City University of Hong Kong
Course Syllabus

offered by Department of Architecture and Civil Engineering
with effect from Semester A in 2016/17

Part I Course Overview

Course Title:	Quantitative Method and Analysis for Planning
Course Code:	CA5146
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

This course aims to provide students with quantitative methods and analyses in planning. It seeks to introduce the basic knowledge and application of statistics and quantitative methods that are used in the field of urban design and planning.

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 (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	comprehend the basic principles and techniques of statistics		✓	✓	
2.	perform statistical analysis for testing hypotheses			✓	
3.	interpret statistical data and results accurately		✓	✓	
4.	use statistical computer software package to perform statistical analysis			✓	✓
		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 / week (if applicable)
		1	2	3	4	
Lectures	Principles and techniques of statistics that are used in the fields of urban design and planning	✓	✓	✓	✓	2 hrs/wk
Tutorials	In class discussions and activities on problems related to lecture themes	✓	✓	✓		1 hr/wk

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (2); Tutorial (1); Laboratory (0)

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: 50%						
Assignment 1	✓	✓	✓	✓	25%	
Assignment 2	✓	✓	✓	✓	25%	
Examination: 50% (duration: 3 hours)						
					100%	

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%.

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-)	Adequate (C+, C, C-)	Marginal (D)/ Pass (P) on P/F basis	Failure (F)
Assignment 1	ABILITY to UNDERSTAND and APPLY theories and knowledge to topics related to quantitative analysis	High	Significant	Moderate	Basic	Not even reaching marginal levels
Assignment 2	CAPACITY to EXPLORE, INVESTIGATE, and ORGANIZE knowledge and ideas in an independent fashion in topics related to quantitative analysis	High	Significant	Moderate	Basic	Not even reaching marginal levels
Examination	CAPACITY to DISCUSS, ANALYZE, INNOVATE on given problems or scenarios in topics related to quantitative analysis	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.)

Statistics, Quantitative method, Statistical analysis, Hypothesis test

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.	Agresti A. and Finlay B. (2008) Statistical Methods for the Social Sciences, 4th Edition, Pearson
2.	Moore, D. and Notz, W. (2006) Statistics: Concepts and Controversies, 6th Edition, Freeman
3.	Meier, K., Brudney J. and Bohte, J. (2006) Applied Statistics for Public and Nonprofit Administration, 6th Edition, Thomson Wadsworth
4.	Utts J. M. and Heckard R. F. (2007) Mind on Statistics, 3rd Edition, Thomson