

HASAN KALYONCU UNIVERSITY

Faculty of Engineering Course Description Form

COURSE: Web Programming				
CODE: CENG313	SEMESTER:	FALL		
LANGUAGE: ENGLISH	TYPE: COM	PULSORY		
PRE-REQUISITES: -	THEORY	PRACTICAL	CREDIT	ECTS
CO-REQUISITES: -				
WEEKLY HOURS:	3	2	4	6

CONTENT OF THE COURSE:

The Internet and the World Wide Web. Overview of the .NET and PHP development platforms. Object-oriented concepts in C#. Databases and data access. Introduction to PHP and ASP.NET. Advanced web forms and PHP pages. Web services. Design considerations.

OBJECTIVE OF THE COURSE:

On successful completion of this course unit, students/learners will or will be able to:

- 1. Ability to select and apply a markup language (e.g. HTML5), a stylesheet language (e.g. CSS3), and a scripting language (e.g. JavaScript) for presentation of information in web pages.
- 2. Ability to create database-driven dynamic web applications consisting of multiple Web forms using ASP.NET.
- 3. Ability to create database-driven dynamic web applications consisting of multiple pages using PHP.

WEEKLY	SCHEDULE
Week	Topics
1	General introduction, objectives of the course
2	Web design technologies (HTML, CSS, JavaScript)
3	Web design technologies (HTML, CSS, JavaScript)
4	Web Servers (Apache and IIS)
5	Web App Development with ASP.NET in C# (Introduction)
6	Web App Development with ASP.NET in C# (Database concepts: SQL, LINQ, .NET
	Entity Framework)
7	Web App Development with ASP.NET in C# (Web controls)
8	Web App Development with ASP.NET in C# (State management)
9	Web App Development with PHP (Introduction)
10	Web App Development with PHP (Database concepts: MySQL)
11	Web App Development with PHP (PHP controls)
12	Web App Development with PHP (State management)
13	Web Services
14	Project presentations

TEXTBOOK: Programming the World Wide Web, 8/E Robert W. Sebesta, University of Colorado, Colorado Springs ISBN-10: 0133775984 ©2015 • Addison-Wesley.

REFERENCE BOOKS: Internet and World Wide Web How to Program 5. Edition - by Deitel and Deitel, Prentice Hall 2012.

EVALUATION SYSTEM:		
IN-TERM STUDIES	QUANTITY	PERCENTAGE (%)
Midterm Exam	1	20
Homework	1	20
Laboratory works	13	20
Quiz	0	0
Final Exam	1	40
TOTAL	16	100
CONTRIBUTION OF	15	60
INTERM STUDIES TO		
OVERALL GRADE		
CONTRIBUTION OF FINAL	1	40
EXAMINATION TO		
OVERALL GRADE		
TOTAL	16	100

COURSE CATEGORY:	PERCENTAGE (%)
Mathematics and Basic Sciences	
Engineering	30
Engineering Design	70
Social Sciences	

TABLE OF ECTS / WORKLOAD:			
Activities	QUANTITY	Duration (Hour)	Total Workload
Course Duration	13	3	39
Hours for off-the-classroom study (Pre-study, practice)	14	3	42
Laboratory works	13	2	26
Mid-term	1	2	2
Final examination	1	3	3
Term Project	1	20	20
Quiz	14	3	42
Total Work Load			174
Total Work Load / 30			5.8
ECTS Credit of the Course			6

	PO1	PO2	PO3	PO4	P05	PO6	PO7	PO8	P09	P010	PO11
LO1	1	0	3	3	0	3	2	0	0	0	0
LO2	2	0	3	3	0	0	0	0	0	0	0

LO3	3	0	1	1	0	0	0	0	0	0	0
LO4	3	0	2	2	0	0	0	0	0	0	0
LO5	2	0	3	3	0	0	0	0	0	0	0
LO6	3	0	2	2	0	0	0	0	0	0	0
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Values: 0: None | 1: Low | 2: Medium | 3: High PO: Program Outcome | LO: Learning Outcome

INSTRUCTOR(S):	Asst. Prof. Dr. Ulaş GÜLEÇ
FORM PREPARATION DATE:	23.05.2019

LEARNING OUTCOMES OF THE COURSE: PROGRAM OUTCOMES:

LO1: To develop a realistic Web application with database connection.

LO2: To use the modern tools available to create static and dynamic Web pages.

LO3: To use basic and advanced HTML commands.

LO4: Using CSS in web page design.

LO5: To learn ASP.NET technologies.

LO6: Work with a server-side scripting language like PHP to develop Web applications with database access.

PO1: Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.

PO2: Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.

PO3: Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.

PO4: Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice; ability to employ information technologies effectively.

PO5: Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex engineering problems or discipline specific research questions.

PO6: Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually.

PO7: Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language; ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.

PO8: Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.

PO9: Consciousness to behave according to ethical principles and professional and ethical responsibility; knowledge on standards used in engineering practice. **PO10:** Knowledge about business life practices such

as project management, risk management, and change
management; awareness in entrepreneurship,
innovation; knowledge about sustainable
development.
PO11: Knowledge about the global and social effects
of engineering practices on health, environment, and
safety, and contemporary issues of the century
reflected into the field of engineering; awareness of
the legal consequences of engineering solutions.