

UOW COLLEGE HONG KONG / COMMUNITY COLLEGE OF CITY UNIVERSITY
COURSE INFORMATION RECORD
(Associate Degrees, Higher Diplomas and Diploma)

This form is for the completion by the Course Examiner. The information provided on this form is the official record of course. It will be used for the College's database, various College publications (including websites) and documentation for students and others as required. Please refer to the *Explanatory Notes* attached to this form on the various items of information required.

Offered by	Faculty of Science and Technology
With effect from <i>(semester and academic year)</i>	Semester A, 2021/2022

Part I Course Overview

Course Title:	Climate Change: Threats, Mitigation and Adaptation
Course Title <i>(in Chinese if applicable):</i>	Nil
Course Code:	CGE23218
Course Duration:	1 semester
Credit Units:	3
Level:	A2
QF Credit Units:	14
QF Level:	4
GE Domain: <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and humanities <input checked="" type="checkbox"/> Science and technology <input type="checkbox"/> Society and organisations
Medium of Instruction:	English supplemented by Cantonese
Medium of Assessment:	English
Prerequisites: <i>(Course code and title)</i>	Nil
Precursors: <i>(Course code and title)</i>	Nil
Equivalent courses: <i>(Course code and title)</i>	CGE23208
Exclusive courses: <i>(Course code and title)</i>	CGE13208
Programmes/cohorts of students not allowed to enrol in this course (if any):	Nil

Part II Course Details

1. Course Aims

The course aims to enable students to be climate-literate, so as to improve their ability to make sensible decisions and to take precautionary steps in their lives that would reduce their vulnerabilities to the impacts of climate change.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	Describe the processes which determine the earth's climatic and ecological balance and how human activities impact on the climate.	20
2.	Critically examine the evidence that supports and purports to refute man-made global warming.	20
3.	Analyze the impact of climatic conditions on living and non-living parts of the earth and social development and civilizations.	20
4.	Examine the social, economic and political issues related to climate change and its mitigation	20
5.	Examine the mitigation and adaptive measures to cope with climate change.	20
If weighting is assigned to CILOs, they should add up to		100%

3. Alignment of the CILOs with the Programme Intended Learning Outcomes

<i>Only for Generic Courses and General Education Courses</i>	CILOs (Please ✓ if the CILO(s) is/are aligned with the PILOs)				
Intended learning Outcomes of General Education	1	2	3	4	5
I-V Required (All outcomes below must be aligned with at least one CILO)					
I. Demonstrate a solid foundation of inquiry skills for life-long learning		✓			
II. Apply critical and creative thinking skills		✓	✓	✓	
III. Communicate coherently in written and spoken language	✓				✓
IV. Apply quantitative reasoning / problem solving skills		✓			✓
V. Demonstrate capacity for ethical reasoning and responsible actions				✓	
VI – VIII Optional (At least one outcome below must be aligned with at least one CILO)					
VI. Recognize the important characteristics of diverse peoples and cultures					
VII. Examine the major regional and global issues and relate them to the socio-political, cultural, economic and technological factors.		✓		✓	✓

VIII.Appreciate the impact of scientific and technological development on society and individual.	✓		✓		
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4. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.				
		1	2	3	4	5
a. Lecture	Focuses on the introduction and explanation of concepts and theories on climate change and the essential information on the historical and current development of earth's climate and its impact on society.	✓	✓	✓	✓	✓
b. In class case studies	Provides students with the opportunity to discuss case studies related to cause, issues and mitigation measures of climate change.	✓	✓	✓	✓	✓
c. News reading	Students have to search for news (local or international) on a theme related to climate change, and submit a portfolio of their findings.	✓	✓	✓	✓	✓
d. Field trip	Field trip to museum or organization related to climate change.		✓		✓	✓

5. Teaching Schedule:

Lecture (hr/week):	3 hours	Tutorial (hr/week):	Nil	Other (please specify) (hr/week):	Nil
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6. Assessment Tasks/Activities (ATs)

(ATs are designed to allow students to demonstrate how well they have achieved the CILOs.)

AT	Brief Description	CILO No.					Weighting (%)
		1	2	3	4	5	
a. In-class exercises	Students do short online exercises in each lesson to assess their understanding of the topics. In-class exercises and short tests/exercises include topics on : i. Cryosphere; ii. Global divestment; iii. Changes in atmospheric CO ₂ ; iv. Soil carbon; v. Carbon footprint	✓	✓	✓	✓	✓	35
b. Essay writing	Essay writing on "Differentiated responsibilities on international climate actions, with an emphasis on ethics and justice"			✓	✓	✓	30
c. Group Project and Presentation	Students search for news (local or international) on a theme related to climate change (including but not limited to extreme weather events, debate on climate change, progress in	✓	✓	✓	✓	✓	35

	climate science, technological advancement, development of national and/or international agreement/policies in mitigating climate change, etc.) and submit a portfolio of their findings (15%). They are required to report their findings, views and reflections on that particular climate issue in a group presentation of 15 mins. (20%)						
The weightings must add up to							100%

7. Assessment Schedule (on the basis of Assessment Tasks/ Activities identified above)

Examination (%): 0	Duration (Hrs): 0	Coursework (%): 100
Grading Mode: Standard or Pass/Fail * (delete as appropriate)		

Part III Learning Contents and Readings

1. Syllabus and Alignment with Course Intended Learning Outcomes

Major themes	Related issues and topics	CILOs				
		1	2	3	4	5
a. Weather, climate and the greenhouse effect	Theories and principles of greenhouse-induced climate change; climate variability in global and long term contexts; evidence for climate change; debate between scientists and sceptics on climate change.	✓	✓			
b. Impact of climate change	Extreme weather such as flood, drought, heat wave; agriculture, food prices, health, economy; impacts on flora and fauna; Gaia hypothesis.			✓	✓	
c. Social, political and economic basis of climate change	Tragedy of the commons; free-rider problem; externalities; consumerism; climate justice, individual and government responsibility.				✓	
d. The climate of Hong Kong and its impacts	Trends and variability of past climates; El Nino and its influence; future projections.		✓		✓	
e. Mitigation and adapting to climate change in the 21st Century	Emission mitigation measures; use, problems and limitations of renewable energies; carbon capture, geoengineering, enhancing energy efficiency; adaptive capacity to reduce vulnerability; latest international processes and progress to combat climate change.					✓

2. Reading List

Compulsory Readings:

Maslin, M. (2014). *Global warming: A very short introduction* (3rd ed.). Oxford, UK: CUP.

Additional Readings:

Fagan, B. (2009). *Floods, famines and emperors: El Nino and the fate of civilizations*. New York: Basic Books.

Houghton, J. (2009). *Global warming: the complete briefing* (4th ed.). Cambridge, UK: Cambridge University Press.

Burroughs, W.J. (2007). *Climate change: a multidisciplinary approach* (2nd ed.). Cambridge, UK: Cambridge University Press.

Fagan, B. (2004). *The long summer: how climate changed civilizations*. New York: Basic Books.

Lam, C.Y. (2006). On climate changes brought about by urban living. Hong Kong Meteorological Society Bulletin, 16(1/2).

Leung, Y. K., Wu, M. C., Yeung, K. K., & Leung W. M. (2007). Temperature projections in Hong Kong based on IPCC Fourth Assessment Report. Hong Kong Meteorological Society Bulletin, 17.

Lee, H.F., & Zhang, D. (2012). A tale of two population crises in recent Chinese history. Climatic Change, 136(2), 285-308.

Online Resources:

Latest updates from Hong Kong Observatory website on climate change:

http://www.hko.gov.hk/climate_change/climate_change_e.htm

Latest updates from Climate Change Guide website:

<http://www.climate-change-guide.com/>

Latest updates from Skeptical Science website:

<http://www.skepticalscience.com/>

The Intergovernmental Panel on Climate Change (IPCC) latest publications and data:

<http://www.ipcc.ch/>

Latest updates from UN Climate Change Website:

<http://newsroom.unfccc.int/>

Part IV

1. Course Examiner:

Name: Dr. Christy Lau

Date: 21 August 2021

2. Associate Dean of Faculty

Name: Dr. Ho-lam LAU

Date: 29 August 2021

3. Reviewer (if applicable):

Name: _____

Position/Affiliation: _____

Date: _____