International Trade and the Environment: Resources and Trade
Department of Economics
Course Outline

Course: Economics 611.10
Independent Study

Term: Fall 2014
Section: 02

Time: MW 14:00 – 15:15

Place: SS 403

Instructor: Prof. M. Scott Taylor

Office: SS 428

Telephone: (403) 220-8912

Office Hours: M 16:30 – 17:30

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Course Outline

This course will explore the relationship between resource use and international markets. During the course we will try to answer three basic questions about the link between openness to international markets and resource use using both theoretical and empirical methods. The questions we will try to answer are: (1) How does the ability to sell resource products on international markets affect resource extraction? (2) How does it affect national and international measures of wellbeing? (3) In light of the answers to the first two questions, what role, if any, is there for government policy?

There isn’t a large or cohesive literature that addresses these questions, and that is why I have said the course will explore the relationship. To some extent we are breaking new ground, and looking for cohesion across a literature that is anything but cohesive. There is a small literature on international trade and renewable resources; and even smaller one on non-renewables; a quite different literature on trade in non-renewables such as fossil fuels; and, some discussion of how openness to international markets affects the development of resource rich countries. We are going to sample from these areas and from others in economics to try to weave together some answers in 13 weeks. For Ph.D. students looking for research topics, this course may be quite useful in formulating a research question to pursue. Students are going to learn a bit about international economics, a bit about resource economics, and a bit about doing research in economics. The course would be a great complement to a specialty in international economics or environmental/resource/energy economics at either the M.A. or Ph.D. level.
To proceed we will be discussing in class academic research from journal articles, and some book chapters. The required theory will come from resource economics and international economics. As a result, the course will have a series of Methods lectures where I will spend an entire lecture outlining a tool used in this area of research. These tools will then be employed in our discussions of specific papers. Methods lectures will occur about once a week. The remaining lectures will discuss academic research papers on the topic. You will be expected to have read the relevant paper carefully before class and be prepared to discuss it with your fellow students. I will discuss the paper in a lecture format, but will ask for class input throughout. A typical reading workload is 150 pages per week/per course.

Prerequisites

There are really no formal prerequisites; all that is required is a good understanding of microeconomic theory, some mathematical sophistication, and a willingness to work hard. The course will use techniques and methods used in first year graduate courses in microeconomics, macroeconomics, and international trade. I understand that some students will be taking these courses simultaneously. It is open to both M.A. and Ph.D. students.

General Outline of Topics

**Method Lectures (not necessarily in order)**

1. Making sense of Optimal Control Theory
2. What you really need to know about solving differential equations
3. A pain-free introduction to Phase-Plane Techniques
4. Convergence and the Solow Model
5. What is Hotelling’s rule and why should I care?
6. The ins and outs of the Gordon-Schaefer Model
7. David Ricardo inventor of the simplest general equilibrium model with production.
8. Ricardo’s followers: Dornbusch, Fischer, and Samuelson
9. Ricardo’s followers: Eaton and Kortum

Grade Determination and Final Examination

There will be one midterm in mid October worth (35% total), three short reports on individual papers assigned during the term (45%), and class participation marks of (20%). The short reports will be critical reviews of research papers that I do not discuss in class. Each report cannot be longer than 5 pages, double-spaced in 12 point font.

Organization

The primary means of communication outside of the class will be by email list. Therefore, one requirement for this course is for each student to obtain and monitor an email account. All general announcements regarding readings, etc. will be made via email.
Tentative Reading List (required readings are indicated with *)

1. Renewable Resources: Theory


**2. Non-Renewable Resources: Theory**


3. Resource Economics in an Open Economy: Theory


4. Resource Economics in an Open Economy: Empirical Applications


