City University of Hong Kong Course Syllabus

offered by Department of Architecture and Civil Engineering with effect from Semester A 2022 / 2023

Part I Course Overview

Course Title:	Research Methodology and Ethics
Course Code:	CA8022
Course Duration:	1 Semester (Some courses offered in Summer Term may start a few weeks earlier than the normal University schedule. Please check the teaching schedules with CLs before registering for the courses.)
Credit Units:	3
Level:	R8
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	Nil
Precursors: (Course Code and Title)	Nil
Equivalent Courses: (Course Code and Title)	BC8022 Research Methodology for Built Environment
Exclusive Courses: (Course Code and Title)	Nil

Part II Course Details

1. Abstract

This course aims to develop the students' ability to discover and critically apply the research approach and methodology and ethics for carrying out research works. The following issues will be outlined in the course: (a) research philosophy including the purpose to transform things 'believed to be true' into things 'known to be true'; (b) research strategy including methodologies of different research areas; (c) research instruments including data collection methods, sources of data, data/error analyses, verification and validation; (d) report writing including the ways to present the information/ data, proper referencing and acknowledgment; (e) presentation of research findings; (f) ethical aspects in research.

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs #	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		d s
			A1	A2	A3
1.	demonstrate the investigation ability and skills in defining a problem and understand the ways in which data about a phenomenon should be gathered, analyzed and used; understanding of ethics in research;				√
2.	identify, select and critically appraise a body of literature, verification and validation related to a specific research topic;				
3.	apply and display written communication skills and conduct oral presentation for a subject area.				
* If	weighting is assigned to CILOs, they should add up to 100%.	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)

TLA	Brief Description		No.	Hours /	
		1	2	3	week (if applicable)
Lectures and Class Tests	Defining research problems, literature review, research methodology and ethics, data analysis, verification and validation, conclusion, communication	√	✓	✓	27
Presentations	Assignment presentations			√	12

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (-); Tutorial (-); Laboratory (-)
	Lec/ Tut/ Self-learning mixed mode: 39 hours

4. Assessment Tasks/Activities

Assessment Tasks / Activities	CILO No.		Weighting*	Remarks		
	1	2	3			
Continuous Assessment: 100%						
Assignments	√	√	✓	50%		
Class Tests	√	√		30%		
Presentation			√	20%		
Examination: 0%						
* The weightings should add up to 100%.						

5. Assessment Rubrics

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
Assignments	Ability to appreciate CILO 1 to 3	High	Significant	Basic	Not even reach marginal level
Class Tests	Ability to appreciate CILO 1 to 2	High	Significant	Basic	Not even reach marginal level
Presentation	Ability to present CILO 3	High	Significant	Basic	Not even reach marginal level

Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Assignments	Ability to appreciate CILO 1 to 3	High	Significant	Moderate	Basic	Not even reach marginal level
Class Tests	Ability to appreciate CILO 1 to 2	High	Significant	Moderate	Basic	Not even reach marginal level
Presentation	Ability to present CILO 3	High	Significant	Moderate	Basic	Not even reach marginal level

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

1. Keyword Syllabus

There is no fixed formal syllabus. Research philosophy, research strategy and methodologies, data collection, analysis and used, report writing and presentation will be outlined in the course. Ways in which data about a phenomenon should be gathered, analyzed and used will be discussed.

2. Reading List

2.1 Compulsory Readings

1. Nil

2.2 Additional Readings

- 1. Kumar, R., Research methodology: a step-by-step guide for beginners, London: SAGE, 2005
- 2. Neville, T, Henry, D. and Neville, B., Science and technology research: writing strategies for students. Lanham, Md.: Scarecrow Press, 2002.
- 3. Gomm, R., Social research methodology: a critical introduction, Basingstoke, Hampshire; New York: Palgrave Macmillan, 2004
- 4. Yu, C.H., Philosophical foundations of quantitative research methodology, Lanham, Md.; Toronto, University Press of America, c2006
- 5. Jain, G.L., Research methodology: methods, tools & techniques, Jaipur (India): Mangal Deep Publications, 2003
- 6. http://www.socialpsychology.org/methods.htm
- 7. Ethics in Research Research Methods Research Guides at City University of Hong Kong https://libguides.library.cityu.edu.hk/researchmethods/ethics