

Liverpool John Moores University

Title: BUSINESS SYSTEMS: ANALYSIS & EVOLUTION
Status: Definitive
Code: **6045COMP** (117457)
Version Start Date: 01-08-2018
Owning School/Faculty: Computer Science
Teaching School/Faculty: Computer Science

Team	Leader
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Academic Level: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 74
Total Learning Hours: 240 **Private Study:** 166

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Tutorial	48

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	A report detailing a cybernetic analysis of a student selected system.	50	
Exam	AS2	Examination.	50	2

Aims

To integrate and extend previous learning and experience in systems investigation and development.

To develop competence in the investigation and design of complex or large-scale business and IT systems.

Develop a broad repertoire of investigation techniques.

To appreciate the effects of on-going evolution on business processes and their supporting software systems.

Learning Outcomes

After completing the module the student should be able to:

- 1 Apply a wide range of methodologies and specialist techniques to practical systems problems.
- 2 Critically evaluate the appropriateness of alternative methodologies and techniques according to the situation.
- 3 Appraise and apply modern business management analysis and design techniques.

Learning Outcomes of Assessments

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

Cybernetic analysis	1	
Examination	2	3

Outline Syllabus

Development and fundamentals of General Systems Theory
Systems Dynamics
Managerial Cybernetics and the Viable System Model
Hard Systems Thinking
Checkland's Soft Systems Thinking and Soft Systems Methodology
Total Quality Management vs Business Process Re-engineering
Business Process Management
Software Systems Maintenance & Evolution
Autonomic Software Systems

Learning Activities

Formal lectures introduce key concepts, while tutorial sessions provide the opportunity to explore and assimilate those concepts.

Course Material	Book
Author	Beer, S.
Publishing Year	1995
Title	Diagnosing the System for Organisations
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	0-471-95136-6

Course Material	Book
Author	Hoverstadt, P.
Publishing Year	2008
Title	The Fractal Organization
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	978-0-470-06056-8

Course Material	Book
Author	Checkland, P.B.
Publishing Year	1999
Title	Systems Thinking, Systems Practice
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	0-471-98606-2

Course Material	Book
Author	Checkland, P. and Poulter, J.
Publishing Year	2006
Title	Learning for Action
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	978-0-470-02554-3

Course Material	Book
Author	Hammer, M. and Champy, J.
Publishing Year	2001
Title	Reengineering the Corporation
Subtitle	
Edition	
Publisher	HarperBusiness
ISBN	978-0-060-55953-3

Course Material	Book
Author	Jeston, J. and Nelis, J.
Publishing Year	2006
Title	Business Process Management
Subtitle	
Edition	
Publisher	Elsevier
ISBN	978-0-75-068656-3

Notes

This module seeks to provide students with a toolkit of practical systems analysis and design techniques and approaches that can be selectively drawn upon depending on circumstances. The presentation of these various methods is couched in philosophical approaches that underpin the approach. This allows students not only to use such techniques but also to understand why the technique is appropriate in a given situation.