

Syllabus

for course at advanced level

Systems Theory, Organizations and IT
Systemteori, organisationer och IT

7.5 Higher Education
Credits
7.5 ECTS credits

Course code:	IB471N
Valid from:	Spring 2020
Date of approval:	2016-11-07
Changed:	2019-11-21
Department	Department of Computer and Systems Sciences
Main field:	Computer and Systems Sciences
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus was approved by the Head of the Department 2016-11-07.
This syllabus was updated 2017-11-12.

Prerequisites and special admittance requirements

90 ECTS in Computer and Systems Sciences

Course structure

Examination code	Name	Higher Education Credits
71NH	Systems Theory, Organizations and IT, take home exam	4
71NI	Systems Theory, Organizations and IT, assignments	3.5
71NT	Systems Theory, Organizations and IT, written exam	4

Course content

The overall goal of the course is to provide the student with fundamental knowledge in systems theory as well as systems theory tools / models to be able to study, diagnose and change organizations by using IT. Systems behave and appear in different ways - and to be able to study, understand and design them, we need working concepts. Holism, subsystems, processes, relations and environment are examples of concepts covered. Furthermore, we will relate to organisations as systems and discuss their efficiency and effectiveness, information management and control. Systems theory is applied in business and social contexts, and we use systems theory models and methods to discuss and diagnose organisations and processes. How systems theory can be used to study IT systems and IT management is also covered in the course. The basic idea is to provide students with an academic framework that will help them develop an organisational and systems science perspective on their technical knowledge.

Learning outcomes

Upon successful completion of the course, the student should be able to:

- define and exemplify basic concepts of systems theory
- describe and explain systems by using systems theory
- apply systems theory concepts and reasoning to deal with complex problems
- describe and diagnose organisational systems by using a systemic model
- assess effectiveness of IT systems from a systems theory perspective
- exemplify how to use systems theory to manage learning in organisations

Education

The teaching activities consist of lectures, practical exercises / lessons and a final seminar.

Forms of examination

- a. The course is examined through a written examination and assignments.
- b. The final grading of the course is based on the following grading scale related to the learning outcomes of the course: A = Excellent, B = Very Good, C = Good, D = Satisfactory, E = Sufficient, Fx = Fail, F = Fail.
- c. The grading criteria are communicated to the students at the start of the course.
- d. In order to complete the whole course segment the student must obtain at least grade E (or P with Pass/Fail grades) in all course components/examinations.
- e. In addition the following regulations also apply:
 - Students who obtain grade Fx in a written examination task are allowed to complete a supplementary assignment in order to elevate the grade to E.The examiner informs the concerned students when the results of the written examination are published. The supplementary assignment has to be submitted within a given deadline and can only be utilized to elevate the grade of the actual examination task.
 - Students who obtained grade E in an examination task are not allowed to re-write the examination or resubmit the assignment in order to obtain a higher grade.
 - Students who have failed the same examination task twice are allowed to have another examiner appointed, unless there are special reasons to the contrary.

Interim

When a course is discontinued, or its contents are substantially altered, the following applies:

- Failed examination tasks are replaced with other similar examination tasks according to a specific plan.
- If no similar examination tasks can be provided, at least three examination opportunities per examination task should be offered during a period of at least three terms from the date of the decision. After this period, no examinations should be carried out on the course.

Limitations

This course may not be included in a degree together with a course, taken in Sweden or elsewhere, of identical or partially similar content.

Required reading

Information about course literature is available on the department's website - www.dsv.su.se - at least two months before the start of the course.