COURSE SYLLABUS
Web Development Fundamentals, 7.5 credits

Grundläggande webbutveckling, 7,5 högskolepoäng

Course Code:	TGWK12	**Education Cycle:**	First-cycle level
Confirmed by:	Dean Mar 1, 2022	**Disciplinary domain:**	Technology
Valid From:	Aug 1, 2022	**Subject group:**	DT1
Version:	1	**Specialised in:**	G1F
		Main field of study:	Computer Engineering, Informatics

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding
- display knowledge of the fundamental building blocks of the web (HTTP and HTML)
- demonstrate comprehension of common security concerns in web applications

Skills and abilities
- demonstrate the ability to construct web pages using HTML5, CSS, and CSS frameworks
- demonstrate skills of programming in JavaScript
- demonstrate skills of creating web pages using Node.js
- demonstrate skills of constructing database-backed web applications

Contents

The course aims to convey the fundamentals of web programming. The course begins with an introduction to web architecture, and continues to cover static web pages in HTML and CSS. It then covers JavaScript and Node.js, teaching the students to implement dynamic web pages that generate different HTML for different clients, and on which the user can input information via forms and send data back to the server. Emphasis is placed on cookies, sessions, database use, and security.

The course includes the following topics:
- Client-server communication and HTTP
- HTML
- CSS and CSS frameworks
- JavaScript
- Node.js and Node Package Manager
- Frameworks and related techniques
- Forms, cookies, and sessions
- Security

Type of instruction

Tuition will consist of lectures, lab work, and project work.

The teaching is conducted in English.

Prerequisites

General entry requirements and completion of the courses Object Oriented Programming, 7,5 credits and Databases, 6 credits or Web and User Interface Design, 15 credits and Foundations of Programming, 7,5 credits (or the equivalent).

Examination and grades

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

The final grade for the course is based on 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
Project Work	5.5 credits	5/4/3/U
Written examination	2 credits	5/4/3/U

Course literature

Literature
The litterature list for the course will be provided 8 weeks before the course starts.

Introduction to HTTP by Launch School
https:*launchschool.com/books/http*

HTML & CSS
*https:*marksheet.io/

Eloquent JavaScript 3rd edition by Marijn Haverbeke
http://eloquentjavascript.net/