COURSE SYLLABUS

Product Development in Cross-discipline Teams - 1, 6 credits

Produktutveckling i interdisciplinära team - Del 1, 6 högskolepoäng

Course Code:	TP1S26	**Education Cycle:**	Second-cycle level
Confirmed by:	Dean Mar 1, 2016	**Disciplinary domain:**	Technology (95%) and social sciences (5%)
Valid From:	Aug 1, 2016	**Subject group:**	DT1
Version:	1	**Specialised in:**	A1F
Reg number:	JTH 2016/1169-313		

Intended Learning Outcomes (ILO)

On completion of this course, the student should:

Knowledge and understanding
- show familiarity with development of products that may include software, electronic and mechanical components,
- demonstrate comprehension of practical aspects of Agile product development, including project planning and different activities,
- display knowledge of some existing tools for different activities of project work

Skills and abilities
- demonstrate the ability to work in cross-discipline teams during product development
- demonstrate an ability to deliver intermediate results in an iterative and incremental fashion

Judgement and approach
- demonstrate an understanding of different roles in cross-discipline teams during product development
- demonstrate the ability to select appropriate completion criteria for an evolving product

Contents

The course focuses on development of a product in a real-life-like scenario. A product may include software, electronic and mechanical components. The results may be delivered in different forms, including product specifications, digital and paper-based prototypes, (software) code, and other artefacts. The scenario for the product may originate from an external company or organisation, from a need internal to the University, or from an original idea from the students. The product will be developed through an Agile lifecycle, with clearly defined intermediate deliverable points.
The course includes the following topics:
- project work in teams consisting of different types of professionals,
- analysis of the business, user research, specification of requirements to a product,
- design of user experiences and interactions, design of software and IT architectures,

- development of product prototypes, testing and evaluation,
- communication with stakeholders, users, and management
- project planning, including releases.

Type of instruction

The course will consist primarily of practical work, supported by supervision meetings and review seminars. Students will work in teams.

The teaching is conducted in English.

Prerequisites

Passed courses at least 90 credits within the major subject in Computer Engineering, Electrical Engineering (with relevant courses in Computer Engineering), Informatics, Computer Science, Interaction Design (with relevant courses in web programming) or equivalent, and completed courses Software Engineering - A Product Perspective or User Experience Design. Proof of English proficiency is required (or the equivalent).

Examination and grades

The course is graded 5,4,3 or Fail.

This course will be run part-time over Semester 1 and 2. The code base developed during Part 1 will be extended and enhanced in Part 2.
The final grade will only be issued after satisfactory completion of all assesments.
The final grade for the course is based upon a balanced set of assesments.

Registration of examination:

Name of the Test	Value	Grading
Projekt work A	3 credits	5/4/3/U
Project work B	3 credits	5/4/3/U

Course literature

The literature list for the course will be provided one month before the course starts
Martin, R. C., The clean coder: A code of conduct for professional programmers, Prentice Hall (2011).
Martin, R. C., Clean code: A handbook of agile software craftsmanship, Pearson Education (2009).
Crispin, L., & Gregory, J., Agile testing: A practical guide for testers and agile teams, Pearson Education (2009).