

## Course Syllabus

**offered by School of Energy and Environment  
with effect from Semester A 2016/17**

### Part I Course Overview

<b>Course Title:</b>	<b>Environmental Impact Assessment: Principles and Practice</b>
<b>Course Code:</b>	<b>SEE8203</b>
<b>Course Duration:</b>	<b>One semester</b>
<b>Credit Units:</b>	<b>3</b>
<b>Level:</b>	<b>R8</b>
<b>Proposed Area:</b> <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
<b>Medium of Instruction:</b>	<b>English</b>
<b>Medium of Assessment:</b>	<b>English</b>
<b>Prerequisites:</b> <i>(Course Code and Title)</i>	<b>Nil</b>
<b>Precursors:</b> <i>(Course Code and Title)</i>	<b>Nil</b>
<b>Equivalent Courses:</b> <i>(Course Code and Title)</i>	<b>SEE6203 Environmental Impact Assessment: Principles and Practice</b>
<b>Exclusive Courses:</b> <i>(Course Code and Title)</i>	<b>Nil</b>

## Part II Course Details

### 1. Abstract

This course will review the principles, process and methods for assessing environmental impacts and examines the environmental consequence of development project, in advance. It provides students with inter-disciplinary nature of the subject (socio-economic, environmental and ecological systems) as well as critical analysis. Latest EIA legislation, guidance and good practice will be discussed in the context of both HK and overseas.

### 2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs <sup>#</sup>	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Examine and apply the general principles, processes and methodologies of environmental impact assessment (EIA) in development projects.	20		√	
2.	Explain the approach in socio-economic impact and environmental risk assessments, and the interaction between EIA and landuse planning.	20		√	
3.	Analyze cases, prepare and conduct EIA, and communicate effectively about the complex issues in EIA.	30		√	√
4.	Critically evaluate the problems and issues, limitations and future trends in implementation of EIA.	30	√	√	
		100%			

\* If weighting is assigned to CILOs, they should add up to 100%.

<sup>#</sup> Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### 3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
Lecture	Explain the key concept, process and practice of EIA, and the relationship between EIA and sustainable development.	√	√	√	√			2 hrs/wk
Tutorial and Group discussion	In large and small group activities students will examine various principles, processes and methodologies of EIA and apply these processes to examples of	√	√	√	√			1 hr/wk

	development projects.							
Case study	Students will discover the elements and application of the EIA framework through critical analysis of EIA case studies and develop communication skills through role play exercises and presentations of individual and/or group work.	√	√	√	√			
Project presentation	In large and small group critical evaluation tasks students will discover the application of the EIA framework to specific situations and discuss the problems and issues, limitations and future trends in implementation of EIA.	√	√	√	√			

#### 4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.						Weighting*	Remarks
	1	2	3	4				
Continuous Assessment: <u>60%</u>								
In class test	√	√	√				20	
Assignment	√	√	√				15	
Project presentation	√	√	√	√			25	
Examination: <u>40 %</u> (duration: 2 hours, if applicable)								
* The weightings should add up to 100%.							100%	

To pass a course, a student must do ALL of the following:

- 1) obtain at least 30% of the total marks allocated towards coursework (combination of assignments, pop quizzes, term paper, lab reports and/ or quiz, if applicable);
- 2) obtain at least 30% of the total marks allocated towards final examination (if applicable); and
- 3) meet the criteria listed in the section on Grading of Student Achievement.

## 5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Adequate (C+, C, C-)	Marginal (D)	Failure (F)
1. In-class test	In tutorial assignments (case studies and scenarios) and end-of-course examination students will apply the range of principles, applications, processes and methodologies to EIA examples.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Assignment	Tutorial assignments (case studies and scenarios), discussion and end-of-course examination, will enable students to apply EIA concepts to evaluate the socio-economic impact, ecological impact and environmental risks and benefits.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Project	In a role play report, oral presentation and end-of-course examination students will critically analyze cases, apply knowledge to conduct EIA and communicate effectively in writing and orally about the complex issues in EIA.	High	Significant	Moderate	Basic	Not even reaching marginal levels
4. Final exam	In-classroom and out-of-classroom discussion and end-of-course examination, using problem-based questions which require students to critically evaluate problems and issues, limitations and future trends in implementation related to EIA and environmental management.	High	Significant	Moderate	Basic	Not even reaching marginal levels

## Part III Other Information (more details can be provided separately in the teaching plan)

### 1. Keyword Syllabus

*(An indication of the key topics of the course.)*

- Principles, objectives and scope of EIA. Major issues of the EIA process. Administrative and organizational aspects.
- Defining the scope. Identification and evaluation of alternatives. Baseline studies.
- Methodologies in the identification, prediction and assessment of impact overlay, checklist, matrices, sequences flow diagram, network and other systems.
- Content, preparation and review of environmental impact assessment.
- Monitoring and auditing of impacts.
- Case studies from developed and developing countries. Specific socio-economic impacts and limitations of EIA in developing countries. Case studies from Hong Kong.
- Risk assessment and management. Problems and constraints of EIA.
- Interaction between EIA, land use planning and engineering designs. Identification and evaluation of mitigation measures.

### 2. Reading List

#### 2.1 Compulsory Readings

*(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)*

1.	Introduction to environmental impact assessment: a guide to principles and practice. B.F. Noble. 2010. Oxford University Press.
2.	Introduction to environmental impact assessment. J. Glasson, R. Therivel, A. Chadwick. 2012. Routledge, New York.
3.	Methods of environmental impact assessment / edited by Peter Morris and Riki Therivel. Routledge, 2009.

#### 2.2 Additional Readings

*(Additional references for students to learn to expand their knowledge about the subject.)*

1.	Environmental Impact Assessment Ordinance (EIAO), EPD ( <a href="http://www.epd.gov.hk/epd/eia/english/legis/index1.html">http://www.epd.gov.hk/epd/eia/english/legis/index1.html</a> )
2.	The Operation of Environmental Impact Assessment Ordinance in Hong Kong, April 1998 – December 2001, EPD ( <a href="http://www.epd.gov.hk/eia/operation/index.html">http://www.epd.gov.hk/eia/operation/index.html</a> )
3.	A Guide to the Water Pollution Control Ordinance, EPD ( <a href="http://www.epd.gov.hk/epd/textonly/english/environmentinhk/water/guide_ref/guide_wpc_wpc.html">http://www.epd.gov.hk/epd/textonly/english/environmentinhk/water/guide_ref/guide_wpc_wpc.html</a> )
4.	Guidelines for Development Projects in Hong Kong, EPD ( <a href="http://www.epd.gov.hk/epd/eia/hb/materials/guidelines.htm">http://www.epd.gov.hk/epd/eia/hb/materials/guidelines.htm</a> ) Focused on Environmental Monitoring and Audit
5.	Technical Memorandum on EIA Process, EPD ( <a href="http://www.epd.gov.hk/epd/eia/english/legis/index3.html">http://www.epd.gov.hk/epd/eia/english/legis/index3.html</a> )
6.	EPD Website ( <a href="http://www.epd.gov.hk">http://www.epd.gov.hk</a> )