



The University of Southern Queensland

## Course specification

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: Business Intelligence Systems

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
CIS	8008	86363	1, 2009	EXT	1.00	Toowoomba

<b>Academic group:</b>	FOBUS
<b>Academic org:</b>	FOB005
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	020307

### STAFFING

Examiner: Michael Lane

Moderator: Wui-Gee Tan

### 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/ict/students/standards/default.htm>.

### RATIONALE

This course focuses on business intelligence systems which have become the dominant suite of business analytical and decision making tools to support organisations in achieving superior business performance. Business intelligence systems now play a critical role in ensuring that organisations achieve strategic goals by monitoring organisational performance and achievement of day-to-day operational goals. The intelligence use and sharing of business information and knowledge through business intelligence systems actions effective and efficient decision making at the operational, tactical and strategic levels within an organisation. It is appropriate to examine business intelligence systems, information and knowledge management in terms of theory and design, implementation and use by individuals and groups both within and across organisations.

### SYNOPSIS

This course provides students with a thorough understanding of theory, design, implementation and use of business intelligence systems in an organisational context of decision making informed by intelligent information and knowledge use. The background and context, architecture, tools and applications, implementation and use of business intelligence systems are considered in current and real life context. Business intelligence systems enable collaborative sharing of intelligent information and knowledge essential for superior decision making and enhanced business performance.

## 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. understand how the concepts of business intelligence and performance management have evolved from decision support systems in response to changing business environment and technology (Assignment 1, Examination)
2. understand and be able to assess the various phases and components in the design, implementation and use of business intelligence systems (Assignment 2, Examination)
3. discuss the socio-technical aspects of implementation and use of business intelligence systems (Assignment 2, Examination)
4. understand business performance management in the context of business intelligence systems and knowledge management (Assignment 2, Examination)
5. research and critically evaluate current literature on business intelligence systems, including knowledge management and collaboration systems (Assignment 1, Assignment 2, Examination).

## TOPICS

	Description	Weighting (%)
1.	Decision support and business intelligence systems	10.00
	1.1. Decision making and business intelligence	
	1.2. Decision support systems and business intelligence	
2.	Business intelligence systems and collaborative information sharing and knowledge management	20.00
	2.1. Business intelligence systems actioning information and knowledge	
	2.2. Business intelligence systems enabling collaborative group work	
3.	Business intelligence systems	50.00
	3.1. Business intelligence systems - overview of architecture	
	3.2. Data warehousing	
	3.3. Data mining	
	3.4. Business analytics	
	3.5. Business performance management	
4.	Business intelligence implementation and utilisation	20.00
	4.1. Business intelligence systems - implementation challenges	
	4.2. Business intelligence systems - utilisation challenges and opportunities	

## **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).

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

Turban E, Aronson, JE, Liang, TP & Sharda, R 2007, *Decision support and business intelligence systems*, 8th edn, Pearson/Prentice Hall, Upper Saddle River, New Jersey.

## **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.

Teradata Student Network <<http://www.teradata.com/t/page/144826/index.html>>

Business intelligence portal <<http://www.businessintelligence.com/>>

Pentaho open source business intelligence project <<http://community.pentaho.com/sourceforge/>>

Pentaho business intelligence demo <<http://www.pentaho.com/livedemo/>>

Business intelligence portal <<http://www.businessintelligence.com/>>

Kimball, R & Ross, M 2002, *The data warehouse toolkit: the complete guide to dimensional modeling*, 2nd edn, John Wiley & Sons, New York.

(available to view online via USQ Library - note there are some restrictions on usage, such as no printing or limited printing of e-books)

Liebowitz, J 2006, *Strategic intelligence: business intelligence, competitive intelligence, and knowledge management*, Auerbach Publications, Boca Raton, Florida.

(available to view online via USQ Library - note there are some restrictions on usage, such as no printing or limited printing of e-books)

Loshin, D 2003, *Business intelligence: the savvy manager's guide, getting onboard with emerging IT*, Morgan Kaufmann, Amsterdam, Holland.

(available to view online via USQ Library - note there are some restrictions on usage, such as no printing or limited printing of e-books)

Williams, S & Williams, N 2006, *The profit impact of business intelligence*, Elsevier/Morgan Kaufmann, Amsterdam, Holland.

(available to view online via USQ Library - note there are some restrictions on usage, such as no printing or limited printing of e-books)

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Assessments	40.00
Directed Study	55.00
Private Study	70.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
CMA TEST	50.00	5.00	20 Mar 2009
ASSIGNMENT 1	100.00	15.00	03 Apr 2009
ASSIGNMENT 2	100.00	30.00	22 May 2009
PART A OF 2-HOUR EXAMINATION	30.00	15.00	END S1 (see note 1)
PART B OF 2-HOUR EXAMINATION	70.00	35.00	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 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 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 of the examiner, then a penalty of 5% of the total marks gained by the student for the assignment may apply for each working day late up to ten working days at which time a mark of zero may be recorded.
- 4 Requirements for student to be awarded a passing grade in the course:  
To be assured of receiving a passing grade a student must achieve 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 Student Academic Misconduct for further information and to avoid actions which might contravene university regulations. These regulations can be found at <http://www.usq.edu.au/corporateservices/calendar/part5.htm>. Students should also read the Faculty of Business Policies and Procedures which can be found at <http://www.usq.edu.au/business/aboutfob.htm>.

## 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) 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 assignments which are electronically submitted through the USQ Study Desk for this course. Students who are unable to meet this submission requirement should contact the examiner of the course to negotiate alternative arrangements. (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: Harvard (AGPS) is the referencing system required in this course. Students should use Harvard (AGPS) style in their assignments to format details of the information sources they have cited in their work. The USQ library provides advice on how to format information sources using this system. Details can be found at [http://www.usq.edu.au/library/help/ehelp/ref\\_guides/harvard.htm](http://www.usq.edu.au/library/help/ehelp/ref_guides/harvard.htm) and [http://www.usq.edu.au/library/help/ehelp/ref\\_guides/harvardonline.htm](http://www.usq.edu.au/library/help/ehelp/ref_guides/harvardonline.htm).
- 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 Computer, e-mail and Internet access: 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/ict/students/standards/default.htm>.
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