Economics of Sustainability

Syllabus, SUS 7400C, Spring 2014

Tuesday 5-7:40pm, Room TBD

General Bulletin Description
Basic economic principles in the context of investigations of how consumer and producer choices affect the sustainability of economic development both regionally and globally. Theory of optimal allocation of resources and when markets fail to provide it. Inquiry into social institutions and government policies that correct market failures. Likely topics will include the following:

Economists' approaches to environmental and natural resource problems: Scarcity and allocation. Social choice: How much environmental protection? From individual utility functions to social welfare functions, with a stop at Arrow's Impossibility Theorem. Efficiency and markets.

Spring 2014 Course Description
How does the science of economics help to understand and moderate human effects on the environment? Economics examines how people make choices when their unlimited wants meet scarce resources. As human technology has developed far enough to bump up against the limits of the finite globe, we as policymakers and concerned citizens need to understand how to ensure that the finite resources of the globe can be sustained for the future.

Textbook

Required

Suggested:

*Economics: A Very Short Introduction*, Partha Dasgupta – "very short" is also cheap, under $10

*Oil 101*, Morgan Downey – a terrific read; all the vital basics for understanding oil

*Beyond Smoke & Mirrors: Climate Change and Energy in the 21st Century*, Burton Richter – excellent primer on climate change

Professor

Kevin R. Foster, Department of Economics, The Colin L Powell School for Civic and Global Leadership, The City College of New York, kfoster@ccny.cuny.edu, w: (212) 650-6201, m: (860) 593-7674, office hours [TBA] or by appointment, http://kfoster.ccny.cuny.edu

Course Requirements

This course requires students to complete regular homework assignments and write a midterm exam. It also requires that students, working in a small team, complete a final project. This final project is a substantial analysis of an environmental issue facing policymakers as well as a detailed exploration of the economics of proposed remedies. During class times after the midterm exam we will have presentations from each group (graded as homework).

Educational Outcomes

Students will integrate theory with public policy in areas of pollution regulation, emissions cap-and-trade, and tradable permits. Students will evaluate particular theories about the effectiveness of such strategies against empirical findings documented in studies from a variety of disciplines not limited to economics. Students will write a final project which exhibits their ability to compose excellent oral and written communications for diverse audiences.

Grading

Course grades are determined by three factors: your grade on the final project, your score on the exam, and your scores on the homework assignments. The final project gets 60% weight while the exam has a 20% weight and homework also gets 20%. There is no BS factor of effort or any other unobservable will-o-wisps – the weightings sum to 100. Your grade is determined entirely on observed performance.

Course Material

Homework and basic course documents will be on the class page, publicly accessible from my webpage (http://kfoster.ccny.cuny.edu). Readings and some other material will be available on the Blackboard course page (login required). Some class material will be online videos. I will periodically send emails to the class via Blackboard so you must keep your CCNY email updated.
### Weekly Topics

**Economics of Sustainability SUS C7400**  
Spring 2014, Kevin R Foster, CCNY

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Chapter(s) in text</th>
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<tbody>
<tr>
<td>1</td>
<td>Get up to speed with &quot;The Basics&quot;</td>
<td>online</td>
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<td>2</td>
<td>Markets &amp; Externalities</td>
<td>1, 2, 3</td>
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<td>3</td>
<td>Production and Externalities</td>
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<td>No class: CCNY on Monday schedule</td>
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<td>4</td>
<td>Public Goods: Excludability and Rivalry</td>
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<td>5</td>
<td>Coase Theorem: When do Markets Work?</td>
<td>8, 10</td>
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<td>6</td>
<td>Social Welfare: Present and Future; Sustainability; Risk</td>
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<td>7</td>
<td>Government Policies: Command &amp; Control, Cap &amp; Trade, Tax Economics of Global Climate Change, Every group should read the articles by Stern and by Nordhaus in Science. Group 1 should read and discuss Stern's Report Part I Chapter 2 and Part II Chapters 3 and 5, which outline the economic challenges. Group 2 should read and discuss Stern's Report Part III Chapters 9, 10, and 13, which detail the costs and benefits. Group 3 should read and discuss Stern's Report Part IV Chapters 14 and 15, Part V Chapter 20, and Part VI Chapter 21.</td>
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<td>10</td>
<td>No class</td>
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<td>11</td>
<td>Presentations on Final Project</td>
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<td>12</td>
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<td>14</td>
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<td>15</td>
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**Other Readings:**  
*Every student in the Sustainability program, as well as anyone else interested in Global Climate Change, ought to have read the IPCC report – if not every page then still all of the "Summary for Policymakers" portions as well as big chunks of the rest.*

IPCC AR4 Synthesis Report "Summary for Policymakers"  

Other Readings on Global Climate Change
Stern Review

Deviations from the schedule will be announced in class.

The exam dates and project due dates are given above. You must take the exams at, and hand in the work by, the scheduled times. No excuses.

Academic Integrity
The CCNY Faculty Senate has recommended that every course syllabus include this notice:
CUNY Policy on Academic Integrity
As stated in the CUNY Policy on Academic Integrity: 'Plagiarism is the act of presenting another person's ideas, research or writings as your own. The following are some examples of plagiarism:

• 'Copying another person's actual words without the use of quotation marks and footnotes attributing the words to their source;
• 'Presenting another person's ideas or theories in your own words without acknowledging the source;
• 'Using information that is not common knowledge without acknowledging the source;
• 'Failing to acknowledge collaborators on homework and laboratory assignments.
• 'Internet plagiarism includes submitting downloaded term papers or parts of term papers, paraphrasing or copying information from the internet without citing the source, and "cutting & pasting" from various sources without proper attribution.'
• A student who plagiarizes may incur academic and disciplinary penalties, including failing grades, suspensions, and expulsion.
• A complete copy of the CUNY Policy on Academic Integrity may be downloaded from the College's home page.

Accommodations for Students with Disabilities
The Office of Student Disability Services (SDS) is dedicated to providing students with disabilities equal access to the College curriculum. The Office ensures that, upon request, qualified students with disabilities are provided reasonable and effective accommodations, as mandated by law, as well as appropriate support services.
Students who contact SDS and indicate that they have a disability or believe that they might qualify for services will be asked to make an appointment for an intake interview with SDS staff. To qualify for services, students must register with SDS by providing appropriate documentation from a qualified professional describing the nature of their disability and functional limitations. Although academic adjustments are mandated by law, the College is not required to alter demonstrably essential academic requirements of a course of study nor is the College mandated to lower or effect substantial modifications of reasonable academic standards.

Early planning is essential for many of the resources, adjustments and accommodations; students are asked to contact SDS at the earliest possible date (NA 1/218; 212-650-5913 or 212-650-6910 for TTY/TTD).