LIVERPOOL JOHN MOORES UNIVERSITY

Data Modelling

Module Information

2022.01, Approved

Summary Information

Module Code	4003SEQR
Formal Module Title	Data Modelling
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Oryx Universal College WLL

Learning Methods

Learning Method Type	Hours
Lecture	11
Practical	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-PAR	PAR	April	12 Weeks
JAN-PAR	PAR	January	12 Weeks

SEP_NS-PAR	PAR	September (Non-standard start date)	12 Weeks

Aims and Outcomes

Aims	To introduce the fundamentals of manipulating and presenting data.To manipulate and present data using spreadsheet and database based applications.To evaluate the advantages and disadvantages of spreadsheet and database based applications.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Construct spreadsheet based applications from a given set of requirements.
MLO2	2	Create logical and physical entity relationship models from a given set of requirements.
MLO3	3	Construct database based applications from logical and physical entity relationship models.

Module Content

Outline Syllabus	Data Domains, Models & AbstractionSpreadsheet Dev.Manipulating & Presenting DataPivot Tables & ChartsLimitationsLogical Data ModellingEntities, Attributes & KeysRelationships (Cardinality & Optionality)Physical Data ModellingTablesColumnsData TypesKeysNullabilityFunctional Dependency & Normalisation1NF - 2NF - 3NFDatabase Dev.Designers & Query-By-Example
Module Overview	
Additional Information	The module imparts upon students the ability to model data in various differing scenarios. Students are initially required to manipulate and present data in spreadsheet based applications. The students are then required to solve problems using a data modelling methodology (e.g. entity relationship models / normalisation), ultimately leading towards the construction of database based applications.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Data Modelling Scenario	100	0	MLO1, MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Glyn Hughes	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings