UNIVERSITY OF GOTHENBURG

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DIT094 Mini Project: Team Programming, 7.5 credits

Miniprojekt: Team-programmering, 7,5 högskolepoäng

First Cycle

Confirmation

This course syllabus was confirmed by Department of Computer Science and Engineering on 2020-10-29 to be valid from 2021-08-30, autumn semester of 2021.

Field of education: Science 100%
Department: Department of Computer Science and Engineering

Position in the educational system

The course is a compulsory course in the Software Engineering and Management Bachelor's Programme.

The course can be part of the following programme: 1) Software Engineering and Management Bachelor's Programme (N1SOF)

Main field of studies	*Specialization*
Software Engineering	G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Entry requirements

To be eligible for this course, students must have completed 7,5 hec in object oriented programming (for example DIT042 Object-Oriented Programming, 7.5 hec).

Applicants must prove knowledge of English: English 6/English B or the equivalent level of an internationally recognized test, for example TOEFL, IELTS.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- relate software development to project management activities such as project planning, cost estimation, and risk management,
- explain different methods and techniques within the project management area,
- describe concept and terminology within the project management area,
- explain the impact of human factors and team dynamics on project efficiency and success,
- analyze a programming problem, describe the problem and its design solution in an abstract way,

Competence and skills

- plan and execute a project using different techniques for time management, risk management, cost estimations, project budgeting as well as project monitoring,
- define criteria for project reviews,
- identify and manage the risks involved in a project,
- resolve conflicts and negotiate successfully with project members,
- design and implement an object oriented solution from a problem description,
- perform a stakeholder analysis for a project,

Judgement and approach

- work in a project team, divide a project in tasks and dividing tasks among team members,
- take individual responsibility within a project team,
- communicate and interact professionally within a project team, and
- communicate results of the project to interested parties in professional ways.

Course content

The course introduces the students the theories, concepts and practices of project management and software development projects. The course focuses on project management, the process of creating software, the skill of programming and working together as a team towards a common goal.

The purpose of this course is to give the students an introduction to the project management area and the tools and techniques used to manage software development projects. The course introduces the students to the human element and discusses people, personalities and dynamics and the way in which they have an impact on IT projects. Areas such as cost estimation, risk management, and project evaluation are also discussed.

Students work in a project to create a software prototype and relevant documentation from a conceptual idea and specification. The project enables the students to practice and develop their skills within project management and to collaborate, communicate

and take responsibility. The project requires the student to organize their work efficiently.

Sub-courses

1. **Project** *(Projekt),* 7.5 credits
   Grading scale: Pass with distinction (5), Pass with credit (4), Pass (3) and Fail (U)

Form of teaching

The teaching consists of lectures, workshops, and a project, as well as supervision in connection to the project.

Language of instruction: English

Assessment

The course is examined through a review of the artifacts the students produced for their projects, an oral presentation, a written group report, and individual contributions to the group work. The project is carried out in groups of students.

In case a student fully participated in the project work, but failed the project in a few elements, one individual re-examination is provided. In case the student did not contribute to the project work, or failed the re-examination, the student has to join a new project group.

If a student, who has failed the same examined element on two occasions, wishes to change examiner before the next examination session, such a request is to be submitted to the department in writing and granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, though at most two years after the course has ceased/been changed. The same applies to work experience and VFU, although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Pass with distinction (5), Pass with credit (4), Pass (3) and Fail (U).
The grading scale comprises Fail (U), 3, 4 or 5. To pass the course, all mandatory components must be passed. To earn a higher grade than Pass, a higher weighted average from the grades of the components is required.

Course evaluation

The course is evaluated through a meeting after the course between teachers and student representatives. Further, an anonymous questionnaire is used to ensure written information. The outcome of the evaluations serves to improve the course by indicating which parts could be added, improved, changed or removed.

Additional information

Course literature to be announced 8 weeks prior to the start of the course.