

Agile Principles and Practices

Agila principer och praktiker

3.5 credits

3.5 högskolepoäng

Ladok Code: C2AP1C

Version: 1.0

Established by: Committee for Education in Librarianship, Information, and IT 2023-11-07

Valid from: Spring 2024

Education Cycle: Second cycle

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

Disciplinary Domain: Natural sciences

Prerequisites: 120 credits

Subject Area: Informatics/Computer and Systems Sciences

Grading Scale: Fail (U) or Pass (G)

Content

The course deals with agile principles and practices. The agile methodology contains guiding principles and values for software development and project management. Agile principles emphasise trust and responsibility in co-operation, flexibility and continuous learning, and iterative development.

The aim of the course is to introduce theories, current research and specific activities in agile practices, with a strong emphasis on the established frameworks Scrum, Kanban, and the integrated approach of Scrumban. During the course, students will have the opportunity to delve deeply into, practically apply, and develop critical perspectives on, agile practices and their activities, as well as on how these can be adapted to different organizational contexts. The course will give participants the opportunity to gain both the theoretical knowledge and practical skills necessary to successfully lead agile projects.

The course includes the following:

- Agile values and principles
- Terminology, definitions and theories related to agile practices
- Agile frameworks, with emphasis on Scrum, Kanban and Scrumban.
- Practical application of agile frameworks.

Learning Outcomes

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

Knowledge and understanding

- 1.1 Explain the underlying principles and values of agile frameworks.
- 1.2 Describe agile roles, practices, and artifacts with focus on the Scrum, Kanban and Scrumban frameworks.
- 1.3 Understand the key advantages, obstacles, and effective strategies for implementing agile methodologies.

Competence and skills

- 2.1 Apply appropriate agile framework, along with associated practices, artifacts, and tools in a case study or project.
- 2.2 Analyse the application of agile principles and their motivation within a particular context.

Judgment and approach

- 3.1. Reflect on the application of agile principles and the chosen framework, as well as the motivations within a particular context.

Forms of Teaching

The teaching consists of lectures, seminars and workshops.

The language of instruction is English.

Forms of Examination

The course will be examined through the following examination elements:

Assignment: Agile practices

Learning outcomes: 1.1-1.2, 2.1-2.2, 3.1

Credits: 3

Grading scale: Fail (U) or Pass (G)

Seminar: Presentation and discussion of assignment

Learning outcomes: 1.1-1.3, 3.1

Credits: 0.5

Grading scale: Fail (U) or Pass (G)

To receive a passing grade for the entire course, a passing grade is required for all examination components.

The examiner may decide to replace the seminar with another suitable form of examination if the student has failed or not participated in this component during the course.

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.

Leffingwell, D. (2010). Agile software requirements: lean requirements practices for teams, programs, and the enterprise. Addison-Wesley Professional

In addition to the text above, additional teacher-selected articles of a maximum of 150 pages can be provided during the course or sought out by the students themselves.

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

The course is given as a freestanding course.

This syllabus is a translation from the Swedish original.