Course Name:	**Global Environment (SCBE105) 3(3-0-6)**
Lectures:	Monday 13:30 – 16:30 AM
Location:	SC1-156 @Salaya campus
Course-coordinator:	Associate Professor Dr. Prayad Pokethitiyook

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 examination 30%
2. Final examination 20%
3. Class participation 10%
4. Class assignments 20%
3. Final project and presentation (10+10) 20%

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

Course Coordinator: Dr. Toemthip Poolpak (TP)

Instructor: Associate Professor Dr. Prayad Pokethitiyook (PP)
Dr. Pahol Kosiyachinda (PK)

Teaching Plan

Week	Date/Month	Lecture-Topic	Instructor
1	18-Jan	Goals, history, global environmental problems and population growth and its impact	PP
2	25-Jan	Fishery decline: Eutrophication	PP
3	1-Feb	Global climate change, Greenhouse effects	PP
4	8-Feb	Air Pollution	PP
5	15-Feb	Ocean acidification, coral bleaching	PP
6	22-Feb	Biodiversity loss	PP
7	1-Mar	Invasive species	PP
8	8-Mar	Eutrophication - Midterm Review	PP
9	15-Mar	Midterm week – No class	
10	22-Mar	Anti-biotic resistance	PK
11	5-Apr	Disease emergence	PK
12	19-Apr	Food security	PK
13	26-Apr	Present Energy	PP
14	3-May	Energy for the Future	PP
15	10-May	Looking ahead for the future world	PP
16	??-May	Final Exam (date will be announced)	TP

References:

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

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