



Course syllabus

Faculty of Technology

Department of Computer Science and Media Technology

1ME323 Webbteknik 3, 7,5 högskolepoäng

Web Technology 3, 7.5 credits

Main field of study

Media Technology

Subject Group

Media Production

Level of classification

First Level

Progression

G1F

Date of Ratification

Approved 2015-08-18

Revised 2020-11-18 by Faculty of Technology. Literature list is revised.

The course syllabus is valid from spring semester 2021

Prerequisites

1ME322 Web Technology 2, 7.5 credits or equivalent.

Objectives

Upon completion of the course the student should:

- show knowledge in different ways to publish webpages
- know how to install a local web server
- show knowledge about principles for optimization of a website and how to measure websites usage
- be able to create a webpage that is dynamically updated with external information
- be able to structure information that is to be read and handled with a script language

Content

The course consists of the following parts:

-Web hosting

- Basics of a web server and other interacting systems
- Publication and registration of a domain
- Installation of a local web server
- Overview of content management systems, CMS

-Optimization of webpages on the client side

- Search Engine Optimization, SEO
- WebsitePerformance Optimization, WPO
- Optimization to the users

-Dynamic update of web pages

- Asynchronous communication with JavaScript and AJAX
- Information structuring with XML and JSON

Type of Instruction

The teaching consists of lectures, laborations and seminars.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

The examination consists of submission on mandatory hand in assignments. Publication of produced materials and both written report and oral presentation occurs.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Required Reading and Additional Study Material

Required reading

Rognerud, Jon. (latest edition) *Ultimate Guide to Optimizing Your Website*. Entrepreneur Press, Publisher, appr. 320 pages. (Third edition from 2014 or later)

Pollock, J. (latest edition) *JavaScript A Beginner's Guide*. McGraw-HillEducation, 542 pages.

Web-based material, Linnaeus University, et al., corresponding to appr. 400 pages.