

Liverpool John Moores University

Title: BUSINESS SYSTEMS: ANALYSIS & EVOLUTION
Status: Definitive
Code: **6015KCOM** (118261)
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences
Teaching School/Faculty: Kaplan Financial Singapore

| Team | Leader |
|-------------|--------|
| Andrew Laws | Y |

Academic Level: FHEQ6
Credit Value: 24.00
Total Delivered Hours: 72.00
Total Learning Hours: 240
Private Study: 168

Delivery Options

Course typically offered: Standard Year Long

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 24.000 |
| Tutorial | 48.000 |

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. | 50.0 | |
| Essay | AS2 | A 3000 word academic paper exploring a student selected topic from a list of module specific areas. | 50.0 | |

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 Derive appropriate strategies to address legacy system syndrome development in business systems and software.

Learning Outcomes of Assessments

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

| | | |
|---------------------|---|---|
| Cybernetic analysis | 1 | 2 |
| Academic paper | 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 Development Methodologies
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.

References

| | |
|------------------------|----------|
| Course Material | Book |
| Author | Beer, S. |

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|------------------------|---|
| Publishing Year | 1995 |
| Title | Diagnosing the System for Organisations |
| Subtitle | |
| Edition | |
| Publisher | John Wiley & Sons |
| ISBN | 0-471-95136-6 |

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|------------------------|--------------------------|
| 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 |

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|------------------------|------------------------------------|
| 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 |

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|------------------------|-------------------------------|
| 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 |

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|------------------------|-------------------------------|
| 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 |

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|------------------------|-----------------------------|
| Course Material | Book |
| Author | Jeston, J. and Nelis, J. |
| Publishing Year | 2006 |
| Title | Business Process Management |

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|------------------|-------------------|
| 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.