

CET Syllabus of Record



Program: Chinese Studies and Internship in Beijing

Course Title: Environmental Issues in China

Course Code: CS276

Total Hours: 45

Recommended Credits: 3

Suggested Cross Listings: Chinese Studies, Environmental Studies, Social Sciences

Language of Instruction: English

Prerequisites/Requirements: None

Description

The environmental challenges that have accompanied China's integration into the world economy have begun to take center stage both domestically and internationally. From air quality and algae blooms during the Beijing Olympics to (dog) food scares, pollution has regularly grabbed headlines over the past few years. Moreover, increasing public and official recognition of climate change has made China's greenhouse gas emissions a global concern. Given China's environmental challenges, it is not surprising that policymakers, academics and environmental activists in China and from around the world is increasingly turning their attention to these problems.

The course begins by examining the biophysical landscape of China and historical ways of viewing these landscapes in comparative perspective. This includes considering traditional Han Chinese cosmology, colonial botany and the Western scientific method, as well as Mao's dystopian environmental projects. From there, the course discusses China's environmental issues in successive weeks, including the source and implications of China's large population, agriculture, grasslands, water and climate change. It also discusses China's institutional frameworks and laws, and their relevance to the environment as well as the emergence of a "green" civil society, and its connections to global environmentalism through groups such as the International Crane Foundation. In addition, exploring issues related to pollution enables students to critically reflect upon how Beijing's air and water pollution affects their bodies as they live and study here. Finally, the course focuses the last couple of weeks on energy and climate change, as these two interconnected issues will dominate global and international politics for the foreseeable future. Students leave the course with a broad understanding of the topic along with some analytical tools to grapple with specific issues of interest. Along with understanding the historical, cultural and institutional contexts of China's environmental challenges, the course focuses on how both the drivers and implications of these challenges are mutually constituted by local, national, transnational and global processes. Finally, the course takes advantage of the fact that Beijing is a wonderful field site by incorporating fieldtrips and ethnographic observation into the curriculum.

Objectives

First and foremost this course intends to help students better understand the environmental problems facing China as well as the globe. Readings introduce many of these challenges, providing an overview of the politics and policy implications from which class discussions begin. Students leave the course with a broad understanding of the geographical particularities of the Chinese context, along with the economic, social and political contexts that exacerbate problems.

CET Syllabus of Record

Students are asked to critically examine the United States' role in both China's environmental problems (e.g., American consumption and investment driving widespread industrialization in China) and their possible solutions (e.g., through technology transfers). Finally, students better understand how local, national and global processes shape the environment in Beijing.

Course Requirements

Readings, active participation and fieldtrips: The course is designed in order to create an atmosphere of collaboration and lively discussion. China's environmental issues are so numerous and varied that it is difficult for one person to cover everything. Therefore, many of the assignments are designed to enable students to learn as much as possible by sharing information and experiences. This is only possible if students come to class having read all of the assignments.

The class takes a number of fieldtrips during the semester. As well as visiting the offices of environmental NGOs and the local Environmental Protection Bureau, students also plant trees alongside Chinese university students. Students also have the option to join birdwatching groups in Yuanmingyuan (the old summer palace), go hiking with the local and international hiking groups, and join "Nature University" on one of their Saturday "water walks" along the canals of Beijing. Students are asked to write a short (1-2 pages) reflection piece on the fieldtrips.

Critical Discussant: Students take turns serving as the discussant for the weekly topic. Discussants write a short (2 page) critical summary of the weekly readings, incorporating issues/themes raised by the newspaper coverage and their own research/experiences. These should also include a couple of questions/points of discussion. These are sent to the class email list at least 24 hours before the class. Finally, rather than recapitulate the contents of their critical summary during the class, students are asked to facilitate class discussion.

Midterm and Final Exams: There are short midterm and final exams to ensure that students have retained the most important aspects of the course.

Final Project/Paper: The final project/paper is flexible. Students are welcome to write a standard term paper on a given topic. These should be no longer than 15 pages in length and conform to standard practices in terms of argumentation, evidence and bibliography. Students are encouraged, however, to think of a project/paper that will benefit him/her at this stage of engagement with China and environmental issues, and that is appropriate given the level of Mandarin proficiency. For example, students might write an annotated bibliography on a particular issue (biodiversity conservation in Southwest China) or create a bioregional map of a particular area in Beijing. Students could also trace the commodity chain of the fruits and vegetables sold at the local stand, or create a photo essay of a particular issue/theme. Students might also translate materials from Chinese sources/webpages into English, and then integrate this new information with other readings/research. Group work is encouraged though each person is required to submit separate written pieces.

Methods of Evaluation

The final grade is determined as follows:

Readings, active participation and field trips: 20%

CET Syllabus of Record

Critical summary and facilitator:	10%
Midterm exam:	20%
Final exam:	20%
Final project/paper:	30%
Sketch:	5%
Progress report:	5%
Final project:	20%

Primary Texts

- Ash, Robert F. and Richard Louis Edmonds. 1998 "China's Land Resources, Environment, and Agricultural Production," in Edmonds, *Managing the Chinese Environment*.
- Berkoff, Jeremy. 2003 "China: The South-North Water Transfer Project--is it Justified?" *Water Policy*.
- Brown, Lester. 1995. *Who Will Feed China?: wake-up call for a small planet* New York: W.W. Norton & Co.
- Cann, Cynthia W., Michael C. Cann, and Gao Shangquan, 2005. "China's Road to Sustainable Development," in Kristen A. Day, ed., *China's Environment and the Challenge of Sustainable Development*" pp. 3-34.
- Economy, Elizabeth. 2004. *The River Runs Black*. Ch. 4 "The Challenge of Greening China" pp. 91-128.
- Edmonds, Richard Louis. 1999. "The Environment of the People's Republic of China 50 Years On," *China Quarterly*, 159:640-650.
- Futrell, W. Chad. 2008. "Evolution of International NGOs in China: broadening environmental collaboration and shifting priorities." *China Environment Yearbook: Changes and struggles*. p. 225-257, Brill Academic Publishers.
- Greenhalgh, Susan. 2003. "Science, modernity, and the making of China's one-child policy." *Population and Development Review*, June v29 i2 p163-201.
- Grinspoon, Elisabeth. 2002. *Socialist Wasteland Auctions: Privatizing Collective Forest Land in China's Economic Transition*. Ph.D. dissertation, Environmental Science, Policy, and Management, UC Berkeley. Chapter 2, "Forest Property Rights and Rural Structure."
- Ho, Peter. 2001. "Greening without conflict? Environmentalism, NGOs and civil society in China," *Development and Change*, Vol. 32, No. 5 pp. 893-921.
- Hou Wenhui. 1997 "Reflections on Chinese Traditional Views of Nature." *Environmental History* v.2 n.4 (October), pp.482-492.
- Jahiel, Abigail. 1998. "Organization of Environmental Protection in China," *China Quarterly* 156, pp.757-787.
- Jun Jing. 2003. "Environmental Protests in Rural China," in Elizabeth J. Perry and Mark Selden, *Chinese Society*, 2nd Edition (Routledge), pp. 204-22.
- Kim, Jih-Un. 2001. "Drifting on the drying water pool: China's water scarcity and its political foreboding," *Asian Perspective* 25(1).
- Li, Junhui, 2005 *Position of Chinese Newspapers in the Framing of Environmental Issues* MS Thesis. P. 21-39.
- Lieberthal, Kenneth 1997. "China's Governing System and its Impact on Environmental Policy Implementation." *China Environment Series*, Woodrow Wilson International Center

CET Syllabus of Record

- Lo, Carlos W. H. and Gerald E. Fryxell. 2003. "Enforcement Styles Among Environmental Protection Officials in China." *Journal of Public Policy*, 23(01): pp. 81-115.
- McNeill, J.R. 1998. "China's Environmental History in World Perspective," in M. Elvin, ed., *Sediments of Time: environment and society in Chinese history*. Cambridge: Cambridge University Press. (31-52).
- Maurer, Crescencia et al. 1997. "Water Pollution and Human Health in China," *China Environment Series*, Woodrow Wilson International Center. P. 28-38.
- Menzies, Nicholas. 1988. "A Survey of Customary Law and Control Over Trees and Wildlands in China." In Louise Fortmann and John W. Bruce, ed.s, *Whose Trees? Proprietary Dimensions of Forestry*. Boulder: Westview Press. Pp. 51-62.
- Mertha, Andrew. 2008. *China's Water Warriors: Citizen Action and Policy Change*. Ithaca: NY: Cornell University Press. Chapters 1 & 2.
- Millison, Dan. 2005. "Reviving the Scorched Earth?" A Snapshot of China's Hazardous Waste Management and Cleaner Production Programs," in Kristen A. Day, ed., *China's Environment and the Challenge of Sustainable Development*, pp. 201-233.
- Mol, Arthur and Neil Carter. 2006. 'China's Environmental Governance in Transition.' *Environmental Politics* Vol. 15, No. 2, 149 – 170.
- Morton, Katherine. 2008. "Transnational Advocacy at the Grassroots: benefits and risks of international cooperation. p. 195-215 in *China's Embedded Activism* edited by Peter Ho and Richard Louis Edmonds.
- Rock, M. 2002. 'Getting into the environment game: integrating environmental and economic policy-making in China and Taiwan', *American Behavioral Scientist* 45(9): 1435–55.
- Shapiro, Judith. 2001. *Mao's War Against Nature*.
- Smil, Vaclav. 2004. *China's Past, China's Future*. New York: Routledge. Chapter 2 "Energy" p. 9-72.
- Thwaites, Rik, Terry de Lacy, Li Yong Hong, and Liu Xian Hua. 1998. "Property Rights, Social Change, and Grassland Degradation in Xilingol Biosphere Reserve, Inner Mongolia, China". *Society and Natural Resources* 11:319-338.
- Vermeer, Edward. 1998. "Industrial Pollution in China," in Edmonds, *Managing the Chinese Environment*.
- Weller, Robert. 2006 *Discovering Nature: Globalization and environmental culture in China and Taiwan*. Chapter 2 "Night of the living dead fish." P. 19 – 42.
- White, Lynn. 1967. "Historical roots of our ecologic crisis," *Science* v.155 (March 10).
- White, Tyrene. 2003. "Domination, Resistance, and Accommodation in China's One-Child Campaign," in Elizabeth J. Perry and Mark Selden (eds.), *Chinese Society*, 2nd Edition (Routledge), pp. 183-203 (esp. pp. 196-200).
- Williams, Dee Mack. 1996 "Grassland Enclosures: Catalyst of Land Degradation in Inner Mongolia." *Human Organization* 55 (3):307-312.
- Wu, Fengshi. 2002 'New partners or old brothers? GONGOs in transitional environmental advocacy in China', *China Environment Series* 5: 45–58.
- Yang, Guobin. 2005. "Environmental NGOs and Institutional Dynamics in China" *The China Quarterly* 181: 46–66.

CET Syllabus of Record

- Yang, Guobin and Craig Calhoun. 2008. "Media, Civil Society, and the Rise of a Green Public Sphere in China." p. 69-88 in *China's Embedded Activism* edited by Peter Ho and Richard Louis Edmonds.
- Yeh, Emily T. 2005. "Green governmentality and pastoralism in Western China: 'Converting pastures to grasslands'" *Nomadic Peoples*, 9(1):9-29.
- Yeh, Emily T. and Joanna I. Lewis. 2004. "State power and the logic of reform in China's electricity sector." *Pacific Affairs*. Vol. 77: 437-466.
- Zhang, Peichang et al. "China's Forest Policy for the 21st Century," *Science* 2000, 288 (pp. 2135-2136) and Ming Xu et al. "Reply to Zhang et al." *Science* 289 (pp. 2049-2050).
- Zhao Guang and Shao Guofan, 2002 "Logging Restrictions in China: A Turning Point for Forest Sustainability," *Journal of Forestry*, June, pp. 34-37.

Supplementary Texts

- Albers, HJ, Scott Rozelle, G. Li 1998. "China's forest under economic reform: timber supplies, environmental protection and rural resource access." *Contemporary Economic Policy*. 16(1) 22-33.
- Banks, T. "Property rights and the environment in pastoral China: Evidence from the field." 2001. *Development and Change*, 32 (4): 717-740.
- Barton, Dominic and Jonathan Woetzel. 2007. "Dragon at the crossroads: the future of china's economy." In Kurt Campbell and Willow Darsie, eds, *China's March on the 21st Century*, Aspen Strategy Group, Aspen Institute, Chapter 1.
- Bruun, Ole 1996. "The Fengshui Resurgence in China: Conflicting Cosmologies between State and Peasantry." *The China Journal* 36 (July): 47-65.
- Cooper, Caroline. 2006. "This Is Our Way In." *Government and Opposition*. 110-136.
- Edmonds, Richard Louis. 1994. *Patterns of China's Lost Harmony - A Survey of the Country's Environmental Degradation and Protection*. New York: Routledge. Chapter 2 "Environmental Degradation in China's Past."
- Ellis, et al. 1992. Chapter 1 "The grazinglands of Northern China: Ecology, society and land use," pp. 9-39; and chapter 14 "Key issues in grassland studies," pp. 193-194. *Grasslands and Grassland Sciences in Northern China*. Washington DC: Committee on Scholarly Communication with the People's Republic of China.
- Elvin, Mark. 1998, "The Environmental Legacy of Imperial China," *China Quarterly* 156:733-756.
- Elvin, Mark. "Three thousand years of unsustainable growth: China's environment from archaic times to the present," *East Asian History*, Vol. 6 (1993).
- Elvin, Mark and Liu Ts'ui-jung (eds).1998. *Sediments of time: environment and society in Chinese history*. Cambridge; New York: Cambridge University
- Graeme Lang, 2002. "Forests, floods, and the environmental state in China" *Organization & Environment* 15(20).
- Harkness, James. 1998. "Recent trends in forestry and conservation of biodiversity in China." *The China Quarterly*. No.156: 911-934.
- Herrold-Menzies, Melinda. 2006. "Integrating Conservation and Development." *Journal of Environment and Development*. 15(4): 382-406.
- Ho, Peter, 2000. "China's Rangelands under Stress: A Comparative Study of Pasture Commons in the Ningxia Hui Autonomous Region." *Development and Change* 31:385-412.

CET Syllabus of Record

- Johnson, Todd, 1997. *Clear Water, Blue Skies: China's Environment in the New Century*. The World Bank.
- Lieberthal, Kenneth and Michael Oksenberg. 1988. *Policy Making in China: leaders, structures and processes*. Princeton, NJ: Princeton University Press.
- Liu Changming. 1998. "Environmental Issues and the South-North Water Transfer Scheme," *China Quarterly* 156.
- Liu, Y., Mol, A. & Chen, J. 2005. 'Environmental industries in China: barriers and opportunities between state and market', *International Journal of Environment and Sustainable Development* 4(3): 269–89.
- Morgenstern, Richard D. et al. 2005. "Emissions Trading to Improve Air Quality in an Industrial City in the People's Republic of China," in Kristen A. Day, ed., *China's Environment and the Challenge of Sustainable Development*, pp. 150-179.
- Paarlberg, Robert L. 1997. "Feeding China: a confident view." *Food Policy*. Vol 22 No. 3 pp. 269-279.
- Palmer, Michael. 1998. "Environmental Regulation in the People's Republic of China: The Face of Domestic Law." *China Quarterly* 156, pp.788-808.
- Retherford, Robert T. et al., 2005. "How far has fertility in China really declined?" *Population and Development Review*, March v31 i1 p57-87.
- Rosegrant, Mark, Scott Rozelle, and Roberta V. Gerpacio (guest editors) *Food Policy*. June 1997. Special Issue: "China and the World food economy" Volume 22 Number 3.
- Rosen, Daniel H. and Trevor Houser. 2007. "China Energy: A Guide for the Perplexed."
- Saich, Tony. 2000. "Negotiating the state: the development of social organizations in China," *The China Quarterly*, No. 161, pp. 124–141.
- Sanders, Richard. 2006. "A Market Road to Sustainable Agriculture? Ecological Agriculture, Green Food and Organic Agriculture in China" *Development and Change* 37(1): 201–226.
- Shapiro, Judith. 2002. *Mao's War Against Nature*, chapter 2, "Deforestation, Famine, and Utopian Urgency"
- Shi, H. 2003. 'Cleaner production in China', in A. Mol & J. van Buuren (eds.) *Greening Industrialization in Transitional Asian countries: China and Vietnam* (Lanham, MD: Lexington), pp. 63–82.
- Stalley, Phillip and Dongning Yang. 2006. "An Emerging Environmental Movement in China?" *The China Quarterly*, 186:1, pp. 333-56.
- Vermeer, Eduard B. "Population and Ecology along the Frontier in Qing China," in Mark Elvin, ed., *Sediments of Time*. 1996.
- Weller, Robert P. and Peter K. Bol. 1998. "From Heaven-and-Earth to Nature: Chinese Concepts of the Environment and their influence on policy implementation," in Michael B. McElroy, Chris P. Nielsen, and Peter Lydon, ed.s, *Energizing China*. Cambridge: Harvard University Committee on Environment.
- Williams, Dee Mack. 2000. "Representations of Nature on the Mongolian Steppe: An Investigation of Scientific Knowledge Construction" *American Anthropologist* v102, n3: 503.
- Wright, Tim. 2004. "The Political Economy of Coal Mine Disasters in China: "Your Rice Bowl or Your Life"." *The China Quarterly*, 179:-1, pp. 629-46.
- Xu Jianchu et al., 2006. "Integrating Sacred Knowledge for Conservation: Cultures and Landscapes in Southwest China," *Ecology and Society* 10, 2.

CET Syllabus of Record

Yin, R.S. 1998. "Forestry and the environment in China: the current situation and strategic choices." *World Development* 26(12): 2153-2167.

Yeh, Emily. 2000. "Forest claims, conflicts and commodification: The political ecology of Tibetan mushroom-harvesting villages in Yunnan Province, China." *China Quarterly* N161:264-278.

Outline of Course Content

Note: Fall/Spring students cover 1 to 2 topics per week. During the summer, when class periods are longer, students cover 2 to 3 topics per week.

Topic 1 - Introduction to Course and Overview of Issues

Brief survey of contemporary news coverage of China's environment in U.S.; broad political and socio-economic processes driving environmental degradation nationally and globally

Topic 2 – Biophysical Landscapes and Historical Processes

Overview of China's ancient and contemporary biophysical landscapes with emphasis on retreating forests and waterways within ancient Chinese kingdoms; early urbanization, agriculture, state and war-making in Ancient China and the environmental impacts

Topic 3 - Perceptions of Nature in Comparative Historical Perspective

Confucian, Daoist, Buddhist and animistic understandings of "Nature" in ancient and imperial China; early awareness of environmental degradation; Chinese views of nature in comparison with Judeo-Christian understandings; arrival of Europeans and resulting changes in understanding of "Nature"

Topic 4 – Promethean Dreams and Seeing Like a Maoist Environmental State

Mao's "war on nature" from the Great Leap Forward through the Cultural Revolution; Soviet models, silencing science, and the ecological destruction of the "kill the four pests" and "take grain as the key link" campaigns

Topic 5 - China's Population "Bomb" and the One-Child Policy

Demographic policies and trends from "hero mothers" to the one-child policy; global population growth and demographic transitions; coercive policies and modes of resistance

Topic 6 – Agriculture: from "Who will feed China?" to "Who will China feed?"

Overview of agriculture, especially grain production from Imperial China through the Reform period; erroneous predictions of global famines and the Green Revolution; national and global impacts of growing appetites in China

Topic 7 – Water Resources and Politics

Overview of precipitation levels across the country including droughts in northern China and floods throughout, especially in the southern China; South to North Water transfer project; institutional differences between different provinces and municipalities

CET Syllabus of Record

Topic 8 – Grasslands and Desertification

Extent and range of grasslands; climatic and anthropogenic causes of desertification; conflict and cooperation between Han Chinese farmers and ethnic minority herders such as Mongols, Tibetans, and Kazakhs

Topic 9 – Forests

History of the “Three Big Cuts”; the flood of 1998 and the logging ban; national reforestation campaigns; resulting deforestation in Southeast Asia

Topic 10 – Environmental Laws and Politics

Institutional organization and reorganization of environmental protection; evolution of environmental policies and laws, including international influences on these policies

Topic 11 – NGOs, Nature Reserves, and Biodiversity

Arrival of international NGOs and emergence of domestic NGOs and green civil society; growth of nature reserves and protection of China’s biodiversity “hotspots”

Topic 12 – Public Environmental Awareness, Information, and Participation

Rise of environmental journalism and environmental awareness among both the public and government officials; increasing access to information regarding the environment and pollution; growing public participation in environmental protection

Topic 13 – Trash Trade and E-waste

Trade in trash, including hazardous waste; emergence of e-waste as the fastest growing segment of waste stream, especially waste shipped internationally to China; Guiyu and other e-waste processing areas and their surrounding cancer villages

Topic 14 – Urbanization and Municipal Waste

Overview of rapid urbanization as well as predictions of China’s “urban billion”; growing municipal waste problem including issues surrounding landfills and incineration

Topic 15 – Pollution and Protest

Protests arising from cancer villages and areas located near landfills and incinerators; protests over polluting factories and displacement from dams, urban development, and infrastructure projects

Topic 16 – Energy and Air Pollution

Overview of China’s growing energy demand and supply; roles of coal, oil, hydropower, nuclear, and renewable energies; role of coal in air pollution

Topic 17 – Energy and Geopolitics

Oil and rise of Chinese investment in Africa; possible competition between China and the US over oil; Chinese hydropower development and conflicts with Southeast and South Asian countries

CET Syllabus of Record

Topic 18 – Climate Change

China's role in global climate change; biophysical impacts of climate change in China; international cooperation around climate change

Topic 19 – Renewable Energies, Energy Conservation, and Cooperation

China's rapidly growing wind and solar energy sectors; government and NGO efforts towards energy conservation; cooperation between China and US to mitigate climate change; other cleantech industries