

COMP1022Q  
Introduction to Computing with Excel VBA

# Course Details

Spring 2013

David Rossiter

# 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

1. To be competent in using Microsoft Excel for handling and visualizing data
2. To be able to program the VBA language within Microsoft Excel to build efficient solutions to problems

*Start*



Learn how to use Excel  
(without any VBA)

} *About 4  
weeks*



Learn about using Excel with VBA

} *About 9  
weeks*



*Finished!*

A Flowchart  
for the Course

## COMP 1022Q - Introduction to Computing with Excel VBA

### Course Detail

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

<b>Exclusion</b>	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
  - Is more ‘broad’ than the other two courses, because 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

	<b>COMP1022Q Lecture Timetable, Spring 2013</b>				
	Monday	Tuesday	Wednes	Thursday	Friday
0900-0930					
0930-1000	<b>COMP1022Q</b>		<b>COMP1022Q</b>		
1000-1030	<b>L2 (Rm 3007)</b>		<b>L2 (Rm 3007)</b>		
1030-1100	<b>COMP1022Q</b>		<b>COMP1022Q</b>		
1100-1130	<b>L3 (LTF)</b>		<b>L3 (LTF)</b>		
1130-1200					
1200-1230					
1230-1300					
1300-1330					
1330-1400		<b>COMP1022Q</b>		<b>COMP1022Q</b>	
1400-1430		<b>L1 (Rm 2407)</b>		<b>L1 (Rm 2407)</b>	
1430-1500					
1500-1530					
1530-1600					
1600-1630					
1630-1700					



# Course Instructors



Name	Preferred Email	Lecture Sections
David Rossiter	rossiter@cse.ust.hk	L2
Stavros Papadopoulos	stavrosp@cse.ust.hk	L1 & L3

# Contact Channels

- The best way to contact us is via email
- Any useful replies that we send out are also posted on the newsgroup for everyone to read and learn from
- The newsgroup is `hkust.cs.class.1022q`
- The newsgroup should be checked regularly, particularly when a deadline is near
- If you add a newsgroup message please use your proper email ID, don't use a nonsense one
- We will never post information about the course on Facebook or any other social network

## COMP1022Q Lab Timetable, Spring 2013

	Monday	Tuesday	Wednes	Thursday	Friday
0900-0930		<b>COMP1022Q</b>	<b>COMP1022Q</b>		
0930-1000		<b>LA6</b>	<b>LA4</b>		
1000-1030		<b>(Rm 4213)</b>	<b>(Rm 4213)</b>		
1030-1100		<b>Wallace</b>	<b>Cecia</b>		
1100-1130		<b>COMP1022Q</b>	<b>COMP1022Q</b>		
1130-1200		<b>LA5</b>	<b>LA2</b>		
1200-1230		<b>(Rm 4213)</b>	<b>(Rm 4213)</b>		
1230-1300		<b>Wallace</b>	<b>Jan</b>		
1300-1330					
1330-1400					
1400-1430					
1430-1500		<b>COMP1022Q</b>	<b>COMP1022Q</b>		
1500-1530		<b>LA3</b>	<b>LA1</b>		
1530-1600		<b>(Rm 4213)</b>	<b>(Rm 4213)</b>		
1600-1630		<b>Tom</b>	<b>Cecia</b>		
1630-1700					

# Teaching Assistants (TA)

Name	Preferred Email	Lab Sections
CHAN Ki Cecia	kccecia@cse.ust.hk	LA1 & LA4
VOSECKY Jan	jvosecky@cse.ust.hk	LA2
KO Tom	tomko@cse.ust.hk	LA3
MAK Wai Ho Wallace	wallacem@cse.ust.hk	LA5 & LA6

There are also other people helping you with the course, such as markers and lab helpers

# Course Web Site

- All course information is presented via the web at <http://course.cse.ust.hk/comp1022q/>
- At the start of the semester, there may be no password, but later you will need to log on
- To log on, use your email (i.e. cs\_abc) , with the last four digits of your student id as the password (i.e. 0113)

# Starting the Course

## COMP1022Q Introduction to Computing with Excel VBA Spring 2013

[Newsgroup](#)

Week Number	First Lecture Lecture time slots <a href="#">here</a>	Second Lecture Lecture time slots <a href="#">here</a>	Lab Session Lab time slots <a href="#">here</a>
1 27 Jan			<ul style="list-style-type: none"> <li>No course activity on first day of semester</li> </ul>
1 3 Feb	<ul style="list-style-type: none"> <li>Course Details <a href="#">B&amp;W</a>, <a href="#">colour</a> <ul style="list-style-type: none"> <li>Please go <a href="#">here</a> to register your CSD account</li> </ul> </li> <li>Introduction to Spreadsheets <a href="#">B&amp;W</a>, <a href="#">colour</a> <a href="#">Book pages 1-8, 11-16</a></li> <li>Demonstration of future assignment</li> </ul>	<ul style="list-style-type: none"> <li>Starting to Use Excel_ <a href="#">B&amp;W</a>, <a href="#">colour</a> <a href="#">Book pages 9-11</a> <ul style="list-style-type: none"> <li>Examples used in the notes <a href="#">here</a></li> <li>Examples of Excel charts and how to use them <a href="#">here</a></li> </ul> </li> <li>A quick look at lab 1</li> </ul>	<ul style="list-style-type: none"> <li>You don't have to go to the lab rooms until your first lab session</li> <li>The first lab will be taught Tuesday 19 September- Wednesday 20 February</li> <li>Make sure you register your CSD account first! See the last few slides of the Course Details notes <a href="#">here</a></li> </ul>
2 10 Feb	<ul style="list-style-type: none"> <li>Monday-Wednesday are HK holidays, no lectures</li> </ul>	<ul style="list-style-type: none"> <li>No lecture 2 this week</li> </ul>	<ul style="list-style-type: none"> <li>No labs this week</li> </ul>

• Here is the official [UST calendar](#)

- The first lab will start on 19-20 February
- There is no course activity in the week of the Chinese New Year!

# Course Notes

- For the first few lectures, we will hand out the notes on paper
- After that, we will release the notes on the web site before the lecture, so you have time to download and print them, and bring them to class
- The labs will also be released before they are taught, so you can look at them before you go

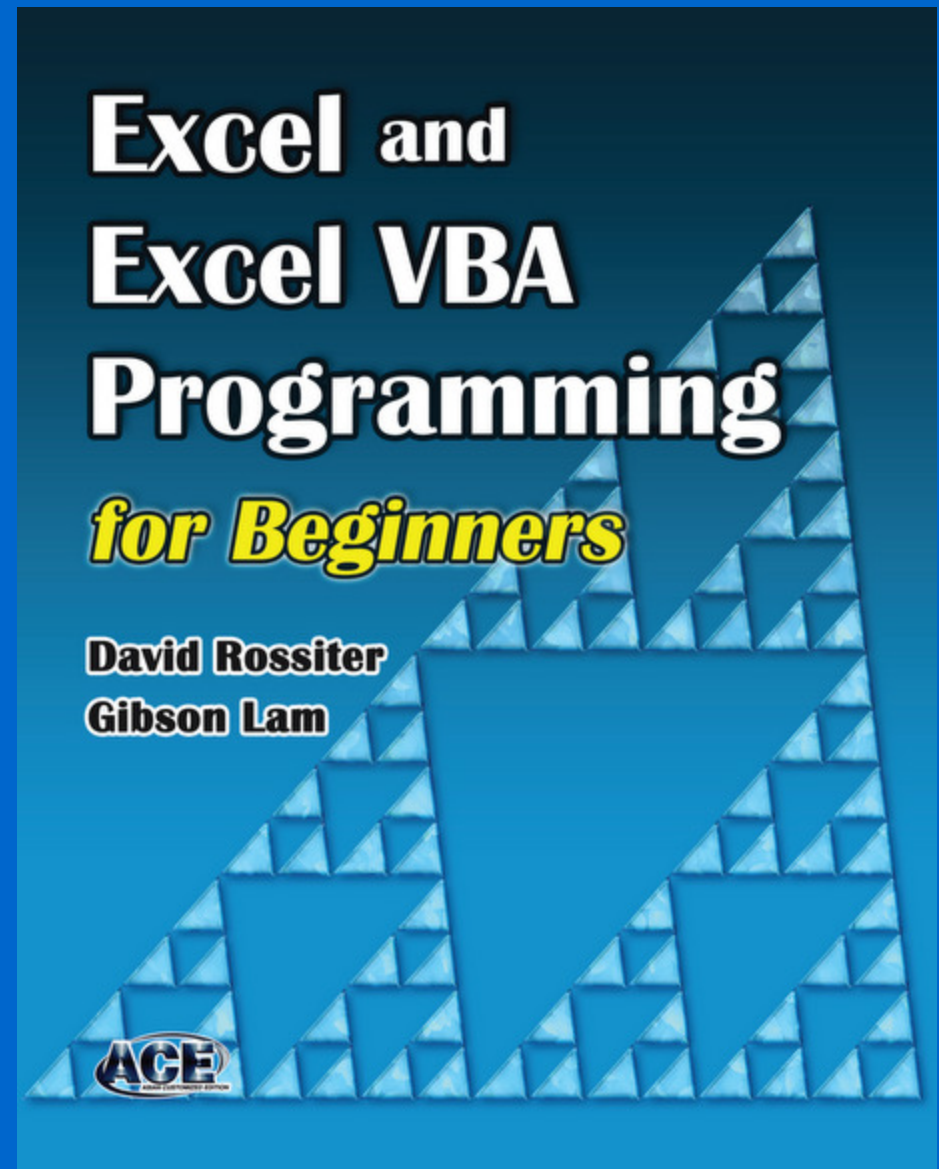
# Course Book

- 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 book shop
- The exam(s) will be open book/open notes, so that you can take the book into the exam room



# Excel and Excel VBA Programming for Beginners

- Written by  
David Rossiter  
and Gibson Lam
- Recently published –  
Sep 2012
- About 250 pages
- Student price last  
semester: \$125.5  
(if you show your student card)



- Lectures Worth:
  - Lectures are typically used to give a solid introduction to a topic, with demonstrations
  - Then the labs and small projects are used for you to explore the subject in depth
- Labs
  - We will have 9-10 taught lab sessions
  - It is very important that you attend the lab sessions, otherwise it will be impossible to do the assignments
- Assignments 40%
  - There will be three assignments, see next slide
- Midterm test 22%
  - This test will be an open book exam starting 7:30pm, Thursday 21 Mar 2013, in LTA, LTD & LTE
  - More details will be released later
- Final exam 38%
  - This will be a 2.5 hour, open book, open note exam

# Assignments

Worth:

- The first assignment will involve using Excel formulas only (no VBA) 10%
- The second assignment will involve using Excel with some VBA programming 12%
- The third assignment will involve more advanced use of Excel with VBA 18%

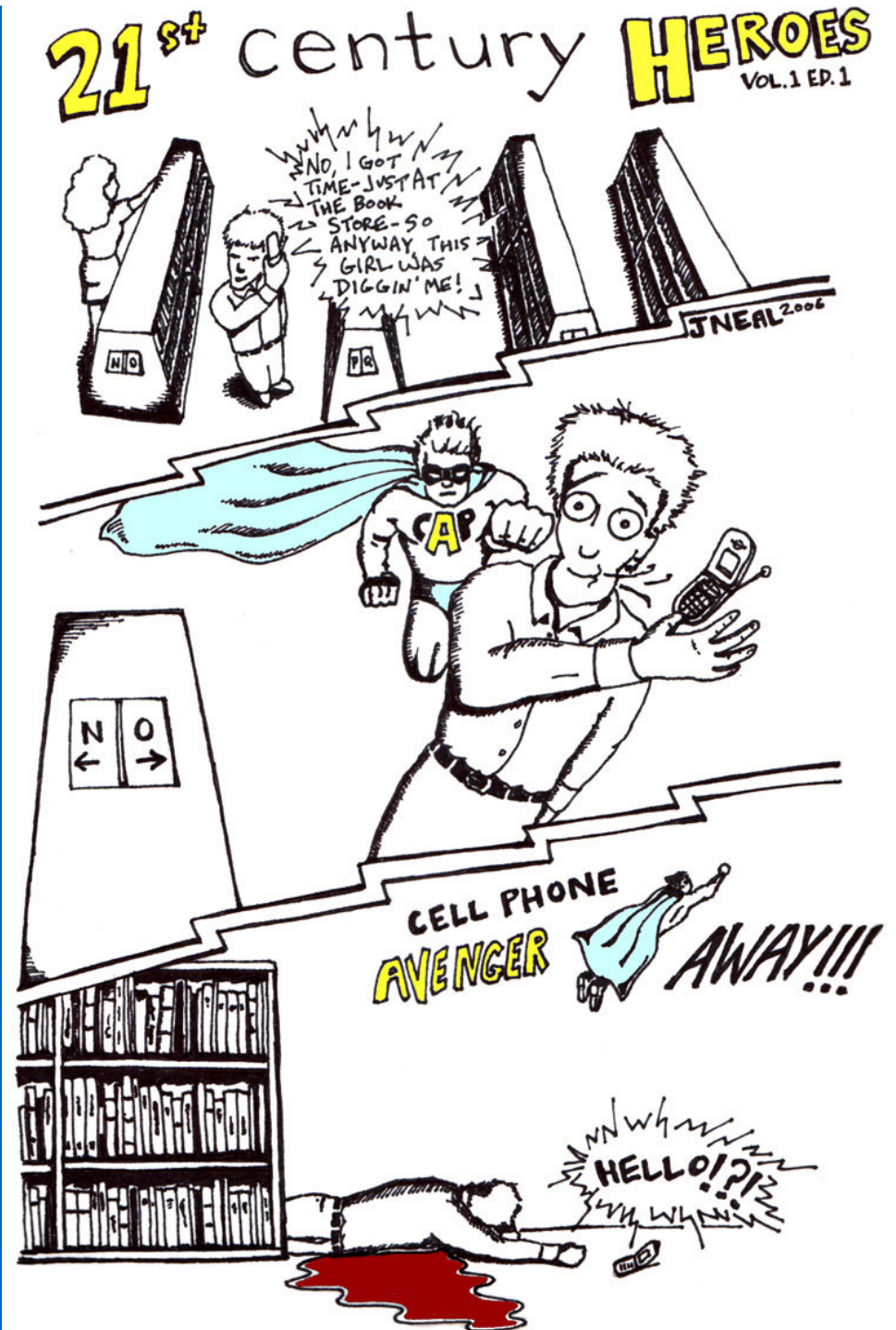
# Conduct During Lessons



- 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

- ‘Cell Phone Avenger’ is our hero!

From <http://autodogmatic.com/art/cpa3.jpg>



# 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 labs/assignments – but that's your choice!





# 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
- For example, there are 9am labs on Tues and Weds
- Maybe some students registered for that lab don't want to get up so early, so they go to a different 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

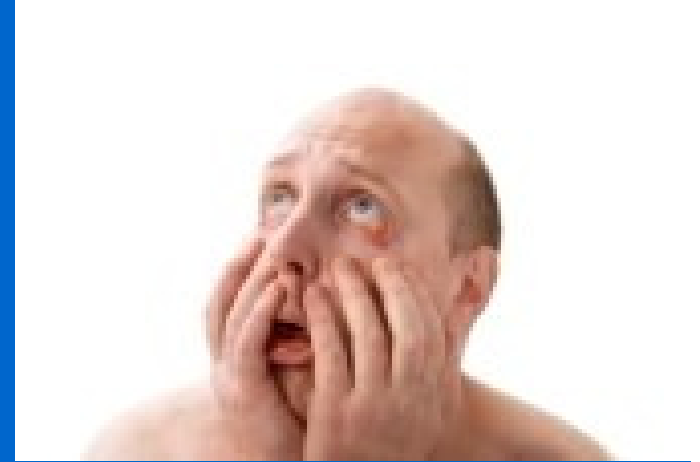
# Cheating Policy

- 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 people
- Copying anything from a previous semester is also cheating (but the assignments are not the same)
- If you cheat twice you get a F grade...





# 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... 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

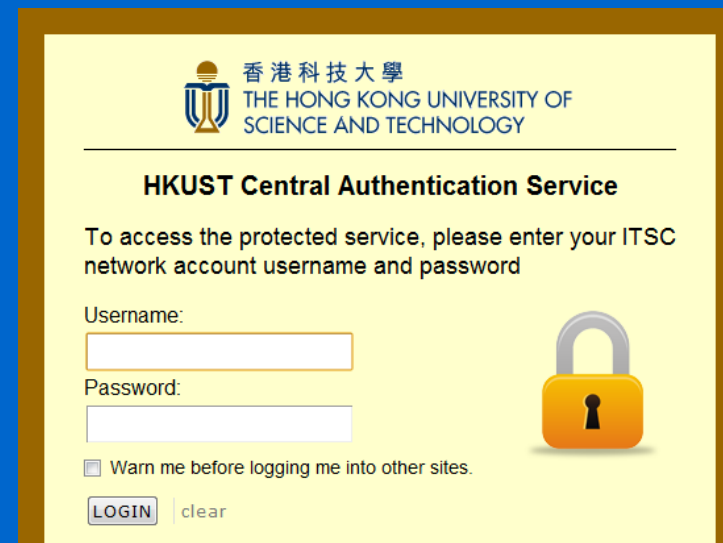
- You have two computer accounts:
- Your ITSC account
  - This is given to you when you join UST
  - This is your main email account at UST
- Your CSD account
  - This is given to you when you first join a COMP course
- All the COMP1022Q labs are taught in the Computer Science Department (CSD) lab rooms (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 HKUST Central Authentication Service login interface. At the top, the HKUST logo and name are displayed in both Chinese and English. Below this, the title 'HKUST Central Authentication Service' is centered. A message states: 'To access the protected service, please enter your ITSC network account username and password'. There are two input fields: 'Username:' and 'Password:'. To the right of the password field is a large orange padlock icon. Below the input fields, there is a checkbox labeled 'Warn me before logging me into other sites.' and a 'LOGIN' button next to 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.

CSD Account Name	<input type="text"/>
New Password (8 chars or more)	<input type="password"/>
Retype Password	<input type="password"/>
Set the password of:	<input type="checkbox"/> Unix account at Faculty/PG domain
	<input type="checkbox"/> Unix account at UG domain
	<input type="checkbox"/> PC account at domain CSD

Go UPDATE

RESET Form

- 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!