



# IC2009 Principles of Visualization 7.5 credits

Visualiseringsprinciper

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

## Establishment

Course syllabus for IC2009 valid from Autumn 2007

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

Courses in Human-computer-interaction and Interaction design.

## Language of instruction

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

# Intended learning outcomes

For successful completion of this course students should be able to

- define and discuss human basics for Information Visualization
- define and describe the various theoretical perspectives on Information Visualization
- define criterias for good visualization within different areas and reason about there usefulness
- list several techniques for Information Visualization and describe there purpose and applications
- apply theories in Information Visualization in design of data visualization
- apply theories in Information Visualization in design of computer systems, especially graphical user interfaces
- apply theories in Information Visualization for designing interactive information retrieval and manipulation of data in computer systems.

# Course contents

This course discuss

:: several perspectives on principles of Visualization and its use in the various areas especially for creation of better graphical user interfaces and data simulations.

:: Information Visualisation and its usefullness in design of interactive systems and application of interactivity.

:: criterias for good visualization within different areas

:: how to use visualizations within different areas.

:: how to evaluate visualizations within different areas.

# Course literature

Collection of articles

# Examination

- INL1 - Assignment, 4.5 credits, grading scale: P, F
- INL2 - Assignment, 3.0 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.

## Other requirements for final grade

Two project assignments, done in groups of 3 - 4 students, regarding design and implementation of Information Visualization applications, 4,5hp

Grades for this is: pass/fail

One written exam, 3.0hp

Probably done as an individual assignment

Grading:

A/B/C/D/E/F/Fx

To pass the whole course students must pass all assignments and the written exam.

The total of all grades sets the grading for the whole course.

## 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.