



The University of Southern Queensland

Course specification

| Description: Knowledge Management Systems | | | | | | |
|--------------------------------------------------|---------|-------|---------|------|-------|-----------|
| Subject | Cat-nbr | Class | Term | Mode | Units | Campus |
| CIS | 3004 | 40557 | 1, 2005 | ONC | 1.00 | Toowoomba |

| | |
|-----------------------------------|--------|
| Academic group: | FOBUS |
| Academic org: | FOB005 |
| Student contribution band: | 2 |
| ASCED code: | 020307 |

STAFFING

Examiner: Peter Byrnes

Moderator: Anita Ryle

REQUISITES

Pre-requisite: CIS1001

RATIONALE

The growing importance of Knowledge Management Systems in the form of artificial intelligence, decision support systems, executive information systems, expert systems and group support software requires new skills to be able to develop, implement, and manage these systems in a business environment. Organisations are increasingly using knowledge management systems to help managers in creating, recording, sharing, and using knowledge for decision making. Skills in designing and using these systems will play an increasing part in applying technology to business needs. This course provides the student with both theoretical knowledge and practical experience in the analysis of applications suited to Knowledge Management Systems and in the development and application of systems which process knowledge rather than data, and explores the broader business and social implications of effective Knowledge Management.

SYNOPSIS

This course introduces the student to the important field of Knowledge Management Systems in a business environment by introducing Knowledge Management concepts, and exploring how Knowledge Management is facilitated by various information system technologies. The emphasis throughout is on the practical use of software to acquire, create, disseminate, organise, and utilise knowledge for decision making. Students are given practical experience in the development of a Decision Support System using Visual Basic for Applications (VBA), and experience in working to presentation standards with Extensible Markup Language (XML) and Cascading Style Sheets (CSS).

OBJECTIVES

On completion of this course students will be able to:

1. understand the terminology and concepts in Knowledge Management and Knowledge Management Systems;
2. apply and evaluate Knowledge Management software in a business environment;
3. demonstrate practical skills in developing Decision Support Systems using Excel with Visual Basic for Applications (VBA) and XML development tools;
4. understand current developments in the field of Knowledge Management Systems and their potential impacts on organisations.

TOPICS

| | Description | Weighting (%) |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1. | Knowledge Management: Knowledge Management Systems in context | 20.00 |
| 2. | Decisions, decision making, and decision makers | 15.00 |
| 3. | Technologies including: Decision Support Systems, GDSS, ODSS, executive information systems, expert systems, intelligent agents, data warehouses, data mining | 25.00 |
| 4. | Knowledge Engineering and Acquisition | 10.00 |
| 5. | Practical: VBA with Excel and XML Development | 30.00 |

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).

We recommend that you use Microsoft Excel XP (or later), Microsoft Internet Explorer 6 (or later), and Microsoft WordPad included with Microsoft Windows XP (or later).

CIS3004 study package available from the USQ Bookshop.

The texts 'The Web wizard's guide to XML' and 'Decision support systems in the 21st century' will be available in a package from the USQ Bookshop at a cost saving to students.

You are required to monitor the course study desk (through USQConnect) for course updates and additional materials.

Hughes, C 2003, *The Web wizard's guide to XML*, Addison Wesley, Boston, Massachusetts.

Marakas, G 1999, *Decision support systems in the 21st century*, Prentice Hall, Upper Saddle River, New Jersey.

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.

Awad, EM 1995, *Building expert systems: principles, procedures and applications*, West Publishing Co, St Paul, Minneapolis.

Awad, EM & Ghaziri, HM 2004, *Knowledge management*, Prentice Hall, Upper Saddle River, New Jersey.

Barnes, S 2002, *Knowledge management systems: theory and practice*, Thomson Learning, London.

Becerra-Fernandez, I, Gonzalez, A & Sabherwal, R 2004, *Knowledge management: challenges, solutions, and technologies*, Prentice Hall, Upper Saddle River, New Jersey.

Castro, E 2001, *XML for the world wide web*, Peachpit Press, Berkeley, California.

Chapra, SC & Blayney, P 2003, *Excel VBA for business*, Prentice Hall, Upper Saddle River, New Jersey.

Davenport, TH & Prusak, L 2000, *Working knowledge: how organizations manage what they know*, Harvard Business School Press, Boston, Massachusetts.

Dhar, V & Stein, R 1997, *Intelligent decision support methods: the science of knowledge work*, Prentice Hall, Upper Saddle River, New Jersey.

Holsapple, CW & Whinston, AB 1996, *Decision support systems: a knowledge-based approach*, International Thompson Pub, Cambridge, Massachusetts.

Turban, E, Aronson, JE & Liang, TP 2005, *Decision support systems and intelligent systems*, 7th edn, Prentice Hall, Upper Saddle River, New Jersey.

STUDENT WORKLOAD REQUIREMENTS

| ACTIVITY | HOURS |
|---------------------------------|--------|
| Laboratory or Practical Classes | 24.00 |
| Lectures | 12.00 |
| Private Study | 129.00 |

ASSESSMENT DETAILS

| Description | Marks out of | Wtg(%) | Due date |
|--------------------|--------------|--------|------------------------|
| ASSIGNMENT 1 | 30.00 | 15.00 | 18 Apr 2005 |
| ASSIGNMENT 2 | 30.00 | 15.00 | 30 May 2005 |
| 3 HOUR EXAMINATION | 100.00 | 70.00 | END S1 (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:
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. If you are an international student in Australia you are advised to attend all classes at your campus. Failure to attend may infringe the conditions of your student visa.
- 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 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 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. Students who do not qualify for a passing grade may, at the discretion of the Examiner, be awarded a supplementary examination and/or assigned additional work to demonstrate to the Examiner that they have achieved the required standard. It is expected that such students will have gained at least 45% in the examination and 50% of the total marks available for all 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; and (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 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) Students must retain a copy of each item submitted for assessment. This must be produced within 24 hours if required by the Examiner. (iii) The Examiner may grant an extension of the due date of an assignment in extenuating circumstances. Students may apply for an extension by contacting the Examiner before the due date or by including 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 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: A road map for students'. Any work not prepared in accordance with these guidelines may be subject to penalty or requirement for resubmission.
- 3 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. The examination may test material already tested in assignments.
- 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 E-mail and Internet Access: Students will require access to e-mail and Internet access to USQConnect for this course.
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