

LIFS 1030 Environmental Science (Summer 2015-2016)

Course Period: 4 July to 8 August 2016
Monday, Wednesday and Friday; 10 am – 12:20 pm
Venue: LTB

Learning Outcomes

By the end of this course, the students are expected to be able to

- 1) Comprehend essential environmental concepts such as life supporting system, biodiversity and biomes, natural resources, sustainability, and their inter-relationships,
- 2) Develop a broad interest and connect the knowledge to their major study,
- 3) Recognize the importance of harmony among human, the nature, and a sustainable living society,
- 4) Apply the knowledge in daily life and contribute to environmental protection.

Course Format

Three lectures (2.5-hour each) per week.

Course Assessment (based on the following course activities and examinations)

Course Activities (about 30%)

- a. Group project with intra-group peer evaluation (about 25%)
 - Each group needs to produce a 5-minute video clip (*submitted by 25 July*)
- b. Inter-group peer evaluation (about 5%)
 - Each student needs to mark 10 video clips from other groups (*finished by 1 August*)

Examinations (about 70%)

Midterm Examination (about 25%) and Final Examination (about 45%)

Course Instructors

Course Director: Prof Pei-Yuan Qian

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Course Instructors: Dr Ice Ko

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Major Reference

Cunningham, W.P. and Cunningham, M.A. (2013) *Principles of Environmental Science: Inquiry and Applications*. Seventh Edition. McGraw-Hill Companies, Inc.

Tentative Lecture Outline and Schedule

	Lecture Topic	Instructor
Part 1: Understanding Our Environment (Chapter 1)		
1)	4 July (Mon) Course Introduction & Pressing Global Environmental Issues	Qian
2)	6 July (Wed) Global Effort in Addressing Environmental Challenges & Movie	Qian
3)	8 July (Fri) Project Briefing	Ko & Lam
Part 2: Matter and Energy (Chapters 2 & 13)		
4)	11 July (Mon) Energy, Matter and Resources in the Environment	Ko
Part 3: Biomes and Biodiversity (Chapter 5)		
5)	13 July (Wed) Earth's Major Biomes	Ko
6)	15 July (Fri) Midterm	Qian & Ko
7)	18 July (Mon) Biodiversity: Its Significance and Threats	Ko
Part 4: Food and Nutrition (Chapter 7)		
8)	20 July (Wed) Nutrition and Food Supply	Ko
Part 5: Atmosphere and Pollution (Chapter 10)		
9)	22 July (Fri) Atmosphere and Climate	Lam
10)	25 July (Mon) Air Pollution	Lam
Part 6: Water Resources and Pollution (Chapter 11)		
11)	27 July (Wed) Water Usage	Lam
12)	29 July (Fri) Water Pollution	Lam
Part 7: Solid and Hazardous Wastes (Chapter 14)		
13)	1 Aug (Mon) Wastes and Disposal	Lam
Part 8: Human Populations (Chapter 4)		
14)	3 Aug (Wed) Human Population Dynamics and Population Control	Ko
	5 Aug (Fri) <i>Study Break</i>	
15)	8 Aug (Mon) Final Exam	Ko & Lam