



GÖTEBORGS UNIVERSITET

The Board of the IT Faculty

DIT191, Agile development Processes, 7.5 higher education credits

Second Cycle/A1N

This syllabus in English is the binding document

1. Confirmation

The Board at the IT Faculty/the Dean established the course plan at 2006-11-17. It has been revised 2009-09-22 to be valid from spring semester 2010.

Field of education: Science

Main field: Computer Science

Department: Computer Science and Engineering

2. Position in the educational system

The course is a part of the Computer Science Master's programme and an elective course at the University of Gothenburg.

The level for the course in relation to degree requirements is Master's degree, code A1N. The course has course/courses at first cycle level as entry requirements.

3. General prerequisites

The requirement for the course is to have successfully completed a first year studies within the subject Computer Science or equivalent.

4. Course content

The course gives knowledge in program design using agile methods. It teaches project management and methods to develop program systems based on the principles:

- The customer is a part of the development team

- Incremental development
- The developer should not be hindered by the process
- Embrace changes
- Continues refactoring (restructuring) of the design

The course covers the eXtreme Programming process and its project management.

- Agile Project Management
- The Agile Manager Role
- Agile processes
- Organic Teams
- APM Principles and Practices
- eXtreme Programming
- Tools: Eclipse, JUnit, Ant, CVS

5. Learning outcomes

After completion of the course the student is expected to be able to:

- Lead an agile project
- Form an organic team
- Work without a detail schedule
- Be a part of a programming pair
- Understand consequences of collective ownership of the code
- Master a code centric CASE tool (like Eclipse)
- Use test driven development
- Refactor a program
- Conduct incremental planning using user stories
- Limit the assignments in order to have a sustainable pace
- Develop programs using small and frequent iterations
- Be a part of a XP team

6. Required reading

See separate literature list.

7. Assessment

The course is examined by project and written exam.

A student who has failed a test twice has the right to change examiner, unless weighty argument can be adduced. A written application should be sent to the Department.

8. Grading scale

The course is graded with the following marks: Fail (U), Pass (G) and Pass with Distinction (VG).

9. Course evaluation

The course is evaluated through meetings both during and after the course between teachers and student representatives. Further, an anonymous questionnaire can be 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

10. Additional information

The course is held in English