

## Semester Description

1<sup>st</sup> semester focuses on the construction of websites. You will be introduced to the technologies HTML and CSS.

The semester holds 11 lectures based on instruction and training through exercises, tasks, and assignments. To achieve a satisfactory outcome, you must expect 4 hours of homework corresponding to each lecture.

Across the semester, there will be an introduction to and work with concepts like Responsive Web Design (RWD), Mobile First and Separate URLs, all representing attempts to adapt "construction of websites" to handle different devices such as laptops, tablets and smartphones.

Almost every lecture includes an exercise, a mandatory assignment. See below.

The students will also have the opportunity to practice and challenge their skills in connection with the four interdisciplinary projects, of which the latter is the test exam on 1<sup>st</sup> semester.

At the end of the semester you will be able to construct a website that supports "best practice", which means that the site is optimized for different devices, that the site is coded in HTML5 using semantic elements, that the code is valid, and that the site is SEO-optimized and optimized in terms of performance (page loading speed).

### What is mandatory?

#### **It is mandatory to attend class:**

You are expected to attend class well prepared. See the lecture plan below including literature.

#### **It is mandatory to meet deadline regarding all compulsory assignments:**

Deadline is often right before the start of the subsequent lecture

Hand-in of assignments takes place on Canvas. You are *not* expected at all times to have solved all parts of the assignments.

There are nine compulsory assignments regarding this subject on 1<sup>st</sup> Semester.

### Expectations

What are my expectations?

- You are ambitious: Attending well prepared, 4 hours of class = min. 4 hours of homework
- You attend class on time, meet deadlines
- You fulfil mandatory assignments (see Lecture Plan below)
- Dialog is welcome

What are your expectations?

**Lecture Plan**29.08-  
22.09

[Project 1.1: Aarhus, European Capital of Culture 2017]

30.08 6 lessons  
8:30HTML and CSS: Introduction  
HTML and CSS: Chapter 1, Web Page Building Blocks  
HTML and CSS: Chapter 2, Working with Web Page FilesAssignment "Remember my Name" and assignment "Publishing Website"  
(Compulsory hand-in)05.09 6 lessons  
8:30HTML and CSS: Chapter 3, Basic HTML Structure  
HTML and CSS: Chapter 4, Text  
HTML and CSS: Chapter 5, Images ( + picture element:  
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/picture> )  
HTML and CSS: Chapter 6, Links  
Google's SEO Guide:  
<https://static.googleusercontent.com/media/www.google.com/en//webmasters/docs/search-engine-optimization-starter-guide.pdf>

Assignment 1 (Compulsory hand-in)

08.09 4 lessons  
8:30HTML and CSS: Chapter 7, CSS Building Blocks  
HTML and CSS: Chapter 8, Working with Style Sheets  
HTML and CSS: Chapter 9, Defining Selectors  
Brackets: Lisa Catalano: Quick Coding with Brackets Tutorials: <http://css-snippets.com/brackets-course/>

Assignment 2 (Compulsory hand-in)

12.09 6 lessons  
8:30HTML and CSS: Chapter 10, Formatting Text with Styles  
HTML and CSS: Chapter 11, Layout with Styles  
HTML and CSS: Chapter 15, Lists  
CSS Flexbox: <https://css-tricks.com/snippets/css/a-guide-to-flexbox/>  
Performance 1: <https://www.youtube.com/watch?v=tN9-abn5tRI> (video 2:36)25.09-  
13.10

[Project 1.2: Content]

26.09 6 lessons  
8:30HTML and CSS: Chapter 17, Video, Audio and Other Multimedia  
HTML and CSS: Chapter 13, Working with Web Fonts  
HTML and CSS: Chapter 14, Enhancements and Effects with CSS  
Chrome DevTools: <https://developers.google.com/web/tools/chrome-devtools/>

Assignment 3 (Compulsory hand-in)

03.10 6 lessons  
8:30HTML and CSS: Chapter 12, Building Responsive Webpages  
The 2014 Guide to Responsive Web Design:  
<http://blog.teamtreehouse.com/modern-field-guide-responsive-web-design>  
GitHub: James Williamson: Github for Web Designers:  
<https://www.lynda.com/GitHub-tutorials/GitHub-Web-Designers/162276-2.htm>

Assignment 4 (Compulsory hand-in)

27.10-  
15.11

[Project 1.3: Mobile First]

31.10  
8:30 6 lessons

Mobile First (Luke Wroblewski: <http://vimeo.com/38187066> (video 1:02:31)  
 Mobile First, Content First: [http://www.youtube.com/watch?v=OHUa2\\_JXH9Y](http://www.youtube.com/watch?v=OHUa2_JXH9Y)  
 (video 12:21)  
 Responsive Navigation: <http://responsivenavigation.net/>  
 Assignment 5 (Compulsory hand-in)

07.11  
8:30 6 lessons

Performance 2: <https://developer.yahoo.com/performance/rules.html>  
 CSS Frameworks: Bootstrap, Skeleton, HTML5 Boilerplate etc.:  
<http://bestreviews2017.com/best-css-framework-2017/>  
 HTML5 Boilerplate: <https://html5boilerplate.com/>  
 Assignment 6 (Compulsory hand-in)

14.11  
8:30 6 lessons

Mobile Sites: Implementation Strategies:  
<https://www.design19.org/blog/responsive-design-separate-website-dynamic-serving/>  
 Dynamic Serving (PHP): <http://www.vervesearch.com/blog/the-ultimate-guide-to-developing-mobile-websites/>  
 RESS: Responsive + Server Side Components:  
<http://www.lukew.com/ff/entry.asp?1392>  
 User Agent Detection: <http://mobiledetect.net/>

24.11-  
19.12

[Project 1.4: Exam Project – Portfolio]

30.11  
8:30 6 lessons

Working with Github and Portfolio  
 GitHub: James Williamson: Github for Web Designers:  
<https://www.lynda.com/GitHub-tutorials/GitHub-Web-Designers/162276-2.htm>  
 Advanced CSS, CSS Pre-processors, CSS Grid  
 Learn SASS in 15 Minutes: <https://tutorialzine.com/2016/01/learn-sass-in-15-minutes>  
 A Complete Guide to Grid: <https://css-tricks.com/snippets/css/complete-guide-grid/>  
 Assignment 7 (Compulsory hand-in)

05.12  
8:30 6 lessons

Working with Portfolio (Recap: Best Practice, Validation, Performance)  
 Interaction in relation to Exam, Report writing: Reportwriting-Interaction.pdf.  
 Semester Evaluation

[Exam]



## Literature 1<sup>st</sup> Semester

### Primary

HTML + CSS: E. Castro & B. Hyslop: HTML and CSS, 8th Ed., Peachpit Press

Picture element: <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/picture>

CSS Flexbox: <https://css-tricks.com/snippets/css/a-guide-to-flexbox/>

Chrome DevTools: <https://developers.google.com/web/tools/chrome-devtools/>

Mobile First (Luke Wroblewski: <http://vimeo.com/38187066> (video 1:02:31)

The 2014 Guide to Responsive Web Design: <http://blog.teamtreehouse.com/modern-field-guide-responsive-web-design>

Google's SEO Guide:

<http://static.googleusercontent.com/media/www.google.com/en//webmasters/docs/search-engine-optimization-starter-guide.pdf>

Performance: <https://developer.yahoo.com/performance/rules.html>

Brackets: Lisa Catalano: Quick Coding with Brackets Tutorials: <http://css-snippets.com/brackets-course/>

GitHub: James Williamson: Github for Web Designers: <https://www.lynda.com/GitHub-tutorials/GitHub-Web-Designers/162276-2.htm>

### Secondary

HTML Tutorial: [http://www.w3schools.com/html/html5\\_intro.asp](http://www.w3schools.com/html/html5_intro.asp)

CSS Tutorial: <http://www.w3schools.com/css/default.asp>

Learn SASS in 15 Minutes: <https://tutorialzine.com/2016/01/learn-sass-in-15-minutes>

A Complete Guide to Grid: <https://css-tricks.com/snippets/css/complete-guide-grid/>

### Alternative literature

Lynda.com:

HTML Essential Training with James Williamson, Chapter 0 - 7

CSS Fundamentals, with James Williamson

Making Sense of the CSS Box Model with Morten Rand-Hendriksen

Responsive Web Design in the Browser with Morten Rand-Hendriksen

Developing for Performance: HTTP/2 with Morten Rand-Hendriksen

CSS: Flexbox First Look with James Williamson

Codecademy.com:

HTML and CSS: <https://www.codecademy.com/learn/web>