

# LIFS/OCES 1030 Environmental Science (Summer 2019-20)

**Course Period: 22 June to 29 July 2020**  
**Monday, Wednesday and Friday; 10:00 – 12:20**

**Lectures will be conducted online via ZOOM**

## **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 (TENTATIVE)**

- A Short Critique (500 words maximum) on an Environmental Topic: About 20%
- Final Examination: About 80%

## **Course Instructors**

Course Director: Prof Pei-Yuan Qian (email: boqianpy@ust.hk)

Course Instructors: Dr Ice Ko (email: iceko@ust.hk)  
Dr Cindy Lam (email: envscindy@ust.hk)

## **Major Reference**

Cunningham, W.P. and Cunningham, M.A. (2020) *Principles of Environmental Science: Inquiry and Application*. 9<sup>th</sup> Edition. McGraw-Hill Companies, Inc.

## Lecture Outline and Schedule (TENTATIVE)

Lecture Topic		Instructor	
<b>Part 1: Understanding Our Environment (Chapter 1)</b>			
1)	22 June (Mon)	Course Introduction & Pressing Global Environmental Issues	Qian
2)	24 June (Wed)	Global Efforts in Addressing Environmental Challenges & Movie	Qian
<b>Part 2: Matter and Energy (Chapters 2 &amp; 13)</b>			
3)	26 June (Fri)	Energy, Matter and Resources in the Environment	Ko
<b>Part 3: Biomes and Biodiversity (Chapter 5)</b>			
4)	29 June (Mon)	Earth's Major Biomes	Ko
	<i>1 July (Wed)</i>	<i>Public Holiday</i>	
5)	3 July (Fri)	Biodiversity: Its Significance and Threats (I)	Ko
6)	6 July (Mon)	Biodiversity: Its Significance and Threats (II)	Ko
<b>Part 4: Food and Nutrition (Chapter 7)</b>			
7)	8 July (Wed)	Food Security and Nutrition	Ko
<b>Part 5: Human Populations and Sustainability (Chapter 4)</b>			
8)	10 July (Fri)	Human Populations and Sustainability (I)	Ko
9)	13 July (Mon)	Human Populations and Sustainability (II)	Ko
<b>Part 6: Atmosphere and Pollution (Chapter 10)</b>			
10)	15 July (Wed)	Atmosphere and Climate	Lam
11)	17 July (Fri)	Air Pollution	Lam
<b>Part 7: Water Resources and Pollution (Chapter 11)</b>			
12)	20 July (Mon)	Water Usage	Lam
13)	22 July (Wed)	Water Pollution	Lam
<b>Part 8: Solid and Hazardous Wastes (Chapter 14)</b>			
14)	24 July (Fri)	Wastes and Disposal	Lam
	<i>27 July (Mon)</i>	<i>Study Break (no lecture)</i>	
<b>15)</b>	<b>29 July (Wed)</b>	<b>Final Exam</b>	<b>Qian, Ko &amp; Lam</b>

### Notes

- Under the University's policy, make-up examination will be granted ONLY under exceptional reasons—which do NOT include travelling, study trips, interviews, exchange, internship/ practicum/ job, student activities, etc.
- Students granted make-up examination may be subject to lowering of course grade.