**Programming for web**

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| **Basic course information** |
| **Academic unit:**  | Department of Mathematics / Financial Mathematics |
| **Title of the course:** | Programming for web |
| **Level:** | BSc |
| **Course Status:** | Elective |
| **Year of studies:** | 3 |
| **Number of hours per week:** | 2+2 |
| **ECTS:** | 4 |
| **Time/location:** | As per published schedule |
| **Course Instructor:** | Prof. Ass. Dr. Ermir Rogova |
| **Contact Details:**  | ermirrogova@gmail.com |
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| **Course Description** | *This course introduces students to web languages and technologies. It enables them to apply dynamic web programing techniques and how to successfully apply web programming concepts.* |
| **Course Goals:** | *The aim of this course is to equip students with the knowledge about Web technologies as well as web programing languages necessary for developing dynamic web sites. In this course students will learn to program in standard web languages: HTML/HTML5, CSS, JavaScript.* |
| **Expected outcomes:** | *Upon successful completion of this course, students should be able to:** *Design and implement simple or animated web sites using (X)HTML, CSS and JavaScript (DHTML).*
* *Design and implement interactive and dynamic web sites using (X)HTML, CSS and JavaScript (DHTML).*
* *Evaluate web sites for use on various browsers and platforms*
* *Know the standards and the role of W3C.*
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| **Student Workload** |
| **Activity** | **Hours**  | **Days/weeks**  | **Total** |
| Lectures | 2 | 15 | 30 |
| Exercise sessions | 2 | 15 | 30 |
| Practical work |  |  |  |
| Office hours | 2 | 15 | 30 |
| Fieldwork |  |  |  |
| Midterms, seminars | 2 | 2 | 4 |
| Homework | 1 | 5 | 5 |
| Self-study  | 2 | 15 | 30 |
| Final exam preparation | 15 | 1 | 15 |
| Time spent in exams (tests, quizzes, final exam) | 2 | 2 | 4 |
| Projects, presentations, etc.  | 2 | 1 | 2 |
| **Total** |  |  | **150** |
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| **Teaching methodology:**  | *Lectures, discussions, homework, usage of audiovisuals and lab-work.* |
| **Assessment methods:** | *Hands-on work: 30%**First midterm: 35% (optional)**Second midterm: 35% (optional)**Final exam: 70% (if midterm results were not satisfactory)* |
| **Literature**  |
| **Principal resource:**  | *Deitel & Andrew B. Goldberg, Internet & World Wide Web How to program, 2011**Jon Duckett, HTML and CSS: Design and Build Websites, 2014**Jon Duckett, JavaScript and JQuery: Interactive Front-End Web Development, 2014* |
| **Additional resources:**  | www.w3schools.com |
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| **Detailed teaching plan:**  |
| **Week** | **Lecture** |
| ***Week 1*** | *Intro to the course, reading materials and evaluation methods* |
| ***Week 2*** | *The Internet, Web servers, browsers and web programming languages* |
| **Week 3** | *Intro to HTML* |
| ***Week 4*** | *Coding of text, lists, images and links in HTML* |
| **Week 5** | *Tables, Forms and Frames in HTML* |
| **Week 6** | *Formatting web pages in CSS* |
| **Week 7** | *Selectors* |
| **Week 8** | *First midterm* |
| **Week 9** | *Animations* |
| ***Week 10*** | *Client-side dynamic web – Intro to JavaScript* |
| **Week 11** | *Functions, validations, objects and events in JavaScript* |
| **Week 12** | *HTML and multimedia* |
| **Week 13** | *XML and AJAX* |
| **Week 14** | *Libraries and frameworks* |
| **Week 15** | *Second midterm* |

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| **Academic policies and rules of comportment:** |
| Pursuant to academic policies and code of conduct set by the University of Prishtina “Hasan Prishtina” |