

COURSE SYLLABUS

ENVIRONMENTAL HEALTH

Alliance for Global Education

Public Health Policy and Practice Program in Shanghai

Suggested US semester credit hours: 3 credits

IFSA-Butler/Alliance course code: PUBH 350 / ENVI 350

Course length: Semester

Delivery method: Face to face

COURSE DESCRIPTION

Environmental health concerns in China are well documented and widely acknowledged on the international stage. In this course, China's environmental challenges and the governmental policies and institutions and initiatives that impact them are examined. Topics include water pollution, indoor and outdoor air pollution, flood control and water management, soil pollution and electronic waste, climate change, and environmental impact on food supply and safety. Rapid growth in China's industry and economy have led to increasing health hazards for Chinese people in their communities, homes, schools, and workplaces. In this course, students explore the various issues policy makers consider when undertaking risk assessment and developing regulatory policies to reduce these negative impacts while maintaining a trajectory of economic growth. Consideration of changing environmental politics and emerging environmental advocacy efforts provides further context for these discussions.

Readings and resources from both social science and environmental science provide an interdisciplinary perspective to these topics. Finally, the setting of Shanghai, an economic, finance and trade center of China, provides a dynamic learning environment and laboratory for local examination of national issues.

STUDENT LEARNING OBJECTIVES

This course includes the following goals for students:

- Increase understanding of China's contemporary environmental challenges and issues.
- Become aware of China's current governmental policies and the structures that provide environmental governance.
- Become aware of changing environmental politics, citizen action, and environmental advocacy efforts in China.
- Become familiar with resources available for research on China's environmental regulatory policies and practices.
- Evaluate policies and practices and develop a recommended policy change on a particular environmental health issue.
- Demonstrate understanding of the cultural considerations of environmental health issues.
- Strengthen research skills, persuasive argument skills, and academic writing skills.
- Make connections between learning in this course and other learning experiences in the Alliance for Global Education Program in Public Health Policy and Practice in Shanghai.

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COURSE SCHEDULE

The following schedule indicates the weekly discussion topics, related readings, and assignments for this course. With the exception of Week 1 (when resources will be reviewed as a group during class), students are expected to read or watch resources in advance and be prepared to actively discuss them in class. In each meeting, the instructor will overview the topic and then facilitate a group discussion, drawing out relevant themes, following up on specific lines of inquiry, and prompting students' thoughtful engagement with the topic. Students are encouraged to bring their prior learning experiences into class discussions and to make connections between this course and others whenever possible. Theories of experiential learning and integrative learning therefore undergird the dynamic learning environment of this course.

Each discussion will present the topic from integrated social science and environmental science perspectives. Each discussion will specifically connect the environmental challenge in question to impacts on China's population and their health.

Week 1: **Introduction: China's Environmental Health Issues in Context**

Kan, H. (2009). Environment and Health in China: Challenges and Opportunities. *Environmental Health Perspectives*, 117(12), A530-A531.

Zhang, J., Mauzerall, D., Zhu, T., Liang, S., Ezzati, M., & Remais, J. (2010). Environmental health in China: Progress towards clean air and safe water. *Lancet*, 375(9720), 1110-1119.

Lu, Y., Song, S., Wang, R., Liu, Z., Meng, J., Sweetman, A.J., Jenkins, A., Ferrier, R.C., Li, H., Luo, W., Wang, T. (2015) Impacts of soil and water pollution on food safety and health risks in China. *Environment International*, 77, 5-15.

Week 2: **Environmental Management and Governance**

He, G., Lu, Y., Mol, A. P. J., & Beckers, T. (2012). Changes and challenges: China's environmental management in transition. *Environmental Development*, 3.

Lingxuan L., Zhang, B., & Bi, J. (2012). Reforming China's multi-level environmental governance: lessons from the 11th five-year plan. *Environmental Science and Policy*, 21.

Zhang, L., Mol, A.P.J., He, G. (2016). Transparency and information disclosure in China's environmental governance. *Current Opinion in Environmental Sustainability*, 18, 17-24.

- Assignment: Response Paper #1: Environmental Management and Governance

Week 3: **Outdoor Air Pollution**

Van Rooij, B. (2010). The people versus pollution: Understanding citizen action against pollution in China. *Journal of Contemporary China*, 19(63).

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Lingxuan L, He, P., Zhang, B., & Bi, J. (2012). Red and green: Public perception and air quality information in urban China. *Environment: Science and Policy for Sustainable Development*, May/June, 44-49.

Week 4: **Spring Festival Holidays** (No Class)

Week 5: **Independent Travel Week** (No Class)

Week 6: **Indoor Air Pollution**

Zhang J, & Smith K. (2007). Household air pollution from coal and biomass fuels in China: measurements, health impacts, and interventions. *Environmental Health Perspectives*, 115, 848-855.

Sinton, J., Smith, K., Peabody, J., Yaping, L., Xiliang, Z., Edwards, R., & Quan, G. (2004). An assessment of programs to promote improved household stoves in China. *Science Direct*, 8(3), 33-52.

Li, Q., Jiang, J., Wang, S., Rumchev, K., Mead-Hunter, R., Morawska, L., Hao, J. (2017). Impacts of household coal and biomass combustion on indoor and ambient air quality in China: Current status and implication. *Science of the Total Environment*, 576, 347-361.

- Assignment: Response Paper #2: Indoor and Outdoor Air Pollution

Week 7: **Water Pollution**

Zhang, J., Mauzerall, D. L., Zhu, T., Liang, S., Ezzati, M., & Remais, J. V. (2010). Environmental health in China: Progress towards clean air and safe water. *Lancet*, 375, 1110–19.

Small group discussion: Examine one of the following case studies:

Ren, H. Wan, X., Yang, F., Shi, X., Xu, J., Zhuang, D., & Yang, G. (2015). Association between changing mortality of digestive tract cancers and water pollution: A case study in the Huai River Basin, China. *International Journal of Environmental Research and Public Health*, 12(1), 214-226.

Qin, B., Guangwei, Z., Gao, G., Zhang, Y., Li, W., Paerl, H. W., & Carmichael, W. W. (2010). A drinking water crisis in Lake Taihu, China. *Environmental Management*, 45, 105-112.

Week 8: **Flood Control and Water Management**

Hvistendahl, M. (2008). China's Three Gorges Dam: An environmental catastrophe? *Scientific American (March)*.

Wilmsen, B., Webber, M., & Yuefang, D. (2011). Development for whom? Rural to urban resettlement at the Three Gorges Dam, China. *Asian Studies Review*, 35, 21-42.

- Assignment: Response Paper #3: Water Pollution and Management

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Week 9: **Soil Pollution**

Yang, H., Huang, X., Thompson, J.R., Flower, R.J. (2014). China's Soil Pollution: Urban Brownfields. *Science Letters*, 344, 691-692.

Li, Z., Ma, Z., Kuijp, T.J., Yuan, Z., Huang, L. (2014). A review of soil heavy metal pollution from mines in China: Pollution and health risk assessment, *Science of Total Environment*, 468-469, 843-853.

Week 10: **Electronic Waste**

Xia Huo, Lin Peng, Xijin Xu, Liangkai Zheng, Bo Qiu, Zongli Qi, Bao Zhang, Dai Han, & Zhongxian Pia. (2007). Elevated blood levels of children in Guiyu, an electronic waste recycling town in China. *Environmental Health Perspectives*, 115(7), 1113-1117.

Hicks, C., Dietmar, R., & Eugster, M. (2005). The recycling and disposal of electrical and electronic waste in China: Legislative and market responses. *Environmental Impact Assessment Review*, 25, 459-471.

Chi, X., Streicher-Porte, M., Wang, M.Y.L., Reuter, M.A. (2011). Informal electronic waste recycling: A sector review with special focus on China. *Waste Management*, 31, 731-742.

- Policy Memo Topic Proposal Due

Week 11: **Field Study Trip** (No Class)

Week 12: **Food Supply and Food Safety**

Lam, H.M., Remais, J., Fung, M.C., Xu, L., Sun, S. S.M. (2013). Food supply and food safety issues in China. *Lancet*, 381, 2044-2053.

Lua, Y., Song, Wang, R., Liu, Z., Meng, J. Sweetman, A., Jenkins, A., Ferriere, R., Hong, L, Wei, L., & Wang, T. (2015). Impacts of soil and water pollution on food safety and health risks in China. *Environment International*, 77, 5–15.

Assignment: Response Paper #4: Soil Pollution and Electronic Waste

Week 13: **Changing Environmental Politics**

Hsieh, S. & Knutson, S. (2013). Special report: The role and challenges of international NGOs in China's development. *China Development Brief*.

Chen, J. (2010). Transnational environmental movement: Impacts on the green civil society in China. *Journal of Contemporary China*, 19(65).

- Annotated Resource List for the Policy Memo Due

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Week 14: **Emerging Environmental Advocacy**

“China’s New Environmental Advocates.” Yale University Environment 360 Project.
(Until recently, the idea of environmental advocacy was largely unheard of in China. But that’s changing rapidly. At a legal aid center based in Beijing, Xu Kezhu and her colleagues are helping pollution victims stand up for their rights.)

http://e360.yale.edu/feature/chinas_new_environmental_advocates/2037/

Thompson, D., & Lu, X. China’s evolving civil society: From environment to health. China Environment Series, Woodrow Wilson International Center for Scholars, 2006.

- Assignment: Response Paper #5: Changing Environmental Politics and Emerging Advocacy

Week 15: **Environmental Risk Management** (a policy study report example)

Eco-environmental Risk Management, China Council for International Cooperation on Environment and Development (CCICED). Special Policy Study Report. CCICED 2014 Annual General Meeting November 9-11, 2015. Eco-Environmental Risk Management.pdf

- Policy Memos Due

Week 16: **Conclusions and Final Projects**

Wrap-up discussions, final thoughts and questions.

Informal in-class student overviews of Policy Memos.

ASSIGNMENTS

Response Papers (5 total; due dates indicated throughout)

Response papers can be constructed in a way that makes the most sense for you as the learner. Consider the class resources provided for the topic. Select one or more for the focus of your response. In a single page, describe your responses to what you encountered. Was your thinking challenged or were your prior ideas confirmed? Perhaps you found a particular reading compelling and it prompted you to consider new ideas or possible solutions; perhaps you made personal connections between a class discussion and your own learning; or maybe you located an additional resource that gave you more information on the topic. Feel free to describe your learning using any of these approaches or others, but do not use the response paper assignment to merely summarize a reading or a discussion. The response paper should demonstrate that you have given additional, reflective thought to an issue. Your voice should be heard in this paper.

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Policy Memo Topic Proposal

Prepare a 1-page statement proposing a topic of personal interest for the final Policy Memo assignment. Clearly state the reasons for your interest in the topic and the questions that motivate you. Reference at least two of the course readings in your statement.

Annotated Resource List

The Annotated Resource List requires you to do additional reading on your area of interest. Prepare a list of 10 annotated resources related to your Policy Memo Topic. Each annotated resource should include the following: (a) a full citation for the resource, (b) a summary of the resource (in your own words—do not use the abstract), and (c) articulation of why you selected this resource/its relevancy to your project. Peer-reviewed journal articles must comprise at least 5 of your 10 selected resources. Do not include resources listed in this syllabus.

Policy Memo

Policy memos are a unique written product that practitioners in the policy and planning fields should be able to produce. Select a topic of interest from among the weekly discussion topics of the course. Research the current regulatory practices, including governmental positions, agency activities, and local initiatives, related to the topic. Evaluate the existing and consider new regulatory practices and positions and determine a recommended policy change or a vigorous defense of the status quo. Consider a potential audience for your recommendation. Develop a 6-10 page policy memo outlining your issue and your recommendation.

For guidance, refer to the “Writing a Policy Memo” guide from the University of Southern California Libraries Research Guides Series: <http://libguides.usc.edu/c.php?g=235034&p=1559842>

The policy memo assignment addresses the following student learning objectives:

- Sharpen academic writing skills. Prepare a clear, persuasive paper.
- Demonstrate understanding and thoughtfulness about a specific “real-world” issue.
- Demonstrate awareness of the cultural considerations surrounding the issue.
- Choose and craft a document’s content based on the needs of a particular audience, anticipating the needs and assumptions of that audience.
- Create original work that synthesizes research into a succinctly written document advocating change or a specific course of action.

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EVALUATION METHODS

Your performance in this course will be assessed through the following, and your final grade will be determined by the percentages indicated:

Participation (includes attendance, engagement in discussion, civility, and respect) – 10%

Response Papers (5 total) – 10%

Policy Memo Topic Proposal – 10%

Annotated Resource List – 20%

Policy Memo (final) – 50%

Individual grading rubrics for the Response Papers, Policy Memo Topic Proposal, Annotated Resource List, and Policy Memo will be provided by the instructor during class.

Alliance programs utilize the follow standard grading policy well accepted by most US institutions.

Excellent	A	93-100%	Good	B+	87-89%	Acceptable	C+	77-79%	
	A-	90-92%		B	83-86%		C	73-76%	
				B-	80-82%		C-	70-72%	
						Unsatisfactory	D+	67-69%	
							D	63-66%	
							D-	60-62%	
							Failing	F	<60%

ATTENDANCE

Everyone benefits by learning from each other; if students are not present, it affects everyone and negatively impacts the program. Attendance is required for all classes and mandatory field visits; attendance will be recorded. Students must notify their instructors and the Resident Director ahead of their absence from class or class-related activities. Class participation is expected and is a contributing factor to students' final course grades. Students' grades will be reduced one grade increment for more than two unexcused absences.

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ACADEMIC INTEGRITY

Any academic endeavor must be based upon a foundation of honesty and integrity. Students are expected to abide by principles of academic integrity and must be willing to bear individual responsibility for their work while studying abroad. Any academic work (written or otherwise) submitted to fulfill an academic requirement must represent a student's original work. Any act of academic misconduct, such as cheating, fabrication, forgery, plagiarism, or facilitating academic dishonesty, will subject a student to disciplinary action.

IFSA-Butler takes academic integrity very seriously. Students must not accept outside assistance without permission from the instructor. Additionally, students must document all sources according to the instructions of the professor. Should your instructor suspect you of plagiarism, cheating, or other forms of academic dishonesty, you may receive a failing grade for the course and disciplinary action may result. The incident will be reported to the IFSA-Butler resident director as well as your home institution.