300106
Decision Support Systems

UNIT OUTLINE

Offered at
Campbelltown, Parramatta & Penrith Campus

Level 2
10 CREDIT POINTS

Spring 2006

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(Parramatta)
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1 **Prerequisite**
None.

2 **Exclusions**
Nil.

3 **Assumed Knowledge**
A general understanding of:
- the role of information technology in business and society;
- the overall process of information systems design and implementation;
- Fundamentals of Computing and Information Systems
- 3 Unit Mathematics and Statistics (at HSC level)

4 **Introduction**
This subject provides the students with an understanding of the role of information technology in decision making in organisations. Students learn the structure of decision making in organizations, and tools/techniques available to support this process. It covers the major components of a Decision Support Systems and their applications in the organisation’s environment, Knowledge-based systems and their role in a Decision Support Systems.

5 **Student Learning Outcomes**
At the conclusion of this unit, students will be able to:
- Explain what managers do and the general context and nature of organisations;
- Recognise and classify structured, semi structured and unstructured decisions;
- Characterise the nature of information requirements at different levels of management;
- Distinguish decision support systems from other kinds of information systems;
- Demonstrate knowledge of the scope and application of information systems applied to decision support;
- Describe the architecture of a decision support system and its development process;
- Describe individually the major components of a decision support system;
- Describe group decision-making and the use of group decision support systems; and
- Explain the use of knowledge-based systems in decision support systems;
- Explain text, hypertext and database management and the possibilities of use of World Wide Web in deploying the decision support systems;
- Describe generic multiparticipant support systems.
6 Content

- Decision making and decision makers
- Overview of quantitative methods in decision making
- Types of information systems
- Transaction Processing systems
- Management Information Systems
- Executive Information Systems
- Decision Support Systems
- Multiparticipant Decision Support Systems
- Knowledge-based or Intelligent Systems
- Decision Support Facilities

7 Presentation

This unit consists of four hours of scheduled classroom attendance per week, consisting of

- Lectures: 1 X two hour lecture session each week
- Tutorial: 1 X two hour tutorial session each week

Activities during this time will include information discussion, tutorial work, group discussions, and practical exercises. It is expected that all students will spend additional time in activities outside of the scheduled classes.

All the unit related material will be accessible on WebCT. Students can access this by clicking on the following link: http://edc.uws.edu.au/elearning/

Lectures & Tutorials: Lecture & Tutorial timings can be accessed by clicking on the following link: http://platformweb.uws.edu.au/pweb_tt/start.asp?yr=2006

8 Practices of the School concerning Assessment

The total marks that a student achieves in the unit will form the basis for the determination of the grade the student will receive in the unit. Scaling of the total mark achieved (to the standard boundaries) may be employed before awarding the final grade.

In order to qualify for a passing grade in the unit a student must satisfy the School that they have appropriately completed all mandatory components of the unit. Satisfactory completion of a component includes a full attempt at the work designated and the demonstration of an appropriate level of knowledge of the component content. Failure to do so will result in a 'Fail' grade, regardless of the total mark achieved in the unit by the student.
The mandatory components of this unit are:

a) Appropriate forms of activity by the student within the tutorial sessions such that the learning process of all students in the class is assisted, or at least not impaired.

b) Tutorial Exercises.

c) Assignment 1

d) Assignment 2

e) Final Examination.

In order to pass this unit, students must obtain a total mark of at least 50% overall and a pass in the final examination. Before submitting assessment items, you are advised to either photocopy or retain disk copies of original work.

Where indicated, a mandatory component of the unit must be completed and submitted by the student, and have been received by the School, prior to a due date indicated by the unit co-ordinator. Unless an extension to a further date is granted to the student by the unit co-ordinator, any marks received for the component will be reduced by 10% of the total mark that could have been achievable for the component, for each day after the due date. An extension of time may be granted only under exceptional circumstances. The unit co-ordinator may advise the students in writing of a date after which submission of the component will not be accepted by the School. In such circumstances a student who has failed to submit the component will not complete the unit and will then receive a FAIL grade in the unit. With the exception of the final examination, the School will not normally accept submissions of mandatory components of a unit subsequent to the final day of the Session. Students who do not attend the final examination without grounds acceptable to the University should expect to fail the unit.

9 Method of Assessment

This unit has two assessment components:

a) Continuous assessment 60%

b) Final exam 40%

Continuous assessment will consist of the following.

<table>
<thead>
<tr>
<th>Continuous Assessment Task</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>20%</td>
<td>TBA, mid-semester</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>30%</td>
<td>TBA, near final teaching week</td>
</tr>
<tr>
<td>Tutorial Activities</td>
<td>10%</td>
<td>Weekly, as advised.</td>
</tr>
<tr>
<td>Total</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

All assignments must be submitted through WebCT, unless advised otherwise during the semester. Any work submitted directly (hard copy or through email) to the Lecturers/Tutors will remain unmarked. Late submission of work incurs a penalty of 10% of available marks per overdue day.
Final exam
It will be based on the material covered in the lectures and tutorials. Format of the final examination will be advised in the last lecture of the semester.

10 Academic Malpractice
All work handed in by students (assignments, exercises, final exam etc.) must be the student’s own work. Plagiarism involves the use of another’s ideas as though they were one’s own, and presenting them without acknowledgement as part of academic work. As such, plagiarism is contrary to the academic principles of originality and scholarship, and is regarded very seriously by UWS. Plagiarism will not be tolerated and will incur an appropriate penalty, up to and including expulsion from the unit and suspension from the University. Assignment work must be individually undertaken; joint work is also regarded as plagiarism in this unit and therefore is unacceptable.

It must be emphasised that it is each student’s responsibility to ensure that no other student has access to his or her work, either in soft or hard copy. Similar action may be taken against both parties in the case of plagiarised assignments, whether permission was granted or not by the original author to copy the work. Students may have a penalty imposed for: leaving a logged on computer unattended; leaving computer listings in the computer laboratories, or other University rooms (including garbage bins); leaving diskettes containing assignment work in the computer laboratories, or other University rooms.

Assignments must be each student’s individual work; joint work is unacceptable in this unit unless the assignment requires you to work in groups.

11 Disabilities
Any student with a disability who may require reasonable accommodation in the unit is requested to seek advice and assistance at the commencement of the session or soon thereafter from the Unit Co-ordinator, in conjunction with the Disability Consultant and/or Disability Academic Officer.

12 Note
The material in this unit outline is accurate at the time of writing. Since variations may be necessary as the session progresses, students will be advised via notice boards on WebCT and should ensure that they are aware of any announcements made in lectures and tutorial/practical. Electronic mail may also be used extensively as a means of promulgating information to students as well, so it is suggested that students check their WebCT and electronic mailboxes at least twice a week. Any changes will not be allowed as grounds of appeal for examination review etc.

13 Recommended Text

14 References

Other journal articles available from the UWS electronic databases.

15 General

University policy requires that all students should read and understand the implications of the following information:

Students should be familiar with all University and College/School rules, policies and processes, related to their studies and time at UWS. Students should also be aware that they are required to abide by the University's Codes, Occupational Health and Safety and Social Justice policies. Information on University, student rules, policies, procedures and codes can be found in the UWS Student Handbook, and online at the Student Administration web page and the UWS Policy and Procedures web page.

Students should regularly check the Student Administration web page for updates, enrolment, timetabling and other related information. The above information can be found online at:

http://www.uws.edu.au/students/stuadmin
http://apps.uws.edu.au/uws/policies/ppm/policies.phtml

Students with a disability are advised to discuss requirements for accommodation (including for examinations) at the commencement of the teaching session with their Unit Coordinator in conjunction with the Counselling & Disabilities Unit within the Office of the Dean of Students. This is a free and confidential service, contact no: 02 4620 3018 or refer:

http://www.uws.edu.au/students/counselling_disability

UWS has a web page for students, which contains links to the library, student support, including the free services offered by Office of the Dean of Students and other relevant information refer URL:

http://www.uws.edu.au/students

The final grades in this unit will be awarded as follows:
Pass - final mark greater than or equal to 50 and less than 65  
Credit - final mark greater than or equal to 65 and less than 75  
Distinction - final mark greater than or equal to 75 and less than 85  
High Distinction - final mark equal or more than 85  
Fail - final marks less than 50, or unsatisfactory marks in the final exam

Students should note, that final marks and grades are subject to confirmation by the School and College Assessment Committee, who may scale, modify or otherwise amend the marks and grades for the units as may be required by University Policies.

**Special Consideration**

Students should notify the University when they have suffered misadventure, or have extenuating circumstances which means they have:

i. been prevented from meeting an assessment deadline;

ii. performed below their usual standard during an assessment, including formal examinations;

iii. been unable to attend a compulsory component of their course;

iv. been unable to attend a formal (end-of-session) examination.

The University has specific criteria, requirements (e.g. supporting documentation) and set deadlines for applying for special consideration and students are strongly encouraged to read the relevant sections of the Assessment and Examinations Policy refer URL:


and in particular the sections relating to: Matters Affecting Assessment and Inability to Attend an Examination.

**Academic Misconduct**

The University takes any form of academic misconduct seriously. Academic misconduct is conduct on the part of a student, which involves amongst other forms of misconduct:

Cheating, Plagiarism and Collusion

For the full definition of academic misconduct and the consequences of such behaviour, students are advised to read the Academic Misconduct policy in its entirety, refer URL:


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