INFN01, Informatics: Research Methods, 7.5 credits

Informatik: Vetenskapliga undersökningsmetoder, 7.5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval
The syllabus was approved by The Board of the Department of Informatics on 2013-09-20 and was last revised on 2017-06-02. The revised syllabus applies from 2018-01-15, spring semester 2018.

General Information
The course is compulsory in the MSc Programme in Information Systems and can also be taken as a separate course.

Language of instruction: English

Main field of studies

Informatics

Informatics: A1F, Second cycle, has second-cycle course/s as entry requirements

Information Systems

Information Systems: A1F, Second cycle, has second-cycle course/s as entry requirements

Learning outcomes
After completing the course, the student should have gained in-depth knowledge of and skills in theories and methods for scientific research.

Knowledge and understanding
For a pass on the course, the student shall demonstrate knowledge of and understanding of

- qualitative, qualitative and design science studies/approaches,
- different research methods,
• interaction between different methods approaches in a research study,
• claims about quality of scientific research,
• ethical positions with regard to research studies.

Competence and skills
For a pass on the course, students shall demonstrate competence and skills individually or in groups to
• generate and argue for a researchable research question,
• design and argue for a research approach,
• use software for data analysis.

Judgement and approach
For a pass on the course, students shall demonstrate the ability to critically review and assess
• different scientific methods and approaches,
• ethical aspects in research.

Course content
The following topics will be covered:
• qualitative methods and approaches,
• quantitative methods and approaches,
• design science approaches and methods,
• design, analysis, interpretation and reporting of scientific studies designing and implementation of design science studies,
• quality aspects and criteria in scientific studies ethical principles, dilemmas and positions.

Course design
The teaching consists of lectures, seminars and supervision.
The course includes compulsory components, which are stated in the schedule.

Assessment
The assessment is based on assignments and a research plan.
Re-examinations are offered in close conjunction with the first examination.

Academic misconduct such as cheating, plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 10 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or suspension for a limited period of time from the university (and all the faculties of the university).

Subcourses that are part of this course can be found in an appendix at the end of this document.
Grades

Marking scale: Fail, E, D, C, B, A.

**Grade** (Definition) Points or percentage out of maximum points. Characteristic.

**A** (Excellent) 85-100. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**B** (Very good) 75-84. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**C** (Good) 65-74. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

**D** (Satisfactory) 55-64. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**E** (Sufficient) 50-54. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

**F** (Fail) 0-49. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

**Grading rules and definitions**

Grades are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum passing grade.

When the exam/assignment is not graded, the grades G (Pass) or F (Fail) will be applied.

**Course grades**

When calculating course grades, the graded components will be weighted according to the following formula:

The number of credits for the exam is multiplied with the exam score. The total value is then divided by the total number of credits for the exams/assignments included. The resulting average is then rounded off to the nearest whole number. The number indicates the relevant course grade in accordance with the grading definitions above.

For exams/assignments which are graded and scored, the grades A to F will be used in accordance with the grading definitions above. The exam score will be used directly in the calculation.

For exams/assignments which are graded but not scored, the grades A to F will be used and converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams/assignments which are not graded but awarded with G (Pass) or F (Fail) will not be included in the calculation of the course grade.

**Entry requirements**

To be admitted to the course, students must have passed the general requirements and: a bachelor’s degree in informatics/information systems and further 30 credits informatics/information systems at advanced level or the equivalent. English 6/English Course B.

This is a translation of the course syllabus approved in Swedish.
An exception for the general entry requirement in Swedish will be granted when the course is given in English.

**Further information**

INFN01 may not be included in a degree together with INFM03 or the equivalent.

It is compulsory to attend the introduction meeting, where a roll call will be taken. Absence without notification means that the admitted student will lose his/her seat on the course.

For transitional provisions with regard to previous courses, please contact the study advisor for an individual assessment.

If the course is discontinued, there may be limited opportunities for re-examination. Please contact the study advisor for information.

**Amendments**

2015-12-04: Added that the course includes compulsory components and that attendance on the introduction meeting is compulsory.
Subcourses in INFN01, Informatics: Research Methods

Applies from V18

1701  Assignments, 2,5 hp
       Grading scale: Fail, Pass
       The assignments are done individually or in groups.
1702  Research Plan, 5,0 hp
       Grading scale: Fail, E, D, C, B, A
       The research plan is done individually or in groups.

Applies from V14

1301  Assignments, 2,5 hp
       Grading scale: Fail, Pass
1302  Research Plan, 5,0 hp
       Grading scale: Fail, E, D, C, B, A

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