

Liverpool John Moores University

Title: BUSINESS MODELLING USING SPREADSHEETS
Status: Definitive
Code: **5053BUSIS** (108229)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Business School
Teaching School/Faculty: Liverpool Business School

Team	Leader
Alistair Beere	Y

Academic Level: FHEQ5
Credit Value: 12.00
Total Delivered Hours: 36.00
Total Learning Hours: 120
Private Study: 84

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12.000
Tutorial	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Coursework - the students will undertake the developemnt of a decision support system using Excel to model a business problem. The problem will centre on the capacity and usage of furances in an aluminium plant. The students as part of the assessment will present their findings via a presentation.	100.0	

Aims

To develop the skills in analysing and redesigning business and management processes.

To develop skills in designing DSS which specifically meet complex business needs.
To develop and extend the students understanding of Excel functionality.
To develop and extend student knowledge of financial modeling and the impact this can have on business.
To develop a prototype DSS to resolve a specific business problem.
To evaluate a range of systems development methodologies to assess their appropriateness for DSS development.

Learning Outcomes

After completing the module the student should be able to:

- 1 Model and diagnose an existing business system in terms of organization of processes, diagnose problems and assess the effectiveness of change.
- 2 Redesign a business system to enhance performance, particularly with regard to adaptive response and learning capabilities.
- 3 Understand how DSS are affected by the richness of the business scenario.
- 4 Asses the impact of automated support given by DSS in the business environment.
- 5 Design and develop a prototype DSS.

Learning Outcomes of Assessments

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

CW	1	2	3	4	5
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Outline Syllabus

Excel functionality including an introduction to VBA.
Financial modeling.
Types of Decision – operational, tactical and strategic levels of decision making.
Strategies for identifying DSS potential and cost justification.
Data capture and integrity data sources, databases and model management.
Data rich v information poor.
DSS Development Methodologies.
Applications and limitations of DSS generators.

Learning Activities

The module will be delivered via a series of lectures, tutorials and workshops.

References

Course Material	Book
Author	Edwards J. S & Finlay P. N

Publishing Year	2003
Title	Decision Making with Computers
Subtitle	The Spreadsheet and Beyond
Edition	3rd
Publisher	Pitman Publishing
ISBN	

Course Material	Book
Author	Jacobson R
Publishing Year	2000
Title	Step by Step Microsoft Excel 2000 Visual Basic
Subtitle	
Edition	
Publisher	Microsoft Press
ISBN	

Course Material	Book
Author	Watson H. R, Houndeshel G & Rainer R.K
Publishing Year	1997
Title	Building Executive Information Systems and Other Decision Support Applications
Subtitle	
Edition	
Publisher	Wiley
ISBN	

Course Material	Book
Author	Aitken P.G
Publishing Year	2000
Title	Excel 2000 Pivot Tables and Pivot Charts
Subtitle	
Edition	
Publisher	Wiley
ISBN	

Course Material	Book
Author	Blattner p & Ulrich L
Publishing Year	1999
Title	Using Microsoft Excel 2000
Subtitle	
Edition	
Publisher	Que
ISBN	

Course Material	Book
Author	Barlow J
Publishing Year	1999

Title	Excel Models for Business and Operations Management
Subtitle	
Edition	
Publisher	Wiley
ISBN	

Course Material	Book
Author	Kinata C & Kyd C.W
Publishing Year	1999
Title	Complete Guide to Microsoft Excel Macros
Subtitle	
Edition	4th
Publisher	Microsoft Press
ISBN	

Course Material	Book
Author	Walkenbach J & Underdahl B
Publishing Year	2000
Title	Excel 2000 Bible
Subtitle	
Edition	
Publisher	Hungry Minds Inc
ISBN	

Course Material	Book
Author	Wexter S & Sharer J
Publishing Year	2002
Title	Microsoft Excel Macros
Subtitle	
Edition	
Publisher	Microsoft Press
ISBN	

Notes

Helps to develop the students understanding of spreadsheets and how they can be used to provide management with vital information, to assist in planning and budgeting.