



System Development Philosophies Systemutvecklingsfilosofier

7.5 credits

7.5 högskolepoäng

Ladok Code: 22SU1D

Version: 7.0

Established by: Committee for Education in Librarianship, Information, and IT 2019-03-12

Valid from: Spring 2020

Education Cycle: Second cycle

Main Field of Study (Progressive Specialisation): Informatics (A1N)

Disciplinary Domain: Natural sciences

Prerequisites: Bachelor Degree in Informatics or equivalent

Subject Area: Informatics/Computer and Systems Sciences

Grading Scale: ECTS-credits

Content

The course shall acquaint students with topics that are relevant in system development. The course starts with different philosophical perspectives such as reductionism, constructivism and inductivism and how they lead to different paradigms such as the construction, people and organization paradigms. We then look at how this in turn leads to concrete system development methods and accompanying techniques and tools. The main question is how to select a method that fits a particular development project and how this method can be adapted to the specific project.

Learning Outcomes

After successful completion of the course student shall, with respect to,

Knowledge and understanding

- 1.1 Explain system development paradigms,
- 1.2 Explain system development methods,
- 1.3 Explain system development techniques and related tools,

Competence and skills

- 2.1 Compare system development paradigms and select a suitable one,
- 2.2 Compare system development methods, select a suitable one and adapt it,
- 2.3 Compare system development techniques and related tools and select suitable ones,

Judgement and approach

- 3.1 Discuss the perspectives lying behind the approaches,
- 3.2 Discuss the relationships between paradigms, methods, techniques and tools,
- 3.3 Discuss current research related to system development.

Forms of Teaching

Teaching is in the form of lectures, tutoring and a seminar.

The language of instruction is English.

Forms of Examination

The course is examined as follows:

- A scientific seminar paper: written assignment

Learning outcomes: 1.1-1.3, 2.1-2.3, 3.1-3.3

Credits: 6,0
Grading scale: AF

- Seminar: oral presentation and opposition
Learning outcomes: 3.1-3.3
Credits: 1,5
Grading scale: AF

A passed grade for the course requires at least a grade E for the seminar paper and the seminar. The grade for the course is thereafter determined by the grade for the seminar paper.

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

The course literature is in English.

Avison, David; Fitzgerald, Guy (2006): Information Systems Development – Methodologies, Techniques and Tools, McGraw-Hill, ISBN 978-0077114176, 670 pages

Student Influence and Evaluation

The course is evaluated in accordance with the school's guidelines, in which students' views will be obtained. The results of the evaluation will be published and fed back to participating and prospective students in accordance with the school's guidelines, and will provide the basis for future course and program development.

Miscellaneous

The course is offered within the Master (one-year) programme in Informatics.

This syllabus is a translation from the Swedish original.