JÖNKÖPING UNIVERSITY
School of Engineering

COURSE SYLLABUS

Software Engineering Project Methods, 7.5 credits

Mjukvaruprojektmetoder, 7.5 högskolepoäng

Course Code:	TMJN10	Education Cycle:	First-cycle level
Confirmed:	Jun 23, 2025	Disciplinary domain:	Technology
Valid From:	Sep 01, 2025	Subject group:	Computer Technology
		Specialised in:	G2F First cycle, has at least 60 credits in first-cycle course/s as entry requirements
		Main field of study:	Computer Engineering

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and understanding

- display knowledge of projects as a working method including leadership and cooperation
- display knowledge of Software Engineering history, terminology and methods
- display knowledge about some commonly used methods for software development, both non-agile and agile

Skills and abilities

- demonstrate the ability to apply a method and use various project tools within the area of project methodology
- demonstrate the ability to cope with changing requirements and conditions in a project
- demonstrate the ability to communicate engineering topics and issues successfully with internal (team members) and external stakeholders (customers)
- demonstrate the ability to choose suitable development tools and technical solutions in a software development project

Judgement and approach

- demonstrate an understanding of the significance of using different concepts and perspectives (gender, social sustainability, culture) in identifying and analysing problems within a software engineering project
- demonstrate the ability to perform retrospective analysis of software engineering projects, determining success and failure factors and the impact of methods followed

Content

The course conveys to students the type of knowledge in software engineering methods, project management, decision making, analysis, leadership, communication, etc. which is needed in order to work as a software engineer in software development projects in industry. The course also gives students the ability to apply the skills that they have gained from other courses in the program in order to develop a product or service.

The course includes the following elements:

- Evolution of Software Engineering: history, terminology and methods
- Software development methods: An overview
- Project methodology, project rolls and project models
- Project definition, including risk analysis, stakeholder-analysis and SWOT-analysis

- A minimalist approach to software documentation
- Software development models, e.g. SCRUM and V-Model
- Project retrospective

Type of instruction

Tuition will consist of lectures and project work.

Language of instruction is in English.

Entry requirements

General entry requirements and 60 credits in the programme including Group Dynamics 3 credits and Object-Oriented Software Design 6 credits (or the equivalent).

Examination and grades

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

The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Examination	3 credits	G/U
Project [1]	4.5 credits	5/4/3/U

[1]Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.

Title: The Elements of Scrum
Author: Sims, C. & Johnson, H. L.
Publisher: Dymaxicon
ISBN: 978-0-9828669-1-7

Title:Clean Code
Author: Martin, R. C.
Publisher: Prentice-Hall
ISBN: 978-0-13-235088-4