

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). Emphasis will be given to environmental impact assessment related to Hong Kong.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. Enhance the awareness of 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	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; Environmental legislation: regulations and ordinances for air pollution control, waste disposal, water pollution control, noise control, ozone layer protection, and hazardous chemicals control etc. Environmental protection administrative system in H.K.: administrative system for environmental assessment in HK; procedures to conduct environmental impact assessment; 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; 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; Application of environmental assessment in city and land use planning: Interaction between environmental impact assessment and city/land use planning; mitigation and control measures; Environmental planning and management: decision making, planning and management of construction projects with due consideration given to the environmental, social, and economical factors; Environmental auditing: environmental impact assessment, review, monitoring and audit.

Teaching/Learning Methodology	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). The lectures aim at introducing basic concepts and principles. Reading materials and video presentations as well as seminars by invited speakers aim at providing students the current practices of environmental impact assessment. Group discussion/presentations and group projects will encourage students to review what they have learned in class and apply the principles in practice.																																																					
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 (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><tr><td>1. Midterm Test</td><td>50%</td><td>√</td><td>√</td><td>√</td><td>√</td><td></td><td></td></tr><tr><td>2. Group Project</td><td>30%</td><td>√</td><td>√</td><td>√</td><td>√</td><td></td><td></td></tr><tr><td>3. Individual Assignment</td><td>30%</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> *Students must pass all components to pass the subject. Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: Midterm test and continuous assessments, including group project and individual assignments, will constitute 50% and 60% of the overall work of the subject, respectively. The continuous assessment will be based on the coursework, assignments projects and presentations. Students are expected to demonstrate their understanding of the concepts and methodologies of Environmental Impact Assessment through assignments. Students’ overall understanding of the subject will be assessed in the midterm test and assignments on both the principles and practical applications.								Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e		1. Midterm Test	50%	√	√	√	√			2. Group Project	30%	√	√	√	√			3. Individual Assignment	30%	√	√	√	√			Total	100%						
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Reading List and References	Environmental Management in Construction: A Quantitative Approach, Zhen Chen, Heng Li, Routledge/Taylor & Francis, 2007 Routledge Handbook of Environmental Impact Assessment, Kevin Hanna, Routledge, 2022 Environment Impact Assessment Precept & Practice, K.M. Baharul Islam, Zafar Mahfooz Nomani, Routledge, 2022																																																					