FIT9004
Computer programming for business

Unit Guide

Semester 1, 2013

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

Last updated: 28 Mar 2013
FIT9004 Computer programming for business - Semester 1, 2013

This unit provides an introduction to the principles and practice of programming for business applications. This includes an overview of spreadsheet modelling and a detailed introduction to programming with Excel including general programming concepts, the syntax and semantics of a current business programming language, design and development of graphical user interfaces.

Mode of Delivery

- Caulfield (Day)
- Sunway (Evening)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload requirements

For on-campus students, workload commitments per week are:

- two-hour lecture
- two-hour tutorial
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.

Unit Relationships

Prohibitions

BUS4520, BUS5520, BUS9001, BUS9003, BUS9004, GCO4801, BUS9520, GCO1810, FIT2066, BUS1010, FIT1013

Chief Examiner

Dr Caddie Gao

Campus Lecturer

Caulfield

Poh Lim (Mary)

Sunway

Lee Hee Jeong
Academic Overview

Learning Outcomes

At the completion of this unit students will have:

- a knowledge of the fundamentals of spreadsheets which will provide them with an understanding of spreadsheet modelling presentation and analysis using Excel;
- learnt the fundamentals of OO concepts;
- gained an understanding of the Excel object model;
- learnt how to create Excel macros;
- learnt the basics of programming including variables, data types, control structures, subroutines and functions;
- learnt to create custom dialog boxes and custom forms using VBA;
- the ability to create non-trivial applications using Visual Basic for Applications;
- learnt to create executable programs with custom dialog boxes and custom forms using appropriate software tools.
# Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>No formal assessment or activities are undertaken in week 0</td>
</tr>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Tutorial in Week 1 (not assessed)</td>
</tr>
<tr>
<td>2</td>
<td>Excel Functions and Applications</td>
<td>Weekly assessed Tutorials and Online Quizzes start in Week 2</td>
</tr>
<tr>
<td>3</td>
<td>Introduction to Excel VBA</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Programming Fundamentals</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Variables, Controls, and Debugging</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Control Structures</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Repetition and Custom Dialog Boxes</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mid-semester Test in lecture</td>
<td>Mid-semester Test in lecture</td>
</tr>
<tr>
<td>9</td>
<td>Dialog Box Controls</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Introduction to Access</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Access Maintenance</td>
<td>Assignment due 5pm, Saturday 25 May 2013</td>
</tr>
<tr>
<td>12</td>
<td>Introduction to SQL and Access Macros</td>
<td>Interview (to be scheduled)</td>
</tr>
<tr>
<td>SWOT VAC</td>
<td></td>
<td>No formal assessment is undertaken in SWOT VAC</td>
</tr>
</tbody>
</table>

*Unit Schedule details will be maintained and communicated to you via your learning system.

# Assessment Summary

Examination (2.5 hours): 60%; In-semester assessment: 40%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorials</td>
<td>5%</td>
<td>Weekly (starting Week 2)</td>
</tr>
<tr>
<td>Online Quizzes</td>
<td>10%</td>
<td>Weekly (starting Week 2)</td>
</tr>
<tr>
<td>Mid-semester Test</td>
<td>10%</td>
<td>Week 8 in lecture</td>
</tr>
<tr>
<td>Assignment - Developing a System</td>
<td>15%</td>
<td>Assignment due Saturday 5pm, 25 May 2013; Interview in Week 12 (to be scheduled)</td>
</tr>
<tr>
<td>Examination 1</td>
<td>60%</td>
<td>To be advised</td>
</tr>
</tbody>
</table>
Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning.
Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

Academic Integrity - Please see the Demystifying Citing and Referencing tutorial at http://lib.monash.edu/tutorials/citing/

Assessment Tasks

Participation

• Assessment task 1

  Title: Tutorials
  Description: Students will be required to complete given tasks based on the lectures during the tutorial classes each week.
  Weighting: 5%
  Criteria for assessment: How well tasks are completed.
  Due date: Weekly (starting Week 2)

• Assessment task 2

  Title: Online Quizzes
  Description: Weekly assessment of lecture topics. Students are required to log-in to the unit website on Moodle to attempt the quizzes. Two attempts are allowed and the highest score is taken.
  More information will be given in class.
  Weighting: 10%
  Criteria for assessment: Correct answers to questions.
  Due date: Weekly (starting Week 2)

• Assessment task 3

  Title: Mid-semester Test
  Description:
A test based on the lecture materials and tutorial tasks covered in Weeks 1-6 will be conducted in Week 8.

Weighting:
10%

Criteria for assessment:
Students must demonstrate a comprehensive knowledge of the lecture materials and tutorial tasks from Weeks 1-6.

Due date:
Week 8 in lecture

• Assessment task 4

Title:
Assignment - Developing a System

Description:
This is an individual assignment involving the development of a system using concepts and features from the unit content.

Weighting:
15%

Criteria for assessment:
The assessment criteria will be based on your ability to perform the following tasks:

♦ Write Macros (sub procedures) using VBA in Microsoft Excel
♦ Use appropriate data types, to declare and use variables and/or constants
♦ Use the Workbook, Worksheet and Range objects
♦ Write event procedures for some Excel and VBA objects
♦ Use other objects as necessary
♦ Use repetition and selection structures in VBA code
♦ Perform data validation on user input
♦ Use the Vlookup() worksheet function in VBA code
♦ Construct arithmetic expressions in VBA code
♦ Follow appropriate rules relating to the scope of variables
♦ Design user forms, using a variety of common graphic-controls (graphic-objects)

Students are required to attend a 15-minute interview session allocated to them in Week 12 as part of the assignment assessment.

Due date:
Assignment due Saturday 5pm, 25 May 2013; Interview in Week 12 (to be scheduled)

Examinations

• Examination 1

Weighting:
60%

Length:
2.5 hours

Type (open/closed book):
Closed book

Electronic devices allowed in the exam:
None
Learning resources

Reading list

Recommended Reading:

For Excel:

For Access:

For VBA:

Monash Library Unit Reading List
http://readinglists.lib.monash.edu/index.html

Feedback to you

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments with comments
- Interviews
- Test results and feedback

Extensions and penalties

Submission must be made by the due date otherwise penalties will be enforced.

You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process:

Returning assignments

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.
Assignment submission

It is a University requirement (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at http://www.infotech.monash.edu.au/resources/student/forms/. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an online quiz).

Online submission

If Electronic Submission has been approved for your unit, please submit your work via the learning system for this unit, which you can access via links in the my.monash portal.

Required Resources

Please check with your lecturer before purchasing any Required Resources. Limited copies of prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

Microsoft Office 2010

Software may be purchased at educational prices from some software retailers.
Other Information

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University’s academic standards, and to provide advice on how they might uphold them. You can find Monash’s Education Policies at: www.policy.monash.edu.au/policy-bank/academic/education/index.html

Key educational policies include:

- Plagiarism; http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html
- Special Consideration; http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.html
- Grading Scale; http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html
- Discipline: Student Policy; http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html
- Academic Calendar and Semesters; http://www.monash.edu.au/students/dates/
- Orientation and Transition; http://intranet.monash.edu.au/infotech/resources/students/orientation/

Graduate Attributes Policy

http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.html

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at http://www.monash.edu.au/students. For Sunway see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/.

Monash University Library

The Monash University Library provides a range of services, resources and programs that enable you to save time and be more effective in your learning and research. Go to www.lib.monash.edu.au or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at http://www.lib.monash.edu.my/. At South Africa visit http://www.lib.monash.ac.za/.
Disability Liaison Unit

Students who have a disability or medical condition are welcome to contact the Disability Liaison Unit to discuss academic support services. Disability Liaison Officers (DLOs) visit all Victorian campuses on a regular basis.

Website: http://www.monash.edu/equity-diversity/disability/index.html
Telephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Community Services at 03 55146018 at Sunway
Email: dlu@monash.edu
Drop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through the Student Evaluation of Teaching and Units (SETU) survey. The University’s student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash’s educational strategy, see:
www.monash.edu.au/about/monash-directions and on student evaluations, see:
www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this Unit

Based on previous student feedback this unit is well structured and no changes have been made for this semester.

If you wish to view how previous students rated this unit, please go to https://emuapps.monash.edu.au/unitevaluations/index.jsp