SYLLABUS

Economics of Environment Protection – FALL 2017 Semester in Florence

COURSE TITLE & NO: ECON 324, ENVS 320: Economics of Environment Protection
DAYS, TIMES & ROOM:  Mo. 10.30 am – 11.30 am
                    Tu. 10.30 am – 11.30 am
                    Th. 10.30 am – 11.30 am
INSTRUCTOR: Tamara Evans
OFFICE HOURS: by appointment
CONTACT: email evanst@gonzaga.edu
tamarae_1999@yahoo.com

COURSE DESCRIPTION
The aim of this course is to explore the economic dimensions of environmental topics. The theory of externalities and market failure are used to provide the basis for applying microeconomic concepts to the study of environmental improvement. Analytical tools of cost-benefit analysis will be explained and applied to problems with environmental dimensions. The course covers environmental topics such as air and water pollution, deforestation, non-renewable resource depletion, recycling, global warming. Theoretical and policy formulations and alternative solution will also be studied with respect to environmental management issues such as air and water quality, and solid and hazardous waste.

OBJECTIVE/GOALS
Upon completion of this course, students should be able to:
- Describe common market failures: externalities and public goods
- Understand the problems of estimating the value of non-market goods
- Apply microeconomic theory to the study of environmental issues.
- Describe how Pigovian taxes, cap and trade and other instruments that address these problems
- Identify and critically evaluate alternative environmental policy instruments.

METHOD
Lectures, case studies, videos, class discussions, and field trips (whenever possible).
Most class sessions will follow a lecture/discussion format. Lectures will be related to the assigned readings-- and devoted to presentation and discussion of concepts, frameworks, and techniques useful for understanding environmental economics. But, some of the time in most class periods will be devoted specifically to discussion of the assignment material--assigned questions, exercises, or short cases.

Teaching Commitment
I am a great believer in active learning and use a variety of methods to encourage discussion and interaction on the issues the course presents. I am very committed to providing an enjoyable learning environment that is both exciting and challenging. I use various assessment strategies that allows me to fairly assess student learning regardless of the student's learning styles. Above all, I treat my students with the utmost respect, creating an environment where students feel safe to frankly discuss topics which they might otherwise be reluctant to address. For all my classes, regardless of size, I pride myself on learning the names of all my students and treating each student as an individual.

Decorum
- Cell-phones off; no food and beverages admitted, except for bottled water,
- No technical devices are accepted (laptops, i pads, etc)
- Disrupting behaviour (doing something else during the course, engaging in private conversations, playing with electronic devices) is not accepted and if repeated it will negatively affect the attendance and participation part of the final grade or may result in removal from the course.

**ATTENDANCE**
Refer to college attendance policy

**Late Arrival and Early Departure**
Coming late and leaving early will affect attendance and participation grade. Class attendance will be recorded at the start of each class. Please be considerate of your classmates and come **ON TIME**! If a student arrives more than 10 minutes after the start of class, he/she will be considered **ABSENT** on that day. Coming in to class late is rude and distracting to fellow students and the instructor. It also displays a serious lack of professionalism on student’s part.

Students are also required to stay the entire duration of the class period, any student who leaves before the end of the class period without the consent of the instructor will be marked **ABSENT**.

**Travel is NEVER an excuse for absence from class.**

*****Class participation**
Students will be evaluated based on their ability to understand and apply the reading material to class discussions.

All students begin the term with a **C+** grade for participation. Contribution to class discussion will raise this grade. Habitual absence from class and disrupting class (i.e., talking, text-messaging, etc.) will reduce this grade.

Each student will be expected to provide opinions, feedback and challenge the instructor’s and other student’s assumptions, in a respectful manner. A correct, active and responsible participation is highly recommended otherwise the participation grade will be strongly affected.

All students “at risk” of failing will always be alerted by the instructor who will also inform the student’s tutor.

**ASSIGNMENTS / TESTS / ASSESSMENT**

**Term paper (due Thursday, November 30th)**

**Subject**: The paper should provide a critical evaluation of an environmental problem, policy, or proposal, with particular attention to its **economic** aspects. The paper should illustrate that you can apply some of the concepts and methods developed in class to a real world problem. It should not be limited to a simple **description** of the issue, but should include your own **economic analysis**.

**Outline of the term paper:**
1. Introduction of the Environmental Problem
2. Economic Reason behind the Environmental Problem (what are the economic reasons behind such a problem; what is the economic explanation) (hint: externality, public good, asymmetric information, etc)
3. Policy implications (what is being done; examples from anywhere in the world)

Topics may be one of the following headings (please note that this list IS to give you an idea and it is not a comprehensive list).

Possible term paper topics:
The topics listed here are not designed to limit your possibilities, but rather to indicate the range of possible topics. You can choose from the list or come up with a topic on your own. Each topic can be chosen by only one student.
- International Environmental Agreements
- Environmental Capitalism: Can Acting Sustainably be Profitable for Firms?
- Electricity Deregulation: What have been the Economic and Environmental Impacts?
- Pricing Traffic Congestion
- The Economics of Marine Reserves
- Population as a Source of Environmental Degradation: What is the Evidence?
- Clean Energy Standards
- Subsidies for Renewable Energies
- The Economics of Sustainable Agriculture
- Pricing Water
- Does the Regulation of International Trade to Protect Endangered Species Do More Harm than Good?
- Strategies for Protecting Endangered Species: Approaches and Results
- The Future Renewable Energies
- Decision Making under Uncertainty: Application to Climate Change
- The nature and impact of global warming
- Climate Change and Adaptation
- Green marketing
- Environmental policy in the EU
- Accidental oil spills
- How Can Environmental Regulation Enhance Innovation and Competitiveness?

**General guideline for term paper**

- An outline of the essay must be in my hand by **Thursday October 12th**
- A sample of bibliography ([3 monographs books, and working papers, and at least 3 articles from reputable journals](#)) should be **included in the outline**, with an explanation of its relevance to your proposed research paper. Depending on your topic, internet search may yield relevant documentation, however you are strongly encouraged to base your research on scholarly publications, and don’t assume that research is the same as doing an internet search. **You are discouraged from using Wikipedia as a source.**
- Term paper must be in the 2000-2500 word ranges
- Please use at least 4 monographs and 5 articles from reputable journals as sources for the final term paper.
- It must be turned in **at the beginning of class on the due date.** Any exception will result in a lowering of your grade.
- Handwritten papers are not accepted.
- Papers sent through email are not accepted.
- Papers will be evaluated not only on the quality of the content, but also on their objectivity, use of source and logical coherence.
- Term papers will be returned with comments before the end of the semester.

N.B. Extensions for the paper will not be granted, so please do not ask. If you are absent on the date the paper is due, the paper must reach me nonetheless.

**Quizzes**: There will be two quizzes. Each quiz consists of 20 T/F and MC questions will be administered at the beginning of the class. Students who are late or miss the class miss the quiz, and gain zero (0) points for that quiz. Quizzes can not be made up.

***Pop quizzes***

Pop quizzes may be given during the course of the semester. Pop quizzes will be administered at the beginning of class and will cover the material discussed in the previous class as well as the assigned material for the day. Pop quizzes are meant to encourage students to take the time to prepare for class; the pop quizzes could have a negative or positive affect on student’s final grade.
EXAMS

- **Mid-term exam**  Midterm exam is held in class at the regular class meeting time. Time and day may not be modified for any reasons. No show at exam F = 0 credit.
  Mid-term exam will cover course textbook material, hand outs, class lectures, controversial issues discussed in class. Format: the exam consists of two parts:
  **Part I:** 30 Multiple choice and T/F questions. Each correct answer is worth 2 points, summing up to 60 points in case of 30 correct answers.
  **Part II:** 3 short essay questions/problem must answer any two questions.

- **Final exam**  Final Exam is held in class at the regular class time.
  Final exam is cumulative and will cover course textbook material, hand outs, class lectures, controversial issues discussed in class, and Supplemental videos viewed in class. The format of final exam is the same as mid-term exam.
  Remember that the dates of the exam can NOT be changed for any reason, so please organize your personal schedule accordingly.

**Instructor’s note:**
You should recognize from the very beginning that there is much more material in your reading assignments, cases, and related exercises than is possible to cover, repeat, and develop in detail in class. Lectures and class discussions will only touch on some of the most important issues. Thus, although tests tend to place somewhat more emphasis on topics that are covered in both the text and in class, the focus of the two exams is on the core material from your reading. Class lectures and related assignments will be directly relevant to your understanding of the material and other aspects of your performance (i.e., participating in class discussions of cases, and essay portion of the final exam), but the exams will go into depth on what you have been assigned to read.

**EVALUATION / GRADING SYSTEM**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Term paper</td>
<td>20%</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>30%</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Failure to submit or fulfil any required assessment element results in failure for the class.

**GRADING SCALE:**

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 – 99.9%</td>
<td>A</td>
<td>90 – 93.9%</td>
<td>A-</td>
</tr>
<tr>
<td>87 – 89.9%</td>
<td>B+</td>
<td>80 – 82.9%</td>
<td>B-</td>
</tr>
<tr>
<td>77 – 79.9%</td>
<td>C+</td>
<td>70 – 72.9%</td>
<td>C-</td>
</tr>
<tr>
<td>64 – 69.9%</td>
<td>D+</td>
<td>less than 60</td>
<td>F</td>
</tr>
</tbody>
</table>

Exams will be closed books and closed notes. If you must make up an exam due to certain circumstances, the prior permission of instructor is required. If that is the case, you must show the proper document(s).

To receive credit, assignments need to be turned in at the beginning of class on due date.
Significance for the final grade of attendance and participation

A: the student has no absence, is punctual and respectful with the professors and the classmates, is always prepared for class (has done the reading and writing assignments); He/she vividly participates in class discussions and contributes with interpretations which prove fine critical sense and creativity, using a grammatically correct, semantically rich and conceptually clear language.

B – the student is respectful and punctual, is prepared for class, participates in discussions, has a good level of understanding the issues under focus and an appropriate use of language.

C – has aadequate but schematic or superficial understanding of the texts and issues under focus, is not always prepared for class, uses a simple language.

Grades Significance for written assignments

Grade A: the work is an excellent synthesis of elaborated course in-puts, extensive reading and original ideas; it is well articulated in a balanced argumentation and formulated in a clear, fluent style.

Grade B: the work shows a good elaboration of the course inputs, a well-conducted discourse and a good use of bibliography; it has a good level of style.

Grade C: the work proves a basic understanding of the research issue, but does not use the bibliography properly/or does not express ideas in a persuasive clear style or lacks in discourse planning, therefore needing improvement.

Grade D: The work is acceptable, but weak in terms of formulating and discussing the question under focus and organizing the discourse. It relies on non-academic sources and does not, in general, comply with the requirements, unless in minimal way.

Grade F: The work is not acceptable in terms of the basic requirements or has not been submitted in time.

Grade 0 : the work has not been submitted

Grade 0 + Main Campus Report: the work has been plagiarized.

Grades Conversion

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+ = 67-69
D = 65- 66
F = below 65

ACADEMIC DISHONESTY:

The following statement is taken from the Gonzaga University Academic Honesty Policy (2002):
“Without honesty the humanist, Catholic and Jesuit traditions could not continue; knowledge would be neither taught nor learned. Even the less obvious ethical and educational principles in our Mission Statement require honesty. Creativity without honesty becomes self-indulgence, intelligence without honesty degenerates into mere mental power. Self-knowledge without honesty cannot rise above self-deception, and the desire for truth becomes a craving for the rewards of those who have honestly found the truth. Without honesty, a concern for others may easily serve as a disguise for manipulation. The commitment to justice requires honesty, for to cheat, to fabricate, or to plagiarize is to act unjustly. Professional expertise requires honesty: cheating or plagiarizing denies the essence of what it means to be a professional in any field.

Because honesty is so essential to the traditions, ideals, and goals that define its kind of education, Gonzaga is committed to protecting academic honesty. This commitment entails practical consequences” (p. 2).

“ACADMIC HONESTY consists of truth-telling and truthful representations in all academic contexts;

ACADEMIC DISHONESTY consists of any of the following activities, which are defined and illustrated in Section II [of the Academic Honesty Policy, 2002]: cheating, fabrication, plagiarism, and facilitating academic dishonesty” (p. 2).

PENALTIES for academic dishonesty are spelled out in detail in the policy, which can be found on the Gonzaga University web site: http://www.gonzaga.edu/Campus-Resources/Offices-and-Services-A-Z/Academic-Vice-President/AcademicHonestyPolicy2002.pdf

The School of Business adheres to the Academic Honesty Policy (2002) in determining appropriate consequences for violations of the policy. For further information, refer to the School of Business website: http://www.gonzaga.edu/Academics/Colleges-and-Schools/School-of-Business-Administration/undergraduate/AcadHonesty.asp

DISABILITY ACCOMODATIONS

Gonzaga University, the School of Business, and the course instructor will certainly make reasonable accommodations for persons with documented disabilities. Students should notify Disability Resources, Education, & Access Management (DREAM) located at Foley 203B (509-313-4134) and the instructor of any special needs during the first week of class.

TEXT BOOK / READINGS / SOURCES

The required textbook is:

Article: Hardin, G. (1968). The Tragedy of the Commons. Science 162 (copies provided by the instructor)

Additional Readings
In addition, students are expected to read the following useful magazines and newspapers:
Content:
The following list is tentative. Topics may be added, subtracted, or reordered. Any such changes will be announced.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Course introduction, course materials, learning goals</th>
<th>What is Environmental Economics?</th>
<th>The Economy and the Environment (Field and Field, Chapter 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday Sept. 19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday Sept. 21</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 2</th>
<th>Demand and Benefits (Field and Field, Chapter 3)</th>
<th>Video: Trashed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Sept. 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday Sept. 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday Sept. 28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Oct. 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday Oct. 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday Oct. 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 4</th>
<th>The Economics of Environmental Quality (Field and Field, Chapter 5)</th>
<th>Video: Bag It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Oct. 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday Oct. 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday Oct. 12 (research outline due)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Oct. 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday Oct. 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday Oct. 22 QUIZ 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 6</th>
<th>Intro to Empirical Environmental Analysis (Field and Field, Chapter 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Oct. 23</td>
<td></td>
</tr>
<tr>
<td>Tuesday Oct. 24</td>
<td></td>
</tr>
<tr>
<td>Thursday Oct. 26 MIDTERM EXAM</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 7</th>
<th>Estimating the Benefits of Environmental Policies (Field and Field, Chapter 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday Oct. 30</td>
<td></td>
</tr>
</tbody>
</table>
| Week 8 | Environmental policy  
(Field and Field, Chapter 8)  
“Measuring the Costs of Air Pollution and Health in China.”  
Resources, Fall  
2009  
| Week 9 | Overview of the Theory of Environmental Policy  
(Field and Field, Chapter 9)  
Decentralized Environmental Policies  
(Field and Field, Chapter 10)  
**Video:** Trashed |
| Week 10 | Command and Control Standards  
(Field and Field, Chapter 11)  
Emissions Taxes  
(Field and Field, Chapter 12)  
“Christie Pulls New Jersey From 10-State Climate Initiative”.  
New York Times,  
May 26, 2011  
| Week 12 | Transferable Discharge Permits  
(Field and Field, Chapter 13) |
| Week 13 | International Environmental Policy  
(Field and Field, Chapters 20 and 21) |
| Week 14 | FINAL EXAMS WEEK  
FINAL EXAM (TBD) |