Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

1ME101 Webbdesign, 15 högskolepoäng
Web Design, 15 credits

Main field of study
Media Technology

Subject Group
Media Production

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved by the Board of the School of Computer Science, Physics and Mathematics 2009-09-08

The course syllabus is valid from autumn semester 2012

Prerequisites
General entry requirements and Mathematics B, Physics A or Mathematics 2a / 2b / 2c, Physics 1b1 / 1a.

Objectives
Upon completion of the course the student should:

- have a good understanding of how the web works
- have acquired both theoretical and practical knowledge in web design
- know how to analyse web sites from a media technological perspective
- master methods and techniques for the development of web sites
- know how to create dynamic web pages with client-based languages
- know how to do basic editing of digital images for web publishing
- know how to write scripts that dynamically change the content and style of web pages
- know how to design usable, interactive web pages
- master methods for design of object-based, event-driven programs in client-based languages

Content
The course consists of the following parts:

Introduction to Internet, especially WWW

- technology, history and trends
- protocol and principles for communication between client and server
- address structure on the web
- standards and W3C, World Wide Web Consortium

Design of web sites

- information architecture for web sites
- layout and style
- use of various digital media
- image editing for digital publishing
- adaption to facilitate searchability
- adaption to various distributions
- languages such as HTML/XHTML, CSS, XML and DTD and also applications such as RSS

Programming

- fundamental programming in script languages, especially JavaScript
- dynamic HTML - combination of HTML, CSS, JavaScript and DOM
- object-based and event-driven programming
- interactivity and dynamic effects on web pages

Type of Instruction

Campus course are based manley on lectures, seminars, tutorials and practicals.
For distance course, the communication is conducted through a learning management system over the Internet. Practical work is conducted individually or in groups.
Attendance is mandatory for some sessions.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
The examination consists of submission on written hand-in assignments. These must be submitted by the due date.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Required Reading and Additional Study Material

Required reading

Felke-Morris, T. (2012) *Basics of Web Design*, Addison-Wesley Educational Publishers Inc., 352 p. ISBN 978-0-13-700338-9

Garrett, J. J. (2011) *The Elements of User Experience, Second edition*, New Riders. 172 p. ISBN 978-0-321-68368-7

McGrath, M. (2009) *JavaScript in easy steps, fourth edition*, In Easy Steps Limited, 192 p. ISBN 978-1-84078-362-9

Web-based material, Linnaeus University, et al. app. 400 p.