



# IV2011 Current Problems in Information Systems 7.5 credits

Aktuella problem i informationssystem

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

## Establishment

Course syllabus for IV2011 valid from Spring 2009

## Grading scale

P, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

At least 60 credits within computer and systems sciences, and at least one of the following courses: IV2008 (2I1242) Models and Languages for Object and Web Databases, IV2009 (2I1404) Model-driven Development of Components, IV2003 (2I1071) Relational Database Design.

### **För fristående studerande gäller följande behörighetskrav:**

- Grundläggande högskolebehörighet, dvs avslutad gymnasieutbildning inkl svenska och engelska el motsv och
- Kandidatexamen/180 hp (120 gamla poäng) i informationsteknik, informationssystem, datateknik eller data- och systemvetenskap.

## Language of instruction

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

## Intended learning outcomes

The goal is to let the students expand their knowledge of a specific and current subject within the area of information systems. The students shall investigate both the theoretical and the practical/technical aspects of the selected field. The focus of this course is on the technical aspects.

After completing the course, the students shall have acquired knowledge on the selected technology/platform/software.

## Course contents

The contents of the course is decided by the students and the teacher together. Each project is adapted for each student group.

Example areas:

XML databases

Applications of the Semantic Web

Multimedia databases

.NET

Web Services

MDA

BPEL

## Disposition

A project is carried out in groups of 2 or 3 students. The group can get the necessary environment for the project. This can include software and special hardware.

It is good if the students have their own ideas about potential projects, but it is also possible to contact one of the teachers in order to discuss possible ideas that the teacher may have.

Students can also discuss their own ideas with the teacher in order to define a project in more detail. Both students and teachers can publish and discuss project ideas in the FC conferences "ISPROB Project Ideas" and "ISPROB Open Forum". This conference may also be used to find other students with similar interests in order to build a group. If you have a project idea that relates directly to the contents of a previous course, you could also use that course's conference to find others to build a group.

It is up to the students to decide when they want to start with their project and whether they want to work 5 weeks full time or at a slower speed (not less than 50% though)

The students start by building a group. After that they come up with a project idea. A short description of the project idea is written (approx. 1 A4 page) and sent to the teacher. The teacher may approve the project idea or may suggest changes (perhaps at a meeting with the group). The students work with their project and compose their report. The report is sent to the teacher who may approve it and schedule a seminar or require that the report is modified

in some way. At the final seminar the students present and discuss their work.

The report should include the following:

- # An introduction to the project
- # An introduction to the relevant/used technologies
- # An introduction to the case used in this project
- # A tutorial-like section explaining how the technologies have been used in the specified case (or parts of the case)
- # A discussion/summary with the groups' experiences about the technologies used and possible problems/limitations with them.

At the final seminar the students should present their work in a similar structure as the report. A demonstration of a prototype built during the project may also be included.

## Course literature

Adapted specifically for each group.

## Examination

- PRO1 - Project, 7.5 credits, grading scale: P, 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.

The project has to be presented at a short seminar. The students present their work and discuss the technologies they have used. Other students and teachers may participate in this seminar.

A complete and detailed documentation of the project is also required. The documentation must include a step-by-step description of the implementation of the project. The documentation can be seen as a tutorial for other people that would want to learn what the students of this group have learned.

The project must be carried out in a group of 2 or 3 students.

The grade P is awarded when the course goal has been achieved and this is reflected in the final report and presentation.

## 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.

