

## *Course Syllabus*

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### **Course Information**

EC0N 4333 001  
Environmental Economics  
Fall 2016, MW 1:00-2:15  
Room: SOM 12.210

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### **Professor Contact Information**

Prof. Kevin Siqueira  
Office: GR 2.537  
Phone: 972-883-6480  
Email: [siqueira@utdallas.edu](mailto:siqueira@utdallas.edu)  
Hours: TTH 1-2 (& by appt.)

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### **Course Pre-requisites, Co-requisites, and/or Other Restrictions**

ECO 2302, Principles of Microeconomics

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### **Course Description**

This course considers environmental problems from the perspective of economics. This is a pragmatic approach since it recognizes the interactions of humans and the environment. Not only do we take this into account when framing the problem, but also during analysis and when giving environmental policy recommendations. Far from a weakening of environmental advocacy, standards, or commitment, this approach should be viewed as a way of harnessing the powerful forces of individual incentives and the market in order to achieve socially desirable outcomes.

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### **Student Learning Objectives/Outcomes**

Specifically we will be concerned with problems, phenomena, and behavior as they pertain to man's relationship between the economy and the environment. Key concepts that will be developed, used, and investigated include: the notion of market failure, externalities and public goods, social welfare analysis, economic efficiency, social benefits and costs, damage and abatement cost functions, optimal environmental quality, the equimarginal principle, cost effectiveness, benefit-cost analysis, and the theory of environmental policy. In addition, if we have time, we will also spend some time investigating the problem of collective action at the international level and in doing so, the student will be introduced to some of the basic concepts in game theory.

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### **Required Textbooks and Materials**

Environmental Economics: An Introduction, 6th Ed., Barry C. Field and Martha K. Field (Boston: Irwin/McGraw Hill, 2012)

The Green Paradox, A Supply Side Approach to Global Warming, Han-Werner Sinn (Cambridge, MA: MIT Press, 2012)

Additional Readings: will be available as either handouts or from the UTD Library.

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### **Assignments & Academic Calendar (Outline of the Course)**

**Introduction**

Economics and Environmental Economics

Chapter 1 (Field &amp; Field)

**The Economy and the Environment**

Perspective/Materials Balance

Chapter 2 (Field &amp; Field)

**Analytical Tools**

Demand &amp; Supply

Chapter 3 (Field &amp; Field)

Market Outcomes &amp; Economic Efficiency

Chapter 4 (Field &amp; Field)

Application to the Environment (balancing between reduced environmental damages and the costs of pollution reduction)

Chapter 5 (Field &amp; Field)

**The Environment and Ethics**

Handout

**Cost-Benefit Analysis**

Procedure and Measurement of Cost and Benefits (including Contingent Valuation Methods)

Chapters 6, 7, 8 (Field &amp; Field), and Handout

**Environmental Policy**

Overview/Criteria for Evaluation

Chapter 9 (Field &amp; Field)

Decentralized Policies

Chapter 10 (Field &amp; Field)

Command and Control Policies

Chapter 11 (Field &amp; Field)

Incentive Based Policies: Taxes &amp; Subsidies

Chapter 12 (Field &amp; Field)

Incentive Based Policies: Pollution Permits

Chapter 13 (Field &amp; Field)

**Special Topics – International Environmental Issues**

Comparative Environmental Policies

Chapter 18 (Field &amp; Field)

Economic Development and the Environment

Chapter 19 (Field &amp; Field)

The Global Environment

Chapter 20 (Field &amp; Field)

International Environmental Agreements

Chapter 21 (Field &amp; Field)

**Note:** Selected readings and readings from Sinn will be assigned throughout the semester. Students will be expected to read the assignment and hand in answers to specific questions or turn in a one page summary detailing the basic points and conclusions of the assigned reading.

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**Grading Policy**

First Midterm	25%
Second Midterm	25%
Final	30%
Assignments/Exercises (Randomly Graded)	20%

**Exam Dates:** 1<sup>st</sup> Midterm, September 28 or October 5, 2<sup>nd</sup> Midterm November 2 or 9, Final, Finals Week (December 9-15)

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**Course & Instructor Policies**

**No make-up exams will be given. Any absence from an exam that is not excused, will result in a grade of zero. For an absence to be excused, the student must supply the appropriate documentation and give advance notification.** By advanced notification, the professor must be notified at least a full day (or more) prior to the exam date if possible. Note well that notification by email or by phone hours before the exam or even the night before does not constitute sufficient advanced notification for most cases. For the *extreme* case where such advanced notification is not feasible, the student must not only supply the appropriate documentation for the absence itself, but must also supply the appropriate documentation related to his or her failure to notify the professor in a timely manner. Excused absences are granted only

for medical or immediate family emergencies (severe personal illness or injury, death of a parent, etc) and since no make-ups are given, the student's grade will be determined by adjusting the appropriate weights for the previous and/or remaining exams or by giving a cumulative final exam.

The same policy as specified above, also applies to the turning in of assignments when they are due.

**Homework is due in class on the assigned date. Late and unexcused homework will not be accepted.**

**There are also no exemptions from taking the final.**

**If these policies are unacceptable or if you feel that you are unable to meet these requirements, then you should drop this course.**

**Attendance Policy:** All students are expected to attend all classes and I'll occasionally take attendance. Any student missing more than 3 classes or coming sufficiently late can be considered ineligible for any rounding up of his or her overall average for their final grade.

Since I expect students to take a mature attitude and approach to learning, I also expect students to have the same mature behavior and attitude in the classroom. This means no talking in class, entering and leaving the classroom, coming to class sufficiently late, or leaving class early. Such behavior is not only disruptive but also disrespectful to fellow students as well. **Therefore such behavior will not be tolerated.**

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## **Student Conduct & Discipline**

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Series 50000, Board of Regents, The University of Texas System*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

## **Academic Integrity**

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the

following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

## **Email Use**

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

## **Withdrawal from Class**

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

## **Student Grievance Procedures**

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

## **Incomplete Grade Policy**

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

## **Disability Services**

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:  
The University of Texas at Dallas, SU 22  
PO Box 830688  
Richardson, Texas 75083-0688  
(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

## **Religious Holy Days**

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

*These descriptions and timelines are subject to change at the discretion of the Professor.*