The University of Southern Queensland

Course specification

This version produced 20 Dec 2007.
The current and official versions of the course specifications are available on the web at
<http://www.usq.edu.au/coursespecification/current>.
Please consult the web for updates that may occur during the year.

Description: Programming with Visual Basic.NET

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
CIS	2001	62433	1, 2007	ONC	1.00	Toowoomba

Academic group: FOBUS
Academic org: FOB005
Student contribution band: 2
ASCED code: 020103

STAFFING

Examiner: Mustafa Ally
Moderator: Angela Howard

REQUISITES

Pre-requisite: CIS1001

OTHER REQUISITES

Students are required to have access to a personal computer, e-mail capabilities and Internet access to USQConnect. Current details of computer requirements can be found at
http://www.usq.edu.au/handbook/current/busgeninfo.html

RATIONALE

Contemporary software development involves object-based, object- oriented, and event-driven programming techniques. Languages such as Visual Basic, Delphi, and Java provide easy-to-use graphical design interfaces, making it relatively easy to employ these programming techniques. Nevertheless, none of these techniques can be sufficient without a solid foundation in traditional programming. A strong knowledge of data representation, data conversion, subroutines, functions, parameter passing, array handling, database and file processing, and report production is essential for effective programming. Advanced programming courses must emphasise these traditional techniques as well as the more contemporary ones. Because of the widespread use of graphical user interfaces (GUIs), students also need to be acquainted with elements of interface design.

SYNOPSIS

This course uses Microsoft Visual Basic to build upon the solid foundations in traditional programming techniques gained in the introductory programming course. It progresses to further develop object-based procedure and event-driven programming skills so that very solid programming techniques may be developed. VB provides an easy-to-use graphical design interface allowing students to quickly and easily design visually-oriented applications using graphical controls such as text boxes, list boxes, and command buttons. These controls simplify the task of providing

standard Windows interfaces for end-users. The course expands upon interface design concepts, introduces the use of databases as a data source, as well as the development of report production techniques.

OBJECTIVES

The course objectives define the student learning outcomes for a course. The assessment item/s that may be used to assess student achievement of an objective is/are shown in parentheses after each objective. On successful completion of this course, students should be able to:

1. Object-oriented programming principles (Assignment 1, Assignment 2, Examination)
2. VB.NET programming concepts related to data typing, control structures and procedures and collection classes (Assignment 1, Assignment 2, Examination)
3. Good interface design principles using GUI programming and reporting techniques (Assignment 1, Assignment 2, Examination)
4. Data access and manipulation using files, streams and database processing methods (Assignment 1, Assignment 2, Examination).

TOPICS

	Description	Weighting (%)
1.	OO concepts, object-oriented programming concepts	10.00
2.	Language framework and development platform	5.00
3.	VB.NET language: features and concepts	25.00
4.	Collections	5.00
5.	File and stream handling	5.00
6.	OO programming	20.00
7.	Interface design	5.00
8.	GUI programming	20.00
9.	Database access	5.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).

Software: Microsoft Visual Studio.NET. (This software will be available for use to all students of this course through a special arrangement between USQ and Microsoft. Details on how to obtain a copy of this software will be made available by the examiner at the commencement of the semester.

CIS2001 study package available from the USQ Bookshop.

Doke, ER, Satzinger, JW, Williams, S & Douglas, DE 2003, *Object-oriented application development using Microsoft Visual Basic.NET*, Thomson Course Technology, Australia.

Lahey, H (ed) 2000, *Information systems developers handbook: a road map for students*, Faculty of Business, USQ, Toowoomba, Queensland.

(Available electronically at http://www.usq.edu.au/faculty/business/departments/infosys/isdhandbook.htm)

Summers, J & Smith, B 2006, *Communication skills handbook: how to succeed in written and oral communication*, 2nd edn, John Wiley & Sons, Milton, Queensland.

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Deitel, HM, Deitel, PJ & Nieto, TR 2002, *Visual Basic.Net: how to program*, 2nd edn, Prentice Hall, Upper Saddle River, New Jersey.

Fowler, M 2004, *UML distilled: a brief guide to the standard object modeling language*, 3rd edn, Addison-Wesley, Boston, Massachusetts.

Martin, T & Selley, D 2002, *Visual Basic.NET at work*, John Wiley & Sons, New York, Vol 1.

Schneider, DI 2003, *An introduction to programming using Visual Basic.NET*, 5th edn, Prentice Hall, Upper Saddle River, New Jersey.

Zak, D 2005, *Programming with Microsoft Visual Basic.NET*, 2nd edn, Thomson Course Technology, Boston, Massachusetts.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Laboratory or Practical Classes	14.00
Lectures	28.00
Private Study	110.00
Tutorials	14.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
ASSIGNMENT 1	100.00	10.00	23 Apr 2007
ASSIGNMENT 2	100.00	20.00	11 Jun 2007
EXAM PART A (MULTI-CHOICE)	40.00	20.00	END S1 (see note 1)
EXAM PART B (WRITTEN)	80.00	50.00	END S1

NOTES

1. The examination is scheduled to be held in the end-of-semester examination period. Students will be advised of the official examination date for Exam (Parts A and B) after the timetable has been finalised. The total working time for Exam (Parts A and B) is 2 hours.

IMPORTANT ASSESSMENT INFORMATION

1 Attendance requirements:

It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2 Requirements for students to complete each assessment item satisfactorily:

To satisfactorily complete an individual assessment item a student must achieve at least 50% of the marks. (Depending upon the requirements in Statement 4 below, students may not have to satisfactorily complete each assessment item to receive a passing grade in this course.)

3 Penalties for late submission of required work:

If students submit assignments after the due date without prior approval then a penalty of 20% of the total marks gained by the student for the assignment will apply for each working day late.

4 Requirements for student to be awarded a passing grade in the course:

To be assured of receiving a passing grade a student must submit all of the assessment items, achieve at least 50% for the examination and at least 50% of the total weighted marks available for the course.

5 Method used to combine assessment results to attain final grade:

The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.

6 Examination information:

This is a restricted examination. Candidates are allowed access to specific materials during the examination. The only materials that candidates may use in the examination for this course are (i) Writing materials: non-electronic and free from material which could give the student an unfair advantage in the examination; (ii) Translation dictionaries: with the examiner's approval, candidates may, take an appropriate non-electronic translation dictionary into the examination. This will be subject to perusal and, if it is found to contain annotations or markings that could give the candidate an unfair advantage, it may be removed from the candidate's possession until the appropriate disciplinary action is completed.

7 Examination period when Deferred/Supplementary examinations will be held:

Any Deferred or Supplementary examinations for this course will be held during the next examination period.

8 University Regulations:

Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL http://www.usq.edu.au/corporateservices/calendar/part5.htm. Students should also read the Faculty of Business Guide to Policies and Procedures of the Faculty which can be found at the URL http://www.usq.edu.au/handbook/current/buspolproc.html.

ASSESSMENT NOTES

1 Assignments: (i) The due date for an assignment is the date by which a student must submit the assignment to the USQ. (ii) Students must retain a copy of each item submitted for assessment. This must be produced within 24 hours if required by the examiner. (iii) In

accordance with university policy, the examiner may grant an extension of the due date of an assignment in extenuating circumstances. (iv) The examiner will normally only accept assessments that have been written, typed or printed on paper-based media. (v) In the event that a due date for an assignment falls on a local public holiday in their area, such as a show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the examiner's convenience.

2   Course weightings: Course weightings of topics should not be interpreted as applying to the number of marks allocated to questions testing those topics in an examination paper.

3   Referencing in assignments: Unless otherwise directed by the examiner, all written and oral assignments submitted by students must conform to the guidelines laid out in the 'Communication skills handbook: how to succeed in written and oral communication'. Any work not prepared in accordance with these guidelines may be subject to penalty or requirement for resubmission.

4   Make-up work: Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete - Make up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non-directed personal study.

5   Deferred work: Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded: IDS (Incomplete - Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).

6   Appeals: Any appeal against the award of a grade in the course will be conducted in accordance with University Regulations. These regulations are published in the University Handbook.

OTHER REQUIREMENTS

1   Learning resources: Prescribed texts and materials (see above); recommended reference materials (see above); printed Introductory Book*, Book/s of Selected Readings*, and Study Book/s*; and course Website accessible via USQConnect. *part of the study package available from the USQ Bookshop

2   E-mail and Internet access: Students will require access to e-mail and Internet access to USQConnect for this course.