# DH1622 Human-Computer Interaction, Introductory Course 7.5 credits

Människa-datorinteraktion, inledande kurs

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for DH1622 valid from Autumn 2019

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

First cycle

## Main field of study

Computer Science and Engineering

## Specific prerequisites

Completed courses DD1318 Programming and Scientific Computing and DH1609 Communication and information or the equivalent.

## Language of instruction

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The language of instruction is specified in the course offering information in the course catalogue.

# Intended learning outcomes

After completing the course with a passing grade the student should be able to:
• explain basic concepts in the field of HCI
• summarise the contents of research papers in the area
• explain and present design properties of interactive artifacts for different stakeholders
• carry out a smaller design project in a group (including simple project management)
• carry out an inspection method, e g Heuristic Evaluation, of existing interactive computer systems
• carry out formative usability tests of own prototypes
• be able to apply a creativity technique, e.g Brainstorming or similar
• create paper prototypes and digital interactive prototypes
• apply general theoretical concepts on concrete interfaces
• based on a given design task discover and identify what characterises the intended target group and situation of usage
• identify and formulate usability requirements after completed field studies
• identify advantages and disadvantages of a specific interactive computer system based on the perspectives and needs of different user groups
• argue for and against different solutions of a usability problem
• reflect on the strengths and weaknesses of their own design based on literature and own evaluations

in order to
• get basic knowledge of fundamental concepts in the area of human computer interaction
• get tools to identify factors that influence the communication between human and computer positively and negatively
• meet design methods that support the development of useful systems.

# Course contents

Theoretical and practical overview of human preconditions and consequences of usage of interactive computer systems, as well as how usability design and user experience design can support the users in performing their tasks smoothly. The course will give an overview of behavioural science methods and theories as well as how they relate to use and design of interactive computer systems. Focus will, however, be on different forms of established practice in human computer interaction.

# Course literature

The course literature list is announced on the course page.

# Examination

• TEN1 - Written exam, 1.5 credits, grading scale: A, B, C, D, E, FX, F

- INL1 - Homework, 6.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

In agreement with KTH's coordinator for disabilities, it is the examiner who decides to adapt an examination for students in possession of a valid medical certificate.. The examiner may permit other examination formats at the re-examination of individual students.

# Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.