Information Systems Methodology, 5 points

Suitable for:
PhD-students in informatics, software engineering or a similar field.

Prerequisites:
Undergraduate course in information systems development and/or software processes.

Teachers:
Prof. Göran Goldkuhl, PhD (examiner)
Dr. Pär J. Ågerfalk, PhD
Dr. Mikael Lind, PhD
Dr. Ulf Seigerroth, PhD
Mr. Fredrik Karlsson, PhLic

Aim:
To give students an up-to-date overview of the nature and role of methods and processes in information systems and software development.

Contents:
Historical development of ISD methods and methodology.
Contemporary understandings of the concept of method in ISD.
Principles of Method construction/Method engineering.
Capability maturity and process improvement.
Method rationale, rationality and methods in practice.
Flexibility, agility and method configuration.

Examination:
Active participation in seminars and a term paper at the end of the course.

Language:
The course will be given in English unless all participants are fluent in Swedish.

Literature (tentative and incomplete):
Goldkuhl (1991), Stöd och struktur i systemutvecklingsprocessen.
Karlsson, Wistrand (2003), Method Components… IRIS 26

Seminar 1: Historical development of ISD methods and methodology. (Pär)

Seminar 2: Contemporary understandings of the concept of method in ISD. (Mikael/Fredrik)
Commercial examples: RUP and XP
The “VITS” concept of method
Method fragments
Method components
Method chunks

Seminar 3: Principles of Method construction/Method engineering. (Ulf/Göran/Mikael)
Meta-modelling
Meta-development
Well-grounded method development

Seminar 4: Capability maturity and process improvement. (Ulf)
CMM (http://www.sei.cmu.edu/cmm/cmm.html)
SPICE (http://www.sqi.gu.edu.au/spice/)

Seminar 5: Method rationale, rationality and methods in practice. (Pär)

Seminar 6: Flexibility, agility and method configuration. (Fredrik)
Rigor vs. flexibility (tex RUP vs. XP)
Method integration
Method configuration