MONASH University

FIT2011
Decision support systems fundamentals

Unit guide

Semester 2, 2008

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FIT2011 Decision support systems fundamentals - Semester 2 , 2008

Unit leader :

Vincent Lee

Lecturer(s) :

Clayton

- Vincent Lee

Tutors(s) :

Clayton

- Vincent Lee
- plus two others to be appointed

Introduction

Welcome to FIT2011 Decision support systems fundamentals for semester 2, 2008. This 6 point unit is core to all undergraduate degree programs in the Faculty of IT except the Bachelor of Software Engineering. The unit has been designed to provide you with an understanding of organizations, the contexts within which information technologies are used, and the ITprofessions. It explores many aspects of IT with emphasis on therelationship between theoretical knowledge and its practical application using cases and real examples.

Unit synopsis

The objective of this unit is to introduce the areas of decision making, decision support, and systems and to serve as a foundation unit for the Decision Making/Decision Support sequence of units. The unit will introduce the history of decision support and business intelligence systems, the types of decision support and business intelligence systems, the ideas of normative and descriptive models for decision making and management. The emphasis will be given to the role of modeling in decision support systems. Traditional systems development approaches will be discussed together with their application to DSS & BIS (providing a focus on soft systems and prototyping).

Learning outcomes

At the completion of this unit, the students will:

have knowledge of:

- the scope and application of fundamental principles to decision support, business analytics for development of DS and BI systems,
- the nature of management and decision making in general,
- the major approaches to the development of decision support and business intelligence systems;

have an understanding of:

- the process of decision support system and business intelligence system development,
- the various major approaches to IT support for managers;

have the skills to:

- document an 'unstructured' decision process,
- understand managerial problem solving activity;

have developed attitudes which allow them to:

- work closely with managers,
- communicate and foster realistic expectations of the role of information technology in management and decision support.

Workload

This unit is on campus and the workload commitments are:

- two-hour lecture and
- two-hour tutorial (or 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 newsgroups/discussion groups.

Unit relationships

Prerequisites

FIT1006 or BUS1100 or ETC1000

Relationships

The unit is a second year core unit in the Bachelor of Business Information Systems. It may be taken as an elective in other programs where you have satisfied the prerequisites and course rules permit.

You may not study this unit if you have studied IMS3001 in your degree.

Continuous improvement

Monash is committed to ‘Excellence in education' and strives for the highest possible quality in teaching and learning. To monitor how successful we are in providing quality teaching and learning Monash regularly seeks feedback from students, employers and staff. Two of the formal ways that you are invited to provide feedback are through Unit Evaluations and through Monquest Teaching Evaluations.

One of the key formal ways students have to provide feedback is through Unit Evaluation Surveys. It is Monash policy for every unit offered to be evaluated each year. Students are strongly encouraged to complete the surveys as they are an important avenue for students to "have their say". The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

Student Evaluations

The Faculty of IT administers the Unit Evaluation surveys online through the my.monash portal, although for some smaller classes there may be alternative evaluations conducted in class.

If you wish to view how previous students rated this unit, please go to
http://www.monash.edu.au/unit-evaluation-reports/

Over the past few years the Faculty of Information Technology has made a number of improvements to its courses as a result of unit evaluation feedback. Some of these include systematic analysis and planning of unit improvements, and consistent assignment return guidelines.

Monquest Teaching Evaluation surveys may be used by some of your academic staff this semester. They are administered by the Centre for Higher Education Quality (CHEQ) and may be completed in class with a facilitator or on-line through the my.monash portal. The data provided to lecturers is completely anonymous.
Monquest surveys provide academic staff with evidence of the effectiveness of their teaching and identify areas for improvement. Individual Monquest reports are confidential, however, you can see the summary results of Monquest evaluations for 2006 at http://www.adm.monash.edu.au/cheq/evaluations/monquest/profiles/index.html

Improvements to this unit

Assessment component weights are modified.

Unit staff - contact details

Unit leader

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plus two others to be appointed

Additional communication information

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Teaching and learning method

This unit is on campus. Besides attending lectures and tutorials (compulsory and attendance will be taken), it is expected at least an additional of 4 hours per week is required.

Students are to follow all unit materials posted on unit MUSO website.

Timetable information

For information on timetabling for on-campus classes at all Australian campuses please refer to MUTTS, http://mutts.monash.edu.au/MUTTS/

If the unit is timetabled at Clayton Campus.

Tutorial allocation

All enrolled students should register for tutorials/laboratories using Allocate+.

Communication, participation and feedback

Monash aims to provide a learning environment in which students receive a range of ongoing feedback throughout their studies. You will receive feedback on your work and progress in this unit. This may take the form of group feedback, individual feedback, peer feedback, self-comparison, verbal and written feedback, discussions (on line and in class) as well as more formal feedback related to assignment marks and grades. You are encouraged to draw on a variety of feedback to enhance your learning.

It is essential that you take action immediately if you realise that you have a problem that is affecting your study. Semesters are short, so we can help you best if you let us know as soon as problems arise. Regardless of whether the problem is related directly to your progress in the unit, if it is likely to interfere with your progress you should discuss it with your lecturer or a Community Service counsellor as soon as possible.

Unit Schedule

Week	Topic	Key dates
1	Introduction to Decision support and business intelligence	15 Jul 2008
2	Decision Making, Systems, Modeling, and Support	22 July 2008
3	Decision Support Systems Concepts, Methodologies, and Technologies: An overview	29 Jul 2008
4	Modeling and Analysis	5 Aug 2008
5	Data Warehousing	12 Aug 2008
6	Data Visualization	19 Aug 2008
7	Business Analytics	26 Aug 2008
8	Class Test (1 hour)	2 Sep 2008
9	Strategy and performance management	9 Sep 2008
10	Group decision support systems and collaborative information portals and systems	16 Sep 2008
11	Knowledge management and Knowledge management systems	23 Sep 2008
Mid semester break		

12	An introduction to intelligent decision support systems	7 Oct 2008
13	Revision	14 Oct 2008

Unit Resources

Prescribed text(s) and readings

Turban, E, Aronson, J F, Liang, Ting-Peng, Sharda, R (2007), "Decision Support and Business Intelligence Systems (8th ed)", Pearson-Prentice Hall, 2007, ISBN 0-13-158017-5

Recommended text(s) and readings

Recommended reading

Marakas, G. M. (2003), "Decision Support Systems in The 21st Century (2nd edition)", Prentice Hall, 2003, ISBN 0-13-092206-4

Required software and/or hardware

You will need access to:

- Java Version 6 Update 1 (download from Sun Microsystems)
- software (provided with the text book)
- Firefox or Internet Explorer browser

On-campus students may use this software which is installed in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook.

Study resources

Study resources we will provide for your study are:

Library access

The Monash University Library site contains details about borrowing rights and catalogue searching. To learn more about the library and the various resources available, please go to http://www.lib.monash.edu.au. Be sure to obtain a copy of the Library Guide, and if necessary, the instructions for remote access from the library website.

Monash University Studies Online (MUSO)

All unit and lecture materials are available through MUSO (Monash University Studies Online). Blackboard is the primary application used to deliver your unit resources. Some units will be piloted in Moodle. If your unit is piloted in Moodle, you will see a link from your Blackboard unit to Moodle (http://moodle.monash.edu.au) and can bookmark this link to access directly. In Moodle, from the Faculty of Information Technology category, click on the link for your unit.

You can access MUSO and Blackboard via the portal: http://my.monash.edu.au

Click on the Study and enrolment tab, then Blackboard under the MUSO learning systems.

In order for your Blackboard unit(s) to function correctly, your computer needs to be correctly configured.

For example:

- Blackboard supported browser
- Supported Java runtime environment

For more information, please visit: http://www.monash.edu.au/muso/support/students/downloadables-student.html

You can contact the MUSO Support by: Phone: (+61 3) 9903 1268

For further contact information including operational hours, please visit:
http://www.monash.edu.au/muso/support/students/contact.html

Further information can be obtained from the MUSO support site:
http://www.monash.edu.au/muso/support/index.html

Assessment

Unit assessment policy

1. Achieve an overall result of at least 50% for the unit
2. Obtain at least 40% of the available assignment marks
3. Obtain at least 50% of the available examination marks

Where a student fails to obtain at least 40% in both the assignment work and examination, the student will receive an overall grade no greater than 44-N.

IMPORTANT NOTE

Tutorial attendance: 10%

Group assignment: 20%

Final Examination: 70% with examination format in multiple choice questions

Assignment tasks

- ### Assignment Task

  Title : Work System Approach to Decision Support Systems

  Description :

  Group Assignment for groups of minimum two and maximum three students per group for FIT2011-Decision support systems fundamentals

  All students enrolled in FIT 2011 unit are to attempt the following assignment:

  Following the Steven Alter (2004)'s definition of Work System (with nine elements) given in Chapter 1 of Turban et al (2007) book. Discuss in details with example on how Work System approach can be applied to Decision Support System (DSS) on the following:

  - ♦1) DSS as a type of work system
  - ♦2) Inheritance of success factors and operational principles
  - ♦3) Different degrees of overlap
  - ♦4) Analysis from a business viewpoint
  - ♦5) Creating or imp[roving a DSS in an organisation.

  You may use the case scenarios given in the textbook to illustrate.

  Weighting : 20% of the FIT 2011 unit

  Criteria for assessment :

  The assignment report will be graded in accordance with the following criteria:

  1) Review of Alter's work system conceptual (30%)

2) Discussion (inclusion of system configuration) of Each part is weighted 10% (total =50%)

3) Conclusion and other issues for further investigation

Due date : 4:00 pm Tuesday, 7 Oct 2007

Remarks (optional - leave blank for none) :

Assignment submitted with signed copy of assignment coversheet will not be graded. All members in the group must sign the assignment coversheet.

Faculty penalty clause policy applies for late submission

Examinations

- **Examination**

Weighting : 70%

Length : 2 hours

Type (open/closed book) : Closed book

Assignment submission

Group Assignment report must be submitted in paper submission (attach a softcopy) by the due date (by 4:00 pm, Monday, 6 October 2007), accompanied with signed assignment coversheet, to the assignment box located at first floor, Building 63, Clayton Campus. No email submission will be accepted.

Assignment coversheets

Download assignment coversheet from Faculty of IT home page:

http://www.infotech.monash.edu.au/resources/student/

University and Faculty policy on assessment

Due dates and extensions

The due dates for the submission of assignments are given in the previous section. 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 seldom regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Requests for extensions must be made to the unit lecturer at your campus at least two days before the due date. You will be asked to forward original medical certificates in cases of illness, and may be asked to provide other forms of documentation where necessary. A copy of the email or other written communication of an extension must be attached to the assignment submission.

Late assignment

There is a penalty for late submission of assignment report.

1 working day late 80% of Grade

2 working day late 60% of Grade

3 working day late 40% of Grade

4 working day late 20% of Grade

5 working day late 0% of Grade.

Return dates

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

Assessment for the unit as a whole is in accordance with the provisions of the Monash University Education Policy at http://www.policy.monash.edu/policy-bank/academic/education/assessment/

Plagiarism, cheating and collusion

Plagiarism and cheating are regarded as very serious offences. In cases where cheating has been confirmed, students have been severely penalised, from losing all marks for an assignment, to facing disciplinary action at the Faculty level. While we would wish that all our students adhere to sound ethical conduct and honesty, I will ask you to acquaint yourself with Student Rights and Responsibilities (http://www.infotech.monash.edu.au/about/committees-groups/facboard/policies/studrights.html) and the Faculty regulations that apply to students detected cheating as these will be applied in all detected cases.

In this University, cheating means seeking to obtain an unfair advantage in any examination or any other written or practical work to be submitted or completed by a student for assessment. It includes the use, or attempted use, of any means to gain an unfair advantage for any assessable work in the unit, where the means is contrary to the instructions for such work.

When you submit an individual assessment item, such as a program, a report, an essay, assignment or other piece of work, under your name you are understood to be stating that this is your own work. If a submission is identical with, or similar to, someone else's work, an assumption of cheating may arise. If you are planning on working with another student, it is acceptable to undertake research together, and discuss problems, but it is not acceptable to jointly develop or share solutions unless this is specified by your lecturer.

Intentionally providing students with your solutions to assignments is classified as "assisting to cheat" and students who do this may be subject to disciplinary action. You should take reasonable care that your solution is not accidentally or deliberately obtained by other students. For example, do not leave copies of your work in progress on the hard drives of shared computers, and do not show your work to other students. If you believe this may have happened, please be sure to contact your lecturer as soon as possible.

Cheating also includes taking into an examination any material contrary to the regulations, including any bilingual dictionary, whether or not with the intention of using it to obtain an advantage.

Plagiarism involves the false representation of another person's ideas, or findings, as your own by either copying material or paraphrasing without citing sources. It is both professional and ethical to reference clearly the ideas and information that you have used from another writer. If the source is not identified, then you have plagiarised work of the other author. Plagiarism is a form of dishonesty that is insulting to the reader and grossly unfair to your student colleagues.

Register of counselling about plagiarism

The university requires faculties to keep a simple and confidential register to record counselling to students about plagiarism (e.g. warnings). The register is accessible to Associate Deans Teaching (or nominees) and, where requested, students concerned have access to their own details in the register. The register is to serve as a record of counselling about the nature of plagiarism, not as a record of allegations; and no provision of appeals in relation to the register is necessary or applicable.

Non-discriminatory language

The Faculty of Information Technology is committed to the use of non-discriminatory language in all forms of communication. Discriminatory language is that which refers in abusive terms to gender, race, age, sexual orientation, citizenship or nationality, ethnic or language background, physical or mental ability, or political or religious views, or which stereotypes groups in an adverse manner. This is not meant to preclude or inhibit legitimate academic debate on any issue; however, the language used in such debate should be non-discriminatory and sensitive to these matters. It is important to avoid the use of discriminatory language in your communications and written work. The most common form of discriminatory language in academic work tends to be in the area of gender inclusiveness. You are, therefore, requested to check for this and to ensure your work and communications are non-discriminatory in all respects.

Students with disabilities

Students with disabilities that may disadvantage them in assessment should seek advice from one of the following before completing assessment tasks and examinations:

- Faculty of Information Technology Student Service staff, and / or
- your Unit Coordinator, or
- Disabilities Liaison Unit

Deferred assessment and special consideration

Deferred assessment (not to be confused with an extension for submission of an assignment) may be granted in cases of extenuating personal circumstances such as serious personal illness or bereavement. Information and forms for Special Consideration and deferred assessment applications are available at http://www.monash.edu.au/exams/special-consideration.html. Contact the Faculty's Student Services staff at your campus for further information and advice.