

CA3629: BUILDING AND FIRE SAFETY CONTROL

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Building and Fire Safety Control

Subject Code

CA - Civil and Architectural Engineering

Course Number

3629

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

BC3629/BC3629F/BC3629P/SE3629 Building and Fire Safety Control

Exclusive Courses

CA3172 Building and Land Use Control

Part II Course Details

Abstract

The course aims to provide an understanding on the relationship of building design and building legislation mechanism with special emphasis on planning and fire safety issues. Furthermore, the students shall acquire the knowledge of construction and environmental legislations with emphasis on health, safety and environmental matters. Comparison of the building related legislations in Hong Kong, Mainland China, United Kingdom and other countries will be introduced.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	apply the knowledge of building control in the design and siting of buildings, and to ensure their compliance with the relevant requirement; emphasis will be given to planning, fire safety design, approval and modification principles, illegal structures and licenses.		x	x	x
2	articulate the responsibilities and roles of various professionals as defined in the building related legislation: and the building control philosophy;		x	x	
3	relate the authority and administrative roles of the Building Authority and related government departments in Hong Kong to the control of building works, etc.;			x	x
4	Compare the building legislations between different countries such as Hong Kong, Mainland China, United Kingdom and etc.			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.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	On topics related to Building and Fire Safety Control, Buildings Ordinance and Regulations	1, 2, 3, 4	

2	Tutorial	In class discussions and activities on problems related to lecture themes; Guest speakers from related agencies is to be invited to share his experience in Building and Fire Safety Control with students	1, 2, 3, 4	
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Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Coursework: Drawing Practice	1, 2, 3, 4	15	
2	Coursework: Quiz	1, 2, 3, 4	10	
3	Coursework: Mid-termTest	1, 2, 3, 4	25	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

3

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: Drawing Practice

Criterion

ABILITY to APPLY theories and knowledge to topics related to building and fire safety control

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

Coursework: Quiz

Criterion

ABILITY to UNDERSTAND and APPLY theories and knowledge to topics related to building and fire safety control

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

Coursework: Mid-termTest

Criterion

ABILITY to UNDERSTAND and APPLY theories and knowledge to topics related to building and fire safety control

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

Examination

Criterion

ABILITY to UNDERSTAND, DISCUSS and APPLY theories and knowledge related to topics in building and fire safety control

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

Part III Other Information

Keyword Syllabus

Building control and building legislations. Plans approval mechanism; status of codes of practices; practice notes and circular letters; building (planning) regulations, building (construction) regulations, building (administrative) regulations, etc; practice codes for building materials; prescriptive fire safety codes: Means of Escape, Fire Resisting Construction, Means of Access for Fire Fighting and Rescue, etc; AP&RSE and Contractors' Registration System; site supervision; appeals; licensing systems. Introduction of building legislations in various countries including British Building Regulations and the related Approved Document, building laws in China, International Building Codes and etc.

Reading List**Compulsory Readings**

Title	
1	Nil

Additional Readings

Title	
1	Bokhary, K. (1989), Section 16(1)(g) of the Buildings Ordinance (Cap. 123) - a shooters' guide, Hong Kong Law Journal, Vol. 19, pp. 314-330.
2	Lai, L.W.C., and Ho, D.C.W., (2000), Planning Buildings for a High-rise Environment, A Review of Building Appeal Decisions: Hong Kong, Hong Kong University Press, HK.
3	Buildings Ordinance, Cap. 123, Laws of Hong Kong (current issues)
4	Codes of Practice on Means of Escape, Fire Resisting Construction, Means of Access for Fire Fighting and Rescue and etc. (current edition)
5	http://www.info.gov.hk
6	http://www.bd.gov.hk/english/index_e.html
7	http://www.gov.cn/flfg/index.htm
8	http://www.communities.gov.uk/planningandbuilding/buildingregulations/