

Course Outline

EE465: SUSTAINABLE DEVELOPMENT

Semester 2/2021 (January 10th – May 7th, 2022)

Number of Credit: 3 (3-0-6)

Prerequisite: EE212 (or EE214) and EE311

Course Description:

Development of sustainable development approach under context of socio-politico-economic development at different levels. Sustainable development crises at global level and in Thailand. Definitions and fundamental ideas regarding Sustainable Development and contemporary debates. Other approaches related to sustainable development and their critiques, such as Gross National Happiness (GNH), Sufficiency Economy Philosophy, Green Growth, etc. Economic theories related to sustainable development, such as the analysis of externalities, public goods, common-pool resources, ecological economics, Green Economy, and economic measures for sustainable development. Policies and indicators related to sustainable development at global level, particularly the Sustainable Development Goals (SDGs). Challenges and obstacles to achieve sustainable development.

Course Objectives:

1. Obtaining a better understanding of the concepts of development and sustainable development, and issues of sustainable development challenges.
2. Learning to critique mainstream economics and alternative views of economics to the achieving of sustainable development.
3. Learning and practicing analytical economic frameworks for sustainable development.
4. Understanding in more details on Sustainable Development Goals (SDGs), its challenges and obstacles, and roles and best practices of different stakeholders in achieving the SDGs.
5. Practicing academic and analytical skills related to sustainable development, such as critical thinking, system thinking, policy analysis, communicating sustainability.

Class Time and Logistic

Class day: Tuesday and Thursday

Class time: 09.30 – 11.00 AM

Teaching Materials Platform: Google Classroom

(please use faculty email account)

<https://classroom.google.com/c/NDUwNDU5NjA0MTYx?cjc=nktlva7>

Meeting Platform: Zoom

<https://zoom.us/j/97528772719?pwd=ZUxSVE1zYlIPV2wwYXFEXaGZvaFo3Zz09>

Instructor:

Name: Assistant Professor Chol Bunnag

Office Hours: 13.00 – 17.00 hours (please email for appointment)

Email: cholb@econ.tu.ac.th

Main Text:

Sachs, Jeffrey D. 2015. *The Age of Sustainable Development*. New York, NY: Columbia University Press.

Raworth, Kate. 2018. *Doughnut Economics*. London, England: Random House Business Books.

Suggested Readings:

Brandon, Alec, John A. List, Robert D. Metcalfe, Michael K. Price, and Florian Rundhammer. 2019. "Testing for Crowd out in Social Nudges: Evidence from a Natural Field Experiment in the Market for Electricity." *Proceedings of the National Academy of Sciences of the United States of America* 116 (12): 5293–98.

Carlsson, Fredrik, and Olof Johansson-Stenman. 2012. "Behavioral Economics and Environmental Policy." *Annual Review of Resource Economics* 4 (1): 75–99.

Dodds, Felix, David Donoghue, and Jimena Leiva Roesch. 2016. *Negotiating the Sustainable Development Goals*. London, England: Routledge.

Kanie, Norichika, and Frank Biermann, eds. 2018. *Governing through Goals : Sustainable Development Goals as Governance Innovation*. Earth System Governance. London, England: MIT Press.

Kotchen, Matthew J., and Kathleen Segerson. 2019. "On the Use of Group Performance and Rights for Environmental Protection and Resource Management."

- Proceedings of the National Academy of Sciences of the United States of America* 116 (12): 5285–92.
- Monkelbaan, Joachim. 2019. *Governance for the Sustainable Development Goals: Exploring an Integrative Framework of Theories, Tools, and Competencies*. Springer, Singapore.
- Ostrom, Elinor. 1990. *Governing the Commons*. Cambridge University Press.
- Polasky, Stephen, Catherine L. Kling, Simon A. Levin, Stephen R. Carpenter, Gretchen C. Daily, Paul R. Ehrlich, Geoffrey M. Heal, and Jane Lubchenco. 2019. "Role of Economics in Analyzing the Environment and Sustainable Development." *Proceedings of the National Academy of Sciences of the United States of America* 116 (12): 5233–38.
- Shogren, J. F., and L. O. Taylor. 2008. "On Behavioral-Environmental Economics." *Review of Environmental Economics and Policy* 2 (1): 26–44.
- Walker, Julia, Alma Pekmezovic, and Gordon Walker. 2019. *Sustainable Development Goals: Harnessing Business to Achieve the SDGs through Finance, Technology and Law Reform*.
- Wright, Diana, and Donella H. Meadows. 2009. *Thinking in Systems*. London, England: Earthscan.

Further suggested readings will be provided in classes.

Grading Criteria:

1. Midterm Examination (Take-home) 20 points

Providing the questions: Thursday, February 24, 2022, 11.00 AM

Submission: Thursday, March 3, 2022: deadline 11.00 AM

2. Final Examination (Take-home) 30 points

Providing the questions: Tuesday, May 3, 2022, 11.00 AM

Submission: Tuesday, May 10, 2022: deadline 4.30 PM

3. Assignment 1: Sustainability Challenges 20 points

Group of 3-4 students

Select 1 topic from the following list:

- Ending Extreme Poverty
- Social Inclusion
- Education for All

- Health for All
- Food Security
- Resilient Cities
- Climate Change
- Saving Biodiversity and Protecting Ecosystem

Prepare a 10-minute presentation of the selected topic. The expected topics include:

- Nature of the problem (what is it? What is going on?)
- What are the possible/plausible causes?
- How is it interconnected with other sustainability aspects (social, economic, environmental, and human rights)?
- Reviewing of the existing solutions.

Present the output in week 7

Submit through Google Classroom assignment (everyone)

4. Assignment 2: ESG Best Practices private sector **20 points**

Group of 3-4 students (same group from assignment 1)

Select 1 sector from the following list

Prepare a 10-minute presentation of ESG/Sustainability Best Practices of companies in the selected sector, linking them to the SDGs.

Present the output in week 16 and 17

Submit through Google Classroom assignment (everyone)

Industry Group	Sector
Agro & Food Industry	Agribusiness
	Food & Beverage
Consumer Products	Fashion
	Home & Office Products
	Personal Products & Pharmaceuticals
Financials	Banking
	Finance & Securities
	Insurance
Industrials	Automotive
	Industrial Materials & Machinery
	Packaging
	Paper & Printing Materials
	Petrochemicals & chemicals

Industry Group	Sector
	Steel & Metal Products
Property & Construction	Construction Materials
	Construction Services
	Property Development
	Property Fund & REITs
Resources	Energy & Utilities
	Mining
Services	Commerce
	Health Care Services
	Media & Publishing
	Professional Services
	Tourism & Leisure
	Transportation & Logistics
Technology	Electronic Components
	Information & Communication Technology

5. Class Review (5 times x 2 points)

10 points

Select one topic in that section you think the most interesting, explaining briefly about the topic and why it is interesting to you.

Write down 500-word class review.

Please provide a title, author (your name), student ID.

Submission dates are provided in the tentative class schedule below

Expected Learning Outcomes:

1. Students understand the concepts of sustainable development and issues of sustainable development challenges.
2. Students obtain knowledge and able to practice analytical economic frameworks for sustainable development.
3. Students understand more details on Sustainable Development Goals (SDGs), its challenges and obstacles, and roles and best practices of different stakeholders in achieving the SDGs.
4. Students develop academic and analytical skills related to sustainable development, such as critical thinking, system thinking, policy analysis, communicating sustainability.

Tentative Class Schedule:

Week	Topic	Remarks
1	I. Overview of Sustainable Development <ul style="list-style-type: none"> History of economic development and the need for sustainable development Concept of Sustainable Development and related concepts Overview of the Sustainable Development Goals (SDGs) 	
2		
3	II. Economics for Sustainable Development <ul style="list-style-type: none"> Role of (mainstream) economics in Sustainable Development Jeffrey Sachs's Clinical Economics Kate Raworth's Doughnut Economics Thailand's BCG policy Sufficiency Economy Philosophy 	Submit Section 1 Class Review
4		
5		
6		
7	Presentation: Sustainability Communication	Submit Section 2 Class Review
8	Midterm Exam Providing the questions: <ul style="list-style-type: none"> Thursday, February 24, 2022, 11.00 AM Submission: <ul style="list-style-type: none"> Thursday, March 3, 2022: deadline 11.00 AM 	
9	III. Economic Theories for Sustainable Development <ul style="list-style-type: none"> How do we allocate limited resource overtime? How do communities solve common-pool resource and public goods problem? Behavioral Economics, Policy, and Institutional Design for Sustainable Development. 	
10		
11	IV. Sustainable Development Goals (SDGs) <ul style="list-style-type: none"> The MDGs and the SDGs SDG structure and principles SDG indicators Governance for SDGs Finance for Development Trade and Development 	Submit Section 3 Class Review
12		
13		
14	Songkran Week	
15	V. Private Sectors and Sustainable Development <ul style="list-style-type: none"> SDGs actions in Private Sector SDG Compass Green Washing / SDG Washing ESG Best Practice: Private Sector	Submit Section 4 Class Review
16		
17	Review and prepare for the Final Exam	Submit Section 5 Class Review