Liverpool John Moores University

Title:	SYSTEMS MODELLING AND REQUIREMENTS ANALYSIS
Status:	Definitive
Code:	**5505TECYPC** (115863)
Version Start Date:	01-08-2018

Owning School/Faculty:	Electronics and Electrical Engineering
Teaching School/Faculty:	YPC International College (Kolej Antarabangsa YPC)

Team	Leader
Paul Otterson	Y

Academic Level:	FHEQ5	**Credit Value:**	12	**Total Delivered Hours:**	38
Total Learning Hours:	120	**Private Study:**	82		

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	24
Practical	6
Tutorial	6

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination: based on a case study; one compulsory Q, then choice of 2 from 3	50	2
Portfolio	AS2	Coursework: model and application	50	

Aims

To provide a basic foundation for the understanding of systems concepts, Systems Analysis and Requirements Analysis.

Learning Outcomes

After completing the module the student should be able to:

1.   Show comprehension of what constitutes a system and be familiar with terminology.
2.   Appreciate the elements required to analyze and model a system.
3.   Perform a rudimentary analysis of a problem and produce a model of that system.
4.   apply object oriented approach to analysis in UML
5.   critically appraise database design and user interfaces

Learning Outcomes of Assessments

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

EXAM   1   2   4   5

model and application   3   5

Outline Syllabus

Introduction to and recognition of various types of everyday systems.
Relevance, abstraction and boundaries.
Need for models (complexity, decision making, planning and understanding).
Use of appropriate models (physical, mathematical, computerized, representational).
Limitations and complications of modeling.
Introduction to systems analysis and systems dynamics.
Case study problem for 'hard systems approach'.
Introduction to UML and case study problem for analysis.

Learning Activities

Lectures, tutorials and computing practical.

Notes

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