

ISOM3230 Business Applications Programming (L3 and L4)**Instructors**

	Lecturer	Tutor
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Course web	https://canvas.ust.hk/	

Please visit Canvas regularly for the updates in the course.

Time and Venue

L3	Tuesday/Thursday 10:30am to 11:50am	LSK1034
L4	Tuesday/Thursday 09:00am to 10:20am	LSK1034
LA1	Tuesday 4:30pm to 5:20pm	LSKG021
LA2	Tuesday 3:00pm to 3:50pm	LSKG021
LA3	Tuesday 1:30pm to 2:20pm	LSKG021
LA4	Wednesday 4:30pm to 5:20pm	LSKG021

Overview

This course is intended to be the first programming class for business students such that students will acquire general programming knowledge including concepts, syntax, structure and techniques. VBA (Visual Basic for Applications) is chosen for the teaching purpose. Apart from acquiring general programming knowledge, students will be given exposure to the design and development of business applications throughout the course. Students will learn how to solve practical problems by applying VBA programming.

Course Objectives

In this course, students will learn the fundamentals of programming including variables, flow control, methods and arrays. By attending this course, students will learn how to develop applications in the environment of Microsoft Excel. Specifically,

- They will learn how to utilize general programming techniques.
- They will learn how to manipulate the objects in Microsoft Excel.
- They will learn how to process varying volume of data stored in Microsoft Excel.
- They will learn how to build up GUI (graphical user interface) with functionalities.

Intended Learning outcomes

- Acquire general programming knowledge with VBA (Visual Basic for Applications)
- Describe the flows of programs
- Predict the output of programs
- Identify and fix logical and runtime errors of programs
- Apply programming techniques to solve practical problems

Grading Scheme

Examinations		
	Midterm Exam	20%
	Final Exam	40%
Assignments		
	Assignment 1 (Individual)	20%
	Assignment 2 (Group)	20%

Assignments (40%)

The objectives of assignments are to analyze business problems and resolve these problems using VBA. The details of the assignment will be announced later in the course.

Assignment 1 (Individual) - (20%)

Write a VBA program to meet ALL requirements set out in the assignment. This individual assignment will be released on 11-October-2019 and due on 1-November-2019.

Assignment 2 (Group) - (20%)

Write a VBA program to meet ALL requirements set out in the assignment. This group assignment will be released on 1-November-2019 and due on 22-November-2019.

A peer evaluation form will be supplied, if students make their request by 29-November-2019. For students who do not contribute to this group assignment and take the advantage of others' contribution (i.e., free-riders), their scores will be adjusted base on the peer evaluation. A student must reflect the actual contribution of every member with honesty. Making false claims in the peer evaluation is a kind of Academic Misconduct. An independent judgement is applied to review each case, and an appeal is NOT allowed.

Midterm Exam (20%) and Final Exam (40%)

All course materials (lecture and lab materials) are subject to the examination. Due to the nature of programming language, the final exam is **cumulative**.

Examination Arrangements and Regulations

Students are required to attend the examinations scheduled by the course instructor and/or Academic Records and Registration (ARR), Academic Registry. If there is a conflict in exam schedule with another course, you should resolve it before the add-drop period (e.g., consider taking a different course/section during add/drop period).

- If a student is unable to attend a scheduled examination because of illness or other circumstances beyond the student's control,

Midterm Exam: the student may request for a make-up midterm exam and seek approval from the course instructor, within one week from the missed examination. Appropriate supporting document is required.

Final Exam: the student may apply to ARR, Academic Registry within one week from the missed exam for a make-up exam. The student is required to provide appropriate supporting document in the application. A make-up exam can be given only if the application of the make-up exam is approved by all related parties including the course instructor, ARR, Academic Registry and etc.

Note. The format of the make-up exam could be different from that of the scheduled exam. The make-up exam is given on a take-it-or-leave-it basis. No further arrangement will be provided if the student fails to attend the make-up exam.

- If a scheduled exam is cancelled due to bad weather conditions (<http://ugadmin.ust.hk/ug-guide/classes/weather.html>),

Midterm Exam: a rescheduled exam will be arranged by the course instructor.

Final Exam: a rescheduled exam will be arranged by ARR, Academic Registry. It is possible that the rescheduled final exam is held after the exam period, i.e., 20 December 2019 or even later.

Students will be notified by email or a public announcement. A student who fails to attend the rescheduled exam is required to apply for the make-up exam and seek approval from all related parties, before a make-up exam can be given.

Lecture Schedule (Tentative)

Wk.	Date	Topics	Assignment
1	3-Sep	Introduction	Asg. 1 Release (11-Oct)
	5-Sep	Getting started with VBA	
2	10-Sep	VBA Basics:	
	12-Sep	Types of Error, Buttons and Shortcut Keys, IO and others	
3	17-Sep	Excel Objects - Workbooks and Worksheets	
	19-Sep		
4	24-Sep	Ranges	
	26-Sep		
5	1-Oct	Holiday	
	3-Oct	Data - Variable, Constant	
6	8-Oct	Control Logic	
	10-Oct		
7	15-Oct	Looping	
	17-Oct		
8	22-Oct	No lecture (Consultation)	
	24-Oct	Midterm Exam 6:30pm to 8:00pm TBA	
9	29-Oct	Arrays	Asg. 1 Due (1-Nov)
	31-Oct		Asg. 2 Release (1-Nov)
10	5-Nov	Methods - Sub and Function	
	7-Nov		
11	12-Nov	Userform	
	14-Nov		
12	19-Nov	Business Applications	
	21-Nov		
13	26-Nov	Revision	Asg. 2 Due (22-Nov)
	28-Nov	No lecture (Consultation)	

Schedule of Laboratory LA1, LA2, LA3 (Tentative)

Wk.	Date	No.	Topics
1	3-Sep		No Lab
2	10-Sep	LA 1	First VBA Program
3	17-Sep	LA 2	Getting started with VBA & Macro Recorder
4	24-Sep	LA 3	Types of Errors, Buttons and Shortcut Keys, Basics, IO
5	1-Oct		Public Holiday
6	8-Oct	LA 4+5	Excel Objects - Workbooks and Worksheets + Ranges
7	15-Oct	LA 6	Data – Variable, Constant
8	22-Oct	LA 7	Control Logic
9	29-Oct	LA 8	Looping
10	5-Nov	LA 9	Arrays
11	12-Nov	LA 10	Methods
12	19-Nov	LA 11	Userform
13	26-Nov	LA 12	Business Applications

Schedule of Laboratory LA4 (Tentative)

Wk.	Date	No.	Topics
1	4-Sep		No Lab
2	11-Sep	LA 1	First VBA Program
3	18-Sep	LA 2	Getting started with VBA & Macro Recorder
4	25-Sep	LA 3	Types of Errors, Buttons and Shortcut Keys, Basics, IO
5	2-Oct	LA 4	Excel Objects - Workbooks and Worksheets
6	9-Oct	LA 5	Ranges
7	16-Oct	LA 6	Data – Variable, Constant
8	23-Oct	LA 7	Control Logic
9	30-Oct	LA 8	Looping
10	6-Nov	LA 9	Arrays
11	13-Nov	LA 10	Methods
12	20-Nov	LA 11	Userform
13	27-Nov	LA 12	Business Applications

Note. Schedule is tentative and subject to change. Please check the course website regularly for the updated schedule.

Reference book

Michael Alexander and Dick Kusleika (2016), Excel 2016 power programming with VBA, John Wiley & Sons.

(Access link: <http://onlinelibrary.wiley.com/book/10.1002/9781119415503>)

Grade appeal

Any appeal to score/grade has to be filed through email to both Dr. Cheung and your tutor (Bosco). No appeal to a particular score/grade shall be allowed 72 hours after its score/grade release day.

Academic honesty

Written work that you hand in is assumed to be original unless your source material is documented appropriately. Using the ideas or words of another person, even a peer, or a web site, as if it were your own, is plagiarism. Cheating and plagiarism are serious academic offenses. Students should read the section on cheating and plagiarism in the HKUST catalog.

Furthermore, students should be aware that faculty members have a range of academic actions available to them in cases of cheating and plagiarism, including failing a student on that particular work, to failing a student in a course, to referring the case to school/university committees for consideration of dismissal from the university program.