ECOLOGICAL ECONOMIC THEORY

Wednesdays, 2:35-5:35 PM

Gund Conference Room

Instructor    Professor Joshua Farley
Office        205 B Morrill Hall
Phone         802-656-2989
E-Mail        jfarley@uvm.edu
Office Hrs    TBA

COURSE DESCRIPTION

Economics is frequently defined as the study of the allocation of scarce resources among alternative desirable ends, within and between generations: how we balance what is physically and ecologically possible with what is morally, socially and psychologically desirable. Economics should be based on the best available science from across the disciplines, but must ultimately be driven by normative values.

This course introduces ecological economics as a transdisciplinary field dedicated to solving pressing economic, social, and environmental problems. Ecological economics assesses the desirable ends of economic activity (a normative question), the nature of the available resources required to achieve those ends, existing institutions, and our knowledge of human behavior before deciding how to allocate. The most widely accepted desirable end in conventional economics is the satisfaction of subjective preferences through market allocation, which boils down to the maximization of monetary value. The desirable ends in ecological economics emphasize sustainability, justice, and a satisfactory quality of life for this and future generations of humans and other species. Ecological economics also differs from conventional economics in assuming that the economic system is embedded in a social system, which in turn is embedded in a finite global ecosystem. The economy is a physical system subject to the laws of both physics and ecology. The global ecological-economic system is highly complex adaptive system, non-linear and continually evolving. Simple answers to difficult questions rarely exist, and answers that were correct in the past may no longer be correct today.

The scientific method is based on falsification: one can never prove a theory to be true, but if empirical evidence contradicts a theory, then it can be proven false. Many ecological economists adhere to the philosophical tradition of pragmatism, which extends empirical testing to normative values. For example, many economists argue that individual choice (typically as expressed in the market) should drive all economic decisions, but ecological economists assert that this normative value should be tested in light of the results it generates. Pragmatism also holds that the goal of good theory to generate accurate predictions and acceptable solutions to real life problems rather than prioritizing an accurate representation of reality. We will use current events to ‘test’ both positive theory and normative values.

OBJECTIVES

1. **Construct** the pre-analytic vision of ecological economics
2. **Formulate** a whole systems approach to ecosystem structure and function.
3. **Formulate** a whole system approach to the human subsystem structure and function.
4. Evaluate and design policy tools based on ecological economic principles.

5. Explore possible future paths for ecological economics

6. Construct a web site to facilitate the teaching and learning of ecological economics

7. Develop peer mentoring relationships and connections to the Gund Institute learning community

**ORGANIZATION and EVALUATION**

The class is organized as a graduate student seminar, with weekly readings and discussion, group and individual presentations, and work on teaching/learning modules for an ecological economics website. The class is designed to be very interactive, with lots of good discussion, and depends entirely on your active engagement. When you fail to do the readings and come to class unprepared, you let down the entire class.

Each class will focus on a major theme in ecological economics. For each theme I have selected at least three articles, book chapters, or other readings with an emphasis on introducing you to leading ecological economists as well as important topics. During the portion of each class I will present the overall theme and lead discussion. During the second portion of class, one or two different students will present important papers on the week's topic (one each, or two jointly) and lead discussion; alternatively we will break up into groups by University to discuss the questions you previously provided. You can find a paper on your own, or present one of the recommended readings. E4A students should try to present material Two days prior to each class, all students will submit carefully thought out discussion points based on that week’s readings. This means that all readings must be done in advance. I will select particularly good discussion points, and those students who submitted them will lead discussion for the final portion of the class (45 minutes - one hr.). Throughout the semester, I will expect students to keep up on current events, and integrate those relevant to the week’s material into the discussions. We will treat current events as empirical tests of the theories presented.

Our major project will be to develop web based modules based on each class topic. Conventional economics textbooks typically have accompanying websites that provide professors with all the material needed to easily deliver a course, but there is little of this nature available in ecological economics. Student groups will therefore build detailed modules that provide reading materials, lecture notes and slide presentations, exercises and assignments, evaluation materials, and any other material required to effectively deliver a course or facilitate self-learning. Among other options, we could ask ecological economists from around the world to develop teaching modules based on their own work, perhaps a specific paper. We could design the site to allow users to review the modules and creators to modify the modules in response in an interactive peer review process. The International Society for Ecological Economics will host the website, which will likely be mirrored on the Gund site as well. I have draft modules for many topics that you can improve upon. There will be due dates for different components of the modules over the course of the semester. In lieu of any exams, you will be required to write an editorial relating course topics to current events, and submit it for publication. Those students who are published will receive an automatic 100%.

**GRADING**

UVM Students will be evaluated based on:

Overall class participation: Coming to class having done the readings and carefully thought about their implications for an ecological economy (10%)

Paper presentations: You will prepare a 15 minute presentation of a paper related to your module topic followed by an additional 15 minutes to discuss the reading (10%)
Discussion points submitted every class: Every week students will submit carefully thought out questions or comments designed to provoke discussion (15%)

Leading class discussion: A couple of times during the semester I will ask you to lead a discussion based on your discussion points (10%)

Editorials: You will write and submit a 700 word editorial relating course topics to important real world events (15%)

Final modules: Following a template that I will provide in by the 3rd week, you will produce a teaching module on one of the course topics (40%)

The courses will be listed separately at McGill and York, and the professors of record will likely do the grading. I will provide my comments on participation and presentations, but the McGill and York professors may grade somewhat differently.

EDUCATION IN THE ANTHROPOCENE

This class is part of the UVM-McGill-York Economics for the Anthropocene program and will therefore include students from all three universities. Basically, our goal is to create a transdisciplinary PhD program in ecological economics, broadly defined. Each year’s cohort of students will focus on a specific transboundary ecological-economic problem. This year’s cohort will focus on climate justice, which I will try to integrate into the readings and discussions. UVM students will meet in the Gund conference room, and McGill and York students in a room on their own campuses connected via interactive video networking. One challenge is that McGill, UVM and York have slightly different schedules, so a couple of classes will be asynchronous.

CERTIFICATE of GRADUATE STUDY in ECOLOGICAL ECONOMICS

For UVM students, this course serves as a gateway to the Certificate of Graduate Study in Ecological Economics. The EE Certificate is a 15-credit program, including 3 core classes and 2 electives. The core classes include this theory course, plus Ecological Economic Methods (previously Dynamic Systems Modeling) and Ecological Economic Practice (also known as Gund ateliers). Candidates for the EE Certificate also have to demonstrate graduate-level experience across four competencies in natural sciences, social sciences, management, and quantitative methods. This can be done with courses (usually at least the 2 electives are used), but also previous graduate classes and life experience. Note that the Graduate College will only allow 6 credits to be transferred into the 15-credit program (including earned or currently enrolled UVM credits). Admission into the EE Certificate program is separate from admission into an MS or PhD program at UVM, requiring an additional (short) application.

ACADEMIC INTEGRITY

Any breach of the Code of Academic Integrity will be considered grounds for failure in the course. See: http://www.uvm.edu/~uvmpgp/ppg/student/acadintegrity.pdf. Collaboration on homework and course projects is required; however everyone is expected to be an equal partner. Copying or free-riding on the sweat of others will be considered grounds for individually failing assignments and/or the class.

USEFUL SOURCES

Center for the Advancement of the Steady State Economy (CASSE)
Ecological Economics Journal
http://www.euroecolecon.org/publications/
Post-carbon Institute
Real World Economic Review
|         |              | Recommended:
|         |              | Recommended:
|         |              | Recommended:

Recommended:

Bauman Y, Rose E. Selection or indoctrination; Why do economics students donate less than the rest? Journal of Economic Behavior & Organization. 2011;79(3):318-327


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Recommended:


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<th>Date</th>
<th>Microeconomics: The valuation debate</th>
<th>Macroeconomics: goals and measurements; the steady state</th>
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Recommended: 
Center for the Advancement of the Steady State Economy (CASSE). See articles by Brian Czech, among others.


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<tr>
<th>Mar. 23</th>
<th>Macroeconomics: Money, finance and speculation</th>
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<td>Real Economic Review issue 64 - 2 July 2013 4 short articles Is it a bubble? 2 Steve Keen - A bubble so big we can't even see it 3 Dean Baker - Are the bubbles back? 11 Ann Pettifor - The next crisis 15 Michael Hudson - From the bubble economy to 21</td>
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<th>Mar. 30</th>
<th>Macroeconomics: Distribution</th>
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<td>OXFAM, 2016. AN ECONOMY FOR THE 1%: How privilege and power in the economy drive extreme inequality and how this can be stopped, Briefing papers. OXFAM.</td>
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<td>April 6</td>
<td>Macroeconomics: International trade and financial contagion</td>
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<th>Policy applications</th>
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<td>Farley, J., 2012. Ecosystem Services: The Economics Debate. Ecosystem Services 1, 40-49. (Note that there is some overlap between this article and the one I co-authored for the efficiency module.)</td>
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Curiously, many conventional economists argue that economics is a positive science, while ‘desirable ends’ implies normative goals. They therefore argue that ends need not be desirable per se, and that the economy should try to satisfy individual preferences (weighted by purchasing power) regardless of the desirability of the consequences. However, this libertarian assumption merely defines ‘desirable’ as whatever the consumer prefers.