City University of Hong Kong Course Syllabus

offered by Department of Architecture and Civil Engineering with effect from Semester A 2017/18

Part I Course Overview

Course Title:	Civil Engineering Studies
Course Code:	CA5244
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:	P5
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)	Nil
Exclusive Courses: (Course Code and Title)	Nil

Part II Course Details

1. Abstract

To illustrate the fundamental knowledge and classical principles of civil engineering orientation including historical developments, education requirements, relation to science, professional practice, and specialties within the profession; to outline the fundamentals on structural engineering, geotechnical engineering, transportation engineering, hydraulic and hydrology, environmental engineering and construction engineering management.

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.	(if curri applicable) learr (plea				iscovery-enriched arriculum related arning outcomes lease tick where opropriate)		
			A1	A2	A3		
1.	Understand the fundamental principles of civil engineering knowledge		√				
2.	Explore civil engineering and the society			√			
3.	Understand the fundamentals of various discipline in civil engineering		√				
4.	Explore the future development of civil engineering.				✓		
		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	CILO	No.	Hours /		
		1	2	3	4	week (if applicable)
Lectures	Review the fundamentals of civil engineering; relationship of civil engineering and the society; understand the fundamentals of structural engineering, wind engineering, geotechnical engineering, transportation engineering, hydraulic and hydrology, earthquake engineering and construction engineering management.	√	√	√		
Tutorials	Case study of new civil engineering development.		✓	✓	√	

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (0); Tutorial (0); Laboratory (0)
	3 hours per week including lectures and tutorials

4. Assessment Tasks/Activities

(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: 100%						
Assignment(s) Report	√	√	√		40%	
Group Project Report			√	√	40%	
Mid Term Test	√	✓	√		20%	
Examination: 0%						
					100%	

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-)	Fair (C+, C, C-)	Marginal (D)/ Pass (P) on P/F basis	
Assignment(s) Report	ABILITY to DISCUSS the fundamentals of structural engineering, wind engineering, geotechnical engineering, transportation engineering, hydraulic and hydrology, earthquake engineering and construction engineering management.	High	Significant	Moderate	Basic	Not even reaching marginal levels
Group Project Report	ABILITY to DISCUSS civil engineering related cases and new civil engineering development	High	Significant	Moderate	Basic	Not even reaching marginal levels
Mid Term Test	ABILITY to RECOGNIZE the fundamentals of various disciplines in civil engineering	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.)

Fundamentals and classical principles of civil engineering orientation including historical developments, education requirements, relation to science, professional practice, and specialties within the profession; fundamentals of structural engineering, geotechnical engineering, transportation engineering, hydraulic and hydrology, environmental engineering and construction engineering management.

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.	Nil

2.2 Additional Readings

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

- 1. Civil engineering body of knowledge for the 21st century: preparing the civil engineer for the future / prepared by the Body of Knowledge Committee of the Committee on Academic Prerequisites for Professional Practice. Reston, Va.: American Society of Civil Engineers, c2008.
- 2. Kevin Gray. Civil engineering technology. Chandni Chowk, Delhi : Global Media, 2007.
- 3. Alan Muir Wood. Civil engineering in context. London: Thomas Telford, 2004.