Liverpool John Moores University

Title: OBJECT DATABASES
Status: Definitive
Code: **6007SUMCOM**   (103011)
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences
Teaching School/Faculty: Computing and Mathematical Sciences

Team	emplid	Leader
Glyn Hughes		Y

Academic Level:	FHEQ6	**Credit Value:**	12.00	**Total Delivered Hours:**	36.00
Total Learning Hours:	120	**Private Study:**	84		

Delivery Options
Course typically offered: Summer

Component	Contact Hours
Lecture	12.000
Practical	12.000
Tutorial	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	UML design and OO database	100.0	

Aims

To examine the developments of database systems which relate to object and object orientated models.
To understand the difference between the conventional relational database and object database and the new object relational database
To be able to apply different object-oriented or object-relational database designs to solve practical database problems.

Learning Outcomes

After completing the module the student should be able to:

1. Identify and use features of database management systems that support object and object-orientated models.
2. Compare object-oriented and object-relational database models and use an appropriate model to design a database application
3. Use object-oriented or object-relational techniques to analyze a problem, design and implement a database solution.

Learning Outcomes of Assessments

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

Report 1 2 3

Outline Syllabus

Review of the concepts of the object-oriented model.
OO databases. Features and standards. Comparison with relational database model.
ODMG. Object-definition language, Object-query languages, Practical databases.
Database connectivity & host language access.
Examples of OO applications.
OO Analysis & Design.
Object-relational model. Comparison with OO databases. SQL standards. Support for OO features. Practical databases.
Examples of object-relational applications.

Learning Activities

Lectures will be supported by tutorial exercises and practical examples.

References

Course Material	Book
Author	Date, CJ , Darwen H.
Publishing Year	1998
Title	Foundation for Object/relational databases: a third manifesto
Subtitle	
Edition	
Publisher	Addison-Wesley
ISBN	0201309785

Course Material	Book

Author	Date, CJ.
Publishing Year	2003
Title	Introduction to Database Systems
Subtitle	
Edition	8TH
Publisher	Addison Wesley
ISBN	0321189566

Course Material	Book
Author	Loomis, M.E.S. Chaudhri, A.B,
Publishing Year	1998
Title	Object databases in practice.
Subtitle	
Edition	
Publisher	Prentice-Hal
ISBN	013899725x

Course Material	Book
Author	Connolly, T & Begg, C
Publishing Year	2003
Title	Database Systems, A practical approach to design, implementation & management
Subtitle	
Edition	3RD
Publisher	Addison-Wesley
ISBN	0201708574

Notes

This module examines object-oriented and object-relational databases and their use in developing object database applications.