COURSE SYLLABUS
# Client-side Programming, 15 credits

*Klientprogrammering, 15 högskolepoäng*

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| **Course Code:** | TKPK18 | **Education Cycle:** | First-cycle level |
| **Confirmed by:** | Dean Feb 1, 2017 | **Disciplinary domain:** | Technology (95%) and social sciences (5%) |
| **Valid From:** | Jan 1, 2018 | **Subject group:** | DT1 |
| **Version:** | 1 | **Specialised in:** | G1F |
| **Reg number:** | JTH 2017/428-313 | **Main field of study:** | Informatics |

## Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding
- display knowledge and understanding of basic concepts of programming like variables, data types, iterations, conditional statements and functions
- display knowledge of core concepts of object-orientation
- show familiarity with the possibilities, limitations and current uses of JavaScript
- demonstrate comprehension of different design principles in the development of JavaScript applications
- demonstrate comprehension of the relationship between JavaScript, HTML and CSS

Skills and abilities
- demonstrate the ability to troubleshoot and identify basic programming errors
- demonstrate the ability to apply web services and third-party data
- demonstrate the ability to apply existing JavaScript libraries
- demonstrate the ability to apply JavaScript to improve usability and compability
- demonstrate skills in applying modern JavaScript APIs, for example geolocation and localStorage, to improve the user experience
- demonstrate the ability to autonomously solve a given problem and choose a suitable method

## Contents

The course comprises modules giving theoretical as well as practical skills for developing modern web applications and services.
The course includes the following parts:
- JavaScript, object-oriented client-side programming
- Reusable JavaScript-libraries
- Ajax and JSON
- Manipulated HTML and Document Object Model
- Design principles and concepts including Event-driven programming, module handling and closures

- New concepts, functions and possibilities in ES6

## Type of instruction

Lectures, assignments and project work.

The teaching is conducted in English.

## Prerequisites

General entry requirements and completion of the courses Web and User Interface Design, 7,5 credits and Graphic Design and Visual Communication, 15 credits (or the equivalent).

## Examination and grades

The course is graded 5,4,3 or Fail.

Final grading of the course is made by averaging the various test.
The final grade will only be issued after satisfactory completion of all assessments,

Registration of examination:

| Name of the Test | Value | Grading |
|---|---|---|
| Written and oral presentation of project work | 6 credits | 5/4/3/U |
| Assignments | 6 credits | 5/4/3/U |
| Written examination | 3 credits | 5/4/3/U |

## Course literature

Literature determines one month before the course starts.