

China's Sustainable Development

SOSC 4290 (3 Credits)

Syllabus – Spring 2021

The Hong Kong University of Science and Technology

Time: Tuesday and Thursday: 15:00-16:20 (February 2 – May 6, 2021)

Venue: Zoom (Please directly log in on CANVAS)

Instructor: Tong LIU (tongliu@ust.hk; +852-2358-7824)

Office Hours: Tuesday and Thursday: 16:30-17:30 (by appointment), Room 2382, Lifts 13-15

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Office Hours: Wednesday 14:00-15:30 (by appointment), Room 3005, Lift 4

Course Description

There is a great necessity and responsibility for China to shift to a more sustainable development path. This course is designed to provide students with an understanding of the concepts, principles, and evaluation methodologies of sustainable development. The course will introduce students to multidisciplinary approaches to apply these principles and methods to analyze sustainable development issues in China, such as energy resources and pollution, transportation and urbanization, and climate change; and to explore solutions for China's future development. Governance and policy, technology, organizational and individual behavior are important elements affecting sustainable development and will be examined at international, national, and local levels.

Intended Learning Outcomes

- Students are expected to have a comprehensive understanding of key challenges in environment, economic development, health, poverty, inequality, and other important issues in China.
- Students will learn the frontiers of research and practice from an interdisciplinary perspective to promote sustainable development.
- Students will learn to apply the analytical framework and skills to explore issues in sustainability and development quantitatively and qualitatively.

Prerequisites

ENVR 3110 (Sustainable Development) OR SOSC 1170 (Environmental and Energy Governance in China) OR SOSC 3150 (Science, Technology and Environment)

Grading

- Individual paper (40%)

Academic writing (6,000-8,000 words)

Highlight the gap in research/ practice, and propose solutions with quantitative/ qualitative analyses.

- Project presentation (40%)

A case study on China's sustainable development issues.

- Attendance and participation (20%)

Please be punctual (log in ~2 min in advance), turn on your camera, and keep your cellphone muted in class.

E-mailing

Please put “SOSC4290” in the subject line of all e-mail correspondence. E-mail should be reserved for questions related to scheduling, appointments or administrative issues. Please come to office hours or schedule an appointment if you have any questions related to course materials.

Textbooks and Readings

Readings are on the reading list and are posted on CANVAS. Below is a list of recommended books and media resource for understanding sustainable development in China.

- “The Economics of the Environment”, by Peter Beck and Gloria Helmand, Prentice Hall; 1 edition, 2010.
- “Development as Freedom”, by Amartya Sen, Oxford Paperbacks, 2001.
- “The China Miracle: Development Strategy and Economic Reform” (中國的奇蹟：發展戰略與經濟改革), by Justin Yifu Lin, Fang Cai, and Zhou Li, Truth & Wisdom Press, 2014.
- “The State Strikes Back: The End of Economic Reform in China?”, by Nicholas R. Lardy, Peterson Institute for International Economics, 2019.
- “Blue Skies over Beijing: Economic Growth and the Environment in China”, by Matthew E. Kahn and Siqi Zheng, Princeton University Press, 2016.
- “Mostly Harmless Econometrics: An Empiricist's Companion”, by Joshua D. Angrist and Jörn-Steffen Pischke, Princeton University Press, 2008.
- Documentary: Under the Dome—Investigating China’s Smog, by Jing Chai, 2015.

Outline (Tentative)

Week 1 (February 2 & 4) – Introduction on Sustainable Development in China

- Overview
- Research Paradigm

Week 2 (February 9 & 11) – Theoretical Framework

Week 3 (February 16 & 18) – Pollution: Causes and Consequences

Week 4 (February 23 & 25) – Climate Change: Adaptation, Mitigation, and Resilience

- Global Warming and Carbon Emission
- Natural Disaster

Week 5 (March 2 & 4) – Energy and Natural Resources

Week 6 (March 9 & 11) – Health

- Population, Aging, and Gender
- Public Health and Pandemic

Week 7 (March 16 & 18) – The Economy: Agriculture, Industry, Service

Week 8 (March 23 & 25) – Urbanization

- Infrastructure
- Housing and Migration

Week 9-10 (March 30 & April 8) – Education and Innovation

Week 11 (April 13 & 15) – Equity and Equality

Week 12 (April 20 & 22) – Governance

- Institution, Regulation, Policy
- Political Economy

Week 13 (April 27 & 29) – China and the World (Belt and Road, Africa)

- Data and Practical Tools

Week 14 (May 4 & 6) – Review and Final Project Presentation