City University of Hong Kong
Course Syllabus

offered by Department of Computer Science
with effect from Semester A 2017/18

Part I Course Overview

Course Title:	Guided Study
Course Code:	CS4552
Course Duration:	1 semester
Credit Units:	3 credits
Level:	B4
Proposed Area: *(for GE courses only)*	☐ Arts and Humanities ☐ Study of Societies, Social and Business Organisations ☐ Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	Completion of at least 60 credit units with an overall GPA of at least 2.0
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

(A 150-word description about the course)

The aim of this course is to provide an opportunity to explore an area of computing in consultation with a member of the academic staff. The objectives are to develop in-depth knowledge of a chosen field of interest and to exercise the skill and techniques acquired in earlier courses, and to apply these skills in proposing solutions to a research problem or formulating creative designs of novel computer applications. The students will also have the opportunity to develop writing skill in conveying the results of project undertaken.

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.	Identify a challenging computer related problem, analyze the problem in detail in the context of an extensive review of existing literature.	20%		✓	
2.	Propose innovative solutions, formulate a detailed design of the solutions and comparison of the proposed solution with existing approaches.	50%		✓	✓
3.	Ability to document and report the system design process, background study and where appropriate the expected performance of the solution, and to present the key concepts in a cogent manner.	30%			
		100%			

** If weighting is assigned to CILOs, they should add up to 100%.*

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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	
Individual Consultation	Each student is expected to solicit the support of an academic supervisor on a one to one basis for each project. The role of the supervisor is to closely monitor the project progress with project meetings regularly, in order to give advice to the student, to establish criteria for assessment, and to advise on possible solutions and potential problems.	✓	✓	✓	1 hour / week individual consultation

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.			Weighting*	Remarks
	1	2	3		
Continuous Assessment: 100%					
Project Report	20%	50%	30%	100%	
Examination: 0% (duration: ---)					
** The weightings should add up to 100%.*				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)	Failure (F)
1. Final Report	1.1 Ability to conduct comprehensive literature survey.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	1.2 Ability to develop innovation solution for a research-oriented problem in a specialized area in computer science.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	1.3 Ability to produce well written interim and final reports regarding the progress and results of the research work.	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.)

Investigate research problem or formulate creative designs of novel computer applications in a specialized area of computer science including but not limited to : Computer Networks, Operating Systems, Distributed Systems, Software Engineering, Data Engineering, Performance Evaluation, Artificial Intelligence, Algorithms, Programming Languages, Multimedia Systems and Pervasive Computing; Survey of related work; Design/Analysis, Final Report.

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.	Readings related to the selected topic of study will be assigned by supervisor.

2.2 Additional Readings

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

1.	Readings related to the selected topic of study will be assigned by supervisor.