Internet Technologies

Course Code:

CSE 315

Course Period:

Spring

Course Type:

Area Elective

Credits:

3

Theoric:

3

Practice:

0

Laboratory Hour:

0

ECTS:

5

Course Language:

English

Course Coordinator:

Tacha Serif [1]
Courses given by:

Tacha Serif [1]
Course Objectives:

The aim of this course is to provide students with the latest Internet technologies knowledge and abilities to design and implement client and server side web programs using modern development environments.

Course Content:

This course introduces students to web technologies by describing the Internet and how the underlying network provides these core services – HTTP, DNS, TCP, Web Servers and IP. Furthermore, it details the client and server side web technologies such as; HTML 4.0 and 5.0, CSS, Dynamic HTML, Forms, JavaScript, Java Applets, Perl, XML, PHP, ASP, JSP, database connectivity and web services.

Course Methodology:

1: Lecture, 2: Question-Answer, 3: Lab, 4: Case-study

Course Evaluation Methods:

A: Testing, B: Experiment, C: Homework, D: Project

Course Learning Outcomes	Program Learning Outcomes	Teaching Methods	Assessment Methods
1) Basic knowledge of networking components; ability to identify and deduce the problems within the three-tier model (presentation, logic, storage & data).	1,6	1,2,4	A,C,D
2) Ability to design and implement both client and server-side applications under realistic constraints and conditions.	3,4,6	1,2,3	B,C,D
3) Ability to identify, test and select best dynamic web application development components. Also brief knowledge in older technologies such as (ASP, Perl and CGI) technologies.	1,4,6	1,2,3	A,C
4) Knowledge and ability to devise, select, and use modern techniques and tools needed to design and implement dynamic web content.	4,6	1,2,3	B,D

COURSE CONTENT

Week	Topics	Study Materials
1	INTRODUCTİON TO INTERNET TECHNOLOGİES	Textbook
2	XHTML: BASICS HMTL CONCEPTS	Textbook
3	XHTML: FRAMES & FORMS	Textbook

4	CASCADING STYLE SHEETS	Textbook
5	JAVASCRIPT: GLOBAL FUNCTIONS AND CONTROLS	Textbook
6	JAVASCRIPT: COOKIES	Textbook
7	MIDTERM EXAM I	Textbook
8	EXTENSIBLE MARKUP LANGUAGE (XML)	Textbook
9	INTRODUCTION TO DATABASES AND mySQL	Textbook
10	PHP: STRING PROCESSING AND REGULAR EXPRESSIONS	Textbook
11	PHP: FORM PROCESSING AND BUSINESS LOGIC	Textbook
12	HTML 5.0 CONCEPTS AND EXAMPLES	Textbook
13	ACTIVE SERVER PAGES (ASP)	Textbook
14	SERVER-SIDE EXAMPLES WITH JSP AND PERL	Textbook

RECOMMENDED SOURCES

Textbook	Lecture Notes: http://cse.yeditepe.edu.tr/v2/en/academic/course-pages [2] Lab material: http://cse.yeditepe.edu.tr/v2/en/academic/course-pages [2]
Additional Resources	INTERNET & WORLD WIDE WEB HOW TO PROGRAM, BY P. DEITEL (3RD EDITION) PROGRAMMING THE WORLD WIDE WEB, BY ROBERT W. SEBESTA (5TH EDITION)

MATERIAL SHARING

Documents	http://cse.yeditepe.edu.tr/coadsys/ [3]
Assignments	http://cse.yeditepe.edu.tr/coadsys/ [3]
Exams	

ASSESSMENT

IN-TERM STUDIES	NUMBER	PERCENTAGE
Mid-terms	1	30
Assignment	6	30

Term Project	1	40
Total		**100**
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		35
CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE		65
Total		**100**

COURSE'S CONTRIBUTION TO PROGRAM

No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied information in these areas to model and solve engineering problems.					**X**
2	Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.					
3	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.					**X**
4	Ability to devise, select, and use modern techniques and tools needed for engineering practice; ability to employ information technologies effectively.					**X**
5	Ability to design and conduct experiments, gather data, analyze and interpret results for investigating engineering problems.					
6	Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually.					**X**
7	Ability to communicate effectively both orally and in writing; knowledge of a minimum of one foreign language.					
8	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.					
9	Awareness of professional and ethical responsibility.					

10	Information about business life practices such as project management, risk management, and change management; awareness of entrepreneurship, innovation, and sustainable development.	
11	Knowledge about contemporary issues and the global and societal effects of engineering practices on health, environment, and safety; awareness of the legal consequences of engineering solutions.	

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION

Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (Excluding the exam weeks: 12x Total course hours)	12	3	36
Hours for off-the-classroom study (Pre-study, practice)	14	2	28
Midterm examination	1	1.5	1.5
Homework	6	4	24
Project	1	35	35
Final examination	1	1.5	1.5
Total Work Load			126
Total Work Load / 25 (h)			5.04
ECTS Credit of the Course			5