



# ID1354 Internet Applications

## 7.5 credits

Applikationer för internet, grundkurs

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

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

### Establishment

Course syllabus for ID1354 valid from Spring 2013

### Grading scale

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

### Education cycle

First cycle

### Main field of study

Information Technology, Technology

### Specific prerequisites

ID1302 or ID1018

### Language of instruction

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

# Intended learning outcomes

## Students should be able to:

- Explain and perform basic web site design using HTML, XHTML, CSS
- Explain and apply client-server architecture for web application development using AJAX, JSON
- Explain and perform basic client side programming using, DHTML, XML, CSS, JavaScript, SQL and DOM
- Explain and perform basic server side programming using PHP, XML, SQL
- Gaining the ability to learn internet technologies and components on their own
- Apply basic GUI design principles and secure communication using HTTPS

## Course contents

- Usage of software tools, languages and techniques for internet application development
- Software design, interface design, and code development for the client-side and server-side web applications
- Introduction to HTML/XHTML
- Cascading Style Sheets
- The Basics of JavaScript
- JavaScript and HTML Documents
- Dynamic Documents with JavaScript
- Introduction to XML
- Introduction to Flash
- Introduction to PHP
- Introduction to Ajax
- Java Web Software
- Introduction to ASP.NET (C#)
- Database Access through the Web

(Introduction to Ruby)

(Introduction to Rails)

## Disposition

Lectures, labs, final project and written exam.

## Course literature

**Textbook for the course:**

Programming the World Wide Web, 7/E

Robert W. Sebesta, University of Colorado, Colorado Springs

ISBN-10: 0132665816 ISBN-13: 9780132665810

©2013 Addison-Wesley Paper, 768 pp, Published 03/14/2012

**Optional reading (not in curriculum):**

The following sources are useful to obtain a deeper understanding of the subject.

Robert Eckstein, Stephen Spainhour, Webmaster in a nutshell, 3rd Edition ,Oreilly Media

comment: a very good desktop quick reference for some titles taught in the course but unfortunately does not cover all topics.

Lecture notes will be posted to the course homepage.

Additional material (concepts, examples, source code) in the curriculum may be added during the course.

## Equipment

LapTop

## Examination

- LAB1 - Assignment, 5.0 credits, grading scale: P, F
- TEN1 - Written Examination, 2.5 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.

Examination is based on lab assignments (LAB1 , P/F)

and a written exam (TEN1, A-F)

**Grading:**

LAB1,5 hp, homeworks/project (Pass/Fail)+ TEN1, 2.5 hp (written exam) (A-F)

**Bonus system:**

In time delivery and presentation of project and homeworks will give you 1 bonus point that will be added to your written exam grade.

**Written Exam:**

There will be a written exam that will test your theoretical as well as analytical knowledge of the course.

**Labs:**

There will be a set of homeworks and a final project which constitute the practical part of the course.

## Other requirements for final grade

LAB1 and TEN1 must be passed.

## 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.