

COMP1022Q
Introduction to Computing with Excel VBA

Course Details
Summer 2015

David Rossiter and Gibson Lam

COMP1022Q

Introduction to Computing with Excel VBA

- Welcome to COMP1022Q !
- This PowerPoint goes through all the basic information about the course
- This course is all about the Excel program – how to use it, how to program it
- After you learn programming with Excel, you can easily program lots of other things
- Let's start by listing the goals of the course

Course Outcomes

- On successful completion of this course, students are expected to be able to:
 1. Manipulate and visualize data using Microsoft Excel
 2. Program using the VBA language within Microsoft Excel to build effective solutions to problems

Start



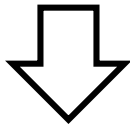
Learn how to use Excel
(without any VBA)

} *About 4
classes*



Learn about using Excel with VBA

} *About 9
classes*



Finished!

A Flowchart
for the Course

COMP 1022Q - Introduction to Computing with Excel VBA

Course Detail

Career	Undergraduate	
Units	3.00	
Grading Basis	Graded A+ to F	
Course Components	Laboratory	Required
	Lecture	Required

Exclusion	COMP 1002, COMP 1003, COMP 1004/104H (prior to 2009-10), COMP 1021, COMP 1022P, ISOM 3230
------------------	---

Description

This course is designed to equip students with the fundamental concepts of programming using the VBA programming language, within the context of the Microsoft Excel program. Students will first learn how to use Excel to analyze and present data, and will then learn how to use VBA code to build powerful programs.

- This is the official information about the course

Three Introductory CS Courses

- There are 3 introductory courses run by the CSE department that anyone can join
- Each of them teaches computer programming and related techniques, but there are some differences:
- COMP1021 Introduction to Computer Science
 - Teaches the Python programming language, which is a really good language for learning programming
 - It looks at some areas of computer science (CS) that the other two courses don't look at, to get a better appreciation of CS

Three Introductory CS Courses

- COMP1022P Introduction to Computing with Java
 - A lot of computer languages think about things as *objects*
 - This course focusses on teaching the concept of objects and how they interact using the Java programming language
- COMP1022Q Introduction to Computing
with Excel VBA
 - This course is totally focused on the Microsoft Excel program, which is part of the Microsoft Office group
 - First, students learn how to use Excel (without programming), then they learn how to program it

Course Timetable

- Lecture
 - **L1**: Tue and Thu 10:00-11:50am
 - Venue: rm4619
- Labs
 - **LA1**: Tue and Thu 2:00-3:50pm
 - **LA2**: Tue and Thu 4:00-5:50pm
 - Venue: CS lab 3 (rm4213 near lift 19 the lab area)
<http://pathadvisor.ust.hk/?&floor=4&scale=3&offsetX=1113&offsetY=982>

Course Instructor

- Gibson LAM
 - Email: gibson@cse.ust.hk
 - Office: rm3512
- The best way to contact me is via email
- I won't post information about the course on Facebook or any other social network



Lab Teachers

- Wallace MAK
 - Email: wallacem@cse.ust.hk
 - Labs: first half of the course
- Katherine FUNG
 - Email: kycs@cse.ust.hk
 - Labs: second half of the course
- There will also be other people helping you in the lab



Course Web Site

- All course information is presented via the web at
`https://course.cse.ust.hk/comp1022q/`
- At the start of the semester, there won't be any need to log in to the web site
- Later you will need to use your CSD account (**not** your ITSC account) to log on to the web site

Starting the Course

<div> <div>COMP1022Q</div> <div>Introduction to Computing with Excel VBA</div> <div>Summer 2015</div> </div> <div> Book website Academic Calendar Jump to day: 1 </div>		
Day	Lecture	Lab Session
	<div> L1 Tue/Thu 10:00-11:50am at rm4619 </div>	<div> LA1 Tue/Thu 2:00-3:50pm and LA2 Tue/Thu 4:00-5:50pm at rm4213 </div>
<div>1</div> <div>23 Jun 2015</div>	<div> Course Details [B&W, colour] <div> Please go here to register your CSD account </div> </div> <div> Introduction to Spreadsheets [B&W, colour] <div> Book pages 1-4 </div> </div> <div> Starting to Use Excel [B&W, colour] <div> Book pages 4-22 <div> Examples used in the notes here Examples of Excel charts and how to use them here </div> <ul style="list-style-type: none"> • A quick look at lab 1 • These notes will be handed out • Please print the notes if you want to, starting from the next lecture </div> </div>	<div> You don't have to go to the lab rooms until your first lab session Before you go to the room, click here to register your CSD account, see the last few slides of the Course Details notes here The first lab session will be taught from Thu 25 Jun onwards </div>

- The first lab will be taught on the second day of the course

Course Notes

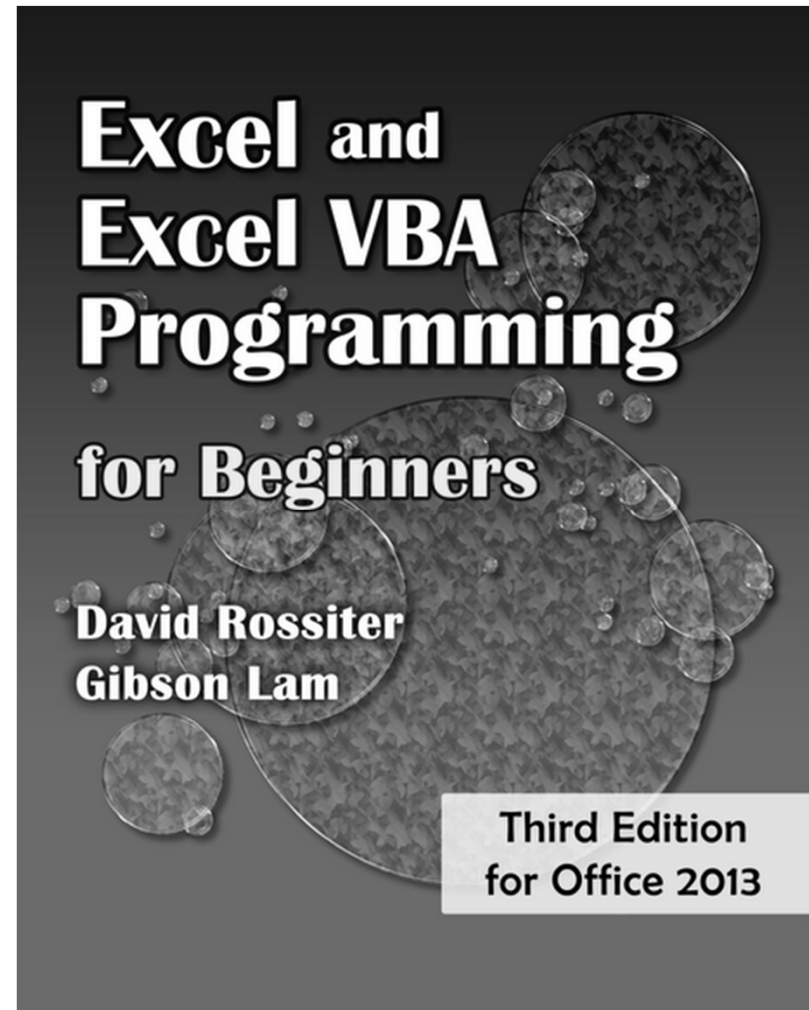
- The notes will be released on the web site before the lecture, so you have time to download and print them, and bring them to class
- Some material will be handed out and discussed during the lectures
- The labs will also be released before they are taught, so you can start them before you go

Course Book

- The book for this course is shown on the next slide
- This book is written specially for this course
- You can get the book from the HKUST bookstore
- The in-class quiz and final exam will be open book/open notes, so you can take the book into the class/exam room

Excel and Excel VBA Programming for Beginners – 3rd Edition

- Written by
David Rossiter and
Gibson Lam
- Published –
Sep 2014
- About 320 pages
- Student price for 3rd edition
is roughly: \$181
(if you show your student card)



Worth:

- Lectures
 - Lectures are typically used to give a solid introduction to a topic, with lots of demonstrations
 - Then the labs are for you to explore the subject in depth
- Labs
 - We will have around 9 taught lab sessions
 - It is very important that you attend the lab sessions, otherwise it will be impossible to do the assignments
- Two assignments **2 x 15% = 30%**
- In-class quiz (optional) **30%**
 - An open book/notes in-class quiz on 16 Jul
- Final exam **40%**
 - This will be a 2.5 hour, open book/notes exam on 11 Aug

Optional In-class Quiz

- The in-class quiz will be optionally counted towards the final grade
- If the quiz is not counted towards the grade, the weighing of the assignments will become 40% and the final exam will become 60%
- We will automatically use the arrangement which gives you a higher course total at the end of the semester
- Even though the quiz may not contribute to your final grade it is still a good practice of what you have learned

Conduct During Lessons



- When you come to the lectures or labs please don't disturb anyone, especially the course instructors!
- So make sure your phone is off before you come in the room, and have any discussions with your friends outside the room

Taking Attendance in Lectures

- We won't take attendance during the lectures
- If you don't go to the lectures, you will quickly become 'lost' and won't understand the course content and labs — but that's your choice!



Assignment Points

- Occasionally I will ask some questions during the lecture
- If you answer a question correctly the first time, you will get 2 assignment points (= two marks in your assignment)
- I may give out assignment points for other activities if I can come up with some
- The assignment points can be used to fill up your assignment score until you get full marks

Taking Attendance in Labs

- We usually won't take attendance during the labs **BUT** if people don't go to their registered lab and go to another one instead, that causes big problems
- Maybe some students in the 4pm lab want to finish school early, so they go to the 2pm lab...
- That lab then has too many students and not enough computers, so some of the students who are really registered in that lab can't do anything
- If we encounter this situation, we will do random checks of all students in the over-crowded lab session, and give penalties to students who shouldn't be there

Cheating Policy



- If you get caught cheating, both you and the other person get zero for that work, and your end-of-semester grade is lowered one sub-grade i.e. a C grade becomes C-
- It doesn't matter if you only copied a little, the penalty is the same for both the source and the copier
- Copying anything from a previous semester is also cheating, make sure you only use material from this semester

Some Interesting Things We Have Heard



- I lent my USB drive to others and forgot my work was on it!
- I lent my work to others only for their reference!
- I submitted someone else's work by mistake!
- My friend prepared a template which I used to do the work, and I forgot to remove his name!
- And so on... sorry, but all these kinds of things get zero

Things That Are OK to Do

- Discussing the work with others is fine; that's different from direct copying
- Another thing you might find helpful is to search the Internet
- There's lots of material about Excel and VBA on the web, and you are welcome to learn from it

Your Computer Accounts

- You have two computer accounts:
- Your ITSC account
 - This is given to you when you join UST
 - This is your main email account at UST
- Your CSD account
 - This is given to you when you first join a COMP course
- All the COMP1022Q labs are taught in the Computer Science Department (CSD) lab rooms (we will use room 4213, called CS lab 3)
- Before you can work in those lab rooms, you need to enable your CSD account

How to Enable Your CSD Account

- Don't wait for the lab time to do this
- Go to a computer in one of the barns at UST
- Run a browser, go to:

`https://password.cse.ust.hk:8443/pass.html`

- Log on using your ITSC details



The screenshot shows the login interface for the HKUST Central Authentication Service. At the top, the HKUST logo and name are displayed in both Chinese and English. Below this, the service name 'HKUST Central Authentication Service' is centered. A message instructs users to enter their ITSC network account username and password. There are two input fields: 'Username:' and 'Password:'. To the right of the password field is a large padlock icon. Below the input fields is a checkbox labeled 'Warn me before logging me into other sites.' At the bottom left, there is a 'LOGIN' button and a 'clear' link.

CSD Password Setting Service

You may set your password for CSD machines (both Unix workstations and PC).

Steps:

1. CSD account name should normally be your ITSC account name.
2. If you are UG students, do not check the box for Faculty/PG domain.
3. Fill in the form, click "Go UPDATE" when finished.

The screenshot shows a web form for setting a CSD password. It includes three input fields for 'CSD Account Name', 'New Password (8 chars or more)', and 'Retype Password'. Below these is a section 'Set the password of:' with three radio button options: 'Unix account at Faculty/PG domain', 'Unix account at UG domain', and 'PC account at domain CSD'. The bottom of the form has two buttons: 'Go UPDATE' and 'RESET Form'. Two black arrows are drawn on the image: one points from the top-right of the form to the first bullet point, and another points from the bottom-right of the form to the second bullet point.

CSD Account Name	<input type="text"/>
New Password (8 chars or more)	<input type="password"/>
Retype Password	<input type="password"/>

Set the password of:

- ☐ Unix account at Faculty/PG domain
- ☐ Unix account at UG domain
- ☐ PC account at domain CSD

- Tick the bottom two check boxes (“Unix account at UG domain” and “PC account at domain CSD”)
- Enter your ITSC account name and password (your CSD account name is the same as your ITSC account name)
- Finally, click ‘Go UPDATE’

- You will see something like this:



- You need to wait 5-10 minutes before your CSD account is activated
- Now you can access any CSD computers i.e. the computers we will use in CS lab 3
- Enable your account before the lab begins!