Course Name:	**Global Environment (SCBE105) 3(3-0-6)**
Lectures:	Monday 13:30 – 16:30 AM
Location:	SC1-155, Salaya
Course-coordinator:	Dr.Toemthip Poolpak

Course Syllabus

Course Description

An overview of large-scale environmental issues and their relation to the development of human societies and resource uses over time, man and environment interactions, pollution and environmental issues, land, air and water resources, management of natural resources, sustainable and conventional sources of energy, balance of nature and the effects of pollutants and contaminants on the natural environment, climate change and loss of biodiversity. This course will cover a number of looming global environmental problems and what society can do about them.

Course Learning Outcomes (CLOs)

After completing this course students should be able to:

1) Elucidate the scientific basis of the global environmental issues covered in class, including the technical options available for avoiding or contending with each problem.

2) Discuss social, psychological, economic and political issues surrounding each of the global environmental issues covered in class.

Teaching and Evaluation Methods

Teaching will be in the classroom with interacting perspectives. A textbook is not required and course content will follow the recommended reading materials.

No practical laboratory but field trips are provided to fit the lecture topics. Field trip reports are required.

Midterm and final examinations are in a written format and will be announce at the beginning of the class or with this course outline.

Fieldtrip is required (if time and the transportation is permitted) and will be announced in class.

Evaluation

1. Mid-term	30%
2. Final examination	30%
3. Class participation	20%
4. Fieldtrip and Report	(10% + 10%)

or Class presentation*

Students will be evaluated from their total score (out of 100%). Grading system is A, B^+, B, C^+, C, D+, D and F.

* If situations are permitted.

Course Coordinator: Dr. Toemthip Poolpak (TP)

Instructor: Associate Professor Dr. Prayad Pokethitiyook (PP)
Dr. Nuttaphon Onparn (NO)
Dr. Toemthip Poolpak (TP)

Teaching Plan

Month	Date	Lecture-Topic	Instructor
Jan	9	Introduction to global environmental problems	TP
	16	Population growth and its impact	NO
	23	Global climate change, Greenhouse effects	NO
	30	Biodiversity loss	NO
Feb	6	Invasive species	NO
	13	Hazardous earth process: Earthquakes, volcanoes, flooding	TP
	20	Soil resources: human activity and soil	TP
	28	Mid-Term Examination	NO/TP
Mar	13	Water resources and alternative sources of freshwater	TP
	20	Pollution and waste disposal	TP
	27	Global pandemic	PP
Apr	3	Ocean acidification, coral bleaching	PP
	10	Air Pollution: cause and effects	PP
	24	Energy for the Future	PP
May	8	Final Examination	PP/TP

References:

David McConnell and David Steer, 2015. The Good Earth: Introduction into Earth Science, 3rd Edition. McGraw-Hill.

G. Tyler Miller Jr. and Scott Spoolman, 2009. Living in the Environment: Principles, Connections, and Solutions, 16th Edition. Brooks/Cole

James S. Riechard, 2011. Environmental Geology. McGraw-Hill.

William P. Cunningham and Barbara W. Saigo, 2003 Environmental Science. 7th Edition. WCB/McGraw-Hill

William P. Cunningham and Barbara S. Cunningham, 2010. Principles of Environmental Science. 5th Edition. WCB/McGraw-Hill