

Introduction to Ecological Economics

ENVS 141, NR 141

Time and Location:

Fall 2016 (Aug 29-Dec 9)
MWF 9:40 – 10:30am
105 Votey Hall

Instructors:

Eduardo Rodriguez
eduardo.rodriquez@uvm.edu
PhD Candidate, Rubenstein School
Graduate Fellow, Gund Institute for Ecol. Economics
Office Hours: Weds 11:00-12:30
(Also by appointment)
105 Johnson House

Michael Wironen
mwironen@uvm.edu
PhD Candidate, Rubenstein School
Graduate Fellow, Gund Institute for Ecol. Economics
Office Hours: TBD
(Also by appointment)
105 Johnson House

Teaching Assistant:

Sam Bliss
PhD Student, Rubenstein School
Graduate Fellow, Gund Institute for Ecological Economics

Course Description:

Ecological economics (EE) provides an alternative to mainstream economics that is aligned with contemporary understanding of earth systems, human biology, and deliberative democracy. While the mainstream is oriented around market efficiency and economic growth, EE is a transdisciplinary study of the economy with a three-tiered focus on sustainable scale, equitable distribution, and efficient allocation. Human economies are embedded in social systems, which in turn are contained and sustained by ecosystems. Economic institutions are historically contingent on social contracts, resource scarcity, and co-evolution with biophysical systems.

The class serves two broad goals: (1) to establish a knowledge base in ecological economics from which to build subsequent problem-based learning courses at UVM, and (2) acquire problem solving skills to address complex socio-ecological challenges. To serve these goals, weekly readings from a textbook in ecological economics will introduce topics, and student groups will then apply course material in a course project.

Pre-requisite:

At least sophomore-standing.

Required Reading:

Daly, Herman and Farley, Joshua. Ecological Economics: Principles and Applications. Island Press, Washington, DC, 2011 (second edition).

Expectations:

Students are expected to come to class prepared. This means arriving on time, reading materials ahead of time and being engaged during the 50-minute period. Cell-phones are not permitted in UVM classes, please turn them off and put them away. Laptops are only permitted for note-taking. Browsing the web and checking social media is not acceptable during class. If a student is struggling with any aspect of the course, please communicate with the instructors before the problem gets out of hand.

Course Project:

The class project will be a structured debate on topics and/or policies related to our economy and environment. Students will work in groups throughout the semester to research their assigned/chosen topic and prepare a final policy brief that will inform the debate. The final week of the course will be dedicated to the in-class debates. Specific guidelines with rules and instructions will be laid out ahead of time.

The goals of the project are to have students 1) engage with current policy issues that affect our environment, society and economy; 2) apply concepts and tools from ecological economics when developing their position on these issues; 3) structure their knowledge and arguments in a clear manner; 4) develop a strong, defensible presentation.

Test and Homework Policy:

You will have the opportunity to reflect on readings and classroom discussion through regular take-home tests and short writing assignments. Late homework or tests will not be accepted for credit. If you have a valid reason for missing a deadline, you should communicate with your instructors ahead of time.

Grading:

Your course grade will be determined in part by individual work, and in part by group work and peer evaluation. The following is a rough guide to your final grade in this class:

Individual Assessments:

15%	1st Take-Home Exam (due 10/07)
15%	2nd Take-Home Exam (due 11/09)
15%	Final Take-Home Exam (due 12/14)
10%	Attendance and participation
5%	Short write-up

Group Projects:

25%	Policy Brief (5% Part 1; 10% Part 2; 10% Part 3)
15%	Debate

Academic Success

UVM has a variety of programs to help our students succeed, including ACCESS, the Learning Co-op, Student Support Services, and the [Writing Center](#). See: <http://www.uvm.edu/aspprogs/>.

Academic Integrity:

Any violation of UVM's Code of Academic Integrity is grounds for failing individual assignments and/or the class. See: <https://www.uvm.edu/policies/student/acadintegrity.pdf>.

ACCESS

In keeping with University policy, and student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated in an accommodation letter to faculty. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course Contact ACCESS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; or www.uvm.edu/access.

The Center for Health and Wellbeing

The University of Vermont has an excellent center for mind and body health. If you are feeling stressed, tired, confused etc., check out <http://www.uvm.edu/~chwb/>.

Course Schedule:

The following dates and associated readings provide a general roadmap for the evolution of the class. Dates are flexible to allow for extending discussion on certain topics, course project planning, and guest lectures drawn from the wealth of expertise in ecological economics and associated disciplines on the UVM campus. (Note: D&F = Daly & Farley textbook.)

Class sessions with an asterisk (*) will be led by Michael Wironen. All others will be led by Eduardo Rodriguez or a specified guest speaker.

	Topic	Date	Content	Assignment	Reading	
<i>Introduction to Ecological Economics</i>						
Economic Foundations	<u>Week 1</u> Economics as an evolving field of study	M 29-Aug	Introduction/What is economics and why study it?		D&F chapter 1	
		W* 31-Aug	A brief history of economic thought		Sandelin chapter 3	
		F 2-Sep	Basic principles of economics		Mankiw chapter 1	
	<u>Week 2</u> Microeconomic Concepts	M 5-Sep	NO CLASS (Labor Day)			
		W 7-Sep	How markets work		D&F chapters 8 & 9	
		F* 9-Sep	Market failures and failed assumptions		D&F chapter 10	
	<u>Week 3</u> Macroeconomic Concepts	M 12-Sep	Measuring the economy		D&F chapter 14	
		W 14-Sep	How money works (Josh Farley)		D&F chapter 15	
		F 16-Sep	Pareto efficiency and distribution		D&F chapter 16	
	<u>Week 4</u> International Trade	M* 19-Sep	International trade		D&F chapter 18	
		W* 21-Sep	Globalization (Laura Sonter)		D&F chapter 19 / Sonter 2014	
		F 23-Sep	Recap #1/Group work		no reading	
Ecological Economic Foundations	<u>Week 5</u> Foundations of Ecological Economics	M 26-Sep	The fundamental vision of ecological economics		D&F chapter 2	
		W* 28-Sep	Principles and objectives of ecological economics		Daly 1980	
		F 30-Sep	The physical nature of the economy		Boulding 1966	
	<u>Week 6</u> The Environment and its Resources	M 3-Oct	Abiotic and biotic resources		D&F chapters 5 & 6	
		W 5-Oct	The role of energy (Discussion groups)		Heinberg / Hagens videos	
		F* 7-Oct	From empty world to full world	Exam 1 due	Steffen 2015 / Christian video	
	<u>Week 7</u> The Economy within the Environment	M 10-Oct	NO CLASS (Fall Recess)			
		W 12-Oct	Ecosystem Services (Taylor Ricketts)		Farley 2012 / Pagiola 2008 / NPR	
		F 14-Oct	New Economics Foundation (Stewart Wallis)		Wallis 2015	
	<u>Week 8</u> Humans in the Environment	M 17-Oct	Human behavior (Brendan Fisher)		D&F chapter 13	
		W 19-Oct	Exam Review #2/Group work		no reading	
		F* 21-Oct	Glimmers of Hope - fixing economy AND environment		no reading	
Policy in Ecological Economics	<u>Week 9</u> Policy Design	M 24-Oct	Policy as a tool for change	Policy Brief 1/3	Meadows 1999	
		W 26-Oct	Policy design in ecological economics (Jon Erickson)		D&F chapter 21	
		F* 28-Oct	Tools for environmental decision-making		no reading	
	<u>Week 10</u> Sustainable Scale	M 31-Oct	Climate change policy (Asim Zia)		SciDev.net blog post	
		W 2-Nov	Sustainable scale and the steady state		D&F chapter 22/Daly 1992	
		F* 4-Nov	Democracy and managing for sustainable scale		Bartlet & Barber 1999	
	<u>Week 11</u> Just Distribution	M 7-Nov	Growth and inequality (Stephanie Seguino)		PDF TBD	
		W 9-Nov	Towards a more just economy	Exam 2 due	D&F chapter 23	
		F* 11-Nov	Group work day		no reading	
	<u>Week 12</u> Efficient Allocation	M 14-Nov	Efficient allocation		D&F chapter 24	
		W 16-Nov	Recap #3/Group work		no reading	
		F 18-Nov	The economics of degrowth (Sam Bliss)	Policy Brief 2/3	PDF TBD	

**Moving forward with
Ecological Economics**

<u>Week 13</u>	M	21-Nov			
Thanksgiving Break	W	23-Nov	NO CLASS: Thanksgiving Break		
	F	25-Nov			
<u>Week 14</u>	M	28-Nov	Review of major themes in ecological economics		PDF TBD
Lessons learned/ the future of Ecological Economics	W	30-Nov	Policies for a steady-state economy		PDF TBD
	F*	2-Dec	The unfinished journey of ecological economics		PDF TBD
<u>Week 15</u>	M	5-Dec	Debate prep	Final Policy Brief	PDF TBD
Final Projects	W	7-Dec	Group project	Debate day 1	
	F	9-Dec	Group project	Debate day 2	
<u>Week 16</u>	M	12-Dec			
Exams	W	14-Dec		Exam 3 due	
	F	16-Dec			