Economics of Sustainability

Syllabus, SUS C7400, Spring 2016 (cross listed as ECO B9526)
Tuesday 5-7:40pm in Shepard 204

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
- *How to Change the World: Social Entrepreneurs and the Power of New Ideas*, David Bornstein – a classic in what was (in 2007) an emerging field

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
- *Economics Rules*, Dani Rodrik – overview of what economics really means for policy

Professor
Kevin R. Foster, Department of Economics, Colin Powell School for Civic and Global Leadership, The City College of New York, kfoster@ccny.cuny.edu, m: (860) 593-7674, office hours Tuesday/Thursday 11-12:30 or by appointment, http://kfoster.ccny.cuny.edu.

Course Requirements
This course requires students to complete regular homework assignments and write an 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 with a detailed exploration of the economics of proposed remedies. During class times after the 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 web page (http://kfoster.ccny.cuny.edu). Readings and some other material will be available on the Blackboard course page (login required). 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 2016, 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>Feb 2</td>
<td>Supply and Demand, Discounting</td>
<td>online</td>
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<td></td>
<td>Feb 9</td>
<td>No class</td>
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<td>2</td>
<td>Feb 16</td>
<td>Markets, Externalities</td>
<td>1, 2, 3</td>
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<td>3</td>
<td>Feb 23</td>
<td>Coase Theorem</td>
<td>4, 5</td>
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<td>4</td>
<td>March 1</td>
<td>Sustainability</td>
<td>6, 7</td>
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<td>5</td>
<td>March 8</td>
<td>Production and Pollution</td>
<td>8, 10</td>
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<td>6</td>
<td>March 15</td>
<td>Fees and Tradable Permits</td>
<td>11</td>
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<td>7</td>
<td>March 22</td>
<td>Oil and basics of Global Climate Change</td>
<td>online</td>
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<td>8</td>
<td>March 29</td>
<td>Global Climate Change</td>
<td>online</td>
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<td>9</td>
<td>April 5</td>
<td>Global Climate Change and Social Cost of Carbon</td>
<td>online</td>
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<td>10</td>
<td>April 12</td>
<td>Financial Markets for Commodities</td>
<td>online</td>
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<td>11</td>
<td>April 19</td>
<td>Social Entrepreneurship</td>
<td>online, Bornstein</td>
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<td>April 26</td>
<td>No Class</td>
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<td>12</td>
<td>May 3</td>
<td>Fracking, Urban Flooding</td>
<td>online</td>
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<td>13</td>
<td>May 10</td>
<td>Exam</td>
<td>comprehensive</td>
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<td>14</td>
<td>May 17/24</td>
<td>Presentations on Final Project</td>
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<td>May 27</td>
<td>deadline for final project</td>
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There will be lecture notes online - these are correlated with (but not exactly matching) the textbook. They are a good hint about what things I consider to be important, some of which are not covered by the textbook.

**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.*


American Economic Review (2014), Climate Change Policy after Kyoto

C E McClure, Jr, Selected International Aspects of Carbon Taxation

D Burtraw, J Linn, K Palmer and A Paul, The Costs and Consequences of Clean Air Act Regulation of CO2 from Power Plants

D B Marron and E J Toder, Tax Policy Issues in Designing a Carbon Tax

B C Murray, M L Cropper, F C de la Chesnaye and J M Reilly, How Effective Are US Renewable Energy Subsidies in Cutting Greenhouse Gases?

Plants and Emission Standards for Modified and Reconstructed Power Plants"
http://www.epa.gov/climatechange/EPAactivities/economics/scc.html 
Nordhaus, W (2011). "The Economics of Tail Events with an Application to Climate Change," Review of 
Environmental Economics and Policy. 
Stern, Jotzo, and Dobes, "The Economics of Global Climate Change: A Historical Literature Review" 
Stern Review 
Weitzman, M L (2014). "Can Negotiating a Uniform Carbon Price Help to Internalize the Global Warming 
Externality?" working paper. 
Literature. 
Weitzman, M L (2012). "Rare Disasters, Tail-Hedged Investments, and Risk-Adjusted Discount Rates," 
working paper. 
Regulatory Impact Analysis - Under Executive Order 12866," 

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).