F29SS Sociotechnical and Soft Systems

COURSE DETAILS
Course Code: F29SS
Full Course Title: Sociotechnical and Soft Systems
SCQF Level: 9
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes  Postgraduate Taught: Yes  Postgraduate Research: No

Additional Information:

COURSE AIMS
• The module aims to give students the opportunity to develop an understanding and an ability to apply Checkland and Wilson's Soft Systems Methodology (SSM)
• They will be introduced to systems thinking as a means of analysing the whole context of an information system
• The use of techniques such as rich pictures and other diagrammatical notations will be used to allow analysis to incorporate all stakeholders
• Students will learn to adopt a critical approach of evaluating socio-technical systems based on an understanding of their role as a reflective practitioner
• To examine the underlying frameworks
• To understand the issues that arise when characterising problems
• Practical use of these skills will be developed through exercises based on case studies.

LEARNING OUTCOMES – SUBJECT MASTERY

Students will develop skills in the following areas:

• Critically analyse system problems from a holistic perspective. Understand and evaluate the theory behind systems thinking and Checkland's theories
• Analysing problems using systems thinking
• Critically evaluate socio-technical systems methodologies
• Compare and contrast the frameworks and methods used within the field
• Propose and reflect on solutions to problems.
• Determine the effectiveness of conceptual models in capturing reality
• Examine the rise of people centred solutions in the modern organisation

LEARNING OUTCOMES – PERSONAL ABILITIES

Students will develop skills in the following areas:

• Identify stakeholders and their interests in solving a problem and evaluating methods and frameworks for solving problems
• Employ a range of modelling techniques to capture and communicate key aspects of a system
• Inform and guide the solution of problems within and improvements to systems
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- Understanding the people / cultural aspects of the Information Systems field
- Ability to use directed reading, and critically evaluate articles and develop learning through case studies
- Report writing and demonstrating argument development
- Use of VLE as a means of learning, contributing and discussing

SYLLABUS

- The problem situation unstructured
- The problem situation expressed
- Root definitions of relevant systems
- Making and testing conceptual models
- Comparing conceptual models with reality
- Identify feasible and desirable changes
- Action to improve the problem situation Systems thinking
- Socio-technical systems methods
- Modelling frameworks and issues
- People centred solutions
- Checkland's theories and thinking

LOCATION AND ASSESSMENT METHODS

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