



The University of Southern Queensland

Course specification

Description: Systems Analysis and Design

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
CIS	2000	45297	2, 2005	ONC	1.00	Toowoomba

Academic group:	FOBUS
Academic org:	FOB005
Student contribution band:	2
ASCED code:	020305

STAFFING

Examiner: Debbie Crabb
Moderator: Kristeen Casey

REQUISITES

Pre-requisite: CIS1000

RATIONALE

This is the initial systems course and it introduces students to the fundamental concepts and terminology used in business systems analysis and design by examining procedures, systems, the components of information systems, common business information systems, types of information systems, and organizational levels. Case studies are used to apply the concepts and techniques involved.

SYNOPSIS

One of the major strands in the information technology field is that of systems analysis and design. The analysis of case studies requires effective listening and reading skills. The students will study analysis techniques and then design appropriate solutions. The design requires the production of accurate, understandable and efficient systems requirement documents using formats which will maximize effective communication. Some typical business information systems will be studied. A CASE product will be utilized.

OBJECTIVES

On successful completion of this course students will be able to:

1. define and demonstrate an understanding of the fundamental concepts and terminology used in business systems analysis and design;
2. identify the basic assumptions and controls involved in the analysis and design of typical business application;
3. outline and demonstrate an appreciation of the functions and inter-relationships of typical business applications;

4. develop competence in the definition and design of process models based on appropriate data models;
5. demonstrate an appreciation of sound computer interface principles;
6. effectively communicate ideas using tools and techniques of systems analysis and design.

TOPICS

	Description	Weighting (%)
1.	Introduction to Systems Analysis and Design	0.50
2.	Analysing the Business Case	0.50
3.	Requirements Modeling	0.50
4.	Enterprise Modeling	40.00
5.	Development Strategies	0.50
6.	Data Design	15.00
7.	User Interface, Input and Output Design	0.50
8.	System Architecture	0.50
9.	Systems Implementation	0.50
10.	Systems Operation and Support	0.50
11.	Communication Tools	0.50
12.	CASE Tools	5.00
13.	Financial Analysis Tools	10.00
14.	Project Management Tools	10.00
15.	Object-Oriented Tools	15.00
16.	Internet Research Tools	0.50

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).

CIS2000 study package available from the USQ Bookshop.

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>)

Shelly, GB, Cashman, T & Rosenblatt, HJ 2004, *Systems analysis and design*, 5th edn, Course Technology, Cambridge Massachusetts.

(revised edition - this item will come packaged with VAW 7.5 which is NOT available separately)

Summers, J & Smith, B 2004, *Communication skills handbook: how to succeed in written and oral communication*, John Wiley & Sons, Milton, Queensland.
(revised & updated edition)

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.

Booch, G 1994, *Object-oriented analysis and design with applications*, 2nd edn, Benjamin/Cummings, Redwood City, California.

Date, CJ 2000, *An introduction to database systems*, 7th edn, Addison-Wesley, Reading, Massachusetts.

Gore, M & Stubbe, JW 1994, *Contemporary systems analysis*, 5th edn, Business & Educational Technologies, Dubuque, Iowa.

Hawryszkiewicz, IT 2001, *Introduction to systems analysis and design*, 5th edn, Prentice Hall, Frenchs Forest, New South Wales.

Kendall, KE & Kendall, JE 2001, *Systems analysis and design*, 5th edn, Prentice Hall, Upper Saddle River, New Jersey.

Robinson, B & Prior, M 1995, *Systems analysis techniques*, International Thomson Computer Press, London.

Whitten, JL, Bentley, LD & Dittman, KC 2001, *Systems analysis and design methods*, 5th edn, Irwin/McGraw-Hill, Boston, Massachusetts.

Wu, SY & Wu, MS 1994, *Systems analysis and design*, Western Publishing, Minneapolis/St Paul, Minnesota.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Assessment	30.00
Directed Study	70.00
Private Study	70.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
ASSIGNMENT 1	15.00	15.00	29 Aug 2005
ASSIGNMENT 2	25.00	25.00	10 Oct 2005
EXAM A MULTI-CHOICE QUESTIONS	30.00	18.00	END S2 (see note 1)
EXAM B SHORT-ANSWER QUESTIONS	70.00	42.00	END S2

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 (A and B) after the timetable has been finalised. The total working time for Exam (A and B) is 3 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 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 may 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; and (iii) 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. Students may apply for an extension before the due date or include an application with the submitted assignment after the due date. Such applications should be in writing and include supporting documentary evidence. The authority for granting extensions rests with the relevant Examiner. (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 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).

OTHER REQUIREMENTS

- 1 Learning Resources: Prescribed text and materials (see above); prescribed reference materials (see above); printed Introductory Book*, Study Book/s*, and Book/s of Selected Readings*; 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.
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