

# **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

Valid From: Aug 1, 2020

Version: 1

Subject group: IF1

Specialised in: G1F

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
- demonstrate comprehension of how web pages can be optimized for search engine indexing
- 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 about typography for screens and its relation to traditional typographic theories and best practises.

## 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 adapt and develop visual identities for dynamic content.

### 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
- Visual identities and styles guides for dynamic content

## 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 <sup>I</sup>	5 credits	5/4/3/U
Assignments	10 credits	U/G

<sup>&</sup>lt;sup>I</sup> 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: Designing Interfaces

Author: Tidwell J, Brewer C and Valencia A

Publisher: O'Reilly

ISBN: 9781492051961

+ Additional handouts and references