University of Engineering and Technology Lahore
Course Outline Report
Subject: SE-324 Principles of Web Engineering

Course Description
A course focusing on the development of dynamic content and applications to facilitate information distribution. The course stresses development strategies for managing the rapidly changing information of corporations and organizations for just-in-time distribution, using authoring programs to create interactive multimedia products that utilize database management systems, file systems, and HTML/XML to provide a method for visualizing and manipulating that data. Significant time is spent on intermediate to advanced programming and scripting. Students are required to plan, design and implement a major project. Topics include intranets, networks, the World Wide Web, development languages, and other newly developed technologies.

Course Detail	
Credit Hrs.	2
Pre-requisite	Programming Fundamentals

Measurable Student Learning Outcomes

CLOs	Description	PLOs	Domain	Domain Level
CLO1	Design front-end of a web application	PLO03	Cognitive	3. Apply
CLO2	Apply client-side scripting technologies	PLO03	Cognitive	3. Apply
CLO3	Implement the server-side programming to build a complete application over the web.	PLO03	Cognitive	3. Apply

Textbooks
1. Web Engineering, Rajiv Chopra, Prentice-Hall of India, 2016
2. Web Engineering, Emilia Mendes and Nile Mosley, Springer Verlag, 2010.
3. Web Engineering: A Practitioners' Approach, Roger S. Pressman, McGraw Hill, 2008.
4. Dynamic HTML: The Definitive Reference: A Comprehensive Resource for XHTML, CSS, DOM, JavaScript 3rd Edition, O'Reilly Media 2007.
5. JavaScript: The Definitive Guide, 8th Edition, David Flanagan. O'Reilly Media. 2014

Week (Lec)	Content	
	Topics	**CLO's**
week1	Introduction to Web Technologies and History of web and Internet	CLO1
week2	Introduction to HTML and Introduction to CSS	CLO1
week3	Discussion on HTML + CSS	CLO1
week4	Introduction to Client Side Programming: JavaScript	CLO2
week5	Introduction to JQUERY; JQUEY +HTML+CSS Website	CLO1, CLO2
week6	Data Intensive Web Applications; Web Server, Application Server, Database Server; MySQL: Data & Data Objects Manipulations via SQL	CLO3
week7	Server-side scripting Technology: PHP - An Introduction, Server Side Variables; Request, Response	CLO3
week8	Review: HTML, CSS, JavaScript, JQuery, Bootstrap, SQL, PHP (Syntax, Variables, Operators, Control Instructions, Loop Instructions)	CLO1, CLO2, CLO3
week9	Mid Term	CLO1, CLO2, CLO3
week10	Database Programming with PHP	CLO3

week11	Session Handling	CLO3
week12	Cookies Handling	CLO3
week13	File Handling in PHP File Uploading in PHP	CLO3
week14	WordPress	CLO1, CLO2, CLO3
week15	A Complete Web Project	CLO1, CLO2, CLO3
week16	Web Security	CLO1, CLO2, CLO3