Blekinge Institute of Technology
Department of Software Engineering

COURSE SYLLABUS

Agile och Lean utveckling av mjukvaruintensiva produkter

Agile and Lean Development of Software Intensive Products

7,5 ECTS credit points (7,5 högskolepoäng)

Course code: PA2563
Educational level: Second cycle
Course level: A1N
Field of education: Technology
Subject group: Computer Technology

Subject area: Software Engineering
Version: 3
Applies from: 2017-08-01
Approved: 2017-04-24
Disused:

1 Course title and credit points
The course is titled Agile and Lean Development of Software Intensive Products/Agile och Lean utveckling av mjukvaruintensiva produkter and awards 7,5 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

2 Decision and approval
This course is established by Dean 2017-02-02. The course syllabus was revised by Head of Department of Software Engineering and applies from 2017-08-01.
Reg.no: BTH-4.1.1-0754-2017
Replaces: PA2541

3 Objectives
The aim of the course is to provide students with thorough and substantial training in Agile and Lean software development in preparation for professional work to evaluate the potential of Agile and Lean, plan implementation of Agile and Lean and make practical use of Agile and Lean in their organisations.

4 Content
The course consist of four modules:
Goal definition, what the objectives of the course are and if any special area should be analysed
Analyse and reflect on the agile principles
Reflect and descibe the differences between various agile approches
Create a value stream mapping

5 Aims and learning outcomes
Knowledge and understanding
On completion of the course, the students shall be able to
• In general be able to describe basic concepts and goals, common practices and tools as agile enablers and constraints.
• Be able to thoroughly explain various agile frameworks, their differences, similarities, advantages and disadvantages.
• Be able to build a value stream mapping based on a chosen process within an operation.
Competence and skills
On completion of the course, the students shall be able to
• In detail be able to apply an agile framework with those definitions that are used within the agile context.
• Be able to plan and create a project using agile methods.
• Do a critically review on an agile project and explain the differences between various solutions.
• Be able to apply a value stream mapping on a process, taken from a selected activity.
Judgement and approach
On completion of the course, the students shall be able to
• Provide a general explanation that justify agile/lean development of a business.

6 Learning and teaching
The course consists of a number of intensive teaching blocks of two weeks each. The teaching within each block is organised around research articles, book chapters, recorded video lectures and one or more assignments. The assignments are designed to help students reflect on previous experiences, books and articles, and the relation between experiences and reading. Throughout the course, communication with teaching staff will take place through email, discussion forums and, at specified weekly sessions through an online forum.
English

7 Assessment and grading
Examination of the course

Code	Module	Credit	Grade

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1710 Written report [1]    1.5 ECTS    G-U
1720 Written report [2]    1.5 ECTS    G-U
1730 Written report [3]    4.5 ECTS    G-U
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The course will be graded G Pass, UX Fail, supplementation required, U Fail.Submission of reports and assignments will be managed with a month as interval, exact date will be announced at the start of the course.

8 Course evaluation
The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the results of these feed back into the development of the course.

9 Prerequisites
At least 120 credits in a technical subject and a minimum of 2 years professional experience in software development (shown by, for example, a work certificate from an employer).

10 Field of education and subject area
The course is part of the field of education and is included in the subject area Software Engineering.

11 Restrictions regarding degree
The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

12 Course literature and other teaching material
Course literature , Agile and Lean Development of Software Intensive Products - material from the department about 500 pages.
Reference literature:
1.M. Cohn "Succeeding with Agile", Addison Wesley, 2010, ISBN-10: 0-321-57936-4, ISBN-13 987-0-321-57936-
2. J. Rasmusson "The Agile Samurai", Pragmatic Bookshelf, 2010. ISBN-10: 1934356581 | ISBN-13: 978-1934356586.
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