NEW YORK CITY COLLEGE OF TECHNOLOGY

The City University of New York

Department of Social Science

Environmental Economics

ECON 2505ID (3 Class Hours, 3 Credits)

Section HD23

INTERDISCIPLINARY, Writing Intensive and Hybrid Course

Spring 2019

## Prof. S. MacDonald

Course prerequisite: Either Econ 1101 or Econ 1401; CUNY proficiency in reading and writing

**Room Namm 1007; Wed** 2:30 – 5:00 PM  **Office:** Namm 624

**Pathways:** World Cultures and Global Issues **Office hours:** Wed 5:00-6:00 pm; Tu 2:30-3:30

**Email:** **smacdonald@citytech.cuny.edu**and by appointment

**Phone:** 718-260-5084

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**CATALOG DESCRIPTION**: This interdisciplinary course examines current environmental issues from a macroeconomic perspective, focusing on both the long and short-term economic viability of various proposals to address current environmental challenges. Traditional goals of economic efficiency will be examined in the context of the need to expand renewable energy sources, green design, sustainable construction and resource allocation and other efforts to combat climate change on a global scale.

**Course Format**

This course is a hybrid interdisciplinary (and writing intensive) course that consists of 6 online sessions and 9 in person sessions. The **online classes will be held on 3/6, 3/13, 4/3, 4/10**. Both the in class and online sessions and assignments are equally important in your successful completion of the course.

Taking on-line (or partially on-line) courses poses a different set of challenges than regular classes and require developing particular time management and independent work skills. To ensure that you are prepared for the on-line component of this course, you will be asked to take the Student Readiness Survey during the first class meeting: <http://websupport1.citytech.cuny.edu/websupport1/It/online/students/crashcourse/crashcourse.htm>.

As an interdisciplinary course, ECON 2505 will include guest lecturers from different disciplines on environmental issues that have economic impacts. Some readings will also include an interdisciplinary perspective. The format of the course includes a short lecture followed by discussions. To make this successful and interesting, it is important that you complete the assigned readings each week and come prepared to engage in thoughtful discussion.

**Course Requirements**

**1. Required Readings and Assignments**

All required readings will be posted on Blackboard under Contents. All other written assignments for the class are also to be submitted on Blackboard. This includes the first and final drafts of the bibliography, research paper outline, the final research paper and group summaries of the mapping project. Log onto Blackboard through the CUNY Portal at: <https://cunyportal.cuny.edu/cpr/authenticate/portal_login.jsp>

(Field trip instructions/forms)

<https://facultycommons.citytech.cuny.edu/faculty-development/student-travel-overview/>

**2. Internet Connection**

To access the on-line component of this class, you will need a computer with a minimum of a 56k modem or high-speed Internet access. Make sure you are using Firefox 3.0x or later or Internet Explorer 8 or higher browsers. JavaScript, Java, and Cookies must be enabled and pop-up windows should be allowed. Please note that Chrome and Safari are not supported.

**3. Technology Requirements**

A. City Tech email: All communications related to this class will take place via City Tech email. If you do not know your City Tech email login information, go to <http://mail.citytech.cuny.edu/UserIdLookupA/> and claim your account. If you need additional help with your City Tech email, contact the Help Desk at 718-260-4900 or via email studenthelpdesk@citytech.cuny.edu. You may also go to the Atrium, First Floor A-114.

B. Blackboard: Blackboard will be used as a virtual classroom. If you do not have a Blackboard account, you should set one up immediately following the first in-person class session. If you encounter problems accessing this class from your Blackboard account, please visit G-600. Blackboard is accessed by signing in through the CUNY portal at <https://cunyportal.cuny.edu/cpr/authenticate/portal_login.jsp>

**Attendance**

Attendance is required for all class meetings – both in person and online. Attendance for online class sessions is determined by timely completion of online assignments by the due date. Attendance counts toward the participation grade for the course.

***In-class:*** Attendance will be takenpromptlyat the beginning of each class meeting. Make sure to arrive on time. Two cases of unexcused lateness will count as one absence.

***On-line:*** You are required to login and read all on-line materials on Blackboard at least on 2 separate occasions during the week that class meets on-line. You are also required to answer questions on the readings on Blackboard and comment on at least one of your classmate’s posts (see the Participation rubric for more details) during the weeks we are meeting on-line. The deadline for submitting your assignments is Tuesdays by 11:59pm and posting responses to your classmates is Wednesdays by 2:00pm. Failing to complete these assignments on Discussion Board will count as absence in that week’s class. Each submission of on-line assignments that is up to 30 minutes late will count as lateness. Submitting your on-line responses more than 30 minutes late counts as absence.

**Scope of assignments and other course requirements**

Students in this course will be required to complete an annotated bibliography (first and final drafts) on their research topic, a final class presentation and a research summary of approximately 2 pages. The research topic may consist of a topic chosen from any of those covered in the course or a case study tied to a particular topic in the student’s major course of study. There is also a midterm and a final exam (essay format). Both exams will place an emphasis on a written understanding of key concepts covered in the course and readings. Participation will be measured in terms of contributions to class discussions of assigned readings and timely posts on Blackboard the weeks the class meets online. You will be expected to come prepared to discuss the questions based on the assigned readings during the days the class meets in person. There will be a final presentation on the research project, a final annotated bibliography and one-page research summary due at the end of the semester. Students also have the opportunity to participate in the Fall 2018 Poster Presentation, presenting their research project (individually or in teams).

**METHOD OF GRADING**: elements and weight of factors determining course grade)

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| --- | --- |
| 1. Participation: attendance; contributing to class discussions and group projects; completion of ***taking an online course*** assignment; timely completion of online assignments on Blackboard | 20% (10% in class; 10% online) |
| 2. Mapping project and presentation  | 15% |
| 3. Midterm and final exams – essay format (on line) | 30% (midterm: 15%; final: 15%) |
| 4. Summary of research proposal | 10% |
| 5. Research paper; final team presentations | 25%: [research paper: 15%  final presentation: 10%]  |

**Grading Policy:** calculated according to the college grade scale:

Letter Grade Meaning of Letter Grade Number Grade

A Exceptional 100-93

A- Superior 92.9-90

B+ Very good 89.9-87

B Good 86.9-83

B- Above Average 82.9-80

C+ Slightly Above Average 79.9-77

C Average 76.9-70

D Poor 69.9-60

F Failure 59.9-0

**1. Participation**

The participation grade is based on both in-class activities and discussions and online posts/discussions

* **In class participation**: All students are expected to participate in a meaningful way to class discussions of readings, lecture material and to guest lecturers’ readings and presentation.

**Grading criteria**: demonstration that you have completed and understand the assigned readings, presenting thoughtful comments; participating in and engaging in exchange of ideas with others in class; completion of online assignments by the due date and attendance during in-class meetings.

* **Online participation**: All students will be evaluated based upon their posts to all assigned online readings. The quality of posts, completion of all assigned posts, at least one response to another student’s post for each online class session. These assignments will consist of a few questions (2 to 4) on the readings. To receive full participation credit, you must complete each assignment posted on the Blackboard discussion board by **Tuesday, 11:59 PM** before the next class (except where noted on syllabus). In addition to preparing your post, you must respond thoughtfully to one of your fellow student’s posts no later than **2:00 PM on Wednesday** of the same week.

**Grading Criteria:** Relationship of posts to the assigned readings; demonstration that you understand the readings; thoughtful responses to others’ posts; clarity of writing. Simply stating that you agree (or disagree) with someone else’s post on the reading is not sufficient. Your own responses and your responses to others’ comments need a thorough explanation.

All comments/thoughts on the readings and other material both in class and posted to the Discussion Board should reflect respect for one another’s opinions whether you agree with them or not.

**2. Short summary of research paper proposal:** The proposal will address specific questions/instructions posted on Blackboard.

**Grading criteria: Clear presentation and summary; clear statement of objectives including an economic and environmental focus.**

**3. Midterm and Final Exams**

The midterm will be online and the final exam will be in class. You will have the entire class session to complete the exams. Exams will consist of essay questions on the readings and topics that have been covered through week 7 (midterm) and weeks 8 – 13 (final), as well as material presented by guest lecturers. Review questions will be posted on Blackboard by week 7 (midterm) and week 13 (final). You will choose two essay questions and any third question (optional) for extra credit points.

**Grading criteria**: **Demonstration of understanding the readings and guest lecturer topics; clear writing**; **relationship of answers to the questions;** **complete answers to questions**.

**4**. **Research Paper**

The research project will require you to select a topic on an environmental issue, to conduct both scholarly research and primary research (place-based or virtual place-based research). The paper should be 4 – 5pages in length. Your topic should reflect a key research question or thesis on an environmental issue. The focus should include an environmental and economic analysis and it should be interdisciplinary.

Examples:

Why sustainable land use is important to environmental conservation?

What are the cost savings and benefits of promoting renewable energy in emerging economies?

Why are food deserts an environmental issue?

How is sustainable tourism important to resource renewal?

How can consumer behavior be effectively changed to promote sustainable consumption?

1. **Selecting your topic**: For week two you will conduct some preliminary research and bring 2-3 topic ideas that you are interested in and that relate to environmental issues. Be prepared to answer questions and talk about each topic for 2-3 minutes. Also, think about where you might be able to observe the issue either directly or virtually? **Due:** **Conduct preliminary research on 2 to 3 possible topics and bring to class on Wed. Feb. 13.**
2. **Formal research proposal: March 13**
* Provide the title of your research topic
* Provide a clear thesis and a one to two paragraph summary of your research project.
* The sources used in your research may include scholarly articles, books, articles from web-based journals, videos, documentaries.
* A minimum of three sources should be included with your summary, using APA format.
* The format for what to include in the summary will be posted on Blackboard before the assignment is due.

**due** **Mon March 13**. Your annotated bibliography should be submitted as a Word document on Blackboard no later than **Monday, March 13 at 11:59 PM**.

**Grading criteria: Relevance of sources to topic; thorough summary (5-6 sentences each); clear writing; minimum of 4 sources**

1. **Research paper: 4- 5 pages**: The research paper should include an introduction and thesis, a clear discussion of the central question or argument, why you chose the topic and why it is important. It should also clearly summarize the findings from your secondary sources, a clear description of where you conducted your place-based research and your findings from that research. The conclusion should discuss what you see as the key contributions of your research. The paper should be single-spaced, 1” margins and 12 pt. font.

Your research should also be **interdisciplinary** - making reference to at least one other disciplinary perspective in addition to the environmental and economic focus. This might be based on your own interest/field of study; introduced in class by a guest lecturer, or from the readings. You are also encouraged to include a discussion of the relevance of your topic to your own major/ field of study.

**Grading criteria**: **clear thesis or guiding question**; **introduction;** **organization, clear coherent writing, clear reasoning, grammar (please use the spell check and grammar check in Word); inclusion of an interdisciplinary perspective; place-based research; clear summary/conclusion.**

What to include in final research paper:

* Title page (name of course, your name, title of research project, date)
* Research paper (4 - 5 pages) that follows the format indicated (introduction, why the issue is important, relationship to at least one topic, reading or guest lecturer topic from class, discussion of findings from research, conclusion and the contributions of your research).
* Final bibliography with a minimum of 6 sources, cited in APA format (This follows your research summary).

**Due: May 15** **by 11:59 PM.** The paper should be a Word document on Blackboard.

1. **Final Presentation:** Each team/group will prepare an 8 - 10 minute presentation on your research topic.

Prepare a PowerPoint presentation that states your thesis/central question and summarize the findings of your research. Remember to include a title slide with your name, course name, and the title of your research project. To avoid going over the allotted time, limit slides to the title slide, 5 or 6 slides summarizing your research project and findings, and a concluding slide. **Final presentations are scheduled for May 22**.

**Grading criteria: organization; clear presentation; effective communication; clear summary, complete list of sources on the last slide.**

**Other:**

* **Blackboard messaging will be used for all communication – questions, problems, etc.**
* **Please do not email assignments. All assignments MUST be posted on Blackboard by the due dates.**

**ACCADEMIC INTEGRITY POLICY STATEMENT**

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalog.

link to permalinker: <https://library.citytech.cuny.edu/research/permalinker/index.php>

**WEEKLY SEQUENCE OF TOPICS** **(online class sessions highlighted)**

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| **Class** | **Topic** | **Assignment and due date** |
| 1. Jan 30 | **Introductions**; What is an interdisciplinary course?Environmental Economics: what is sustainability? Why is sustainability critical to long term economic growth? Review research project/topics |  |
|  |  |  |
| 2. Feb 6 | Defining Sustainable Economic Growth   | **Reading & questions**: **Session 2 posted on Blackboard &Open Lab:**  1. Sardar M.N. Islam, Mohan Munasinghe, Matthew Clarke. Making long-term economic growth more sustainable: evaluating the costs and benefits. *Ecological Economics*, Volume 47, Issues 2–3, 2003, pp. 149-166.2. Finding a sustainable model of economic growth fit for the future. *The Guardian*, Jan. 22, 2013 3. In-class discussion and group project based on reading and ques.4. Brainstorming research ideas |
| 3. Feb 13 | Why is food security an environmental issue? discussion of reading and questions Refining research questions and group feedback on proposals  | **Reading & questions**: **Session 3 posted on Blackboard & Open Lab** 1. Achieving Food Security in the Face of Climate Change; *CGIAR Research Program on Climate Change, Agriculture and Food Security* (CCAFS).2. Robert Mendelsohn. Environmental Economics and Human Health. *Environmental Health Perspectives*, Vol. 110, No. 3 (Mar., 2002), pp. 118-119.3. View short film: “How to Feed the World in 2050: Actions in a Changing Climate” <https://www.youtube.com/watch?v=gjtIl5B1zXI>4. Food Deserts: A Global Crisis in New York City, Causes, Impacts and Solutions. A. Segal. *Consilience: The Journal of Sustainable Development,* vol. 3 issue 1, (2010), pp. 197-214. <http://cityte.ch/111>**5. Guest lecture: Prof. Amanda Almond, Psychology, Dept. of Social Science****Assignment:** in-class discussion/project on related questions posted on Blackboard Groups: Be prepared to answer questions on and **talk about your possible research topic ideas** for 2-3 minutes. |
|  |  |  |
| 4. Feb 20 | Why sustainable consumption? | **Reading & questions**: **Session 4 posted on Blackboard & Open Lab**1. The Elephant in the boardroom2. Film: "The Story of Stuff" <https://www.youtube.com/watch?v=9GorqroigqM>3. Complete the Global footprint exercise at: <http://www.footprintcalculator.org/> **Assignment:** in-class discussion/project on related questions posted on Blackboard  |
| 5.Feb 27 |  | **Reading & questions: Session 6**  |
| **6.Mar 6** | Greening the Urban Economy: Economic Benefits | **Reading & questions**: **Session 6 posted on Blackboard**1. Rowe, D. Bradley. Green roofs as a means of pollution abatement. Environmental pollution 159.8-9 (2011): 2100-2110.2. Erica Oberndorfer, et al. Green Roofs as Urban Ecosystems, *BioScience*, November 2007 / Vol. 57, No. 10 [https://academic.oup.com/bioscience/article/57/10/823/232363](https://academic.oup.com/bioscience/article/57/10/823/232363%C2%A0)3. Film: “Do Cities Need More Green Roofs?” – NPR<https://www.youtube.com/watch?v=FlJoBhLnqko> **Assignment: due 11:59pm Tuesday, Feb 26;** Post responses to session 4 questions on Discussion Board. Remember to meaningfully respond to at least one of your classmates’ posts |
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| **7. Mar 13** | **Midterm** | Please see detailed assignment and instructions for completing the midterm on Blackboard |
| 8. Mar 20  | Carto: Using maps to detail environmental problems | 1.Exploration of the evolving environmental and economic landscape of New York through maps using Carto; working in teams of 2 or 3 on specific projects.2. Open a free public account: **3.Guest Lecturer session 12: Prof. Diana Mincyte, Department of Social Science (Sociology)** |
| 9. Mar 27 | How can urban agriculture be a model for sustainable food production and natural resource use?  | **Reading & questions**: **Session 8 posted on Blackboard**1. Nathan McClintock, Why Farm the City? Theorizing Urban Agriculture through a Lens of Metabolic Rift *Cambridge Journal of Regions, Economy and Society*, Volume 3, Issue 2, 1 July 2010, Pages 191–207 http://cityte.ch/1142. Film: “Urban Farming: Growing Food in NYC” <https://www.youtube.com/watch?v=2PUVlx0jqsI>3. The Brooklyn Grange Rooftop Farm: [https://ny.curbed.com/2017/7/19/15998808/brooklyn-grange-rooftop-farm-video-tour](https://ny.curbed.com/2017/7/19/15998808/brooklyn-grange-rooftop-farm-video-tour%C2%A0)**Assignment:** in-class discussion/project on related questions posted on Blackboard  |
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| **10. Apr 3** | Session 10: Green GDP  | **Reading & questions**: **Session 10 posted on Blackboard**1. Moving Beyond GDP: How to factor natural capital into economic decision making: <https://whygreeneconomy.org/information/moving-beyond-gdp-how-to-factor-natural-capital-into-economic-decision-making-waves/>2. Voices: Greening the Gross Domestic Product:<https://www.earthmagazine.org/article/voices-greening-gross-domestic-product>**Assignment due Mon. April 3 by 11:59 pm** |
|  |  |  |
| **11. Apr 10**  | How can sustainability be measured?  | **Reading & questions: Session 11 posted on Blackboard**1. What is an indicator of sustainability? *Sustainable Measures* (nd)<http://www.sustainablemeasures.com/node/89>  |
| 12. Apr 17 | Group presentations/mapping project | **Group presentations/mapping project****3. Guest Lecturer session 13: Prof. Susan Phillip, Dept. of Hospitality Management**; **sustainable tourism** **4. Assignment**: Research paper due on Blackboard by Tues. April 30 by 11:59 pm  |
| 13. May 1 | Sustainable Cities: Green infrastructure; planning and re-design in emerging economies | **Reading: Session 13 readings on Blackboard:** 1. Sustainable Cities Hubs of Innovation, Low Carbon Industrialization and Climate Action. United Nations Industrial Development Organization 2016). <https://www.unido.org/sites/default/files/2016-10/sustainable_cities_brochure_0.pdf>2**.** View film on sustainable cities – “The Urban Green” <https://www.youtube.com/watch?v=o86Ut6kAEMQ>3. Mahesh Ramanujam. Charting a path forward: Key factors in applying sustainability to infrastructure, *Journal of Urban Regeneration and Renewal* Vol. 11, 1, 8– 15.**4.** **Guest Lecturer session 13: Prof. Gulgun Bayaz Ozturk, Economics, Dept. of Social Science**  |
| 14. May 8 | **Final exam**  |  Final exam – in class; post presentation schedule**Research paper and presentations due May 15 by 11:59 pm** on Blackboard |
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| May 15 | **READING DAY** | **NO CLASSES – READING DAY** |
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| 15. May 21 | **Final Presentations** (in class) | Presentations on final research project. Team/group presentations should be approximately 8-10 minutes. Review details on pg. 5 of syllabus. |
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**COURSE INTENDED LEARNING OUTCOMES/ASSESSMENT METHODS:** To develop an understanding of the fundamental concepts of environmental economics. Specifically, course objectives include the following:

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| LEARNING OUTCOMES1  | ASSESSMENT METHODS |
| 1. Students in the course should be able to demonstrate an understanding of many dimensions of sustainability as they relate to the potential for renewed economic growth.
 | 1. The midterm and final exams, which will include essay questions, will test students’ understanding of sustainability issues as they relate to economic practices and policy |
| 1. Demonstrate a knowledge of the importance of changing economic behavior – from consumers, to business practices to government – to build upon the move toward sustainable economic practices
 | 2. Class discussions of assigned articles and other supplementary readings in class and on course blog site on Open Lab.  |
| 1. Identify a range of tools from environmental economics that can be applied to solving real world environmental challenges that impact the U.S. economy.
 | 3. Both the exams and class discussions will serve as tools to encourage students to make the connections between environmental goals and addressing economy-wide and global economic issues. |
| 1. Develop a breadth and depth of knowledge of how to begin to apply the concepts of sustainability to consumer, business and trade practices.
 | 4. Through the written research project and/or case study and final presentations, students will focus on a problem/issue, the challenges posed by that issue and critically examine various solutions. |

**GENERAL EDUCATION LEARNING OUTCOMES/ASSESSMENT METHODS**

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| LEARNING OUTCOMES | ASSESSMENT METHODS |
| 1. KNOWLEDGE: To develop a understanding of the key concepts that relate to environmental economics, the central topics and theories of how to address environmental problems through economic policy.
 | 1. Discussion of readings, material presented by guest lecturers and field visits that both test an understanding of basic concepts and that require students to express their understanding in writing (short essay quizzes)  |
| 1. SKILLS: Develop and apply the tools of environmental economics to be able to critically question, analyze, and discuss environmental economic problems and issues; Develop and strengthen the ability to discuss concepts and thoughts in writing.
 | 2.Completion of essay questions on exams; class discussions of questions tied to topics covered in class and to supplemental short readings and articles on timely relevant issues; students analyze, evaluate and consider policy options  |
| 1. INTEGRATION: Apply the tools acquired in the course to be able to build upon an understanding of environmental issues and sustainability across disciplines, both in the social sciences and other disciplines.
 | 3. Research project which requires students to select and define a topic, problem or issue and examine possible solutions drawing upon and employing the tools of related disciplines; Final in-class summaries of research; participation in Emerging Scholars poster session. |
| 1. VALUES, ETHICS, AND RELATIONSHIPS: Develop an understanding of and ability to apply diverse perspectives to the understanding of sustainability/environmental economics; work creatively with others in group problem solving; develop a respect for diverse viewpoints and apply the skills and concepts covered in the course to the analysis of related issues and concepts across other disciplines
 | 4.Weekly in-class group assignments; assignments encourage student discussion and sharing of ideas and perspectives; focused discussions that encourage students to question and think critically to develop their own perspectives on issues covered in the class .  |

**Interdisciplinary Course Learning Outcomes and Assessment Methods**

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| ***Learning outcomes*** | ***Assessment Methods*** |
| Purposefully connect and integrate across-discipline knowledge and skills to solve problems | Readings assigned by guest lecturers will be the focus of discussion of a specific issue that links the economic perspective to other disciplines to address an environmental challenge.  |
| Synthesize and transfer knowledge across disciplinary boundaries | Short essay questions on midterm exam that incorporate material presented by guest lecturers; students answer at least one of these questions; class discussions  |
| Think critically, communicate effectively, and work collaboratively | Focused group assignment based on prior class on mapping/geocoding; students will work in teams of 2-3 on designing and presenting a map; writing a reflection paper on the environmental significance of the data presented. |
| Recognize varied perspectives | Group assignment/problem solving/research project: students will incorporate the perspective of another discipline in the final research project.  |
| Become flexible thinkers | Focused group assignment based on prior assigned readings; final presentation |

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**Bibliography:**

Charles D. Kolstad. *Environmental Economics,* 2nd ed. Oxford University Press, 2010

William C. Whitesell . *Climate Policy Foundations: Science and Economics with Lessons from Monetary Regulation*, Cambridge University Press, September 2012

Charles S. Pearson. *Economics and the Challenge of Global Warming*, Cambridge University Press

David C. Victor. *Global Warming Gridlock: Creating More Effective Strategies for Protecting the Planet*, Cambridge University Press, 2011.

Karsten Neuhoff. *Climate Policy after Copenhagen: The Role of Carbon Pricing*, Cambridge University Press

Edward B. Barbier. *Capitalizing on Nature: Ecosystems as Natural Assets*, Cambridge University Press

Christian dePerthuis. *Economic Choices in a Warming World*, Cambridge University Press

Nicholas Stern. *The Economics of Climate Change*, Cambridge University Press

Herman E. Daly, *Beyond Growth: The Economics of Sustainable Development*. Beacon Press, 1997.

David Pearce, and Edward Barbier. *Blueprint for a Sustainable Economy*, Earthscan Publications, 2000

Michael Shellenberger, and Ted Nordhaus. *Break Through: From the Death of Environmentalism to the Politics of Possibility*, Houghton Mifflin, 2007

Jerry Mander, ed. *The Case Against the Global Economy*, Sierra Club Books, 1997

Joshua Karkiner. *The Corporate Planet: Ecology and Politics in the Age of Globalization*, Sierra Club Books, 1997

Brian Milani. *Designing the Green Economy*, Rowman & Littlefield Publishers, 2000

Lester Brown. *Building an Economy for the Earth*, W.W. Norton, 2001

Joshua Farley, and Herman E. Daly. *Ecological Economics: Principles and Applications*, Island Press, 2003

William E. Rees, and Mathis Wackernagel*. Our Ecological Footprint: Reducing Human Impact on the Earth,* New Society Publishers, 1995

Paul Hawken. *The Ecology of Commerce*, Collins, 1994

William K. Jaeger. *Environmental Economics for Tree Huggers and Other Skeptics*, Island Press, 2005

Suzanne Iudicello and Micahel L. Weber and Robert Wieland. *Fish, Markets, and Fishermen: The Economics of Overfishing*, Island Press, 1999

 Ed Ayres. *God’s Last Offer: Negotiating for a Sustainable Future*, Four Walls Eight Windows, 2000

Paul Hawken, Amory Lovins, and L. Hunter Lovins. *Natural Capitalism: Creating the Next Industrial Revolution,* Back Bay Books, 2000

Daniel Pauly, and Jay Maclean. *In a Perfect Ocean: The State of Fisheries and Ecosystems in the North Atlantic Ocean*, Island Press, 2003

Jim Merkel. *Radical Simplicity: Small Footprints on a Finite Earth*, New Society Publishers, 2003

Nicky Chambers, Craig Simmons, and Mathis Wackernagel. *Sharing Nature’s Interest: Ecological Footprints as an Indicator of Sustainability*, Earthscan Publications, 2001

E.F. Schumacher. *Small is Beautiful, 25th Anniversary Edition: Economics As If People Mattered: 25 Years Later (With Commentaries),* Hartley and Marks Publishers, 2000

Jonathan Harris, et. al., eds. *A Survey of Sustainable Development: Social and Economic Dimensions*, Island Press, 2001

Andres Edwards. *The Sustainability Revolution: Portrait of a Paradigm Shift*, New Society Publishers, 2005

Juliet Schor and Betsy Taylor, eds. *Sustainable Planet: Solutions for the Twenty-first Century*, Beacon Press, 2003

Tom Tietenberg, and Lynne Lewis. *Environmental Economics & Policy, 6th ed*., Prentice Hall, 2010

Cédric Afsa, Didier Blanchet, Vincent Marcus, Pierre-Alain Pionnier and Laurence Rioux (INSEE), and Marco Mira d’Ercole, Giulia Ranuzzi and Paul Schreyer (OECD). *SURVEY OF EXISTING APPROACHES TO MEASURING SOCIO-ECONOMIC PROGRESS;* Commission on the Measurement of Economic Performance and Social Progress*.*

Robert J. Bullard, ed. The Quest for Environmental Justice: Human Rights and the Politics of Pollution, Sierra Club Books, 2005.

Films:

Consumerism in America

<https://www.youtube.com/watch?v=LT579_Nrnqo&index=4&list=PLjIaf0SlDZUCDxaDVUHVjzfPRjMvSKfIf>

The Urban Green: <https://www.youtube.com/watch?v=o86Ut6kAEMQ>

How to Feed the World in 2050: Actions in a Changing Climate: <https://www.youtube.com/watch?v=gjtIl5B1zXI>

Urban Farming: Growing Food in NYC: <https://www.youtube.com/watch?v=2PUVlx0jqsI>