Study program : Electrical Engineering

Type and level of studies: BSC

Course unit: Internet (web) application development

Teacher in charge : Miladin Stefanovic

Language of instruction: English

ECTS: 6

Prerequisites: no

Semester: *Summer semester*

Course unit objective:

The goal of the course is introduction in Internet (web) design and development. The goal is presentation of advanced tools, programming languages, development environments, data base, methods and techniques of design and development of Internet (web) application.

Learning outcomes of Course unit

Understanding and usage of environment and specific demands for application development in Internet environment:

- Understanding and usage of client side script languages
- Understanding and usage of server side script languages
- Understanding and development of software solutions based on different data base in Internet environment.
- Understanding and dealing with specific issues of Internet (sessions, security…).

Course unit contents

Theoretical classes

The following issues will be presented and students will learn: client side programming; development of Internet (web) application using server side scripting. Introduction to PHP, variables, rows, functions, objects and classes, Forms, data base access (vendor extensions, PDO). SQLite data base, MySQL data base, sessions, cookies, XML regular expressions, usage of files, doctirine, safety of developed applications.

Practical classes

Exercises, Other forms of teaching, research study

Programming of different software solutions (individual and in groups)

Literature

[1] Stefanovic M.: Handouts, Faculty of Science,

[2] Gilmore J.: PHP 5 Beginning PHP and MySQL, from Novice to Professional, APRESS, 2007, ISBN 978-1-59059-552-7

Number of active teaching hours				**Other classes 0**
Lectures: 2	Practice: 2	Other forms of classes:0	Independent work:0	

Teaching methods

Classic “frontal” approach combined with group and individual approach with the use of current resources.

Tests: Introduction in PHP and Development of softeware solution.

Examination methods (maximum 100 points)

Exam prerequisites	**No. of points:**	**Final exam**	**No. of points:**
Student’s activity during lectures	**4**	oral examination	
practical classes/tests	**36**	written examination	**30**
Seminars/homework	**30**	.....	
Project			
Other			

Grading system

Grade	**No. of points**	**Description**
10	**91-100**	Excellent
9	**81-90**	Exceptionally good
8	**71-80**	Very good
7	**61-70**	Good
6	**51-60**	Passing
5	**≤50**	Failing