

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LSGI1B02M
Subject Title	Climate Change and Society
Credit Value	3
Level	1
Pre-requisite / Co-requisite/ Exclusion	NIL
GUR Requirements Intended to Fulfill	Cluster Area Requirement (CAR) Community, Organisation and Globalisation
Objectives	<ul style="list-style-type: none"> (i) To enhance students' knowledge of climate and historical climate change (ii) To enhance students' understanding of the dependence of life on the non-living environment (iii) To enable students to appreciate the difference between information sources from textbooks on the one hand, and scientific literature on the other (iv) To impart skills in basic sentence and paragraph construction in academic writing
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ul style="list-style-type: none"> (a) Understand the historical development of processes which maintain the earth's climatic and ecological balance (b) Understand the interdependence between living and non-living parts of the earth (c) Recognise the dependence of social development and civilizations on the particular climatic context and conditions (d) Appreciate the fragility of the relationships between society and climate, and society's response to climate change (e) Have a better understanding of recent greenhouse-induced climate change and our response to it in the context of previous changes in global climate (f) Use logical concepts of premises, inference and conclusion, to construct meaningful arguments in academic writing.
Subject Synopsis/ Indicative Syllabus	<ol style="list-style-type: none"> 1. World climates and climate change since prehistoric times 2. Human evolution in climatic context 3. Examples of European, American and Asian societies in climatic context (Roman, Middle Eastern, Chinese Dynasties) 4. Climatic impacts on life and society 5. Theories and principles of greenhouse-induced climate change 6. The climate of Hong Kong in context of regional and global climate, and in long term context including trends and variability of past climates 7. Climate change predictions for Hong Kong and its impacts on society

Teaching/Learning Methodology	<p>Staff-student contact in lectures and tutorials Lectures are mainly for information on the historical and current development of earth's climate and its historical impact on society In tutorials case studies will be introduced and students will be asked to prepare their own cases studies for further discussion and group presentation.</p>																																																									
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1" data-bbox="517 421 1474 1335"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th rowspan="2">% weighting summer semester</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> </tr> </thead> <tbody> <tr> <td>1. Written test on students' understanding of lectures, and course readings</td> <td>40</td> <td>40</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> </tr> <tr> <td>2. Group project presentation</td> <td>20</td> <td>20</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> </tr> <tr> <td>3. Written 1,500-word summary of essay, particular attention to writing of logical grammatical constructs and structured arguments</td> <td>40</td> <td>40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>√</td> </tr> <tr> <td>Total</td> <td>100 %</td> <td>100%</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>The 40% essay writing enables students to have a thorough and in-depth understanding of the subject matter, and be trained to express ideas critically. This is also reinforced by a written test on students' understanding of the essential knowledge.</p> <p>The group project enables students to work in a team. Based on a chosen topic of climate change impact, students need to conduct a literature review, produce and present in class a scientific report with supporting data.</p>							Specific assessment methods/tasks	% weighting	% weighting summer semester	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e	f	1. Written test on students' understanding of lectures, and course readings	40	40	√	√	√	√	√		2. Group project presentation	20	20	√	√	√	√	√		3. Written 1,500-word summary of essay, particular attention to writing of logical grammatical constructs and structured arguments	40	40						√	Total	100 %	100%						
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	<ul style="list-style-type: none"> ▪ Essay writing 	20 Hrs
	Total student study effort	107 Hrs.
Reading List and References	<p>Burrough, W.J., 2007. Climate change: a multidisciplinary approach. 2nd edition, Cambridge University Press.</p> <p>Houghton, J., 2009. Global warming: the complete briefing. 4th Edition, Cambridge University press, UK., 283p.</p> <p>IPCC, 2014. Climate Change 2014: Working Group II: Impacts, Adaptation and Vulnerability”http://www.ipcc.ch/report/ar5/wg2/ (20,000 words of reading)</p> <p>Lam CY (2006) On Climate Changes Brought About by Urban Living. Hong Kong Met. Soc. Bull. 16(1/2).</p> <p>Leung Y K, Wu M C, Yeung K K, Leung WM (2007) Temperature projections in Hong Kong based on IPCC Fourth Assessment Report. Hong Kong Met. Soc. Bull. 17.</p> <p>Lee, H.F., Zhang, D. 2012. A tale of two population crises in recent Chinese history. Climatic Change, DOI 10.1007/s10584-012-0490-9</p> <p>**Maslin, M. (2014) Global Warming: A Very Short Introduction’ (3rd edn), Oxford, OUP: 2008, 176 pp.; ISBN 978-0-19-954824-8 (30,000 words of reading)</p>	

Last updated in June 2020