

Course Description Form	
Course Code and Name	CENG363 WEB BASED TECHNOLOGIES (TECH.ELECT.)
Course Semester	5
Catalog Content	Internet and client/server Technologies, Internet information systems, Web browsers and servers, Client and server side languages, Web databases and XML, Basic Internet applications and protocols: DNS, HTTP, POP3, SMTP, FTP, P2P, IRC etc., Data Networks, OSI Layers, Wireless and mobile Networks
Textbook	Web-Based Learning and Teaching Technologies: Opportunities and Challenges, Anil Aggarwal, Information Science Reference, 2000.
Supplementary Textbooks	- Internet and World Wide Web: How to Program 5/E, Deitel, P. Deitel, H., & Deitel, A., Pearson Education, 2012. - Web Application Architecture Principles, protocols and practices, Leon Shklar, Richard Rosen, John Wiley & Sons Ltd, 2003. - Web Technologies: A Computer Science Perspective 1st Edition, by Jeffrey C. Jackson, Pearson, 2006
Credit	6
Prerequisites of the Course (Attendance Requirements)	-
Type of the Course	Technical Elective
Instruction Language	English
Course Objectives	To provide knowledge about Internet and client/server Technologies, Internet information systems, Web browsers and servers, Client and server side languages, Web databases and XML, Basic Internet applications and protocols: DNS, HTTP, POP3, SMTP, FTP, P2P, IRC etc., Data Networks, OSI Layers, Wireless and mobile Networks
Course Learning Outcomes	Students who can successfully complete this lesson have a background knowledge on Internet and client/server Technologies, Internet information systems, Web browsers and servers, Client and server side languages, Web databases and XML, Basic Internet applications and protocols: DNS, HTTP, POP3, SMTP, FTP, P2P, IRC etc., Data Networks, OSI Layers, Wireless and mobile Networks
Instruction Methods	The mode of delivery of this course is face to face
Weekly Schedule	1. Week: Internet and client/server Technologies 2. Week: Internet information systems 3. Week: Internet information systems 4. Week: Web browsers and servers 5. Week: Web browsers and servers 6. Week: Client and server side languages 7. Week: Web databases and XML 8. Week: Web databases and XML 9. Week: Basic Internet applications and protocols: DNS, HTTP, POP3, SMTP, FTP, P2P, IRC etc. 10. Week: Basic Internet applications and protocols: DNS, HTTP, POP3, SMTP, FTP, P2P, IRC etc. 11. Week: Data Networks 12. Week: OSI layers 13. Week: Wireless and mobile Networks 14. Week: Wireless and mobile Networks
Teaching and Learning Methods <i>(These are examples. Please fill which activities you use in the course)</i>	Weekly Theoretical Course Hours: 3 Reading Tasks Studies Midterm Exam and Preparation for Midterm Exam Final Exam and Preparation for Final Exam

Assessment Criteria		Numbers	Total Weighting (%)						
	Midterm Exams	1	30						
	Assignment	5	50						
	Application								
	Projects								
	Practice								
	Quiz								
	Percent of In-term Studies (%)		60						
	Percentage of Final Exam to Total Score (%)		40						
	Attendance								
Workload	Activity	Total Number of Weeks	Duration (weekly hour)	Total Period Work Load					
	Weekly Theoretical Course Hours	14	3	42					
	Weekly Tutorial Hours	0	0	0					
	Reading Tasks	10	4	40					
	Studies	10	4	40					
	Material Design and Implementation	0	0	0					
	Report Preparing	0	0	0					
	Preparing a Presentation	0	0	0					
	Presentations	0	0	0					
	Midterm Exam and Preparation for Midterm Exam	1	13	13					
	Final Exam and Preparation for Final Exam	1	15	15					
	Other (should be emphasized)	0	0	0					
	Total Workload			150					
	Total Workload / 25			6					
	Course Credit (ECTS)			6					
Contribution Level Between Course Learning Outcomes and Program Outcomes	No	Program Outcomes			1	2	3	4	5
	1	Sufficient knowledge on mathematics, science and computer engineering; ability to apply theoretical and practical knowledge in these areas to model and solve engineering problems							X
	2	Ability to identify, define, formulate and solve complex engineering problems; ability to choose and apply appropriate analysis and modelling methods for these purposes						X	
	3	Ability to design a complex system, process, device, software, algorithm, or product under realistic constraints and circumstances to meet certain requirements; ability to apply modern design techniques for this purpose							X
	4	Ability to choose, develop and use modern techniques and tools necessary for engineering applications; ability to effectively use computing technologies							X

	5	Ability to design and implement systems or experiments to solve engineering problems, collect and interpret data to evaluate and analyze the results of solutions					X
	6	Ability to work effectively in intradisciplinary and interdisciplinary teams or individually				X	
	7	Ability to efficiently prepare, evaluate and interpret reports					X
	8	Ability to make presentations and conduct effective verbal and written communication in Turkish and English				X	
	9	Awareness of the necessity of lifelong learning; ability to access information, follow scientific and technological developments; ability to perpetually renew oneself				X	
	10	Awareness of professional and ethical responsibility, ability to act in accordance with ethical principles				X	
	11	Ability to apply knowledge on project management, risk management and change management			X		
	12	Awareness of entrepreneurship and innovation, ability to design and build	X				
	13	Ability to devise local and global solutions to contemporary issues considering the effects of engineering applications on health, environment and security		X			
	14	Awareness of the legal consequences of engineering solutions		X			
	15	Ability to apply knowledge on software development process and documentation rules	X				
	16	Knowledge on standards used in engineering applications		X			
	17	Awareness of occupational health and security, information security and privacy	X				
The Course's Lecturer(s) and Contact Information		Prof. Dr. M. Ali AKCAYOL akcayol@gazi.edu.tr					