



DEPARTMENT OF APPLIED INFORMATION TECHNOLOGY

TIA132 Digital tools for communication and learning, 15 credits

Digitala redskap för kommunikation och lärande, 15 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Applied Information Technology on 2015-03-16 and was last revised on 2018-01-30 to be valid from 2018-01-30, spring semester of 2018.

Field of education: Science 100%

Department: Department of Applied Information Technology

Other participating department

Department of Education, Communication and Learning

Position in the educational system

The course can be given as a freestanding course.

The course can be part of the following programme: 1) International Master's Programme in Information Technology and Learning (S2ITL)

Main field of studies

Applied Information Technology with
Specialization in Learning and
Communication

Specialization

A1N, Second cycle, has only first-cycle
course/s as entry requirements

Entry requirements

To be eligible for the course the student must possess a Bachelor's degree with a minimum of 180 higher education credits. Furthermore, the student must demonstrate proficiency in English equivalent to English B/English 6 (Swedish upper secondary level) or equivalent.

Learning outcomes

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

Knowledge and understanding

1. describe a design-oriented approach to develop and evaluate IT-support,
2. describe common methods to develop IT-support for learning,
3. describe how technology can be understood as part of social practices,
4. show an understanding of how different theories to analyze learning are integrated with technology.

Competence and skills

5. analyze IT-support for learning and describe consequences of choice of technique and implementation in specific contexts,
6. evaluate and choose relevant methods for the development of IT-supported learning activities,
7. apply common design methods to develop IT-support for learning,
8. apply common design methods to evaluate IT-support for learning.

Judgement and approach

9. evaluate IT-support in relation to a practices specific goals for learning and education.

Course content

The course provides knowledge and skills to design and develop IT-support and IT-supported learning activities through a user-centered approach. The student learns to apply and understand design as a method for development work. The course aims for the students to learn through both content and form. An important part is to practically work with analysis and design. In that way the students can learn from examples, reflections and elaboration of their own experiences as well as sharing of experiences and theoretical analysis, both over time and in conjunction with ongoing design considerations.

The students perform evaluations of different contemporary and relevant tools used for learning and education. The students also perform a design project where they will develop a requirements specification and work iteratively with design and evaluation to develop and refine a design proposal.

Sub-courses

- 1. Develop a conceptual foundation for (user-centered) design as approach and method** (*Utveckla en begreppsapparat för (användar-centrerad) design som angreppssätt och metod*), 5 higher education credits
 Grading scale: Pass (G) and Fail (U)
 In the sub-course the students develop knowledge of foundational concepts in (user-centered) design, such as approaches and methods, and discuss these concepts in a literature seminar. The understanding of the concepts will be assessed through a written exam. Sub-course 1 focuses on goals 1 to 3.
- 2. Methods for (user-centered) design of IT-support for learning** (*Metoder för (användar-centrerad) design av IT-stöd för lärande*), 10 higher education credits
 Grading scale: Pass with Distinction (VG), Pass (G) and Fail (U)
 In the sub-course the students work in groups to design an IT-supported learning activity or tool, present the results of the design process, including an evaluation of the learning activity or tool, and write an individual analysis of the process. Sub-course 2 focuses on goals 4 to 9.

Form of teaching

The course is composed of class lectures, seminar, individual and group assignments. In the course students will work practically with analysis and design.

Language of instruction: English

Assessment

The assessment is based on:

Sub-course 1

- A written exam testing the student's understanding of the relevant concepts.

Sub-course 2

- Presentation and documentation of the design work in the group.
- Individual analysis of the design process.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

For the grade Pass, the two sub-courses must be graded at least Pass.

For the grade Pass with Distinction, the grade Pass with Distinction is demanded on the individual analysis in the second sub-course, as well as a Pass grade on the first sub-course and the documentation and presentation of the design work in the second sub-course.

Course evaluation

An evaluation will be conducted after completion of the course. Students will give the evaluation anonymously. The results from the course evaluation will be compiled and made available to the students. If changes are implied by the evaluation, these should be presented. Compilation of the course evaluation is to be available for students attending the next time the course is offered.