# Semester Description

1st semester focuses on the construction of websites. You will be introduced to the technologies HTML, CSS and PHP.
The semester holds 9 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 Dynamic Serving, 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 two interdisciplinary projects, of which the latter is the test exam on 1st 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 assignments**
Deadline is often right before the start of the subsequent lecture
Hand-in of assignments takes place on Fronter. You are *not* expected at all times to have solved all parts of the assignments.
**Compulsory individual assignment in HTML and CSS (A Personal Portrait)**
The assignment must be handed in on time in Fronter and approved by the teacher

There are 7 mandatory assignments in all.

## 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 fulfill mandatory assignments (see Semester Description on Fronter)
• Dialog is welcome
What are your expectations?

## Lecture Plan

| | | |
|---|---|---|
| 01.02<br>8:30 | 6 lessons | HTML and CSS: Introduction<br>HTML and CSS: Chapter 1, Web Page Building Blocks<br>HTML and CSS: Chapter 2, Working with Web Page Files |
| 17.02<br>8:30 | 6 lessons | HTML and CSS: Chapter 3,  Basic HTML Structure<br>HTML and CSS: Chapter 4,  Text<br>HTML and CSS: Chapter 5,  Images ( + picture element:<br>https://developer.mozilla.org/en-US/docs/Web/HTML/Element/picture )<br>HTML and CSS: Chapter 6,  Links<br>Google´s SEO Guide:<br>https://static.googleusercontent.com/media/www.google.com/en//webmasters/<br>docs/search-engine-optimization-starter-guide.pdf<br><br>Mandatory assignments: Exercise 1 |
| 24.02<br>8:30 | 6 lessons | HTML and CSS: Chapter 7,  CSS Building Blocks<br>HTML and CSS: Chapter 8,  Working with Style Sheets<br>HTML and CSS: Chapter 9,  Defining Selectors<br><br>Mandatory assignments: Exercise 2 |
| 03.03<br>8:30 | 4 lessons | HTML and CSS: Chapter 10,  Formatting Text with Styles<br>HTML and CSS: Chapter 11,  Layout with Styles<br>Performance 1: https://www.youtube.com/watch?v=tN9-abn5tRI (video 2:36)<br><br>Mandatory assignments: Exercise 3<br><br>[Projekt 1.1] |
| 28.03<br>8:30 | 6 lessons | Beginning PHP: Chapter 1, 2, 3 (intro til PHP)<br>PHP include() + require(): http://www.w3schools.com/php/php_includes.asp<br>Evaluation: "A Digital Portrait"<br><br>Mandatory assignments: Exercise 4 (A Digital Portrait) |
| 07.04<br>8:30 | 6 lessons | HTML and CSS: Chapter 12, Building Responsive Webpages<br>The 2014 Guide to Responsive Web Design:<br>http://blog.teamtreehouse.com/modern-field-guide-responsive-web-design<br><br>Mandatory assignments: Exercise 5 |
| 21.04<br>8:30 | 6 lessons | Mobile First (Luke Wroblewski: http://vimeo.com/38187066 (video 1:02:31)<br>Mobile First, Content First: http://www.youtube.com/watch?v=OHUa2_JXH9Y<br>(video 12:21)<br>HTML and CSS, Chapter 13: Working with Web Fonts<br>Responsive Navigation: http://responsivenavigation.net/<br><br>Mandatory assignments: Exercise 6 |

| 25.04 | 6 lessons | Mobile Sites: Implementation Strategies: |
| 8:30 | | 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/ |
| | | Mandatory assignments: Exercise 7 – only the wireframe |

| 04.05 | 6 lessons | Performance 2: https://developer.yahoo.com/performance/rules.html |
| 8:30 | | CSS Frameworks: Bootstrap, Skeleton, HTML5 Boilerplate etc.: |
| | | http://bestreviews2017.com/best-css-framework-2017/ |
| | | HTML5 Boilerplate: https://html5boilerplate.com/ |
| | | Report writing: Reportwriting-Interaction.pdf. |
| | | Mandatory assignments: Exercise 7 |

[Projekt 1.2 + Exam]

## Literature 1st Semester

**Primary**
HTML + CSS:
E. Castro & B. Hyslop: HTML and CSS, 8th Ed., Peachpit Press
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
Mobile Sites: Implementation Strategies: https://www.design19.org/blog/responsive-design-separate-website-dynamic-serving/

PHP:
Doyle M (2009): Beginning PHP 5.3. 1st ed. Wrox
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

SEO:
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

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**Secondary**
HTML Tutorial: http://www.w3schools.com/html/html5_intro.asp
CSS Tutorial: http://www.w3schools.com/css/default.asp

PHP tutorial (w3schools): http://w3schools.com/php/default.asp
PHP tutorial (php.net): http://www.php.net/manual/en/index.php

**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

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