FIT9004
Computer programming for business

Unit Guide

Semester 1, 2011

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: 27 Feb 2011
FIT9004 Computer programming for business - Semester 1, 2011

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)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

For on campus students, workload commitments are:

- two-hour lecture and
- 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, BUS520, GCO1810, FIT2066, BUS1010, FIT1013

Chief Examiner

Sue Bedingfield

Campus Lecturer

Caulfield

Oshadi Alahakoon

Learning Objectives

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;
• 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;
• 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 how to create Excel macros;
• learnt to create executable programs with custom dialog boxes and custom forms using appropriate software tools.

Graduate Attributes

Monash prepares its graduates to be:

1. responsible and effective global citizens who:

   a. engage in an internationalised world
   b. exhibit cross-cultural competence
   c. demonstrate ethical values

critical and creative scholars who:

   a. produce innovative solutions to problems
   b. apply research skills to a range of challenges
   c. communicate perceptively and effectively

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>10%</td>
<td>To be completed each week during class</td>
</tr>
<tr>
<td>Mid semester test</td>
<td>10%</td>
<td>Week 8</td>
</tr>
<tr>
<td>Assignment</td>
<td>20%</td>
<td>20 May 2011</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.

Feedback

Our 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
- Test results and feedback
- Other: Solutions to tutes

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 SETU, Student Evaluation of Teacher and Unit. 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, and on student evaluations, see:
http://www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this unit

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

Required Resources

Microsoft Office 2010

Software will be available for use in University computer labs.

Software may be:

- purchased at educational prices from some software retailers.

Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date*</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>21/02/11</td>
<td></td>
<td>No formal assessment or activities are undertaken in week 0</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Topic</td>
<td>Tutorial Details</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>28/02/11</td>
<td>Unit Outline and Objectives</td>
<td>Tutorial Week 1</td>
</tr>
<tr>
<td>2</td>
<td>07/03/11</td>
<td>More Excel: range names, working with Record Macro, data validation, if() function, protecting cells. ActiveX controls - using the Controls Toolbox Toolbar</td>
<td>Tutorial Week 2</td>
</tr>
<tr>
<td>3</td>
<td>14/03/11</td>
<td>Object and string variables in Excel</td>
<td>Tutorial Week 3</td>
</tr>
<tr>
<td>4</td>
<td>21/03/11</td>
<td>Debugging tools</td>
<td>Tutorial Week 4</td>
</tr>
<tr>
<td>5</td>
<td>28/03/11</td>
<td>Variables and Controls</td>
<td>Tutorial Week 5</td>
</tr>
<tr>
<td>6</td>
<td>04/04/11</td>
<td>Control structures</td>
<td>Tutorial Week 6</td>
</tr>
<tr>
<td>7</td>
<td>11/04/11</td>
<td>Repetition structures and Custom GUIs</td>
<td>No Tutorial; Test preparation (sample paper)</td>
</tr>
<tr>
<td>8</td>
<td>18/04/11</td>
<td>Test (during lecture)</td>
<td>Tutorial Week 8; Mid semester test; Assignment discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mid semester break</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>02/05/11</td>
<td>Built In GUIs</td>
<td>Tutorial Week 9</td>
</tr>
<tr>
<td>10</td>
<td>09/05/11</td>
<td>Introduction to Access, Database concepts, Rules for database design, Query window, Reports, Forms.</td>
<td>Tutorial Week 10</td>
</tr>
<tr>
<td>11</td>
<td>16/05/11</td>
<td>Access maintenance, Indexes, Table Joins, Lookup Wizard</td>
<td>Tutorial Week 11; Assignment due 20 May 2011</td>
</tr>
<tr>
<td>12</td>
<td>23/05/11</td>
<td>SQL, Access macros</td>
<td>Assignment demos</td>
</tr>
<tr>
<td>13</td>
<td>30/05/11</td>
<td>SWOT VAC</td>
<td>No formal assessment is undertaken SWOT VAC</td>
</tr>
</tbody>
</table>

*Please note that these dates may only apply to Australian campuses of Monash University. Off-shore students need to check the dates with their unit leader.

**Assessment Policy**

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit’s examination, and
- 40% or more in the unit’s total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 50% then a mark of no greater than 49-N will be recorded for the unit.

**Assessment Tasks**
Participation

• Assessment task 1

  Title: Tutorials
  Description: Tasks will be given during tutorial classes.
  Weighting: 10%
  Criteria for assessment: The assessment criteria is fully described on the assignment page of the Moodle-based unit web site.
  Due date: To be completed each week during class

• Assessment task 2

  Title: Mid semester test
  Description: A test based on the materials covered in Weeks 1 - 6 will be conducted in Week 8.
  Weighting: 10%
  Criteria for assessment: To be advised.
  Due date: Week 8

• Assessment task 3

  Title: Assignment
  Description: This is an individual assignment involving the development of a system using the concepts and features of the unit content.
  Weighting: 20%
  Criteria for assessment: The assessment criteria is fully described on the assignment page of the Moodle-based unit web site. A peer assessment form is also completed by all students to ensure a fair distribution of marks.
  Due date: 20 May 2011

Examinations

• Examination 1

  Weighting: 60%
  Length:
Assignment submission


You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

Extensions and penalties

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


Returning assignments

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

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: [http://policy.monash.edu.au/policy-bank/academic/education/index.html](http://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](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](http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.html))
- Discipline: Student Policy ([http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html](http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html))
- Academic Calendar and Semesters ([http://www.monash.edu.au/students/key-dates/](http://www.monash.edu.au/students/key-dates/))
- and
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 www.monash.edu.au/students. The Monash University Library provides a range of services and resources that enable you to save time and be more effective in your learning and research. Go to http://www.lib.monash.edu.au or the library tab in my.monash portal for more information. 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://adm.monash.edu/sss/equity-diversity/disability-liaison/index.html;
- Telephone: 03 9905 5704 to book an appointment with a DLO;
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus.

Recommended Reading

For Excel:


For Access:


For VBA:
