Study program: Information Technologies and Systems

**Course title:** Web Development

Professor/assistant: PhD Zoran D. Mirović

Type of course: Compulsory

ECTS credits: 6

Prerequisites: none

# Aims of the course:

Students master the latest Microsoft ASP.NET 3.5 technologies in order to create high-performance server-side web applications.

### Learning outcomes:

Students gain detailed knowledge of ASP.NET 3.5 technologies, design high-performance web applications using Microsoft SQL Server databases. The skills that students acquire at practical training are in accordance with the above knowledge.

### Syllabus:

Theoretical part:

### Module 1: Basic concepts

Introduction to ASP.NET, Visual Studio, Web forms, server control, ASP.NET applications, State Management

### Module 2: Access to data

ADO.NET, Data components and DataSet, Data Binding, Rich Data Controls, caching and asynchronous pages, files and data streams, LINQ, XML

### Module 3: Creating ASP.NET web applications

User controls, themes and Master pages, navigation, Website Deployment

### Module 4: Advanced user interface

Custom Server controls, Design-Time support, Dynamic Graphics and GDI+, portals with Web Part pages

## Module 5: Client-Side programming

JavaScript and AJAX techniques, ASP.NET, Silverlight

Practical training: Exercises, Other forms of teaching, Research papers

Each module is covered by an appropriate number of practical classes. Students have two written tests after the second and fifth module and work on two projects.

## Literature:

- 1. Pro ASP.NET 3.5 in C# 2008 Matthew MacDonald and Mario Szpuszta, Apress 2008
- 2. Skripte iz predmeta Web systems, Zoran Mirović (on the website of the College)
- 3. Vežbe iz predmeta Web systems, Zoran Mirović (on the website of the College)
- 4. Willing L, Thompson L. 2009. PHP and MySQL: Razvoj aplikacija za Web, Mikro knjiga

<b>Total number of active classes:</b> 5	Lectures:	3 Pract	tical classes: 2
Teaching methods:			
Each module is covered by an appropriate number of practical classes. Students take two			
written tests after the second and fifth module and work on two projects.			
Grading system (maximum 100 points)			
grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51- 60 points, grade 7 from 61-			
70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
Pre-exam obligations:	<b>Points:</b>	Final exam:	<b>Points:</b>
Activity during lectures	5	Oral exam	60
Practical training	5		
Written test(s)	30		