

**City University of Hong Kong
Course Syllabus**

**offered by Department of Public Policy
with effect from Semester B 2018/19**

Part I Course Overview

Course Title: Environmental Crises: Identifying Causes And Searching For Solutions

Course Code: GE1213

Course Duration: One Semester

Credit Units: 3

Level: B1

Arts and Humanities

Proposed Area: Study of Societies, Social and Business Organisations

(for GE courses only)

Science and Technology

Medium of Instruction: English

Medium of Assessment: English

Prerequisites: None
(Course Code and Title)

Precursors: None
(Course Code and Title)

Equivalent Courses: None
(Course Code and Title)

Exclusive Courses: None
(Course Code and Title)

Part II Course Details

1. Abstract

(A 150-word description about the course)

This course focuses on regional and global energy and environmental challenges. Students will gain knowledge as well as form a critical thinking on human impact on the environment by participating in the lectures, class discussion and debates, and film screening. Working out individual essays and group projects will allow students to discover and reflect on the cultural, scientific, economic, and political aspects of environmental problems, demonstrate their capacity for self-directed learning, and engage in informed discussions on contemporary environmental issues.

Course Aims

This course aims to examining the global and regional energy and environmental challenges. Students will be exposed to the cultural, scientific, economic, and political aspects of environmental problems. It is an attempt to cultivate a critical thinking on human impact on the environment by identifying and discovering the driving forces for environmental damage such as increased production and consumption, current state of environmental quality, and societal responses to environmental challenges including bureaucratic and self governance. Upon completion of this course, students should be able to form informed and reasoned positions in relation to trade offs that have to be made by governments, businesses, and individuals for pursuing a better environment.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Describe the cultural, scientific, economic, and political aspects of environmental problems	30%		x	
2.	Identify and discover the driving forces for environmental damage and the current state of the environment	30%		x	
3.	Assess societal responses to deteriorating environmental quality and depleting natural resources	25%		x	
4.	Construct environmental worldviews being able to make trade offs that are pro environment and assess environmental behaviours of societal actors in an informed light.	15%	x		
		100%			

* If weighting is assigned to CILOs, they should add up to 100%.

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.				Hours/week (if applicable)
		1	2	3	4	
Lectures	Introduction of multidisciplinary nature of environmental problems; Survey the cultural, scientific, economic, and political aspects of environmental problems; Identification of driving forces for environmental damage; and Critical assessment of the current state of the environment and societal responses.	x	x	x		2-3
Class discussion and debate	An opportunity for students to clarify and evaluate key concepts and arguments through exchange and interaction with others; an exercise for students to listen to and appreciate alternative views and arguments.	x	x	x	x	0.5-1
Film screening and the use of multi-media aids (films, music, documentaries, images, online resources, etc.)	A means to provide real life examples to illustrate the complexity of environmental problems, enhance cultural sensitivity and cultivate individual sense of responsibility for protecting the environment.	x	x	x		0.5-2
Group presentation	Offers students a chance to work in a team, discover and reflect on the cultural, scientific, economic, and political aspects of environmental problems, demonstrate their capacity for self-directed learning, and engage in informed discussions on contemporary environmental issues.	x	x	x	x	0.5 hours per group
Individual essays (response papers)	Reading notes and reflection on the cultural, scientific, economic, and political aspects of environmental problems.	x	x	x	x	N.A.

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.				Weighting*	Remarks
	1	2	3	4		
Continuous Assessment: <u>100</u> %						
Discussion / Debate			x	x	10%	
Group presentation	x	x	x	x	45%	
Individual essay	x	x	x	x	45%	
Examination: _____% (duration: _____, if applicable)						
* The weightings should add up to 100%.					100%	

Role play: Being a campaign assistant in an environmental NGO

The tutorial sessions are arranged to facilitate student self-learning and engage in current environmental policy studies. Each 3-5 students form a team of campaign assistants in an environmental NGO (imaginary or a real person of your choice). The assistant teams are to study an environmental challenge of their own interest, make oral presentations, write a manuscript for public environmental education, and debate in class the selected environmental issues. Each team will conduct a Mimic Public Environmental Campaign at the end of the class.

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Discussion / Debate	Knowledge /Understanding	Participants demonstrate consistent depth and breadth of knowledge and understanding by incorporating relevant and accurate details to support the group's position.	Overall participants demonstrate depth and breadth of knowledge and understanding by incorporating relevant and accurate details to support the group's position.	Some participants demonstrate a depth and breadth of knowledge and understanding by incorporating relevant and accurate details to support the group's position.	Few participants demonstrate a depth and breadth of knowledge and understanding by incorporating relevant and accurate details to support the group's position.	Participants do not demonstrate a depth and breadth of knowledge and understanding by incorporating relevant and accurate details to support the group's position.
	Ability to respond to questions from the audience	Each member of the group effectively and thoroughly responded to audience questions and demonstrated understanding of the issues.	Some members of the group effectively and thoroughly responded to audience questions and demonstrated understanding of the issues.	Members of the group responded to audience questions but failed to demonstrate understanding of the issues.	Members of the group failed to respond to audience questions nor demonstrate understanding of the issues.	Members of the group are not willing to respond to audience questions.
2. Individual essay (reading notes / reflection)	Knowledge /Understanding	Demonstrate very good understanding about the reading materials.	Demonstrate good understanding about the reading materials.	Demonstrate fair understanding about the reading materials.	Demonstrate little understanding about the reading materials.	Demonstrate very little understanding about the reading materials.
	Synthesis	Very good synthesis and comparison across different readings.	Good synthesis and comparison across different readings.	Fair synthesis and comparison across different readings.	Little synthesis and comparison across different readings.	Very little synthesis and comparison across different readings.
	Reflection	Relate very well the readings to real life environmental issues.	Relate well the readings to real life environmental issues.	Relate the readings to real life environmental issues.	Slightly relate the readings to real life environmental issues.	Do not relate the readings to real life environmental issues.
3. Group presentation	Organization	Presentation effectively draws in the audience, expands on the group's goal or thesis, and concludes with a well-planned ending.	Presentation draws in the audience, expands on the group's goal or thesis, but does not conclude with a well-planned ending.	Presentation draws in the audience and concludes with a well-planned ending, but need improvement on expanding the group's goal or thesis.	Presentation is weak in either its introduction, expansion of detail, or conclusion.	Presentation totally unstructured.

	Content	Presentation consists of well-researched concepts supported by well-researched and articulated details/illustrations.	Presentation consists of well-researched concepts but not necessarily supported by well-researched and articulated details/illustrations.	Presentation is scant in the use of well-researched concepts, though there is evidence of well-researched and articulated details/illustrations.	Presentation does not consist of well-researched concepts nor supported by well-researched and articulated details/illustrations.	Presentation does not define any concepts, provides no evidences, does not come to any conclusions.
	Use of presentation tools	Effective use of presentation tools, including the use of links, tables and charts etc.	Moderately effective use of presentation tools.	Not very effective use of presentation tools including spelling mistakes and wrong information.	Ineffective presentation tools, including, spelling mistakes, wrong information, absence or inappropriate use of tables and charts, illegibility etc.	Unacceptable
	Ability to respond to questions from the audience	Each member of the group effectively and thoroughly responded to audience questions and demonstrated understanding of the issues.	Some members of the group effectively and thoroughly responded to audience questions and demonstrated understanding of the issues.	Members of the group responded to audience questions but failed to demonstrate understanding of the issues.	Members of the group failed to respond to audience questions nor demonstrate understanding of the issues.	Members of the group are not willing to respond to audience questions.

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

Environment: air pollution, water pollution, soil contamination, deforestation, endangered species, natural disasters, climate change

Energy: fossil fuel, renewable energy, energy supply, energy consumption;

Human activities: production, consumption, politics;

Incentives: economic growth, quality of life, happiness;

Vulnerability: exposure to environmental risks, capacity to adapt, poverty, social exclusion, communication, transportation;

Society: environmental movements, self-governance;

Governance: incentive structures, policy instruments, participatory approach, responsiveness and accountability;

Communication: media, discourse, social media.

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1. Åhman, Markus, Dallas Burtraw, Joseph Kruger, and Lars Zetterberg. 2007. A Ten-Year Rule to Guide the Allocation of EU Emission Allowances. *Energy Policy* 35 (3):1718-1730.
2. Arimura, Toshi H., and Kajime Katayama. 2005. Is Voluntary Approach an Effective Environmental Policy Instrument? A Case of Environmental Management Systems.
3. Ashford, Nicholas A. 1988. Science and Values in the Regulatory Process. *Statistical Science* 3 (3):377-383.
4. Bowman, Margaret. 1992. The Role of the Citizen in Environmental Enforcement. In *Environmental Law Institute's Environmental Program for Central and Eastern Europe*. Washington, DC.
5. Carson, Rachel. 1994. *Silent Spring*. Boston: Houghton Mifflin.
6. Coglianese, Cary. 2001. Social Movements, Law, and Society: The Institutionalization of the Environmental Movement. *University of Pennsylvania Law Review* 150 (1):85-118.
7. Esty, Daniel C. 1997. Environmental policy: the next generation.: National Academy of Sciences.
8. Ferris, Richard J. , and Hongjun Zhang. 2003. Reaching out to the Rule of Law: China's Continuing Efforts to Develop An Effective Environmental Law Regime. *William and Mary Bill of Rights Journal* 11:568 - 602.
9. Fung, Archon. 2002. Making Social Markets: Dispersed Governance and Corporate Accountability. In *Market-Based Governance: Supply Side, Demand Side, Upside, and Downside*, edited by J. D. Donahue and J. S. Nye. Washington, D.C.: Brookings Institution Press.
10. Gunningham, Neil, and Darren Sinclair. 2002. *Leaders and Laggards: Next-Generation Environmental Regulation*. Sheffield: Greenleaf Publishing Limited.

11. Hills, Peter. 2005. Environmental Reform, Ecological Modernization and the Policy Process in Hong Kong: An Exploratory Study of Stakeholder Perspectives. *Journal of Environmental Planning & Management* 48 (2):209-240.
12. Jahiel, Abigail R. 1998. The Organization of Environmental Protection in China. *China Quarterly* (156, Special Issue: China's Environment):757-787.
13. Li, Wanxin. 2006. Environmental Governance: Issues and Challenges. *Environmental Law Reporter: News & Analysis* 36 (7):10505-10525.
14. Lieberthal, K. 1997. China's Governing System and Its Impact on Environmental Policy Implementation. *China Environment Series* (1):3-8.
15. Mol, Arthur P. J. 2006. Environment and Modernity in Transitional China: Frontiers of Ecological Modernization. *Development & Change* 37 (1):29-56.
16. Stavins, Robert N. 2004. *The Political Economy of Environmental Regulation, The international library of critical writings in economics ; 180*. Cheltenham, UK ; Northampton, MA: Edward Elgar Pub.
17. Wheeler, David. 2000. *Greening Industry: New Roles for Communities, Markets, and Governments*. Washington, D.C.: The World Bank.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1. United Nations <http://www.un.org/>
2. World Bank <http://www.worldbank.org/>
3. Organization for Economic Cooperation and Development <http://www.oecd.org/>
4. China Council for International Cooperation on Environment and Development <http://www.cciced.org/>
5. Institute for Global Environmental Strategies <http://www.iges.or.jp/>
6. International Network for Environmental Compliance and Enforcement <http://www.inece.org/>
7. State Environmental Protection Administration <http://www.sepa.gov.cn/>
8. National Development and Reform Commission <http://www.ndrc.gov.cn/>
9. China Development Gateway <http://www.chinagateway.com.cn/>
10. China Daily <http://www1.chinadaily.com.cn/>
11. Xin Hua News <http://www.xinhuanet.com/>
12. China's Environment and Development Information <http://www.enviroinfo.org.cn/>
13. China Development Brief <http://www.chinadevelopmentbrief.org.cn/>
14. Horizon Key Indicator <http://www.horizonkey.com/>

A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

GE PILO	Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)
PILO 1: Demonstrate the capacity for self-directed learning	CILOs 2-4 plus reading, in-class discussion, essay writing
PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology	CILOs 1-3: Two basic methods, cost-benefit analysis and institutional analysis will be introduced for analysing the driving forces for and societal responses to environmental challenges.
PILO 3: Demonstrate critical thinking skills	CILOs 2-4: Reflective and empirical analysis involve critical thinking
PILO 4: Interpret information and numerical data	CILOs 1-3: Approaching environmental challenges from multiple perspectives requires processing and interpreting information and numerical data on government policies and business practices
PILO 5: Produce structured, well-organised and fluent text	CILO 4 plus written assignment
PILO 6: Demonstrate effective oral communication skills	CILO 2-4 plus group presentation and in-class discussion
PILO 7: Demonstrate an ability to work effectively in a team	CILO 2-4 plus group presentation and in-class discussion
PILO 8: Recognise important characteristics of their own culture(s) and at least one other culture, and their impact on global issues	
PILO 9: Value ethical and socially responsible actions	CILOs 3-4: Environmental worldviews built on a careful analysis of causes for environmental problems would empower students to make choices that are pro environment
PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation	

GE course leaders should cover the mandatory PILOs for the GE area (Area 1: Arts and Humanities; Area 2: Study of Societies, Social and Business Organisations; Area 3: Science and Technology) for which they have classified their course; for quality assurance purposes, they are advised to carefully consider if it is beneficial to claim any coverage of additional PILOs. General advice would be to restrict PILOs to only the essential ones. (Please refer to the curricular mapping of GE programme: http://www.cityu.edu.hk/edge/ge/faculty/curricular_mapping.htm.)

B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

Selected Assessment Task

ATTACHMENT: Tentative course outline

Course arrangement: this course will be delivered either by a mixture of lectures and tutorials or by workshop sessions which combine elements of lecturing and student participation (such as group presentations). Topics are organized around the science, economics, and politics of environmental issues by analyzing behaviours and choices by environmental stakeholders including individuals/households, businesses, environmental NGOs, and government. Materials and examples included in each topic can be used as illustrations or for class debate/discussion.

Individual essay 1, 2, and 3 are due by week 4, 8, and 12, respectively.

Group presentations are made in week 13.

Readings

Introduction: World in Crisis (Week 1)

Video:

An inconvenient truth [videorecording] / Paramount Classics and Participant Productions present ; directed by Davis Guggenheim; produced by Laurie David, Lawrence Bender, Scott Z. Burns ; a Lawrence Bender/Laurie David production. Hong Kong : Distributed by Deltamac (Hong Kong) Co., Ltd, c2006. QC981.8.G56 I533 2006 DVD. (90 min)

Optional:

Albert Gore and Melcher Media., *An inconvenient truth : the planetary emergency of global warming and what we can do about it* (Emmaus, Pa.: Rodale Press, 2006).

Rachel Carson, *Ji jing de chun tian* (Beijing Shi: Jing hua chu ban she, 2000).

Rachel Carson, *Silent spring* (Boston: Houghton Mifflin, 1994).

Earth, Environment and Society (Week 2)

Required:

United Nations Economic Commission for Europe(UNECE) (2005) "Environmental Performance Review Programme."

UNESCO's International Year of Planet Earth 2007-2009 thematic brochures.
[Http://www.yearofplanetearth.org](http://www.yearofplanetearth.org).

Optional:

International Geosphere-Biosphere Programme
[Http://www.igbp.net](http://www.igbp.net).

Why Should We Value Nature (Week 3)

Required:

Edwin O. Wilson, *Biophilia*, (Cambridge, MA: Harvard University Press, 1984): 1-2, 83-101, 119-140.

Optional:

Stephen R. Kellert and E. O. Wilson, *The Biophilia Hypothesis*, (Washington, D.C.: Island Press, 1993.)

Giant pandas [videorecording] : the last refuge / produced by the National Geographic Society; produced by Mark Stouffer, Adrian Warren; directed by Mark Stouffer; written by Mose Richards. [U.S.]: National Geographic Video; [Taipei]: King's International Multimedia [distributor], c2000. QL737.C27 G53 2000 DVD. (60 min)

Save the panda [videorecording]. Stamford: Vestron Video [distributor], 1986. QL795.P18 S28. (60 min)

P-S-R Framework and Vulnerability (Week 4)

Required:

Organization for Economic Co-operation and Development, *OECD Environmental Performance Reviews: A practical introduction*, (Paris: Head of Publications Service OECD, 1997): 7-10.

Asian Development Bank, *Environmental Performance Assessment* (Bangkok, Thailand: GMS Environment Operations Center, 2008): 1-10.

Shi tian zai hai shi ren hu?. Shang ji [videorecording] / bian dao Li Junping ; jian zhi Liang Qinghua ; Xianggang dian tai dian shi bu zhi zuo. 是天災還是人禍?. 上集 [videorecording] / 編導李君萍 ; 監製梁慶華 ; 香港電台電視部製作. DS796.H7 K45 2008 v.9 LOCAL TV. (23 min)

Optional:

Mark Pelling, *The Vulnerability of Cities: Natural Disasters and Social Resilience* (London; Sterling, VA : Earthscan Publications, 2003).

Margarita Alario, *Environmental destruction, risk exposure, and social asymmetry : case studies of the environmental movement's action* (Lanham, Md.: University Press of America, 1995).

Wenchuan di zhen yi zhou nian. Chu si ru sheng [videorecording] / dao bo Cai Qingtian ; jian zhi Ruan Ziaoqing ; Xin wen ji zi xun bu gong gong shi wu ke zhi zuo. 汶川地震一周年. 出死入生 [videorecording] / 導播蔡慶添 ; 監製阮小清 ; 新聞及資訊部公共事務科製作. DS796.H7 X57 2009 v.5 LOCAL TV. (23 min)

Robert W. Mead and Victor Brajer, "Environmental Cleanup and Health Gains from Beijing's Green Olympics," *The China Quarterly*, Vol. 194, No. -1 (2008), pp. 275-293.

Judith Shapiro, *Mao's war against nature: politics and the environment in Revolutionary China* (Cambridge ; New York: Cambridge University Press, 2001), pp. xvii, 287 p.

Civil Society and Climate Change (Week 5)

Required:

Handouts to be distributed during the lecture and pdf of the powerpoint lecture presentation.

W.W.-S. Yim and C.D. Ollier, "Managing planet Earth to make future development more sustainable: climate change and Hong Kong," *Quaternary Sciences*, Vol. 29, No. 2 (2009), pp. 190-198.

35 inconvenient truths [Http://scienceandpublicpolicy.org/monckton/goreerrors.html](http://scienceandpublicpolicy.org/monckton/goreerrors.html).

Optional:

Hong Kong Observatory website [Http://www.hko.gov.hk](http://www.hko.gov.hk).

W.W.-S. Yim, "Vulnerability and adaptation of Hong Kong to hazards under climatic change conditions," *Water, Air, and Soil Pollution*, Vol. 92 (1996), pp. 181-190.

Greening Industry (Week 6)

Required:

David Wheeler, "Greening Industry: New Roles for Communities, Markets, and Governments", (Washington, D.C.: The World Bank, 2000).

Optional:

Daniel C. Esty and Andrew S. Winston, *Green to gold: how smart companies use environmental strategy to innovate, create value, and build competitive advantage* (Hoboken, N.J.: Wiley, 2009).

Impact of International Trade on the Environment (Week 7)

Required:

Jennifer Clapp and Peter Dauvergne, *Paths to a Green World: The Political Economy of the Global Environment* (Cambridge, MA: MIT Press, 2005). Read Chapter 5, 'Global Trade and the Environment'.

Optional:

Pamela S. Chasek, David L. Downie, and Janet Welsh Brown, *Global Environmental Politics (Fifth Edition)* (Boulder, CO: Westview Press, 2010). Read pages 342-364.

Kevin P. Gallagher (ed) *Handbook on Trade and the Environment* (Cheltenham: Edward Elgar, 2008). See especially Introduction, Chapters 4, 7, 19.

Learning about Choices for Government (Week 8)

Required:

Ruth Greenspan Bell, "Choosing Environmental Policy Instruments in the Real World", OECD Global Forum on Sustainable Development: Emissions Trading/Concerted Action on Tradable Emissions Permits Country Forum (OECD Headquarters, Paris: 2003).

Margaret Bowman, "The Role of the Citizen in Environmental Enforcement", Environmental Law Institute's Environmental Program for Central and Eastern Europe (Washington, DC: 1992).

Wanxin Li, "Environmental Governance: Issues and Challenges," *Environmental Law Reporter: News & Analysis*, Vol. 36, No. 7 (2006), pp. 10505-10525.

Optional:

Thomas C. Beierle, "The Benefits and Costs of Environmental Information Disclosure: What Do We Know About Right-to-Know?," RFF Discussion Paper, No. 03-05 (2003).

Ruth Greenspan Bell, "Institutional Challenges in Environmental Governance: Moving Beyond General Principles to Achieve Concrete Results," RFF Issue Brief, No. 02-12 (2002).

Mary Graham, *Democracy by Disclosure: the Rise of Technopopulism* (Washington, D.C.: Governance Institute/Brookings Institution Press, 2002).

Neil Gunningham and Joseph Rees, "Industry Self-Regulation: An Institutional Perspective," *Law & Policy*, Vol. 19, No. 4 (1997), pp. 363-414.

Neil Gunningham and Darren Sinclair, *Leaders and Laggards: Next-Generation Environmental Regulation* (Sheffield: Greenleaf Publishing Limited, 2002).

Keith Hawkins, *Environment and enforcement: regulation and the social definition of pollution* (Oxford: Oxford University Press, 1984).

Michael T. Rock, *Pollution control in East Asia : lessons from the newly industrializing economies* (Washington, DC: Resources for the Future, 2002), pp. ix, 197 p.

Politics of Climate Change (Week 9)

Required:

Harriet Bulkeley and Peter Newell, *Governing Climate Change* (London: Routledge, 2010). Read Introduction and Chapter 1.

Optional:

Special issue of the journal *Environmental Politics* on 'Climate Change and Political Strategy'. Volume 18, Issue 5, 2009.

Anthony Giddens, *The Politics of Climate Change* (Cambridge: Polity Press, 2009).

Stewart J. Cohen and Melissa W. Waddell, *Climate Change in the 21st Century* (Montreal & Kingston: Mc-Gill-Queen's University Press, 2009). Especially Chapter 8.

Dieter Helm and Cameron Hepburn (eds), *The Economics and Politics of Climate Change* (Oxford, Oxford University Press, 2009). Especially Introduction, Chapters 2,3.

Hugh Compston and Ian Bailey (eds), *Turning Down the Heat: The Politics of Climate Change in Affluent Democracies* (New York: Palgrave Macmillan, 2008).

Low Carbon Life Style (Week 10)

Required:

Wikipedia, "Low Carbon Economy," http://en.wikipedia.org/wiki/Low-carbon_economy

Ministry of the Environment, Japan, "Building A Low Carbon Society," 2007.
<http://www.env.go.jp/earth/info/pc071211/en.pdf>

Research Project to Establishing of Methodology to Evaluate Middle to Long Term Environmental Policy Options toward Low Carbon Society in Japan, 2009, "Japan Scenarios and Actions towards Low-Carbon Societies (LCSs)," http://2050.nies.go.jp/material/2050_LCS_Scenarios_Actions_English_080715.pdf

Research Project to Establishing of Methodology to Evaluate Middle to Long Term Environmental Policy Options toward Low Carbon Society in Japan, 2009, “Japan Roadmaps towards Low-Carbon Societies (LCSs),”
http://2050.nies.go.jp/material/20090814_japanroadmap_e.pdf

Optional:

Dr Christina Dean, EcoAsia: Fresh ideas from the Green resource,
<http://www.eco-asia.info/content/en/latest>

“Low carbon living on the way,” CCTV International,
<http://english.cctv.com/program/bizchina/20100119/102314.shtml>.

Cash from trash [videorecording] / writer, Johanna Moriarty; director, Carrie Thomas; producer, Bob Thorpe. Wetherby, West Yorkshire: CFL Vision [distributor], [1986]. TD794.5 .C374 1986. (30 min)

Cycles of recycling [videorecording]. [United States]: Sunburst Visual Media, c2004. TD794.5 .C952 2004 DVD. (23 min)

Raghubendra Jha and K. V. Bhanu Murthy, *Environmental sustainability: a consumption approach* (New York, NY: Routledge, 2006).

Communicating Environmental Challenges (Week 11-12)

Required:

Woolever, Kristin R., (2005), *Writing for the Technical Professions*, 3rd edition, New York: Pearson/Longman, pp. 183-202 (memo and letters), 265-278 (abstract and executive summary), 285-337 (reports), 415-439 (presentations).

Struyk, Raymond J., (2006), *Managing Think Tanks: Practical Guidance for Maturing Organizations*, expanded 2nd edition, Budapest: Local Government and Public Service Initiative, Open Society Institute, Ch. 5.

Optional:

Woolever, Kristin R., (2005), *Writing for the Technical Professions*, 3rd edition, New York: Pearson/Longman, pp. 339-377 (proposals), 441-467 (finding a job).

Colebatch, Hal K., (2006), “What Work Makes Policy?” *Policy Science*, 39, pp. 309-321.