Liverpool John Moores University

Title:	DECISION SUPPORT SYSTEMS
Status:	Definitive
Code:	**6004SUMCOM** (103345)
Version Start Date:	01-08-2011
Owning School/Faculty:	Computing and Mathematical Sciences
Teaching School/Faculty:	Computing and Mathematical Sciences

Team	Leader
Mark Taylor	Y

Academic Level:	FHEQ6	**Credit Value:**	12.00	**Total Delivered Hours:**	72.00
Total Learning Hours:	120	**Private Study:**	48		

Delivery Options
Course typically offered: Summer

Component	Contact Hours
Lecture	28.000
Practical	28.000
Tutorial	14.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	100.0	2.00

Aims

To provide an appreciation of decision making in organisations and the use of computer based systems to support executive decision making. The students should, on completion of the unit, have a good knowledge of methods and techniques required to design and implement Decision Support Systems.

Learning Outcomes

After completing the module the student should be able to:

1 Explain the concept of decision support systems
2 Describe the methodology of decision making
3 Describe the conceptual foundations of decision making and the system approach, and how support is provided.
4 Assess the capabilities, structure and classification of DSS.
5 Describe the five major components of DSS and discuss its related issues.
6 Construct a DSS and the development process.
7 Describe computer-supported cooperative work (CSCW) and group support systems (GSS).
8 Describe enterprise-wide DSS.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Exam	1	2	3	4	5	6	7	8

Outline Syllabus

1. Introduction to Decision Support Systems.

Basic Concepts.
Structured, semi-structured and unstructured decisions.
Individual, organisational and group decisions.
Need for adaptive approach in analysis and design of Decision Support Systems.

2. Tools in Decision Making

Decision making process.
Decision under certainty.
Decision under uncertainty.
Risk analysis.
Decision trees.
Delphi techniques.
Statistical Methods and Simulation.

3. Decision Support Systems

Man-Computer Interface.
Dialogue generation and management.
Database for decision support.
Model base for decision support.
Decision Support Systems in operational management.
Decision Support Systems in strategic management.
Decision Support Systems with minis and micros.
Host computer interface and support.

4. Implementation of Decision Support Systems

Organisation impact of Decision Support Systems.
Management and control of Decision Support Systems.

Learning Activities

Lectures, tutorials and practical lab sessions.

References

Course Material	Book
Author	Efraim Turbon, Jay E. Aronson
Publishing Year	2004
Title	Decision Support Systems and Intelligent Systems
Subtitle	
Edition	7th edition,
Publisher	Prentice Hall International, Inc.
ISBN	

Course Material	Book
Author	Ralph H. Sprague, Jr., Hugh J. Watson
Publishing Year	1993
Title	Decision Support Systems Putting Theory into Practice
Subtitle	
Edition	
Publisher	Prentice Hall International, Inc.
ISBN	

Course Material	Book
Author	R Jayashankar
Publishing Year	1989
Title	Decision Support Systems
Subtitle	
Edition	
Publisher	Tata McGraw-Hill Publishing Company Ltd
ISBN	

Course Material	Book
Author	Hugh J. Watson, George Houdeshel, Rex Kelly Rainer, Jr
Publishing Year	1996
Title	Building Executive Information Systems and other Decision Support Applications
Subtitle	
Edition	

Publisher	John Wiley & Sons
ISBN	

Notes

The module explores the use of computer-based systems to support executive decision-making.