City University of Hong Kong
Course Syllabus

offered by Department of Information Systems
with effect from Semester A 2017 / 2018

Part I   Course Overview

Course Title:	Business Programming with Spreadsheet
Course Code:	CB2022
Course Duration:	One Semester (13 weeks)
Credit Units:	3
Level:	B2

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)*	Nil
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	Nil
Exclusive Courses: *(Course Code and Title)*	GE2335 Business Programming with Spreadsheet

Part II   Course Details

1. **Abstract**
   (A 150-word description about the course)

   Business programming with Spreadsheet is among the necessary skills for professionals in all business sectors, e.g. in accounting and financial services. Mastering knowledge and skills of data management using spreadsheet gives students competitive advantages in job application and career advancement.

   Upon completion of this course, students should be able to use spreadsheet to solve business problems and design their own spreadsheet applications to support business operations and decision making (e.g. critical skills for business analysts in banks).

   This course aims to:
   - Introduce the concepts, methods and techniques of simple data management using spreadsheet (basic functions such as formula, chart, conditional formatting, pivot table, etc) for accounting and financial services, and other business sectors.
   - Equip students with the advanced spreadsheet techniques, such as web query, macro and programming abilities to support smart business decision making.

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.	Describe the concepts of data management using spreadsheet in business.	10%	✓	✓	
2.	Describe and explain how spreadsheet techniques contribute to efficient data management.	45%	✓	✓	
3.	Develop innovative solutions for business using simple and advanced spreadsheet techniques.	45%	✓		✓
	If weighting is assigned to CILOs, they should add up to 100%.	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. 1	CILO No. 2	CILO No. 3	Hours/week (if applicable)
TLA1. Lecture	Concepts and applications of spreadsheet techniques (e.g. formula, pivot table, what-if analysis, scenario manager, goal seeking, web query, macro, programming) to support smart business decision making are explained by instructor using real life examples, together with in-class discussions and activities by students.	✓	✓	✓	
TLA2. Laboratory	Demonstrations by instructor and hands-on exercises by students on solving problems in business using Microsoft Excel and VBA skills and functions.	✓	✓	✓	
TLA3. Group Project	Students investigate a real life business application of spreadsheet techniques in an industry of their choice / assigned by instructor.	✓	✓	✓	

4. Assessment Tasks/Activities (ATs)

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

Assessment Tasks/Activities	CILO No. 1	CILO No. 2	CILO No. 3	Weighting*	Remarks
Continuous Assessment: _60%					
AT1. Participation: Students are encouraged to participate in discussion and reflect on the materials covered in the lecture and attempt the laboratory exercises.	✓	✓	✓	10%	
AT2. Group Project: A group project, which is about Business programming with Spreadsheet (e.g. macro/VBA, data management, etc.), will be assigned to students to investigate a real-life application of Business programming with Spreadsheet in a selected industry and apply the concepts learned in the course.	✓	✓	✓	30%	
AT3. Online Exercises or Assignments: Online exercises (e.g. MC, T/F) or assignments will be given to students to reinforce their concepts learned in lecture and tutorials.	✓	✓		20%	
Examination: _40% (duration: 2 -hour)					
AT4. Final Examination: A written examination is given to assess students' competence level of the subjects covered in the course.	✓	✓	✓	40%	
The weightings should add up to 100%.				100%	

** Students must pass BOTH coursework (AT1-AT3) and examination (AT4) in order to get an overall pass in this course. **

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)
AT1. Participation	Ability to accurately describe concepts of data management using spreadsheet in business	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Ability to describe and explain how spreadsheet techniques contributes to efficient data management	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Capacity to develop innovative solution for business using simple and advanced spreadsheet techniques	High	Significant	Moderate	Basic	Net even reaching marginal levels
AT2. Group Project	Ability to accurately describe concepts of data management using spreadsheet in business	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Ability to describe and explain how spreadsheet techniques contributes to efficient data management	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Capacity to develop innovative solution for business using simple and advanced spreadsheet techniques	High	Significant	Moderate	Basic	Net even reaching marginal levels
AT3. Online Exercises or Assignments	Ability to accurately describe concepts of data management using spreadsheet in business	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Ability to describe and explain how spreadsheet techniques contributes to efficient data management	High	Significant	Moderate	Basic	Net even reaching marginal levels
AT4. Final Examination	Ability to accurately describe concepts of data management using spreadsheet in business	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Ability to describe and explain how spreadsheet techniques contributes to efficient data management	High	Significant	Moderate	Basic	Net even reaching marginal levels
	Capacity to develop innovative solution for business using simple and advanced spreadsheet techniques	High	Significant	Moderate	Basic	Net 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.)

   Roles of data management in the business decision making (e.g. data management using Access and Excel, text processing, date/time calculation); business application of analytic techniques in spreadsheet (e.g. formula, pivot table, web query); spreadsheet programming (e.g. variables, Boolean, array, looping, data structure, decision making, function, database); spreadsheet automation through macro and VBA.

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.	Steven C. Chapra, Tufts, Introduction to VBA for Excel, 2/E, Prentice Hall, 2010. ISBN-13: 9780132396677.

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

1.	Kari Wood, Randy Nordell, Microsoft Office Excel 2013 Complete: In Practice, McGrawHill, 2014. ISBN: 9780077486914 / 0077486919.

   2.3   Online Resources

   Readings will be augmented by pertinent journal/newspaper/magazine articles.

   Training courses for Excel 2013 by Microsoft

   http://office.microsoft.com/en-001/excel-help/training-courses-for-excel-2013-HA104032083.aspx

   http://msdn.microsoft.com/en-us/library/office/fp179694.aspx

   http://www.excel-vba-easy.com/