**Approved by: Head of Department**

**PhD. Eljona Proko**

**COURSE PROGRAM**

**CS 251 Web Programming**

**Lecturer:** Alma Sheko, Lecturer, Master of Science.

**Hours:** 6 credits, 2 lec / 2 sem / 1 lab

**Typology:** Specific subject

**Academic year / semester:** 2019/ Fall

**Type of course:** Mandatory

**Study program:** Bachelor in Informatics, Bachelor in Computer Science

**Course code:** CS 251

**The electronic address of the lecturer:** [al.bregu@gmail.com](mailto:al.bregu@gmail.com)

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**SUMMARY AND LEARNING RESULTS:** Basics of web services, the importance of its use and the technology used nowdays. HTML, a markup language for web pages. Styling web pages with CSS . Building a static web page. Javascript language, syntax, variables, loops, conditions, functions, vectors, etc. DOM (Document Object Model), BOM (Browser Object Model). PHP, a programming language for programming by server-side. The final objective of this course is to build a dynamic web page.

**Basic Concepts:**

1. HTML.
2. Styling web pages, Cascading Style Sheets (CSS) .
3. A scripting language for web pages, Javascript .
4. DOM (Document Object Model).
5. Server-side programming , PHP.

**Lectures Topics:**

**Topic I–** Computer Networks. Web Service, general concepts.. p. 3-38 [1].

**Topic II–** Web Page Structure. HTML Basics. p. 49-68[1].

**Topic III–** Special symbols and Tables. p: 69-104 [1].

**Topic IV–** The Basics of Web Forms. p.133-146 [1].

**Topic V–** Styling web pages, Cascading Style Sheets (CSS). p. 207-223[1].

**Topic VI–** A scripting language for web pages, Javascript ( I ). Variables in JS. Operators in JS. Conditional Statements in JS. Loops in JS. p.459-483[1].

**Topic VII–** A scripting language for web pages, Javascript ( II ). Functions in JS. Arrays in JS. Events in JS. Objects in JS. Popup boxes in JS. Implementing Javascript in Web pages. Evaluation forms in JS. p.485-502[1].

**Topic VIII–** DOM (Document Object Model). p. 305-309 [2].

**Topic IX–** Server-side programming ( I ). Introduction in PHP. Syntax, Variables, Operators. Data types in PHP. p. 37-62 [2].

**Topic X–** Server-side programming ( II ). Conditional statements in PHP. Strings, and string built-in functions. Functions and code moduling. p. 65-91 [2].

**Topic XI–** Server-side programming ( III ). Browser communication. Arrays in PHP. p.93 -117 [2].

**Topic XII –** Server-side programming ( IV ). Working with files in PHP. Sessions and Cookies. p.119-131 [2].

**Topic XIII**–Server-side programming ( V ). E-mail sending. p. 133-140[2].

**Topic XIV –** Web site evaluation. p: 155-158 [2].

**Topic XV–** Publishing Web sites. p: 469-495[2].

**Seminars Topics:**

**Topic I–**Web Service, general concepts.

**Topic II–**HTML Basics.

**Topic III–** Special symbols and Tables.

**Topic IV–** The Basics of Web Forms.

**Topic V–**Cascading Style Sheets (CSS).

**Topic VI–**Introduction inJavascript. Variables in JS. Operators in JS. Conditional Statements in JS. Loops in JS.

**Topic VII–** A scripting language for web pages, Javascript ( II ). Functions in JS. Arrays in JS. Events in JS. Objects in JS. Popup boxes in JS. Implementing Javascript in Web pages. Evaluation forms in JS.

**Topic VIII–** DOM (Document Object Model).

**Topic IX–**Introduction in PHP. Syntax, Variables, Operators. Data types in PHP.

**Topic X–**Conditional statements in PHP. Strings, and string built-in functions. Functions and code moduling.

**Topic XI–**Browser communication. Arrays in PHP.

**Topic XII –**Working with files in PHP. Sessions and Cookies. p.

**Topic XIII**–E-mail sending.

**Topic XIV –** Web site evaluation.

**Topic XV–** Publishing Web sites.

**Laboratory Topics:**

**Topic I–**Web Service, general concepts.

**Topic II–**HTML Basics.

**Topic III–** Special symbols and Tables.

**Topic IV–** The Basics of Web Forms.

**Topic V–**Cascading Style Sheets (CSS).

**Topic VI–**Introduction inJavascript. Variables in JS. Operators in JS. Conditional Statements in JS. Loops in JS.

**Topic VII–** A scripting language for web pages, Javascript ( II ). Functions in JS. Arrays in JS. Events in JS. Objects in JS. Popup boxes in JS. Implementing Javascript in Web pages. Evaluation forms in JS.

**Topic VIII–** DOM (Document Object Model).

**Topic IX–**Introduction in PHP. Syntax, Variables, Operators. Data types in PHP.

**Topic X–**Conditional statements in PHP. Strings, and string built-in functions. Functions and code moduling.

**Topic XI–**Browser communication. Arrays in PHP.

**Topic XII –**Working with files in PHP. Sessions and Cookies. p.

**Topic XIII**–E-mail sending.

**Topic XIV –** Web site evaluation.

**Topic XV–** Publishing Web sites.

**STUDENT EVALUATION FORMS**

|  |  |
| --- | --- |
| Control | Percentage evaluation |
| Control I | 25% |
| Annual evaluation | 15% |
| Final control | 60% |

Evaluation of students is done based on Percentage evaluation conversion; grade 5-10 progressively 41- 100% Student, resulting in less than 75% attendance for the period that belongs to the partial exam, period in which will be tested, will not be introduced in the respective exam, will be evaluated with M. If a student has attended the course, but is not present in the exam will be estimated NP (Not Present).

**Course format:**

The course will be evaluated on the basis of a partial exam, assignments and final exam. Points received will be cumulative. Exams will not be repeated, for any reason. If you will miss an exam without a major reason, then you will lose points for that examination in which you did not attend.

**TEXT BOOK**

**a) Basic Literature**:

[1] Robbins, J. N. (2012). *Learning web design: A beginner's guide to HTML, CSS, JavaScript, and web graphics*. " O'Reilly Media, Inc.".

[2] Nixon, R. (2014). *Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5*. " O'Reilly Media, Inc.".

**CONCLUDING REMARKS FROM LECTURER**

If you have any problem or question, please send e-mail with the subject "CS 251". E-mail may take a few days to respond. Enter the subject "Urgent CS 251" if your problem is urgent and cannot wait. Students are invited to not send e-mail relating to the course without the subject: CS 251. Before the students make a question, make sure that this information was not found in the official website of UV. Students are not invited to make questions through e-mail about course content because is better to answer them in the auditor, in the presence of other students. Before students ask a question, make sure this information is not found on the course website: https://sites.google.com/site/almabregaj111 .

**Email**: Every student is obliged to regularly check e-mail. Different tasks and notifications will be made only by e-mail.

**Code of honesty**: Not permitted to work in groups for homework, as they are individual. Also not allowed to copy in.