City University of Hong Kong Course Syllabus

offered by School of Energy and Environment with effect from Semester A 2022/23

Part I Course Overview

Course Title:	Environmental Impact Assessment: Principles and Practice
Course Code:	SEE6203
Course Duration:	One semester
Credit Units:	3
Level:	P6
Proposed Area: <i>(for GE courses only)</i>	Study of Societies, Social and Business Organisations Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites : (Course Code and Title)	Nil
Precursors : (Course Code and Title)	Nil
Equivalent Courses : <i>(Course Code and Title)</i>	BCH6106 Environmental Impact Assessment SEE8203 Environmental Impact Assessment: Principles and Practice
Exclusive Courses : (Course Code and Title)	Nil

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	Weighting		very-eni ilum rel	
		(if applicable)		ig outco	
		applicable)		tick	
			approp		where
			Al	A2	A3
1.	Examine and apply the general principles, processes and	20%			
	methodologies of environmental impact assessment (EIA)				
	in development projects.				
2.	Explain the approach in socio-economic impact and	20%		\checkmark	
	environmental risk assessments, and the interaction				
	between EIA and landuse planning.				
3.	Analyze cases, prepare and conduct EIA, and communicate	30%		\checkmark	\checkmark
	effectively about the complex issues in EIA.				
4.	Critically evaluate the problems and issues, limitations and	30%		\checkmark	
	future trends in implementation of EIA.	2.370			
		100%			

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		CIL	CILO No.				Hours/week (if
		1	2	3	4		applicable)
Lecture	Explain the key concept, process and practice of EIA, and the relationship between EIA and sustainable development.	\checkmark	\checkmark	V	\checkmark		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 development projects.	V	\checkmark	V	V		1 hr/wk
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.	V	V	V	V		
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.	V	V	V	\checkmark		

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	\checkmark	\checkmark	\checkmark		20%	
Assignment	\checkmark	\checkmark			15%	
Project presentation	\checkmark	\checkmark		\checkmark	25%	
Examination: <u>40</u> % (duration: 2 hours, if applicable)						
					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 Assessment Rubrics.

5. Assessment Rubrics

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

Applicable to students admitted in semester A 2022/23 and thereafter

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

Applicable to students admitted before semester A 2022/23

Assessment Task	Criterion	Excellent	Good	Fair	Marginal	Failure
		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(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.
- Detailed methodology and process in conducting EIA
- 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 (http://www.epd.gov.hk/epd/eia/english/legis/index1.html)
2.	The Operation of Environmental Impact Assessment Ordinance in Hong Kong, April 1998 – December 2001, EPD (<u>http://www.epd.gov.hk/eia/operation/index.html</u>)
3.	A Guide to the Water Pollution Control Ordinance, EPD (http://www.epd.gov.hk/epd/textonly/english/environmentinhk/water/guide_ref/guide_wpc_wpco.html)
4.	Guidelines for Development Projects in Hong Kong, EPD (http://www.epd.gov.hk/epd/eia/hb/materials/guidelines.htm) Focused on Environmental Monitoring and Audit
5.	Technical Memorandum on EIA Process, EPD (http://www.epd.gov.hk/epd/eia/english/legis/index3.html)
6.	EPD Website (http://www.epd.gov.hk)