

Liverpool John Moores University

Title: BUSINESS SYSTEMS: SYNTHESIS & ANALYSIS
Status: Definitive
Code: **6007COMP** (102891)
Version Start Date: 01-08-2011

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

Team	Leader
Andrew Laws	Y

Academic Level: FHEQ6
Credit Value: 24.00
Total Delivered Hours: 74.00
Total Learning Hours: 240
Private Study: 166

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	36.000
Tutorial	36.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report	50.0	
Exam	AS2	Examination	50.0	2.00

Aims

- 1. The integration and extension of previous learning and experience in systems investigation and development.*
- 2. Competence in the investigation and design of complex or large-scale business and information systems.*
- 3. A wide repertoire of investigation techniques.*
- 4. A development of the theories underlying systems analysis and design issues.*

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 individual methodologies.
- 3 Evaluate the appropriateness of alternative methodologies and techniques according to the situation

Learning Outcomes of Assessments

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

Report	1	2	
Exam	1	2	3

Outline Syllabus

Development and fundamentals of General Systems Theory
Functionalist Systems Approaches

e.g.

Organizations as Systems

Barnard's System's Thinking

Contingency Theory

Socio-technical Systems Theory

-ETHICS Methodology

Hard Systems Thinking

Operational Research

Systems Analysis

Systems Engineering

-SSAD Methodology

Systems Dynamics

Systems Dynamics Models

Systems Dynamics Methodology

Cybernetics & Organizational Cybernetics

Living Systems Theory

Interpretive Systems Approaches

e.g.

Churchman's Social System Design

Ackoff's Social System's Sciences

Checkland's Soft Systems Thinking

Soft Systems Philosophy & Theory
Soft Systems Methodology
Wilson's SSM & IS Development
Multiview Methodology

Senges Soft Systems Thinking

Soft Operational Research, System Dynamics & Cybernetics

Learning Organizations

Emanicipatory Systems Approaches
e.g.

Critical Operational

Research/Management Science

Ulrich's Critical Systems Heuristics

PostModern Systems Approaches
e.g.

Postmodern Systems Methods

Taket & White's PANDA

Critical Systems Thinking

System of Systems Methodologies

Total Systems Intervention

Philosophy & Principles of Total Systems Intervention

Creativity

Choice

Implementation

NIMSAD Framework

Learning Activities

The module involves attendance at lectures and tutorials.

References

Course Material	Book
Author	Jackson, M.C.,

Publishing Year	2000
Title	Systems Approaches to Management
Subtitle	
Edition	
Publisher	Kluwer Academic/Plenum Publishers
ISBN	0-306-46500-0

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

Course Material	Book
Author	Yolles, M
Publishing Year	1999
Title	'Management Systems: a viable systems approach.'
Subtitle	
Edition	
Publisher	Financial Times- Prentice Hall
ISBN	0-273-62018-5

Course Material	Book
Author	Espejo, R.
Publishing Year	1996
Title	'Organizational transformation and learning: A cybernetic approach to management.'
Subtitle	
Edition	
Publisher	John Wiley & son
ISBN	0-471-96182-5.

Course Material	Book
Author	Flood, R.L., Jackson, M.C.,
Publishing Year	1991
Title	Creative Problem Solving – Total Systems Intervention
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	0471930520.

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	Wilson, B.
Publishing Year	1990
Title	Systems Concepts: Methodologies and Applications
Subtitle	
Edition	2ND
Publisher	John Wiley & Sons
ISBN	0-471-92716-3.

Course Material	Book
Author	Checkland P.B, Poulter, J.
Publishing Year	2006
Title	Learning for Action
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	0470025549

Course Material	Book
Author	Stacey, R.D.
Publishing Year	2002
Title	Strategic Management & Organisational Dynamics
Subtitle	
Edition	4th Edition
Publisher	2nd Pitman
ISBN	0273658980

Notes

The module provides a topical and practical study of advanced systems investigation, design and development methodologies and techniques. It develops a range of specialist techniques and explores their theoretical underpinnings.