MONASH University

FIT2066
Computer programming for business

Unit guide

Semester 1, 2009

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Unit leader :

Shyh Wei Teng

Lecturer(s) :

Gippsland

- Shyh Wei Teng

Tutors(s) :

Gippsland

- Shyh Wei Teng

Introduction

Welcome to FIT2066 in Computer Programming for Business for semester 1, 2009. FIT2066 is an elective unit offered to student enrolled in non-Faculty of IT degrees.

This unit has been designed to provide you with the fundamentals of programming and spreadsheet modelling.

Unit synopsis

ASCED code: 020103

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.

Learning outcomes

At the completion of this unit, students will : (1)have a knowledge of the fundamentals of spreadsheets which will provide them with an understanding of spreadsheet modelling presentation and analysis using Excel; (2)have learnt the fundamentals of OO concepts; (3)have gained an understanding of the Excel object model; (4)have learnt how to create Excel macros; (5)have learnt the basics of programming including variables, data types, arrays, control structures, subroutines and functions; (6)have learnt to create custom dialog boxes and custom forms using VBA; (7)have the ability to create non-trivial applications using Visual Basic for Applications.

Workload

For on campus students, workload commitments are:

- two-hour lecture and
- two-hour laboratory (requiring advance preparation)
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.
- You will need to allocate up to 5 hours per week in some weeks, for use of a computer, including time for newsgroups/discussion groups.

Off-campus students generally do not attend lecture and tutorial sessions, however, you should plan to spend equivalent time working through the relevant resources and participating in discussion groups each week.

Unit relationships

Prerequisites

Before attempting this unit you must have satisfactorily completed

24 points of level 1 study, or equivalent. You should have knowledge of

Ability to operate a computer using the Microsoft Windows environment.

Relationships

FIT2066 is an elective unit in non-Faculty of IT (FIT) degrees.

This unit the foundation of programming and spreadsheet modelling to student from non-FIT faculties (e.g. Faculty of Business).

You may not study this unit and

FIT9004, BUS4520, BUS5520, GCO9801, BUS9001, BUS9002, BUS9003, BUS9004, CSE9000, GCO4801, GCO8019, BUS9520, GCO2851

This unit is not available to any student enrolled in an FIT degree in your degree.

Continuous improvement

Monash is committed to 'Excellence in education' (Monash Directions 2025 - http://www.monash.edu.au/about/monash-directions/directions.html) and strives for the highest possible quality in teaching and learning.

To monitor how successful we are in providing quality teaching and learning Monash regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through Unit Evaluation Surveys. The University's Unit Evaluation policy (http://www.policy.monash.edu/policy-bank/academic/education/quality/unit-evaluation-policy.html) requires that every unit offered is evaluated each year. Students are strongly encouraged to complete the surveys as they are an important avenue for students to "have their say". The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

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Faculties have the option of administering the Unit Evaluation survey online through the my.monash portal or in class. Lecturers will inform students of the method being used for this unit towards the end of the semester.

Student Evaluations

If you wish to view how previous students rated this unit, please go to
http://www.adm.monash.edu.au/cheq/evaluations/unit-evaluations/

Improvements to this unit

Syllabus of this unit is updated.
Unit staff - contact details

Unit leader

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Tutor(s) :

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Teaching and learning method

For on-campus students, this unit will be delivered via a series of lectures and laboratories.

In the lectures, students will be introduced to the key theoretical concepts of programming and spreadsheet modelling. Relevant examples will also be shown. To ensure maximum benefits from these sessions, students should:

- download the lecture materials (i.e. lecture slides and study guide) from the unit MUSO site and read up before the each lecture;
- take notes, participate and clarify doubts during the lecture;
- go through the materials and seek help (if doubts still exist) after the lecture.

In the laboratory sessions, we will go through practical exercises related to programming and spreadsheet modelling topics taught in that week. Student are expected to download these exercises and attempt them before each laboratory session.

Off-campus distributed learning or flexible delivery

As off-campus learning students do not attend face-to-face lectures and laboratories, they should go through the relevant study materials guided by the weekly study guides carefully. Any doubts should be clarified on the discussion forum available on the unit MUSO site.

Communication, participation and feedback

Monash aims to provide a learning environment in which students receive a range of ongoing feedback throughout their studies. You will receive feedback on your work and progress in this unit. This may take the form of group feedback, individual feedback, peer feedback, self-comparison, verbal and written feedback, discussions (on line and in class) as well as more formal feedback related to assignment marks and grades. You are encouraged to draw on a variety of feedback to enhance your learning.

It is essential that you take action immediately if you realise that you have a problem that is affecting your study. Semesters are short, so we can help you best if you let us know as soon as problems arise. Regardless of whether the problem is related directly to your progress in the unit, if it is likely to interfere with your progress you should discuss it with your lecturer or a Community Service counsellor as soon as possible.

Unit Schedule

Week	Topic	Study guide	Key dates
1	Introduction	Study Guide 1	
2	Excel - Logical Functions & Developing an Excel Application	Study Guide 2	
3	Business Analysis in Excel & Introduction to Visual Basic for Application	Study Guide 3	
4	The Fundamentals of Visual Basic for Application for Excel	Study Guide 4	
5	Variables, Data Types & Arrays	Study Guide 5	
6	Functions	Study Guide 6	Assignment 1 due
	Mid semester break		
7	Decision Control Structures & Debugging	Study Guide 7	
8	Repetition Control Structures	Study Guide 8	
9	Custom & Built-in Dialog Boxes	Study Guide 9	
10	Introduction to Databases	Study Guide 10	
11	Database Queries & Reports	Study Guide 11	Assignment 2 due
12	Revision		
13	Revision		

Unit Resources

Prescribed text(s) and readings

Mastering VBA for Microsoft Office 2007, Mansfield R.

ISBN: 978-0-470-27959-5

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Text books are available from the Monash University Book Shops. Availability from other suppliers cannot be assured. The Bookshop orders texts in specifically for this unit. You are advised to purchase your text book early.

Recommended text(s) and readings

Johnson S., Microsoft Office Excel 2007 on Demand, 0-7897-3643-X

Parsons J. J., Oja D., Ageloff R., Carey P., New Perspectives on Microsoft Office Excel 2007 : comprehensive, ISBN: 878-1-4239-0585-1

Rob P., Coronel C., Database systems : design, implementation, and management, 8th Edition, ISBN: 978-1-4239-0201-0

Zak, Microsoft Visual Basic for Applications, 0-619-00020-1

Required Readings are provided on the Reading Lists on the Library Website (http://www.lib.monash.edu.au/resourcelists/)

Required software and/or hardware

Microsoft Office 2007

Software may be:

- purchased at academic price at good software retailers

Equipment and consumables required or provided

Students studying off-campus are required to have the minimum system configuration specified by the Faculty as a condition of accepting admission, and regular Internet access. On-campus students, and those studying at supported study locations may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to **n** hours per week for use of a computer, including time for newsgroups/discussion groups.

Study resources

Study resources we will provide for your study are:

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For DE students: the FIT2066 web site on MUSO, where lecture slides, weekly tutorial requirements, assignment specifications, sample solutions and supplementary material will be posted.

Library access

The Monash University Library site contains details about borrowing rights and catalogue searching. To learn more about the library and the various resources available, please go to http://www.lib.monash.edu.au.

The Educational Library and Media Resources (LMR) is also a very resourceful place to visit at http://www.education.monash.edu.au/library/

Monash University Studies Online (MUSO)

All unit and lecture materials are available through MUSO (Monash University Studies Online). Blackboard is the primary application used to deliver your unit resources. Some units will be piloted in Moodle. If your unit is piloted in Moodle, you will see a link from your Blackboard unit to Moodle (http://moodle.monash.edu.au) and can bookmark this link to access directly. In Moodle, from the Faculty of Information Technology category, click on the link for your unit.

You can access MUSO and Blackboard via the portal: http://my.monash.edu.au

Click on the Study and enrolment tab, then Blackboard under the MUSO learning systems.

In order for your Blackboard unit(s) to function correctly, your computer needs to be correctly configured.

For example:

- Blackboard supported browser
- Supported Java runtime environment

For more information, please visit: http://www.monash.edu.au/muso/support/students/downloadables-student.html

You can contact the MUSO Support by phone : (+61 3) 9903 1268

For further contact information including operational hours, please visit: http://www.monash.edu.au/muso/support/students/contact.html

Further information can be obtained from the MUSO support site: http://www.monash.edu.au/muso/support/index.html

Assessment

Unit assessment policy

To pass this unit, a student must obtain :

- 40% or more in the unit's examination and
- 40% or more in the unit's 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 assessment then a mark of no greater than 44-N will be recorded for the unit.

Assignment tasks

- **Assignment Task**

  Title : Assignment 1

  Description :

  Spreadsheet Modelling

Weighting : 20%

Criteria for assessment :

Assessment of each task will be based on:

- How well your solution meets the task requirement
- Quality of solution:

    ◊ how concise the various formulas and functions are written

- Presentation of the spreadsheet

Due date : 9/4/2009

- **Assignment Task**

Title : Assignment 2

Description :

Programming
Weighting : 20%

Criteria for assessment :

Assessment of each of the required functionalities will be based on:

- How well your solution has achieved the functionality
- Quality of solution, in terms of:

    ◊ simplicity - is the code concise, simple to read and understand.
    ◊ generality/flexibility - does the solution work with valid data the marker will enter when testing your program.
    ◊ robustness - does the solution cope gracefully with human errors (e.g. entering invalid or inconsistent data)
- Appropriateness of variable and constant declarations and usage, e.g. are conventions followed, are variables declared in suitable places, etc.
- Appropriate use of graphic controls in the design of your user forms.

Due date : 22/5/2009

Examinations

- **Examination 1**

Weighting : 60%

Length : 2.5 hours

Type (open/closed book) : Closed book

Assignment submission

See assignment specifications.

Assignment coversheets

Assignments are to be submitted electronically online and the assignment coversheets will be provided within the assignment submission system.

University and Faculty policy on assessment

Due dates and extensions

The due dates for the submission of assignments are given in the previous section. Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are seldom regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Requests for extensions must be made to the unit lecturer at your campus at least two days before the due date. You will be asked to forward original medical certificates in cases of illness, and may be asked to provide other forms of documentation where necessary. A copy of the email or other written communication of an extension must be attached to the assignment submission.

Late assignment

Assignments received after the due date will be subject to a penalty of 2% per day including weekends. Assignments received later than cut-off date will not normally be accepted.

This policy is strict because comments or guidance will be given on assignments as they are returned, and sample solutions may also be published and distributed, after assignment marking or with the returned assignment.

Return dates

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

Assessment for the unit as a whole is in accordance with the provisions of the Monash University Education Policy at http://www.policy.monash.edu/policy-bank/academic/education/assessment/

We will aim to have assignment results made available to you within two weeks after assignment receipt.

Plagiarism, cheating and collusion

Plagiarism and cheating are regarded as very serious offences. In cases where cheating has been confirmed, students have been severely penalised, from losing all marks for an assignment, to facing disciplinary action at the Faculty level. While we would wish that all our students adhere to sound ethical conduct and honesty, I will ask you to acquaint yourself with the University Plagiarism policy and procedure (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) which applies to students detected plagiarising.

In this University, cheating means seeking to obtain an unfair advantage in any examination or any other written or practical work to be submitted or completed by a student for assessment. It includes the use, or attempted use, of any means to gain an unfair advantage for any assessable work in the unit, where the means is contrary to the instructions for such work.

When you submit an individual assessment item, such as a program, a report, an essay, assignment or other piece of work, under your name you are understood to be stating that this is your own work. If a submission is identical with, or similar to, someone else's work, an assumption of cheating may arise. If you are planning on working with another student, it is acceptable to undertake research together, and discuss problems, but it is not acceptable to jointly develop or share solutions unless this is specified by your lecturer.

Intentionally providing students with your solutions to assignments is classified as "assisting to cheat" and students who do this may be subject to disciplinary action. You should take reasonable care that your solution is not accidentally or deliberately obtained by other students. For example, do not leave copies of your work in progress on the hard drives of shared computers, and do not show your work to other students. If you believe this may have happened, please be sure to contact your lecturer as soon as possible.

Cheating also includes taking into an examination any material contrary to the regulations, including any bilingual dictionary, whether or not with the intention of using it to obtain an advantage.

Plagiarism involves the false representation of another person's ideas, or findings, as your own by either copying material or paraphrasing without citing sources. It is both professional and ethical to reference clearly the ideas and information that you have used from another writer. If the source is not identified, then you have plagiarised work of the other author. Plagiarism is a form of dishonesty that is insulting to the reader and grossly unfair to your student colleagues.

Register of counselling about plagiarism

The university requires faculties to keep a simple and confidential register to record counselling to students about plagiarism (e.g. warnings). The register is accessible to Associate Deans Teaching (or nominees) and, where requested, students concerned have access to their own details in the register. The register is to serve as a record of counselling about the nature of plagiarism, not as a record of allegations; and no provision of appeals in relation to the register is necessary or applicable.

Non-discriminatory language

The Faculty of Information Technology is committed to the use of non-discriminatory language in all forms of communication. Discriminatory language is that which refers in abusive terms to gender, race, age, sexual orientation, citizenship or nationality, ethnic or language background, physical or mental ability, or political or religious views, or which stereotypes groups in an adverse manner. This is not meant to preclude or inhibit legitimate academic debate on any issue; however, the language used in such debate should be non-discriminatory and sensitive to these matters. It is important to avoid the use of discriminatory language in your communications and written work. The most common form of discriminatory language in academic work tends to be in the area of gender inclusiveness. You are, therefore, requested to check for this and to ensure your work and communications are non-discriminatory in all respects.

Students with disabilities

Students with disabilities that may disadvantage them in assessment should seek advice from one of the following before completing assessment tasks and examinations:

- Faculty of Information Technology Student Service staff, and / or
- your Unit Coordinator, or

- Disabilities Liaison Unit

Deferred assessment and special consideration

Deferred assessment (not to be confused with an extension for submission of an assignment) may be granted in cases of extenuating personal circumstances such as serious personal illness or bereavement. Information and forms for Special Consideration and deferred assessment applications are available at http://www.monash.edu.au/exams/special-consideration.html. Contact the Faculty's Student Services staff at your campus for further information and advice.