Liverpool John Moores University

Title:	SYSTEMS MODELLING AND REQUIREMENTS ANALYSIS
Status:	Definitive
Code:	**5511TECYPC** (119817)
Version Start Date:	01-08-2018
Owning School/Faculty:	Engineering
Teaching School/Faculty:	YPC International College (Kolej Antarabangsa YPC)

Team	Leader
Michael Shaw	

Academic Level:	FHEQ5	**Credit Value:**	24	**Total Delivered Hours:**	107
Total Learning Hours:	240	**Private Study:**	133		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	56
Practical	6
Tutorial	42

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report based on a case study	25	
Report	AS2	Report based on a design model	25	
Exam	AS3		50	3

Aims

To provide a basic foundation for the understanding of systems concepts, systems analysis and design using object-oriented approach.
To provide the student with a thorough grounding in the design, build, querying and deployment of databases.

Learning Outcomes

After completing the module the student should be able to:

1 Demonstrate how information systems can be useful in managing organizations and the challenges in information system development.
2 Analyse a problem and produce a model
3 Apply object-oriented approach to analysis in UML.
4 Apply database design approach in system development.
5 Use Queries in both native Access and SQL.
6 Generate meaningful reports in various formats and how to link to other applications.

Learning Outcomes of Assessments

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

Report	1	2	
Report	6		
Examination	3	4	5

Outline Syllabus

Introduction to information system and challenges
Software development process
Requirement analysis, system design and architecture
Introduction to object-oriented and UML
System implementation
Introduction to database, environment and architecture
Introduction to database model (object-oriented, relational)
Forms, queries and reports
Normalization and relationship
Macros and modules
Structured Query Language (SQL)
Importing, exporting and linking files
Compact, repair and deployment

Learning Activities

Lectures, tutorials and computing practical.

Course Material	Book
Author	Robertson S., Robertson J.
Publishing Year	2012
Title	Mastering the Requirements Process: Getting Requirements Right

Subtitle	
Edition	3rd ed
Publisher	Addison-Wesley Professional
ISBN	

Course Material	Book
Author	Bennet S., McRobb S., Farmer R.
Publishing Year	2012
Title	Object-Oriented Systems Analysis and Design using UML
Subtitle	
Edition	4th ed
Publisher	McGraw Hill
ISBN	

Course Material	Book
Author	Podeswa H
Publishing Year	2005
Title	UML for the IT Business Analyst: A Practical Guide to Object-Oriented Requirements Gathering
Subtitle	
Edition	
Publisher	Course Technology
ISBN	

Course Material	Book
Author	Weisfeld M
Publishing Year	2009
Title	The Object-Oriented Thought Process
Subtitle	
Edition	
Publisher	Upper Saddle River
ISBN	

Course Material	Book
Author	Miles R., Hamilton, K
Publishing Year	2006
Title	Learning UML 2.0
Subtitle	
Edition	
Publisher	O'Reilly
ISBN	

Course Material	Book
Author	Coronel, Morris, Rob
Publishing Year	2012
Title	Database Principles: Fundamentals of Design, Implementation and Management

Subtitle	
Edition	10th ed
Publisher	Cengage Learning
ISBN	

Course Material	Book
Author	Connoly T., Begg C
Publishing Year	2010
Title	Database Systems: A Practical Approach to Design, Implementation, and Management
Subtitle	
Edition	5th ed
Publisher	Pearson
ISBN	

Course Material	Book
Author	Wempen F
Publishing Year	2010
Title	Teach Yourself VISUALLY Access 2010
Subtitle	
Edition	1st
Publisher	Visual
ISBN	

Course Material	Book
Author	MacDonald M
Publishing Year	2010
Title	Access 2010: The Missing Manual
Subtitle	
Edition	1st
Publisher	Pogue Press
ISBN	

Notes

This module provides a grounding in systems theory, modelling and analysis. It particularly focuses on an e-business orientation