	Faculty of
	Economics
Course unit	Subotica
Descriptor	
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UNIVERZITET U NOVOM SADU UNIVERSITY OF NOVI SAD

## **GENERAL INFORMATION**

Study program in which the course unit is offered	Business Information Systems
Course unit title	Development of Internet Business Solutions
Course unit code	OASPI13
Type of course unit <sup>1</sup>	Compulsory
Level of course unit <sup>2</sup>	Bachelor
Semester when the course unit is offered	winter
Year of study (if applicable)	3
Number of ECTS allocated	8
Name of lecturer/lecturers	Sasa Bosnjak
Mode of course unit delivery <sup>3</sup>	Face-to-Face
Course unit pre-requisites (if any)	None

# PURPOSE AND OVERVIEW (max 5-10 sentences)

The objective of the course is acquiring and adopting knowledge about the fundamental principles and concepts of developing Web business solutions. Understanding the basic methods and techniques as well as standards of Web design and their implementation on different hardware platforms includes the basic knowledge and application of HTML5 and CSS3. The realization of the objectives of the course emphasizes the application of the new possibilities of ACP.NET and .NET.C # programming language in creating modern Web business solutions. During applications design, students will acquire theoretical and practical knowledge on software development and implementation, utilization of software components in ASP.NET programming environment on client/server platforms taking into account the specificities of Internet architecture. Students will gain knowledge of advanced techniques of planning and development of dynamic web applications on the server side, in the C # programming language, as one of the key objectives of the course.

### LEARNING OUTCOMES (knowledge and skills)

Student are trained to use different strategies, methodologies and tools for developing and creating content of Web sites with a serious emphasis on elements of Web design. They are able to apply the skills and competencies of writing software solutions for optimized web pages and link them to consistent multimedia dynamic Web solutions recognizable

<sup>&</sup>lt;sup>1</sup> Compulsory, optional

<sup>&</sup>lt;sup>2</sup> First, second or third cycle (Bachelor, Master's, Doctoral)

<sup>&</sup>lt;sup>3</sup> Face-to-face, distance learning, etc.

independently of the hardware and software platform with HTML5, CSS3 and ASP.NET. Students are prepared to create optimized Web pages applicable on various hardware and software platforms using different methods and techniques embedded in ASP.NET and .NET.C#. The course provides the knowledge about creating a dynamic Web site that is able to be in constant synchronization with the MS SQL database server using ASP and ADO.NET technology.

### SYLLABUS (outline and summary of topics)

#### Theory

HTML basics and HTML page structure; HTML tags, images, tables and patterns on HTML pages; HTML5 characteristics and the flow of its creation. HTML5 display of HD videos, audio clips and graphics; creating a web page and document using HTML5 tags; CSS3 styles and application to the web page structure and document; new CSS3 rules from animation to application; HTML5 video and audio, hidden headings; using ASP.NET library functions and .NET.C# language functionality for development Internet business solutions; Creating an ASPX Web pages with communications of the database server.

### Practice

Applied HTML tags, images, tables and patterns on HTML pages to create Web pages; Integration of dynamic Web pages into Internet business solutions; Creating an ASPX Web pages with ADO.NET component; Using CSS3 to harmonize layout and structure of Web solutions.

LEARNING AND TEACHING (planned learning activities and teaching methods)

Lectures supported by Power Point presentations, case studies and group discussions, individual and teamwork in computer laboratory

#### **REQUIRED READING**

1. Josh Hill, James A. Brannan: "Brilliant HTML5 & CSS3", Pearson Publishing, 2011

2. Ben Frain: "Responsive Web Design with HTML5 and CSS3" - Second Edition, Publisher: Packt Publishing, 2015

3. Dino Esposito & Dino Esposito: "Microsoft .NET - Architecting Applications for the Enterprise" Microsoft Press 2015

### ASSESSMENT METHODS AND CRITERIA

Theoretical test 20 written exam 25 Practical work in computer laboratory 20 oral exam 35

#### LANGUAGE OF INSTRUCTION

English