

Course title: Web Programming
Course code: 64039
ECTS credits: 6
Requirements: None
Basic information
Level of studies: Master applied studies
Year of study: 1
Trimester: 2
Goal: Training students for real-life implementation of acquired knowledge in the fields of web design and web programming in order to create modern commercial dynamic web sites.
Outcome: Students should be able to create a commercially-oriented dynamic web site with high-quality SEO characteristics and security, using modern technologies and programming languages (client-side and server-side).
Contents of the course
Theoretical instruction
1. Different ways of generation and implementation of server-side script languages
2. Regular expressions
3. Object oriented PHP
4. Class design
5. Property and method access control
6. Working with textual data
7. Working with files
8. Page content protection from unauthorized access
9. Designing, using and managing databases
10. Data validation and filtering
11. JavaScript
12. Working with object oriented JavaScript
13. Usage and implementation of AJAX
14. Working with XML and JSON files
15. Resource access control
16. JavaScript, jQuery and AJAX integration with server-side languages
17. SEO
18. Application security

19. Handling errors and exceptions
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Interaction between JavaScript and HTML
2. Events
3. Data validation
4. Regular expressions
5. Different ways of access and manipulation of HTML and CSS using JavaScript
6. The way of displaying XML data
7. XSL
8. Xpath
9. Processing XML data using JavaScript
10. Objects in JavaScript
11. JSON format
12. jQuery animations
13. Processing XML and JSON data using jQuery
14. Working with data: read, write, upload
15. Working with databases
16. PhpMyAdmin
17. Data filtering
18. Deleting and updating table data
19. Pagination
20. Working with sessions and cookies
21. Access control
22. Authentication realization
23. Working with images
24. AJAX
Textbooks and References
1. S. Holzner, PHP 5, Kompjuter biblioteka, 2006.
2. M. Zandstra, PHP Objects, Patterns and Practice, Apress, 2010.
3. D. Goodman, JavaScript Bible Mikro knjiga, Belgrade 2001.
4. A group of authors, jQuery Cookbook Mikro knjiga, Belgrade 2011.
5. N. Kojić, Praktikum iz WEB programiranja, Visoka ICT škola, 2010.
Number of active classes (weekly)
Lectures: 3
Practical classes: 3

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: 50
Colloquium:
Final exam: Points
Written exam: 45
Oral exam:
Lecturer
Nenad Kojić, PhD
Associate
Slobodan Čabarkapa