



MONASH University

**FIT5093**  
**Business intelligence applications**

**Unit Guide**

**Semester 2, 2009**

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

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# **FIT5093 Business intelligence applications - Semester 2, 2009**

## **Chief Examiner:**

**Mr Peter O'Donnell**

Lecturer

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## **Lecturer(s) / Leader(s):**

### **Caulfield**

**Mr Peter O'Donnell**

Lecturer

Phone: +61 3 990 32502

**Steve Remington (tutor)**

**Reza Keikha (tutor)**

## **Additional communication information:**

Outside the scheduled class contact hours you can contact teaching staff by email, by phone, or during their consultation hours or by making an appointment. The "staff" page on the Moodle-based unit web site contains staff contact details including their consultation hours.

If you need a staff member urgently and are unable to contact them, please contact Caulfield School of IT service desk, Level 6 – Building H, Ph: 9903 2535.

The staff involved in teaching this unit (including the unit leader, Peter O'Donnell) are active bloggers, and maintain an active presence on Facebook and Twitter (the unit its own Twitter account @fit5093). Again, see the "staff" page on the Moodle-based unit for details.

## Introduction

Welcome to FIT5093 Business Intelligence Applications for semester 2, 2008. This 6 point unit forms a part of the Business Intelligence stream within the Master of Information Management and Systems degree but can be taken as an elective unit in any Faculty of Information Technology Master's level degree. The unit occasionally attracts students from other Faculties as well - most notably Business. The unit fits nicely with the other units - esp. data warehousing - from the Business Intelligence stream but is also intended to stand on its own.

## Unit synopsis

This unit is intended to provide students with a framework for understanding business intelligence reporting systems with particular focus on the evolutionary process of developing an OLAP-based business intelligence system.

## Learning outcomes

At the conclusion of this unit students will:

1. Understand the scope and application of OLAP technology and business intelligence systems;
2. Have knowledge of the major approaches to the development of business intelligence and reporting systems;
3. Be able to design simple multi-dimensional databases;
4. Be able to develop a simple business intelligence system using an OLAP tool;
5. Be able to develop a simple reporting system;
6. Be able to communicate and foster realistic expectations of the role of OLAP technology and business intelligence systems in management and decision support.

## Contact hours

3 hrs/week

## Workload

For on campus students, workload commitments are:

- two-hour lecture and
- one-hour tutorial (held in a computer laboratory) (requiring advance preparation)
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.
- You will need to allocate up to 5 hours per week in some weeks, for use of a computer, including time for discussion groups, tutorial and assignment work..

## Unit relationships

### Prerequisites

FIT9003

## **Prohibitions**

IMS5004

## **Relationships**

FIT5093 is a unit in the business intelligence track of the Master of Information Management and System and the Master of Business Systems degrees. The unit is available as an elective unit in all FIT masters and also as an elective unit in the Master of Business (IT Management)

You may not study this unit and IMS5004 in your degree.

## Teaching and learning method

Teaching strategies will include lectures, laboratory-based tutorials, assignment work, reading exercises and guest lectures (given by practitioners).

## Timetable information

For information on timetabling for on-campus classes please refer to MUTTS, <http://mutts.monash.edu.au/MUTTS/>

## Tutorial allocation

On-campus students should register for tutorials/laboratories using the Allocate+ system:

<http://allocate.cc.monash.edu.au/>

## Unit Schedule

Week	Topic	References/Readings	Key dates
1	Introduction to the unit; introduction to business intelligence applications	See the unit web site for weekly readings	
2	The nature of business intelligence applications		
3	Business intelligence case studies (I)		
4	Methods of business intelligence application development		
5	Business intelligence technology		
6	Multi-dimensional modelling (I)		
7	Multi-dimensional modelling (II)		
8	Business performance measurement (I)		
9	Business performance measurement (II)		
10	Designing business intelligence application user interfaces		Submission of draft assignment 1 will be encouraged by this date.
Mid semester break			
11	Business intelligence case studies (II)		
12	Unit review; The future of business intelligence applications		Assignment 1 and 2 due
13	Business performance measurement (III) - guest lecturer		

## Unit Resources

### Prescribed text(s) and readings

There is no prescribed text.

### Recommended text(s) and readings

Extensive reading will be made available to students using the library's digital scanning service and has been posted on the unit website. Useful texts include:

Eckerson, W (2006) *Performance Dashboards: Measuring, Monitoring, and Managing Your Business* Wiley.

Thomsen, E. (2002). *OLAP Solutions: Building Multidimensional Information Systems* (2nd Ed.). Wiley.

Parmenter, D. (2007) *Key Performance Indicators (KPI): Developing, Implementing, and Using Winning KPIs* Wiley.

Vitt ,E., Luckevich, M. & Misner, S. (2002). *Business Intelligence*. Microsoft Press.

### Required software and/or hardware

The unit will make extensive use of a wide variety of OLAP and business intelligence software packages including Microsoft Excel, Crystal Reports, Crystal Xcelsius and Radius90. The main tool that will be used is Microsoft SQL Server Analysis Services 2008. This product is installed in the computer laboratories we will be using, and is available for loan under a license agreement from Microsoft - so that students can install a copy on their personal computer for use on assignment and tutorial work.

### Equipment and consumables required or provided

Students studying off-campus are required to have the minimum system configuration specified by the Faculty as a condition of accepting admission, and regular Internet access. On-campus students, and those studying at supported study locations may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to 6 hours per week for use of a computer, including time for newsgroups/discussion groups.

### Study resources

Study resources we will provide for your study are:

Study resources we will provide for your study are:

- Copies of the weekly lecture slides;
- Additional readings for each week's lecture;
- Weekly laboratory exercises which will help build the practical skills and knowledge required to complete the assignment work;
- Assignment specifications and sample solutions;
- Access to past examination papers;
- Discussion groups on the Moodle-based unit web site;
- A unit podcast featuring lecture and tutorial recordings and interviews with industry practitioners;
- This Unit Guide outlining the administrative information for the unit;

- The unit web site on Moodle, where resources outlined above will be made available.

## Assessment

### Overview

Examination (3 hours): 50%; Assignments: 50%

### Faculty assessment policy

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 44% then a mark of no greater than 44-N will be recorded for the unit.

To pass this unit, a student must obtain :

- 40% or more in the unit's examination and
- 40% or more in the unit's non-examination assessment  
and
- an overall unit mark of 50% or more

If a student does not achieve 40% or more in the unit examination or the unit non-examination assessment then a mark of no greater than 44-N will be recorded for the unit.

### Assignment tasks

#### Assignment coversheets

Assignment coversheets are available via "Student Forms" on the Faculty website:

<http://www.infotech.monash.edu.au/resources/student/forms/>

You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

**Assignment submission and return procedures, and assessment criteria will be specified with each assignment.**

#### • Assignment task 1

**Title:**

Specification of a Business Intelligence application

**Description:**

Assignment 1 involves the development of a specification of a business intelligence prototype system. A prototype system, based on this specification, will be constructed in assignment 2.

The Moodle-based unit web site contains details of the required submission and the case study the assignment work will be based on.

**Weighting:**

25%

**Due date:**

End of week 12.

### • Assignment task 2

**Title:**

Business Intelligence application (prototype system).

**Description:**

Assignment 2 involves the construction of a working business intelligence prototype system. The system will be specified in assignment 1.

The Moodle-based unit web site contains details of the required submission and the case study the assignment work will be based on.

**Weighting:**

25%

**Due date:**

End of week 12.

### • Assignment task 3

**Title:**

Reflective blog posts

**Description:**

- ◆ Each student is invited to keep a reflective journal on the either the Moodle-based unit web site or using the [www.blogger.com](http://www.blogger.com) system. This blog will provide the opportunity to reflect on the learning that takes place throughout the unit. Each week you will be able to make a new posting to your blog. The blog entries should include a reflection on what has happened in terms of your progress on assignment and tutorial work, your management of the assignment project and its tasks, what lessons have been learned to date and what you (and the staff) could do differently.

To obtain the 3% bonus mark for this task you must complete a minimum of 10 weekly blog entries during the semester. Each blog post will be read and assessed by the chief examiner. To get the 3% bonus 6 of these posts should be assessed as "satisfactory".

The 3% bonus will be added to the assignment component of the mark available for the unit. Note that that component cannot exceed 50%. So, for example, a student who obtained 46/50 for their assignment work who earns the bonus will get 49%. While a student who got 49/50 would get 50/50 - the maximum available - if they earned the bonus.

For more details, please refer to the Moodle-based unit web site.

**Weighting:**

Bonus of 3% added to overall assignment mark.

**Due date:**

Your last blog entry can be made anytime before the exam.

## Examination

- **Weighting:** 50%

**Length:** 3 hours

**Type (open/closed book):** Closed book

**Remarks:**

The exam will be scheduled by the central Monash exams branch during the normal examination period at the end of the semester.

**See Appendix for End of semester special consideration / deferred exams process.**

## **Due dates and extensions**

Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are not regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Students requesting an extension for any assessment during semester (eg. Assignments, tests or presentations) are required to submit a Special Consideration application form (in-semester exam/assessment task), along with original copies of supporting documentation, directly to their lecturer within two working days before the assessment submission deadline. Lecturers will provide specific outcomes directly to students via email within 2 working days. The lecturer reserves the right to refuse late applications.

A copy of the email or other written communication of an extension must be attached to the assignment submission.

Refer to the Faculty Special consideration webpage or further details and to access application forms:  
<http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html>

## **Late assignment**

Assignments received after the due date will be subject to a penalty of 5% per day, including weekends. Assignments received later than one week (seven days) after the due date will not normally be accepted. In some cases, this period may be shorter if there is a need to release sample solutions.

## **Return dates**

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

## Appendix

Please visit the following URL: <http://www.infotech.monash.edu.au/units/appendix.html> for further information about:

- Continuous improvement
- Unit evaluations
- Communication, participation and feedback
- Library access
- Monash University Studies Online (MUSO)
- Plagiarism, cheating and collusion
- Register of counselling about plagiarism
- Non-discriminatory language
- Students with disability
- End of semester special consideration / deferred exams