# Course title: Web Programming 1

Course code: 64039

ECTS credits: 5

Requirements: None

#### **Basic information**

Level of studies: Undergraduate applied studies

Year of study: 2

Trimester: 5

Goal: Training students for the implementation of acquired knowledge in the field of web design in creating and increasing the interactive functionalities of static commercial web presentations and graphic animation of objects via jQuery.

Outcome: Students should be able to independently create a website and apply basic theoretical and practical knowledge in the field of web programming and web design; to implement script codes, modify the existing codes, optimize and increase the quality of static websites.

### Contents of the course

Theoretical instruction

- 1. The role of JavaScript on the WWW, web browser and document objects, Implementation of scripts in HTML
  - 2. Windows and Document Objects, JavaScript Operators, Event Object
  - 3. Functions and dedicated objects, Management of forms and their elements
  - 4. Working with arrays, mathematical functions and dates
- 5. Working with image and multimedia objects, Objects: window, location, history, document, link
  - 6. Regular expression objects and RegExp and regular expression rules
  - 7. Security and signed scripts, Cookies and durability of client-side data
- 8. Introduction to jQuery, Selecting elements using jQuery, Working with HTML page objects, Working with libraries, Arrays and objects
  - 9. Working with element dimensions, Visual effects, Events
  - 10. Basic processing of HTML form elements, Use of Plugins

Practical instruction (Problem solving sessions/Lab work/Practical training)

- 1. HTML forms: realization and design of form elements
- 2. How to run JavaScript, the interaction of JavaScript and HTML

- 3. Processing data from web forms using JavaScript
- 4. Events
- 5. Data validation, Regular expressions
- 6. How to access and manipulate HTML and CSS using JavaScript
- 7. Positioning HTML elements using JavaScript
- 8. Selecting elements in jQuery
- 9. Validation of data from the form, events implemented in form elements
- 10. jQuery animations

## **Textbooks and References**

- 1. D. Gudman, JavaScript Biblija, Mikro knjiga, Beograd, 2001.
- 2. D. Flanagan, JavaScript: sveobuhvatni vodič, Mikro knjiga, Beograd 2008.
- 3. Grupa autora, jQuery kuvar, Mikro knjiga, Beograd 2011.
- 4. N. Kojić, M. Vesić, Praktikum iz WEB programiranja, Visoka ICT škola, 2013.
- 5. N. Kojić, Web programiranje- detaljan priručnik, Visoka ICT škola, Beograd, 2018. (317 strana) ISBN: 978-86-88245-31-9.

## Number of active classes (weekly)

Lectures: 3

Practical classes: 2

Other types of classes: 0

# **Grading (maximum number of points: 100)**

### **Pre-exam obligations: Points**

Activities during lectures:

Activities on practical exercises: 20

Seminary work:

Colloquium: 30

Final exam: Points

Written exam: 50

Oral exam:

#### Lecturer

Nenad Kojić, PhD

#### **Associate**

Milena Vesić, Ksenija Lazić, Dimitrije Borčanin