

## Liverpool John Moores University

Title: SOFT SYSTEMS MODELLING  
Status: Definitive  
Code: **6010COMP** (102980)  
Version Start Date: 01-08-2011

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

Team	Leader
Hulya Francis	Y

**Academic Level:** FHEQ6  
**Credit Value:** 12.00  
**Total Delivered Hours:** 36.00  
**Total Learning Hours:** 120  
**Private Study:** 84

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Workshop	36.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Portfolio to be completed in weekly workshops throughout the module.	100.0	

### Aims

*To develop and apply knowledge and abilities in systems thinking.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Develop concepts associated with Systems theory and systems thinking.
- 2 Apply soft systems modelling techniques to human activity systems.

- 3 Demonstrate a critical understanding of the philosophical issues associated with soft systems modelling in comparison to hard systems modelling.
- 4 Appraise the contentions associated with methodological application per se and the resulting ramifications for the practice of systems analysis and design.

**Learning Outcomes of Assessments**

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

Portfolio                                    1    2    3    4

**Outline Syllabus**

*Review concepts associated with Systems Theory. Outline the structure of Checkland's Soft Systems Methodology. Trace the impact of SSM within the discipline of Information Systems and the practice of Systems Analysis and Design. Apply SSM to the modelling of Human Activity Systems. Investigate the implications of using soft modelling techniques. Discover the ramifications for the discipline of contentions associated with methodological applications (the soft versus hard; or the soft embedded with hard dilemma). Develop expertise in applying methodology to a complete problem scenario.*

**Learning Activities**

There are no formal lectures for this module. Each session will operate on a workshop type basis and students will be expected to participate in class discussions.

**References**

<b>Course Material</b>	Book
<b>Author</b>	Checkland P.B., Holwell S.
<b>Publishing Year</b>	2002
<b>Title</b>	Information Systems and Information Systems
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Wiley
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Checkland, P.B.
<b>Publishing Year</b>	1981
<b>Title</b>	Systems Thinking, Systems Practice
<b>Subtitle</b>	

<b>Edition</b>	
<b>Publisher</b>	Wiley
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Checkland,P.B. Scholes, J.
<b>Publishing Year</b>	1990
<b>Title</b>	Soft Systems Methodology in Action
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Wiley
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Stoweel,F.A.(ed)
<b>Publishing Year</b>	1995
<b>Title</b>	Information Systems Provision: The Contribution of Soft Systems Methodology
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Mc Graw Hill
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Jayoratna, N.
<b>Publishing Year</b>	1994
<b>Title</b>	Understanding and Evaluating Methodologies
<b>Subtitle</b>	NIMSAD, A Systematic Framework
<b>Edition</b>	
<b>Publisher</b>	Mc Graw Hill
<b>ISBN</b>	

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## Notes

This module provides an in depth theoretical and practical study of soft systems modelling techniques. The focus is primarily on effective problem definition and the satisfactory elucidation of system requirements. The implications of methodological applications and of the analyst's actions are made explicit. The module seeks to encourage students to 'look beyond' traditional modelling techniques.