

## ISLAMIC UNIVERSITY OF TECHNOLOGY



#### **Course Outline and Course Plan**

Name of the Teacher	Md. Nazmul Haque		Position	Lecturer	
Department	Computer Science an	d Engineering	Programme	B. Sc. in CSE	
Course Code	CSE 4539/ CSE 4581		Course Title	Web Programming	
Academic Year	2021-2022		Semester	5 <sup>th</sup>	
<b>Contact Hours</b>	3.0		Credit Hours	3.0	
Text books and Reference books (if any)	Learning Web Design: A Beginner's Guide to (X) HTML, Stylesheet, and Web Graphics     PHP and MySQL Web Development.      Learning JavaScript		Authors of the books	<ol> <li>Aaron Gustafson.</li> <li>Laura Thomson.</li> <li>Shelley Powers.</li> </ol>	
Prerequisites			Curriculum		
(If any)			Requirement		
Course Homepage					
Teaching Methods/	Lecture Group discussion Demonstration Problem		<b>✓</b> Problem solving		
Approaches	☐ Project				
Teaching aids	✓ Multi-media □ OHP		Board and	d Marker	Others

Course Assessment Method								
Attendance (10%)	Quiz 15% of Total Marks (Best 3 out of 4)				Mid Semester (25%)	Semester Final (50%)		
Evaluate based on the participatio n in the class	1st Quiz	2 <sup>nd</sup> Quiz	3 <sup>rd</sup> Quiz	4 <sup>th</sup> Quiz	Otl	ners		Week/Dat e
	Week/Da	Week/Da	Week/Da	Week/Da	Assignme	Homewor	Week/Date	
	te	te	te	te	nt	k		
	3 <sup>rd</sup> Week	6 <sup>th</sup> Week	10 <sup>th</sup> Week	13 <sup>th</sup> Week	Will be given according ly	Will be given according ly	As per schedule of IUT	As per Schedule of IUT

	<ul> <li>Show understanding of the logic behind advanced web applications.</li> <li>Write HTML pages and use basic JavaScript code to enhance the pages.</li> <li>Demonstrate an understanding of Content Management Systems.</li> <li>Plan, develop, debug, and implement interactive client-side and server-side web applications.</li> </ul>
	Course Outcomes (COs)
Course Outcomes	CO1 – Discuss the basic principle on web development, the structural design of web pages using HTML, approaches in designing webpages. Select and apply appropriate debugging and testing techniques to ensure the correctness of a program and compliance to given specifications, to solve a computing problem
	CO2 – Apply an appropriate coding standard with proper documentation in order to come up with a readable, understandable and maintainable program code.
	CO3 – Design and implement a dynamic website using various web development tools and observe the rules in developing a website in order to come up with an interactive, informative and user-friendly website.

Weekly plan for course content					
Weeks	Topics	Task/Reading			
1	Introduction to Web technologies, DNS, Web Protocols				
2	Introduction to HTML, Basic structure				
3	HTML elements, Paragraphs Links colours and Frames, Forms, Tables				
4	The webpage presentation using CSS: Inline, Embedded and External CSS, CSS rules and selectors, Style cascading and inheritance, Bootstrap	Quiz 1 – CO1			
5	Introduction to JavaScript, what is JavaScript, JavaScript basic concepts				
6	JavaScript Advanced concepts				
7	JavaScript Objects and their types				
8	JavaScript events: Different types of events and action listeners	Quiz 2 – CO1, CO2			
	MID Semester Examination	MID - CO1,CO2			
9	Introduction to PHP and MYSQL				
10	PHP and MySQL history, Introductions to PHP and MySQL, COOKIES and SESSIONS				
11	PHP basic Syntax, Variables, Operators, Decision statement, loops, Exception handling	Quiz 3 – CO2, CO3			
12	PHP Arrays, control structure and functions				
13	MySQL Database: Tables, Records, and fields; Creating database and tables	Quiz 4 – CO2,CO3			
14	Using PHP with MySQL: Connect PHP to MySQL, Perform Queries				
15	Review Class				
	Semester Final Examination	Final - CO1,CO2,CO3			

## **CO-PO Mapping with Bloom's Taxonomy**

CO-1 O Mapping with bloom's Taxonomy						
	Mapping with CO, PO and Bloom's Taxonomy					
CO No.	Course Outcomes (CO) Statement	Levels of Bloom's Taxonomy	Matching with Program Outcome (PO)			
CO1	<b>Discuss</b> the basic principle on web development, the structural design of web pages using HTML, approaches in designing webpages. Select and apply appropriate debugging and testing techniques to ensure the correctness of a program and compliance to given specifications, to solve a computing problem	C3	PO1			
CO2	Apply an appropriate coding standard with proper documentation in order to come up with a readable, understandable and maintainable program code	C4	PO2			
СОЗ	<b>Design</b> and implement a dynamic website using various web development tools and observe the rules in developing a website in order to come up with an interactive, informative and user-friendly website.	C4	PO2			

## **Program Outcomes (POs: PO1 ~ PO12)**

PO No.	Program Outcomes (POs)			
140.	Students graduating from the Bachelor of Science in Computer Science and Engineering (B.Sc. in CSE) program, upon graduation students will have the ability to:			
PO1	Engineering knowledge: Apply knowledge of mathematics, natural science, engineering			
	fundamentals and an engineering specialization as specified in K1 to K4 respectively to the			
	solution of complex engineering problems.			
PO2	<b>Problem analysis:</b> Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. (K1 to K4)			
PO3	<b>Design/development of solutions</b> : Design solutions for complex engineering problems and			
100	design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations. (K5)			
PO4	<b>Investigation:</b> Conduct investigations of complex problems using research-based knowledge			
	(K8) and research methods including design of experiments, analysis and interpretation of data,			
	and synthesis of information to provide valid conclusions.			
PO5	Modern tool usage: Create, select and apply appropriate techniques, resources, and modern			
	engineering and IT tools, including prediction and modelling, to complex engineering			
	problems, with an understanding of the limitations. (K6)			
PO6	The engineer and society: Apply reasoning informed by contextual knowledge to assess			
	societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to			
	professional engineering practice and solutions to complex engineering problems. (K7)			
PO7	Environment and sustainability: Understand and evaluate the sustainability and impact of			
	professional engineering work in the solution of complex engineering problems in societal and			
	environmental contexts. (K7)			
PO8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice. (K7)			
PO9	<b>Individual work and teamwork:</b> Function effectively as an individual, and as a member or			
	leader in diverse teams and in multi-disciplinary settings.			
PO10	Communication: Communicate effectively on complex engineering activities with the			
	engineering community and with society at large, such as being able to comprehend and write			
	effective reports and design documentation, make effective presentations, and give and receive			
	clear instructions.			
PO11	<b>Project management and finance:</b> Demonstrate knowledge and understanding of engineering			
	management principles and economic decision-making and apply these to one's own work, as			
	a member and leader in a team, to manage projects and in multidisciplinary environments.			
PO12	<b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in			
	independent and life-long learning in the broadest context of technological change.			

## **Grading Policy**

Numeric Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	В	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00

## **Class Schedule**

Day	Section 1	Section 2
Thursday	12:00 PM – 1:00 PM	1:30 PM – 2:30 PM
Friday	1:30 PM – 2:30 PM	12:00 PM – 1:00 PM

Student's consulting hour: Wednesday at 3:00 PM

# Instructor contact details: Md. Nazmul Haque

Lecturer

Department of Computer Science and Engineering

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