

Subject Description Form

Subject Code	BRE461
Subject Title	Environmental Impact and Assessment
Credit Value	3
Level	4
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	To provide students with an overview and understanding of the environmental issues and the principles and current practices of environmental impact assessment (EIA). Particular emphasis will be given to environmental impact assessment related to Hong Kong.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. Enhance the awareness of the environmental issues and realize the importance of sustainable development; b. Gain an in-depth understanding of the concepts, processes and methodologies of environmental impact assessment; c. Contribute significantly in conducting environmental impact assessment in a team; d. Apply the environmental assessment in city and land use planning and management.
Subject Synopsis/ Indicative Syllabus	<p>Environmental objectives & sustainable development: environmental issues in global, regional, and local context, such as ozone depletion, acid rain, global warming, extreme weathers etc; international agreements, Kyoto Protocol;</p> <p>Environmental legislations: regulations and ordinances for air pollution control, waste disposal, water pollution control, noise control, ozone layer protection, and hazardous chemicals control etc.</p> <p>Environmental protection administrative system in H.K.: administrative system for environmental assessment in HK; procedures to conduct environmental impact assessment;</p> <p>Environmental impact studies and impact prediction: Methods for assessing direct and indirect environmental impacts; identification, prediction and assessment of environmental impact; performance benchmarks and targets;</p> <p>Types of environmental impact assessment and environmental impact statement: Strategic environmental impact assessment; life-cycle environmental impact assessment; Ecological, socioeconomic, visual, and risk impact assessment; Role of environmental impact statement, statement scope& content, report writing skills;</p>

	<p>Application of environmental assessment in city and land use planning: Interaction between environmental impact assessment and city/land use planning; mitigation and control measures;</p> <p>Environmental planning and management: decision making, planning and management of construction projects with due consideration given to the environmental, social, and economical factors;</p> <p>Environmental auditing: environmental impact assessment, review, monitoring and audit.</p>																																																				
<p>Teaching/Learning Methodology</p>	<p>The subject teaching will adopt a range of methods including: (1) lectures; (2) tutorial sessions; (3) group discussions and presentations; (3) reading materials and video presentations; (4) seminars (where applicable) by invited speakers from professional environmental consultants; and (5) group project (case study).</p> <p>The lectures aim at introducing the basic concepts and principles. Reading materials and video presentations as well as seminars by invited speakers aim at provide students the current practices of environmental impact assessment. Group discussion/presentations and group project will encourage students to review what they have learned in class and apply the principles in practices.</p>																																																				
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="443 1066 1471 1514"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</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></th> </tr> </thead> <tbody> <tr> <td>1.Continuous assessment</td> <td>30%</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>2. Midterm</td> <td>20%</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>3. Examination</td> <td>50%</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>Total</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>Examination and continuous assessment will constitute 60% and 40% of the overall work of the subject respectively. The continuous assessment will be based on the coursework, assignments projects, presentations, peer-group critiques and in-class tests. Students are expected to demonstrate their understanding of the concepts and methodologies of Environmental Impact Assessment through the assignments, group projects and presentations. Students' overall understanding of the subject will be assessed in the examination, on both the principles and practical applications.</p>							Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e		1.Continuous assessment	30%	√	√	√	√			2. Midterm	20%	√	√	√	√			3. Examination	50%	√	√	√	√			Total	100%						
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Student Study Effort Required	Class contact:	
	▪ Lectures	26 Hrs.
	▪ Tutorials	65 Hrs.
	Other student study effort:	
	▪ Project work	70 Hrs.
	▪	
	Total student study effort	161 Hrs.
Reading List and References	<p>Barbara Carroll, Trevor Turpin, Adam Boyden, Alison Carroll, and Ruth Thomas, <i>Environmental impact assessment handbook: a practical guide for planners, developers and communities</i>, London: Thomas Telford, c2009.</p> <p>Kevin S. Hanna, <i>Environmental impact assessment: practice and participation</i>, 2nd Edition, Don Mills, Ont. Oxford University Press, 2009.</p> <p>Neil Craik, <i>The international law of environmental impact assessment: process, substance and integration</i>, Cambridge; New York: Cambridge University Press, 2008.</p> <p>John Glasson, Riki Therivel and Andrew Chadwick, <i>Introduction to environmental impact assessment</i>, 3rd Edition, London; New York: Routledge, 2005.</p> <p>Stephen Tromans and Karl Fuller, <i>Environmental impact assessment: law and practice</i>, London: LexisNexis, c2003.</p> <p>Environmental Assessment and Noise Division, Environmental Protection Department, <i>The operation of Environmental Impact Assessment Ordinance in Hong Kong, April 1998--December 2001</i>. (Cir Coll Large Bk - TD194.68.H6 O73 2002)</p>	