

Mona Ray, Economics, 2017

Participation in the Piedmont Project helped me to get a perspective on sustainability issues and develop new ways to engage these topics in my Environmental Economics 306 course. This course deals with the fundamental question of how the economic system shapes economic incentives in ways that lead to environmental degradation as well as improvement. Students develop knowledge to use the analytical tools like trade-offs, costs and benefits, efficiency to manage natural resources and effectively deal with the policy issues in understanding the complex relationship between property rights, market structure, institutional and political reforms and cultural practices. Last Fall, students demonstrated interests in global environmental issues. Accordingly, I have added recent global environmental issues into my course and added a project that will enable students to apply economic tools to actually investigate into the factors affecting the sustainability of a county -big or small, and come up with recommend policies to address sustainability.

HECO 306: Environmental Economics Fall 2017, Department of Economics Morehouse College

Meeting Time: 1:40 pm -2:55 pm, M, W
Leadership Building, Room # 152

Instructor: **Dr. Mona Ray**
Office: 114 Leadership Center
Phone: 470-639-0622
Office Hours: M, W: 9.30am -10.30am or by appointment
Email: mona.ray@morehouse.edu

Prerequisites: ECO 201: Principles of Macroeconomics and ECO 202 Principles of Microeconomics, or permission of the instructor.

Course Objective: This course will deal with the fundamental question of how the economic system shapes economic incentives in ways that lead to environmental degradation as well as improvement. This course will provide an opportunity for the students to gain knowledge to use the analytical tools like trade-offs, costs and benefits, efficiency to manage natural resources. It will effectively deal with the policy issues in understanding the complex relationship between property rights, market structure, institutional and political reforms and cultural practices. Students will also learn the various forms of sustainable development and how the society, economy and the environment are interconnected in ensuring sustainability.

Required Text: *Environmental Economics: An Introduction*, 7th ed., by Barry C. Field and Martha K. Field, McGraw-Hill Website: www.mhhe.com/field7e

Supplemental Reading: *The Economics of Natural Resource Use*, 2nd ed., by John M. Hartwick and Nancy D. Olewiler

Environmental Economics and Natural Resource Management, 4th ed., by David A. Anderson,

Course Requirement: This course involves active class participation. Along with my lecturing in each class, I expect students to engage in discussions on environmental issues and concerns. Throughout the

semester there will be two tests, a midterm test as scheduled in the attached course schedule and a final exam. A group project will also be conducted in class. Weekly quizzes will be conducted to assess your progress in this class. In addition, there will be homework assigned from time to time. All assignments are to be typed (not handwritten) and turned in by the due date. If drawing graphs by hand use graph paper. **No make-ups for the exams will be allowed.**

Expected Student Learning Outcomes: After completing the course the students should be able to

1. Demonstrate that the principles of economics can be used to the study of how environmental resources are managed.
2. Understand the importance of incentives that lead people to make decisions that help or hurt the environment.
3. Use economic tools to evaluate the environmental damages
4. Demonstrate the interdependence between the economy and the environment.
5. Use graphical analysis to explain the difference between private costs and social costs associated with resource use.
6. Define sustainable development and understand the economics of sustainability.
7. Demonstrate the effect of environmental damage on human health
8. Analyze the impact of international agreements of common resource use on individual economies.
9. Demonstrate the methods of non-market valuation of resource use.
10. Distinguish between Equi-marginal principle and Equi-proportional principle of resource use.

Grading and Attendance Policy: For real learning to take place, you must first be intellectually humble, open and courageous. After all, that is why we are all at this institution. I expect you to act in ways that reflect those values. Students with more than 3 unexcused absences will be referred to the Office of Student Success and may be administratively withdrawn from the course. Failure to meet minimum attendance requirements may result in the loss of the student’s financial aid in accordance with federal financial aid requirements. **No student will be allowed into the class after 5 minutes of class starting time. No Student will be allowed to audio and/or videotape my class lectures without disability accommodations.**

All assignments are to be turned in by the due date. However, in cases of valid excuses you get two class periods’ time to make up for that assignment. I expect all students in my class to maintain classroom etiquettes – **no inappropriate attires, indecent behavior and talks will be tolerated in the classroom.** Your passing grade for this course is C and will depend on the following rough weighting scheme:

Quiz	10%
Homework	10%
Two tests	(15%+15%)
Group Project	15%
Midterm exam	15%
Final Exam	20%

Grades Scale: 90 - 92: A-; 93-96: A; 97-100: A+
 80 - 82: B-; 83-86: B; 87-89: B+
 70 - 72: C-; 73-76: C; 77-79: C+
 60 - 62: D-; 63-66: D; 67-69: D+
 59 & below: F

There will be no curving in any of the exam grades. No make-ups for the exams will be allowed. No incompletes will be given.

Academic Honesty

Part of being a Man of Morehouse is exhibiting integrity in all aspects of your life. You have the obligation as students to exhibit honesty and to respect the ethical standards of Morehouse College. According to “Academic Integrity Policy” listed in the student handbook (pages 36-40), when confronted with student academic dishonesty, the professor has the right to assign any academic penalty, including failure, and may be reported to the Honor and Conduct Review Board for disciplinary action. Students should not seek, receive, accept or give assistance on individual assignments, whether in class or out of class. **All cell phones should be switched off and tucked in your bag once you are inside my classroom. During test periods, you have to bring a regular calculator and not use any other electronic device as a calculator.** Contribute fairly to group work. Always cite reference materials that you use (including materials from the Internet). Do not plagiarize or as pass off the work of others as your own. Examples of plagiarism include but are not limited to “cutting and pasting” information off the Internet. When in doubt, err on the safe side. **Cheating or using unfair means to answer exams will be heavily penalized and will result in ‘F’ grade.**

Disability:

Any student who feels may require an accommodation based on any physical and/or learning disability must contact the office of disability services at 104 Sale Hall Annex, Morehouse College, 830 Westview Dr. S.W., Atlanta, GA 30314, (404) 215-2636 and provide an official letter stating the types of accommodations needed as early as possible in the semester.

Inclement Weather Policy:

In the event of inclement weather, the College will announce any closures via the emergency notification system and/or through local news outlets. Absent an official closure, students are not excused from attending class due to weather and any absences will be considered unexcused.

Final Exam Date: TBA

Important Dates:

First Day of Class: Wednesday August 16, 2017
Last day to add/drop a class is Friday August 25, 2017
Labor Day Holiday: Monday September 4, 2017
Fall Break Oct 9-10, M & Tu, 2017
Last day to withdraw is Friday, Oct. 27, 2017
Thanksgiving Holiday: November 22- 24, W-F, 2017
Last Day of class: Wednesday November 29, 2017

Tentative Course Outline: The course syllabus is not a contract between instructor and student, but rather a guide to course procedures. The instructor reserves the right to amend the syllabus when conflicts, emergencies or circumstances dictate and students will be duly notified. This course will focus on three broad areas.

- I. **Building the Foundation**
Field & Field, Chapters 1 & 2
Anderson, Chapters 1
Hartwick & Oilwiler, Chapter 1
- II. **Issues in Environmental Economics and Policies**
 - a. Economic Efficiency – Field & Field, Chapters 3, & 4; Anderson, Chapter 2
 - b. Environmental Quality – Field & Field, Chapters 5; Anderson, Chapter 6

- c. Analysis Frameworks- Field & Field, Chapters 6-8;
- d. Strategies and Policies - Field & Field, Chapters 11-13; Hartwick & Oilwiler, Chapter 7
- e. Non-Renewable Resource Use and Policies- Anderson, Chapter 14 and Hartwick & Oilwiler, Chapters 8, & 9
- f. Renewable Resources - Anderson, Chapter 13 and Hartwick & Oilwiler, Chapters 10, & 11

III. Sustainability

Anderson, Chapter 8 and Hartwick & Oilwiler, Chapters 2, & 12

FIELD & FIELD

- Chapter 1 – What is Environmental Economics?
- Chapter 2 - The Economy and the Environment
- Chapter 3 - Benefits and Costs, Supply and Demand
- Chapter 4 – Economic Efficiency and Markets
- Chapter 5 – The Economics of Environmental Quality
- Chapter 6 – Frameworks of Analysis
- Chapter 7 – Benefit –Cost Analysis: Benefits
- Chapter 8 – Benefit –Cost Analysis: Costs
- Chapter 11 – Command-and-Control Strategies
- Chapter 12, 13 – Incentive-Based Strategies

ANDERSON

- Chapter 1 – The Big Picture
- Chapter 2 – Efficiency and Choice
- Chapter 6 – Environmental Quality
- Chapter 8 – Sustainability
- Chapter 13 – Natural Resource Management – Renewable Resources
- Chapter 14 – Natural Resource Management – Depletable and Replenishable Resources

HARTWICK&OLEWILER

- Chapter 1: - Economic Concepts for Examining Natural Resource Use
- Chapter 2 – Sustainability and Natural Resource Scarcity
- Chapter 7 – Pollution Policy in Practice
- Chapter 8 – Nonrenewable Resource Use: The Theory of Depletion
- Chapter 9 – Nonrenewable Resource Use: Departures from the Competitive Case and from Fixed Stock Size
- Chapter 10 – Forest Use
- Chapter 11 – Dynamic Models of the Fishery
- Chapter 12 – The Economics of Sustainability

More Journal articles on global environmental issues will be posted on Blackboard throughout the semester.

$$\text{Course Grade: } \left(\frac{\text{T1 score}}{30}\right) \times .15 + \left(\frac{\text{T2 score}}{30}\right) \times .15 + \left(\frac{\text{T3 score}}{30}\right) \times .15 + \left(\frac{\text{project score}}{50}\right) \times .15 + \left(\frac{\text{final exam score}}{50}\right) \times .20 + \left(\frac{\text{Q1+Q2+Q3+Q4+Q5+Q6}}{\text{Q total}}\right) \times .10 + \left(\frac{\text{HW1+HW2+HW3+HW4+HW5+HW6}}{\text{HW total}}\right) \times .10$$

Project Description:

The project will be on measuring carbon footprint for different countries to assess if the country is sustainable economically and environmentally. The entire class will be broken down into 4 groups and each group will pick two countries- one developed and another developing. Using the Global Footprint Network data, the groups will create sustainability index for each country and compare their level of sustainability relative to the rest of the world.

Environmental Economics – HECO 306-01 Fall 2017					
CRN: 44860					
MONTH	DATE	CLASS	DAY	TOPIC	ASSNMTS
August	16	1	W	Building the Foundation	
	21	2	M	Building the Foundation	
	23	3	W	Building the Foundation	HW 1 ASN
	28	4	M	Building the Foundation	HW1 DUE
	30	5	W	Building the Foundation	
September	4	X		Labor day holiday	
	6	6	W	Issues in Env. Econ.	HW 2 ASN
	11	7	M	Issues in Env Econ Q2	HW 2 DUE
	13	8	W	TEST 1	
	18	9	M	Issues in E.E.	
	20	10	W	Issues in E. E. Q3	HW 3 ASN
	25	11	M	Issues in E. E.	HW 3 DUE
	28	12	W	Issues in E.E.	
October	2	13	M	Issues in E.E.	
	4	14	W	TEST 2	Project Details Post on Blackboard
	9	X	M	FALL BREAK	
	11	15	W	Issues in E.E.	
	16	16	M	Issues in E.E.	HW 4 ASN
	18	17	W	Issues in E.E.	HW 4 DUE
	23	18	M	Issues in E.E.	
	25	19	W	Policies Q5	HW 5 ASN
	30	20	M	Policies	HW 5 DUE
November	1	21	W	TEST 3	
	6	22	M	Sustainability	
	8	23	W	Sustainability Q6	HW 6 ASN
	13	24	M	Sustainability	HW 6 DUE
	15	25	W	Sustainability	
	20	26	M	Sustainability	
	22	X	W	Thanksgiving Holiday	
	27	27	M	Project Presentation	Project Presentation
	29	28	W	Last day: wrap-up	
December	5-9		M-F	FINAL EXAM	