UNIVERSITY OF ECONOMICS - VARNA
MASTER DEGREE STUDIES CENTER
DEPARTMENT „INFORMATICS"

ACCEPTED BY:
Rector:
(Prof. Dr. Plamen Iliev)

SYLLABUS

SUBJECT: "SERVER-SIDE WEB PROGRAMMING";

DEGREE PROGRAMME: "Computer Science"; MASTER`S DEGREE

YEAR OF STUDY: 5; SEMESTER: 10; (for same field graduates)

YEAR OF STUDY: 6; SEMESTER: 11; (for other fields graduates)

TOTAL STUDENT WORKLOAD: 240 h.; incl. curricular 75 h.

CREDITS: 8

DISTRIBUTION OF WORKLOAD ACCORDING TO THE CURRICULUM

TYPE OF STUDY HOURS	WORKLOAD, h.	TEACHING HOURS PER WEEK, h
CURRICULAR: incl.		
• LECTURES	30	2
• SEMINARS (lab. exercises)	45	3
EXTRACURRICULAR	165	-

Prepared by:

1. …………………………………………
   (Assoc. Prof. Dr. Pavel Petrov)

2. ………………………………………
   (Chief Assist. Prof. Dr. Ivan Kuyumdzhiev)

Head of department: ………………………………
"Informatics"   (Prof. Dr. Vladimir Sulov)

I. ANNOTATION

During the course the students should receive theoretical and practical knowledge of basic concepts, standards and technologies necessary to create client-server web applications in the local and global networks. It focuses primarily on the server side of client-server web technology.

As a result of the training students are expected to understand the principles of creating web server applications and using open source software in a real network environment.

The course combines knowledge from programming, operating systems, databases, web design, computer networks and communications.

II. THEMATIC CONTENT

No. by row	TITLE OF UNIT AND SUBTOPICS	NUMBER OF HOURS		
		L	S	L.E.
1. The concept of client-server		**2**		**3**
1.1	Client, server.			
1.2	Data, network connection, protocol			
1.3	Features of the web server programming.			
2. Standards for communication protocols		**2**		**3**
2.1	De-jure and de-facto standards. RFC.			
2.2	HyperText Transfer Protocol 1.0			
2.3	HTTP 1.1			
2.4	HTTP/2			
3. Webserver		**4**		**6**
3.1	Configuration files.			
3.2	Log files.			
3.3	CGI scripts.			
4. Server applications with web interface		**6**		**9**
4.1	PHP. Configuration.			
4.2	Super global arrays.			
4.3	Functions.			
4.4	Classes.			
5. Web apps working with DBMS		**4**		**6**
5.1	MySQL			
5.2	Administration tasks.			
6. Working with templates in PHP.		**4**		**6**
7. Technology AJAX. Library jQuery.		**4**		**6**
8. Security of Web applications. Using Free software.		**4**		**6**
	Total:	**30**		**45**

III. **FORMS OF CONTROL:**

No. by row	TYPE AND FORM OF CONTROL	№	extra-curricu-lar, h.
1.	**Midterm control**		
1.1.	Programming test	1	45
1.2.	Programming project related to the topics discussed in this course	1	45
	Total midterm control:		**90**
2.	**Final term control**		
2.1.	Test	1	75
	Total final term control:	**1**	**75**
	Total for all types of control:	**3**	**165**

IV. **LITERATURE**

REQUIRED (BASIC) LITERATURE:
1. Robin Nixon, Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5 (4th Edition), O'Reilly, 2014.
2. Luke Welling, PHP and MySQL Web Development (5th Edition), 2016.

RECOMMENDED (ADDITIONAL) LITERATURE:
1. Josh Lockhart, Modern PHP: New Features and Good Practices, O'Reilly, 2015.
2. Doug Bierer, PHP 7 Programming Cookbook, 2016.