

## Subject Description Form

<b>Subject Code</b>	BRE461
<b>Subject Title</b>	Environmental Impact and Assessment
<b>Credit Value</b>	3
<b>Level</b>	4
<b>Pre-requisite / Co-requisite/ Exclusion</b>	Nil
<b>Objectives</b>	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.
<b>Intended Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Enhance the awareness of the environmental issues and realize the importance of sustainable development;</li> <li>b. Gain an in-depth understanding of the concepts, processes and methodologies of environmental impact assessment;</li> <li>c. Contribute significantly in conducting environmental impact assessment in a team;</li> <li>d. Apply the environmental assessment in city and land use planning and management.</li> </ol>
<b>Subject Synopsis/ Indicative Syllabus</b>	<p>Environmental objectives &amp; 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&amp; 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><b>Teaching/Learning Methodology</b></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><b>Assessment Methods in Alignment with Intended Learning Outcomes</b></p>	<table border="1" data-bbox="440 1066 1469 1509"> <thead> <tr> <th data-bbox="440 1066 770 1234" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="775 1066 927 1234" rowspan="2">% weighting</th> <th colspan="6" data-bbox="932 1066 1469 1167">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="932 1173 1018 1234">a</th> <th data-bbox="1023 1173 1109 1234">b</th> <th data-bbox="1114 1173 1200 1234">c</th> <th data-bbox="1204 1173 1291 1234">d</th> <th data-bbox="1295 1173 1382 1234">e</th> <th data-bbox="1386 1173 1469 1234"></th> </tr> </thead> <tbody> <tr> <td data-bbox="440 1240 770 1301">1.Continuous assessment</td> <td data-bbox="775 1240 927 1301">30%</td> <td data-bbox="932 1240 1018 1301">√</td> <td data-bbox="1023 1240 1109 1301">√</td> <td data-bbox="1114 1240 1200 1301">√</td> <td data-bbox="1204 1240 1291 1301">√</td> <td data-bbox="1295 1240 1382 1301"></td> <td data-bbox="1386 1240 1469 1301"></td> </tr> <tr> <td data-bbox="440 1308 770 1368">2. Midterm</td> <td data-bbox="775 1308 927 1368">30%</td> <td data-bbox="932 1308 1018 1368">√</td> <td data-bbox="1023 1308 1109 1368">√</td> <td data-bbox="1114 1308 1200 1368">√</td> <td data-bbox="1204 1308 1291 1368">√</td> <td data-bbox="1295 1308 1382 1368"></td> <td data-bbox="1386 1308 1469 1368"></td> </tr> <tr> <td data-bbox="440 1375 770 1435">3. Examination</td> <td data-bbox="775 1375 927 1435">40%</td> <td data-bbox="932 1375 1018 1435">√</td> <td data-bbox="1023 1375 1109 1435">√</td> <td data-bbox="1114 1375 1200 1435">√</td> <td data-bbox="1204 1375 1291 1435">√</td> <td data-bbox="1295 1375 1382 1435"></td> <td data-bbox="1386 1375 1469 1435"></td> </tr> <tr> <td data-bbox="440 1442 770 1503">Total</td> <td data-bbox="775 1442 927 1503">100%</td> <td colspan="6" data-bbox="932 1442 1469 1503"></td> </tr> </tbody> </table> <p data-bbox="440 1563 1469 1630">Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p data-bbox="440 1648 1469 1888">Examination and continuous assessment will constitute 70% and 30% 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	30%	√	√	√	√			3. Examination	40%	√	√	√	√			Total	100%						
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<b>Student Study Effort Required</b>	Class contact:	
	▪ Lectures	26 Hrs.
	▪ Tutorials	13 Hrs.
	Other student study effort:	
	▪ Project work	70 Hrs.
	▪	
	Total student study effort	109 Hrs.
<b>Reading List and References</b>	<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>, 2<sup>nd</sup> 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>	