Linnæus University

Course syllabus

Faculty of Technology
Department of Informatics

5IK501 IS/IT för organisering, kommunikation och koordinering II, 15 högskolepoäng
IS/IT for Organizing, Communicating, and Coordinating II, 15 credits

Main field of study
Informatics

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
Second Level

Progression
A1F

Date of Ratification
Approved by Faculty of Technology 2016-04-25
The course syllabus is valid from autumn semester 2016

Prerequisites
30 credits of completed courses in Informatics at advanced level or equivalent.

Objectives

Knowledge and understanding after completing the course students should be able to:

- Describe information technology's strategic importance for different types of organisations and how this development has evolved over time.
- Describe and explain the concepts, models and methods that can be used to identify and describe strategic significance of information technology for any given organization
- Describe and account for basic theories and models for the planning and management of organizational IS / IT resources.

Skills and abilities after completing the course students should be able to:

- Analyse information technology's strategic importance for different types of organisations.
- Analyse and identify challenges and opportunities in connection with the formulation of organizational IS / IT strategies.
- Design models for planning, managing and leading organizations' IS / IT resources.

Evaluation ability and attitude after completing the course students should be able to:

able to:

- From a holistic perspective, critically analyse and reflect on different traditions of strategic thinking
- Reflect on ethical issues in relation to management and governance of organizational IS / IT resources and relate to impacts on different involved stakeholder groups
- Identify and value the core content of the literature used in the course

Content

The course focuses on the interplay between use of IS / IT resources and organizations business and activities, including vision and mission.

The course includes the following elements:

- theories and approaches for planning and managing organizational IS / IT resources from a strategic perspective
- the concepts IT capability /digital capability
- applying IT capability in organizational contexts
- systems Thinking models and methods
- applying organizational model with a focus on functions and information flows, Viable System Model
- applying holistic and process-driven business modeling, Soft Systems Methodology

Type of Instruction

Teaching consists of lectures, tutorials, supervised group work and seminars.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.
The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Assessment of student performance is made through:

1)written and oral review of historical development of the information technology's strategic importance for different types of organizations; and

2)written presentation of the basic theories and models for planning and managing organizational IS/IT resources;

3)written presentation that includes the application of key concepts and models for the analysis of information technology strategic importance for today's organizations;

4)written and oral presentation of a case (group assignment) with the focus of designing an integrated strategy for the business and IS/IT resources.

The different examination items are weighted as follows:
1.10 % (written and oral presentation)?
2.20 % (written presentation)?
3.40 % (written presentation)
4.30 % (caseassignment, written and oral presentation)

To obtain the minimum E grade, at least E on all examination items are required.

The student will be informed of the examination at the beginning of the course on how the examination items are weighted and how the final grade for the course is calculated.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Beer, S. (1984). The Viable System Model: Its Provenance, Development, Methodology and Pathology, The Journal of the Operational Research Society, 35 (1): 7- 25.
See also recordings at www.youtube and other Internet sources.

Checkland, P. (2011). Autobiographical Retrospectives: Learning your way to 'action to improve' – the development of soft systems thinking and soft thinking methodology. International Journal of General Systems, vol. 40 (5), pp. 487-512.
http://dx.doi.org/10.1080/03081079.2011.571437
See also: https://www.youtube.com/watch?v=XA2i1n-o9L0

Checkland, P. and Poulter, J. (2010). Soft Systems Methodology. In Reynolds, M. and Holwell, S. (eds). Systems Approaches to Managing Change: A Practical Guide. London: Springer, pp. 191–241.
https://devpolicy.crawford.anu.edu.au/public_policy_community/content/doc/2010_Checkland_Sof

Mirijamdotter, A. and Somerville, M.M. (2009). Collaborative Design: An SSM-Enabled Organizational Learning Approach. International Journal of Information Technologies and the Systems Approach, vol 2 (1), pp. 48-69.

Peppard, J. and Ward, J. (2016). The Strategic Management of Information Systems. Building A Digital Strategy (Fourth Edition). Chichester: Wiley.

Reynolds, Martin and Holwell, Sue (2010). Introducing Systems Approaches. In Reynolds, M. and Holwell, S. (eds). Systems Approaches to Managing Change: A Practical Guide. London: Springer, pp. 1–23.
http://oro.open.ac.uk/21298/1/systems-approaches_ch1.pdf
See also, on the difference between hard and soft systems thinking:
https://www.youtube.com/watch?v=TWctDGpefOM

Somerville, M.M. (2015) Informed Systems. Organizational Design for Learning in Action. Elsevier. (available as an e-book at the LNU-Library)

Stephens, J. and Haslett, T. (2011). A Set of Conventions, a Model: An Application of Stafford Beer's Viable Systems Model to the Strategic Planning Process, Systemic Practice and Action Research, 24 (5): 429-452. Walker, J. (1998). The Viable Systems Model a guide for co-operatives and federations,
http://www.esrad.org.uk/resources/vsmg_3/pdf/vsmg_2_2.pdf accessed 20160725]

Additional papers related to the lectures will be added.