



The University of Southern Queensland

## Course specification

<b>Description: Introduction to Business Programming</b>						
Subject	Cat-nbr	Class	Term	Mode	Units	Campus
CIS	1001	48115	3, 2005	EXT	1.00	Toowoomba

<b>Academic group:</b>	FOBUS
<b>Academic org:</b>	FOB005
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	020103

### STAFFING

Examiner: Wayne Pease

Moderator: Daniel Van Der Westhuizen

### RATIONALE

While the power and capability of programming languages have increased dramatically over the last few decades the basic concepts inherent in all of them have changed little. These need to be mastered before the full potential of a language can be exploited for useful purposes. Coupled with this requirement is the need to also understand and effectively apply object-based, object-oriented, event-driven programming techniques. All of the contemporary programming languages provide these features to a lesser or greater extent and learning to apply them is the first step to developing well constructed software applications in the future.

### SYNOPSIS

This course aims to introduce students to programming in a practical way. JavaScript is used to demonstrate concepts and techniques that are fundamental to the development of efficient and effective solutions in any programming language. Students will create interactive Web pages, and in doing so discover the practical use of variables, functions, operators, conditional statements and loops, event handlers, objects, string handling, and other general programming techniques, as well as advanced features of the JavaScript language. Assuming no previous programming experience, the course provides ample opportunity to learn programming in a relatively inexpensive and unintimidating environment, while attempting to demonstrate that programming can also be 'fun'.

### OBJECTIVES

On completion of this course students will be able to:

1. understand program design and development, incorporating problem solving skills and algorithm construction;
2. understand and apply programming concepts including data types, variables and constants, program control structures, procedures and parameter passing, array processing and functions;

3. understand introductory object oriented concepts by using and applying objects and object libraries;
4. understand and utilise programming standards for effective testing and debugging; and
5. file processing.

## TOPICS

	Description	Weighting (%)
1.	Fundamentals of programming	20.00
2.	Object-based programming	20.00
3.	Array and file processing	10.00
4.	Algorithm design and problem solving	50.00

## 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).

Constant access to or purchase of the following texts and materials is required

Lahey, H (ed), 2000, 'Information systems developers handbook: a road map for students', University of Southern Queensland, Toowoomba, Queensland. (This handbook is available on the USQ website at <http://www.usq.edu.au/faculty/business/departments/infosys/isdhandbook.htm>)

Gosselin, D 2004, 'JavaScript', 3rd edn, Course Technology, Cambridge, Massachusetts AND Robertson, LA 2003, 'Simple program design: a step by step approach', 4th edn, Thomson, South Melbourne, Victoria. (These two textbooks are available as a package through the USQ Bookshop)

## 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.

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Assessment	65.00
Private Study	100.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
ASSIGNMENT 1	100.00	10.00	21 Dec 2005
ASSIGNMENT 2	100.00	30.00	18 Jan 2006
3 HOUR EXAMINATION	100.00	60.00	END S3 (see note 1)

### 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 after the timetable has been finalised.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
If you are an international student in Australia, you are advised to attend all classes at your campus. For all other students, there are no attendance requirements for this course. However, it is the students' responsibility 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 complete the assignments satisfactorily, students must obtain at least 50% of the marks available for the assignments in aggregate. To complete the examination satisfactorily, students must obtain at least 50% of the marks available for the examination.
- 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 available 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 attempt all of the summative assessment items, achieve an aggregated mark of at least 50% in the total marks allocated for the assignments, achieve at least 50% in the examination, and at least 50% of the available weighted marks for the summative assessment items.
- 5 Method used to combine assessment results to attain final grade:  
The final grades for students will be assigned on the basis of the weighted aggregate of the marks (or grades) 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; (iii) Calculators: calculators which cannot hold textual

information (students must indicate on their examination paper the make and model of any calculator(s) they use during the examination).

- 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 despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner. (ii) If requested, students will be required to provide a copy of an assignment submitted for assessment purposes. This should be despatched to the USQ within 24 hours of receipt of a request being made. (iii) 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) Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the Examiner to negotiate such special arrangements. (vi) 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 Guidelines for 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' and the 'Information systems developers handbook'. 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 text and materials (see above); recommended reference materials (see above); printed Introductory Book and Study Book/s; and course Website accessible via USQConnect.
  - 2 E-mail and Internet Access: Students will require access to e-mail and Internet access to USQConnect for this course.
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