



COURSE SYLLABUS

Web and User Interface Design, 15 credits

Webb- och gränssnittsdesign, 15 högskolepoäng

Course Code: TWTG10	Education Cycle: First-cycle level
Confirmed by: Dean Mar 1, 2021	Disciplinary domain: Technology
Revised by: Director of Education Aug 9, 2023	Subject group: IF1
Valid From: Oct 23, 2023	Specialised in: G1F
Version: 3	Main field of study: Informatics

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- show familiarity with the communication between web clients and web servers
- display knowledge of the specific conditions regarding visual design for digital interactive media
- demonstrate comprehension of how traditional design principles can be used within the context of digital interactive media
- demonstrate comprehension of the relationship between JavaScript, HTML and CSS

Skills and abilities

- demonstrate the ability to apply HTML standards in the construction of web pages
- demonstrate the ability to apply CSS in the design of web pages
- demonstrate the ability to apply precompiled CSS (SASS/LESS)
- demonstrate the ability to develop a web site according to principles and best practise of responsive web design
- demonstrate the ability to develop a finished web solution with the aid of CSS and HTML following a given specification
- demonstrate the ability to create graphics and visual elements for web design and user interfaces
- demonstrate the ability to plan, create and present wireframes, prototypes and sketches for web design and user interfaces
- demonstrate the ability to design a GUI with regard taken to accepted conventions of modern interface design
- demonstrate the ability to apply JavaScript to a web page to make it interactive

Judgement and approach

- demonstrate the ability to suggest a user interface that is accessible and useable, and to motivate why.

Contents

The course comprises contemporary and basic techniques to create modern web applications for desktop as well as mobile devices.

The course includes the following parts:

- HTML
- CSS (Cascading Style Sheets) including animation and transitions
- Precompiled CSS (SASS/LESS)
- Accessibility guidelines
- Responsive design theory and implementation methods
- Standards and templates for construction of forms and input
- Design of interactive graphical elements
- Responsive graphics and vector graphics in code
- High fidelity wireframes, storyboards, mockups and prototypes
- Typography for screens
- Manipulating HTML with help of JavaScript through the DOM (Document Object Model)

Type of instruction

Lectures, assignments and project work.

The teaching is conducted in English.

Prerequisites

General entry requirements and completed course Introduction to Human-Computer Interaction (or the equivalent).

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Examination ¹	5 credits	5/4/3/U
Assignments	10 credits	U/G

¹ Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

Literature

Literature determines 8 weeks before the course starts.

Title: HTML and CSS: Visual QuickStart Guide

Author: Casabona, J.

Publisher: Peachpit Press

ISBN: 9780136702566