

# CA2111: CONSTRUCTION ENVIRONMENT

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## Effective Term

Semester A 2022/23

## Part I Course Overview

### Course Title

Construction Environment

### Subject Code

CA - Civil and Architectural Engineering

### Course Number

2111

### Academic Unit

Architecture and Civil Engineering (CA)

### College/School

College of Engineering (EG)

### Course Duration

One Semester

### Credit Units

3

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

Nil

### Precursors

Nil

### Equivalent Courses

BC2111/BC2111F/BC2111P Construction Environment

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

This course aims to introduce the students to the Hong Kong building and construction environment and to develop their understanding of environmental protection issues.

### Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	discover and analyse the environmental protection issues;		x	x	
2	discover and analyse the important environmental issues in Hong Kong, their causes and effects;		x	x	
3	discover and appraise the governmental legislature and administrative structure which affect environmental protection;		x	x	
4	explore and criticize existing legislation and statutory control relating to environmental protection.		x	x	

#### 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 real-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.

### Teaching and Learning Activities (TLAs)

	TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Provide an introduction to environmental issues related to building construction in Hong Kong.	1, 2, 3, 4	
2	Scenario type tutorial	Being immersed in real life/simulated scenario, students will be required to apply what they have already learned to the tasks and learn new knowledge by doing.	1, 2, 3, 4	

**Assessment Tasks / Activities (ATs)**

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Coursework	1, 2, 3, 4	20	
2	Mid-term/End-term quiz	1, 2, 3, 4	30	

**Continuous Assessment (%)**

50

**Examination (%)**

50

**Examination Duration (Hours)**

2

**Additional Information for ATs**

To pass a course, a student must obtain minimum marks of 30% in both coursework and examination components, and an overall mark of at least 40%.

**Assessment Rubrics (AR)****Assessment Task**

Coursework

**Criterion**

1. Capacity to appraise the environment issues on a project
2. Ability to critique current practices and explore new opportunities of improvements

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

**Assessment Task**

Mid-term/End-term quiz

**Criterion**

1. Capability to describe the fundamental knowledge of environment issues related to building construction
2. Ability to analyse the environmental issues systematically

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

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**Assessment Task**

Examination

**Criterion**

1. Capability to describe the fundamental knowledge of environment issues related to building construction
2. Ability to analyse the environmental issues systematically

**Excellent (A+, A, A-)**

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**Failure (F)**

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## Part III Other Information

**Keyword Syllabus**

Environmental protection issues: air, energy, noise and water; Statutory controls on environmental protection with special emphasis on building and construction industry.

**Reading List**

**Compulsory Readings**

Title	
1	Nil

**Additional Readings**

Title	
1	Best practice guide : environment : best practice guide for environmental protection on construction sites. Hong Kong : Hong Kong Construction Association, Ltd., 2002

2	Technical memorandum on noise from construction work in designated areas. Hong Kong : Environmental Protection Dept., 2001
3	Sustainable Construction: Green Building Design and Delivery by Charles J. Kibert. 2012.
4	Environmental Standards & Guidelines - Statutory. Environmental Protection Department, Hong Kong. [ <a href="http://www.epd.gov.hk/epd/english/envir_standards/statutory/esg_stat.html">http://www.epd.gov.hk/epd/english/envir_standards/statutory/esg_stat.html</a> ]
5	Environmental Standards & Guidelines - Non-Statutory. Environmental Protection Department, Hong Kong. [ <a href="http://www.epd.gov.hk/epd/english/envir_standards/non_statutory/esg_non_stat.html">http://www.epd.gov.hk/epd/english/envir_standards/non_statutory/esg_non_stat.html</a> ]
6	Online Resources: <a href="http://www.epd.gov.hk/">http://www.epd.gov.hk/</a>