

Liverpool John Moores University

Title: INFORMATION SYSTEMS ANALYSIS AND DESIGN
Status: Definitive
Code: **5024DACOMP** (125368)
Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics
Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
Mark Taylor	Y

Academic Level: FHEQ5 **Credit Value:** 20 **Total Delivered Hours:** 55

Total Learning Hours: 200 **Private Study:** 145

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Tutorial	33

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	System Analysis and Design	100	

Aims

To provide an understanding of the underlying principles of systems analysis and design.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply the underlying principles of systems analysis and design.
- 2 Apply different systems analysis and design methodologies.
- 3 Differentiate between the logical and physical design process.
- 4 Apply the concepts of object orientation within software systems analysis and design.

Learning Outcomes of Assessments

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

System Analysis and Design	1	2	3	4
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Outline Syllabus

Process overview: Traditional and contemporary systems development lifecycles and management including waterfall, prototyping and agile approaches such as DSDM and XP.

Pre-analysis phase: Investigation, information gathering, feasibility studies.

Analysis phase: Requirements capture, prototyping, analysis and specification (structured techniques such as DFDs, ERM; object-oriented techniques such as UML, use cases, activity diagrams and class diagrams).

Object-oriented analysis and design; Logical design; Physical design;

Architectural design (component diagrams, deployment diagrams); Usability issues: HCI and prototyping.

Post implementation phases: System testing, installation, training and maintenance

Learning Activities

Formal theory will be introduced via lectures and practical knowledge will be acquired via tutorials and coursework.

This module will have online practical.

Notes

This module explores the theories and practical application of systems analysis and design techniques with particular emphasis on object-oriented analysis and design and its role in software development.