



COURSE SYLLABUS

Client-side Programming, 15 credits

Klientprogrammering, 15 högskolepoäng

Course Code: TKPK17	Education Cycle: First-cycle level
Confirmed by: Dean Mar 1, 2016	Disciplinary domain: Technology (95%) and social sciences (5%)
Valid From: Jan 1, 2017	Subject group: DT1
Version: 1	Specialised in: GIF
Reg number: JTH 2016/1422-313	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 for the programme and a passing grade in the courses Web and User Interface Design, 9 credits and Graphic Design and Visual Communication I, 15 credits (or the equivalent).

Examination and grades

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

The final grade for the course is based upon a balanced set of assessments.

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

The literature list for the course will be provided one month before the course starts.