other words, everything but the final exam). If you are having any difficulty that might prevent you completing the coursework, please take a moment to read OSU’s Incomplete Grade Policy.

**Makeup Exams and Quizzes**

Makeup exams will be given only for missed exams excused in advance by the instructor. Excused absences will not be given for airline reservations, routine illness (colds, flu, stomach aches), or other common ailments. Excused absences will generally not be given after the absence has occurred, except under very unusual circumstances.

**Time Limits for Exams and Quizzes**

Exams in this class are timed. Canvas automatically submits quizzes/exams once the time expires.

**Tutoring**

**NetTutor** is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Students connect to live tutors from any computer that has Internet access. NetTutor provides a virtual whiteboard that allows tutors and students to work on problems in a real time
environment. They also have an online writing lab where tutors critique and return essays within 24 to 48 hours. NetTutor can be accessed on the left-hand panel in the course’s Canvas site.

**OSU Student Evaluation of Teaching**

Course evaluation results are extremely important and are used to help me improve this course and the learning experience of future students. Results from the 19 multiple choice questions are tabulated anonymously and go directly to instructors and department heads. Student comments on the open-ended questions are compiled and confidentially forwarded to each instructor, per OSU procedures. The online Student Evaluation of Teaching form will be available toward the end of each term, and you will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. You will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Reading/viewing</th>
<th>Learning Activities</th>
<th>Due Dates</th>
</tr>
</thead>
</table>
| 1    | • Overview of NRE  
      • Economics/Math Review | Field: Ch. 1-2  
      L1-1  
      Econ/math review (Khan Academy) | Self-Assessment I: Two-Period Model  
      Discussion 1 (Mulholland’s Dream) | Post by Wednesday  
      Response post(s) by Saturday |
| 2    | • Supply and Demand in NRE  
      • Market Efficiency in NRE  
      • Cadillac Desert: Mulholland’s Dream | Field: Ch. 3-5  
      L2-1, L2-2  
      Video 1: Mulholland’s Dream | Quiz 1 | Submit Quiz 1 by Friday |
| 3    | • Market Inefficiency  
      • Public Policy | Field: Ch. 6-7  
      L3-1, L3-2, L3-3  
      Tragedy of the Commons | Quiz 2 | Submit Quiz 2 by Friday |
| 4    | • The BCA Framework | Field: Ch. 8  
      L4-1, L4-2 | Self-Assessment II: Dam Construction Analysis - BCA | |
| 5    | • Valuation of Natural Resources | Field: Ch. 9  
      L5-1, L5-2, L5-3 | Quiz 3 | Submit Quiz 3 by Friday |
| 6    | • Application: Mineral Extraction | Field: Ch. 10  
      L6-1, L6-2, L6-3 | WA1: Analysis Assignment Part 1  
      Peer Review 1 (for WA1) | Post Draft by Wednesday  
      Post Feedback by Friday  
      Submit Assignment by Sunday |
| 7    | • Application: Forestry | Field: Ch. 12  
      L7-1 | WA2: Analysis Assignment Part 2  
      Peer Review 2 (for WA2) | Post Draft by Wednesday  
      Post Feedback by Friday  
      Submit Assignment by Sunday |
| 8    | • Application: Fisheries | Field: Ch. 13  
      L8-1 | Quiz 4 | |
| 9    | • Application: Water  
      • Cadillac Desert: The Mercy of Nature | Field: Ch. 15  
      L9-1  
      Video 2: Mercy of Nature | Discussion 2 (Mercy of Nature) | Post by Wednesday  
      Response post(s) by Saturday |
| 10   | • End use/least cost approach | L10-1 | Discussion 3 (End use/least cost approach) | Post by Wednesday  
      Response post(s) by Saturday |
| Finals | | | Final Exam | Submit Exam by Wednesday |
Course Policies

Statement Regarding Students with Disabilities
Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS), with accommodations approved through DAS. Students are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Expectations for Student Conduct
Student conduct is governed by the university’s policies, as explained in the Office of Student Conduct: Information and Regulations.

Conduct in this Online Classroom
Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

Academic Integrity
Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit Avoiding Academic Dishonesty, or contact the office of Student Conduct and Mediation at 541-737-3656.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.

b) It includes:

(i) CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.

(ii) FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.

(iii) ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).

(iv) TAMPERING - altering or interfering with evaluation instruments or documents.

(v) PLAGIARISM - representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.

c) Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University's Academic Dishonesty Report Form, and will also be referred to SCCS for action under these rules.