

Subject Description Form

Subject Code	CSE508
Subject Title	Environmental Impact Assessment
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	<u>Recommended background knowledge:</u> Engineering or applied science undergraduate background.
Objectives	To provide students with an overview and understanding of the principles and current practices of environmental impact assessment (EIA). In particular, emphasis will be placed on environmental impact assessment studies relevant to Hong Kong.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. understand the EIA process and its significance; b. analyze major environmental issues for large development projects; c. analyze various environmental impacts according to the EIA framework; d. understand the importance of public engagement within the EIA process; e. understand how the EIA process contributes to environmental protection and sustainable development; and f. critically evaluate EIA reports and other related documents.
Subject Synopsis/ Indicative Syllabus	<u>Keyword syllabus:</u> i) <u>Development of Environmental Impact Assessment</u> Historical review. Environmental assessment development in the world and Hong Kong. ii) <u>Scope and Objectives of Environmental Impact Assessment</u> Environmental considerations: land use, planning, development and management. EIA aims and objectives. Environmental assessment and sustainable development. iii) <u>Methodology and Assessment Techniques</u> Methods for assessing direct impacts and indirect impacts. Modeling and miscellaneous assessment techniques. Methods for air, water, noise and ecology assessment. Other environmental issues (risk, visual, cultural and social-economical impacts).

	iv) <u>Monitoring and Baseline Studies</u> Environmental effects. Baseline studies requirements. Special field studies. Environmental monitoring and audit. Air, water, ecological, socioeconomic, visual, risk impact assessments. Environmental quality and regulatory requirements. Mitigation and control measures. v) <u>Case Studies</u> Selected case studies on the EIA of infrastructure and other development projects.																																														
Teaching/Learning Methodology	The subject teaching will include the following elements: a. Lectures – to introduce the basic concepts and assessment methods; b. Tutorials – to answer student questions in the learning processes; c. Group discussion and presentations – to let students play different roles in the EIA process; d. Reading materials and video presentations – to give students examples in local EIA case studies; e. Seminars on EIA practices by invited speakers from government agencies and professional environmental consultants; and f. Course work and term project (individual cases study) on EIA in Hong Kong.																																														
Assessment Methods in Alignment with Intended Learning Outcomes	<table><tr><th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="6">Intended subject learning outcomes to be assessed</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th>e</th><th>f</th></tr><tr><td>1. Individual Assignment</td><td>10%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr><tr><td>2. Group Report and Presentation</td><td>30%</td><td></td><td>✓</td><td>✓</td><td></td><td>✓</td><td>✓</td></tr><tr><td>3. Written Examination</td><td>60%</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></table> Written examination is evaluated by final examination. Students must pass the final examination and achieve a passing overall score / grade to pass the subject.	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed						a	b	c	d	e	f	1. Individual Assignment	10%	✓	✓	✓	✓			2. Group Report and Presentation	30%		✓	✓		✓	✓	3. Written Examination	60%	✓	✓	✓	✓	✓	✓	Total	100%						
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3. Written Examination	60%	✓	✓	✓	✓	✓	✓																																								
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Student Study Effort Expected	Class contact:	
	▪ Lectures	39 Hrs.
	Other student study effort:	
	▪ Coursework	40 Hrs.
	▪ Self-study	30 Hrs.
	Total student study effort	109 Hrs.
Reading List and References	The following texts provide the majority of the basic materials to be covered in lectures. Students will need to study other publications including case studies. Barbara Carroll, 2002. <i>Environmental Impact Assessment Handbook: A Practical Guide for Planners, Developers and Communities</i>. Thomas Telford, London. Canter, L.W., <i>Environmental Impact Assessment</i>, 2nd Ed., McGraw-Hill, (1996). Christopher Wood. 2003. <i>Environmental Impact Assessment: A Comparative Review</i>. Prentice Hall, New Jersey. Hong Kong Environmental Protection Department http://www.epd.gov.hk/eia/ Riki Therivel, Peter Morris, 2001. <i>Methods of Environmental Impact Assessment</i>, Spon Press, London.	