

## Basic Information

Faculty	Satyaki Das, (Room PC-315)							
Office Hour	<b>Sunday:</b> 9:15 am – 10:00am & 1:30 pm – 4:30 pm (Permanent Campus: Room: PC-315) <b>Tuesday:</b> 9:15 am – 10:00am & 1:30 pm – 4:30 pm (Permanent Campus: Room: PC-315) <b>Monday:</b> 9:15 am – 12:30 pm (Permanent Campus: Room: PC-315) <b>Wednesday:</b> 9:15 am – 12:30 pm (Permanent Campus: Room: PC-315) <b>Thursday:</b> 9:30 am – 12:30 pm (Permanent Campus: Room: PC-315) Note: Also available by Email Appointment at other times satyaki.das@ulab.edu.bd							
Contact Details	<b>Room:</b> PC315  satyaki.das@ulab.edu.bd							
Course Pre-requisites	CSE 201 (OOP-Java), CSE 207 (Data Structure)							
Department offering the course	Computer Science and Engineering							
Course Title	Web Technology							
Course Type	Core Course							
Course Code	CSE480		Sec	2	Credit	03	Term	Summer 2020
Number of Lectures	24	Number of Tutorials		0	Number of Practical	0	Total	24

## Course Details

### 1.Course Description

Hand on experience in developing interactive Web Sites and Web Applications using latest programming languages and tools. Discussion topics may include: JavaScript, jQuery, AJAX, Client-side validation, User Authentication, Asynchronous HTTP requests, Website Security.

### 2. Course Objective

1. To **provide** a thorough **understanding** Front-End designs with code efficiency.
2. To **introduce** to latest client-side programming languages and tools.
3. To **emphasis** on different languages and their benefits.
4. To **enable** students to **write** quality enterprise/commercial websites.

### 3. Intended learning outcomes of the course (ILOs)

<b>1. Recognize, recall and understand</b> latest practices and performance implications of client-side languages
<b>2. Understand and outline</b> different processes for transmitting data
<b>3. Design and develop</b> real-life Web Application
<b>4. Use</b> available libraries, APIs and functions in Client-Side Language
<b>5. Possess</b> positive approach to adapting and learning new languages/features and <b>apply</b> them to <b>create</b> interactive Web Applications

### 4. Mapping of Course LO and PLO:

Learning Outcome (LO) of the Course	Program Learning Outcome (PLO)											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>ILO1</b>	MJ		MJ		MJ						MJ	
<b>ILO2</b>	MJ			MN							MN	
<b>ILO3</b>	MJ	MJ	MJ	MJ	MJ						MJ	
<b>ILO4</b>	MJ	MJ	MN	MJ	MJ						MJ	
<b>ILO5</b>	MJ	MJ	MJ	MJ	MJ						MJ	

### 5. Contents

ILO	Topic	Teaching Strategy	Assessment Strategy of Los	Number of Sessions
1	Introduction to Web Technologies	Lecture, Exercise	Q/A, Test	2
1,3,5	HTML5, CSS3 with its new components	Lecture, Exercise	Q/A, Test, Assignment	6
1-5	JavaScript, jQuery, AJAX	Lecture, Exercise	Q/A, Test, Assignment	8
1-5	Data transmission formats and processes, XML and JSON, API design	Lecture, Exercise	Q/A, Test, Assignment	6
2,5	Cyber Security and Secured Protocols	Lecture, Exercise	Q/A, Test, Assignment	2
			<b>Total</b>	<b>24</b>

### 6. Alignment of topics of the courses with CLOs

This is already included as ILO

## 7. A. Assessment Schedule

Assessment 1	Quizzes	Session	Week 3, 5, 8
Assessment 2	Assignments	Session	Week 5, 7, 9
Assessment 3	Final Project	Session	As per ULAB schedule
Assessment 4	Mid-Term Exam	Session	Week 11
Assessment 5	Final Exam	Session	As per ULAB schedule

## B. Weights of Assessments

Assessments	%
Mid-term Examination	20
Final Term Examination	40
Assignments	10
Quizzes	10
Project	20
Total	100

## C. Grading Policy

Policy	Letter Grade	Grade Point
95% and above	A+	4.00
85% to below 94%	A	4.00
80% to below 84%	A-	3.80
75% to below 79%	B+	3.30
70% to below 74%	B	3.00
65% to below 69%	B-	2.80
60% to below 64%	C+	2.50
55% to below 59%	C	2.20
50% to below 54%	D	1.50
below 50%	F	0.00
--	I	0.00
--	W	0.00
--	AW	0.00

## 8. Make-up Procedures

ULAB guidelines will be followed for the makeup of the Midterm and Final Examination.

## 9. List of References

Course Notes	Personal and Online Notes
Essential Books (Text Books)	JavaScript & jQuery 'The Missing Manual' -David Sawyer McFarland
Periodicals	NA
Online Resources	Will be provided during lecture

## Facilities Required for Teaching and Learning

Projector, Whiteboard, computer with internet connection.

## Course Policies and Procedures

- ULAB regulations will be followed in conducting exams and evaluating answer scripts and grading.
- Failing to attend 6 or more classes will result in an automatic fail.
- Mid-term and final examinations will be held according ULAB schedules
- Students are advised to be in the classroom on time.
- Cheating and plagiarism will result in an automatic mark of zero in the assessment item.
- Quizzes will be conducted as surprise quiz. Thus, students are advised to attain class regularly.
- Any cellular phone-based activity is strictly prohibited in the class. Students are advised to keep their phones into silent mode while at the class.

### Appendix-1: Program Learning Outcome (PLO)

No.	PLO
1.	<b>Engineering Knowledge</b>
2.	<b>Problem Analysis</b>
3.	<b>Design/Development of Solutions</b>
4.	<b>Investigation</b>
5.	<b>Modern Tool Usage</b>
6.	<b>The Engineer and Society</b>
7.	<b>Environment and Sustainability</b>
8.	<b>Ethics</b>
9.	<b>Communication</b>
10.	<b>Individual and Team Work</b>
11.	<b>Life Long Learning</b>
12.	<b>Project Management and Finance</b>

### **Generic Skills (Detailed):**

1. **Engineering Knowledge (T)** -Apply knowledge of mathematics, sciences, engineering fundamentals and manufacturing engineering to the solution of complex engineering problems;
2. **Problem Analysis (T)** – Identify, formulate, research relevant literature and analyze complex engineering problems, and reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences;
3. **Design/Development of Solutions (A)** –Design solutions, exhibiting innovativeness, for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, economical, ethical, environmental and sustainability issues.
4. **Investigation (D)** Conduct investigation into complex problems, displaying creativeness, using research-based knowledge, and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions;
5. **Modern Tool Usage (A & D)** -Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations;

6. **The Engineer and Society (ESSE)** -Apply reasoning based on contextual knowledge to assess societal, health, safety, legal, cultural, contemporary issues, and the consequent responsibilities relevant to professional engineering practices.
7. **Environment and Sustainability (ESSE)** -Understand the impact of professional engineering solutions in societal, global, and environmental contexts and demonstrate knowledge of and need for sustainable development;
8. **Ethics (ESSE)** –Apply professional ethics with Islamic values and commit to responsibilities and norms of professional engineering code of practices.
9. **Communication (S)** -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;
10. **Individual and Team Work (S)** -Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.
11. **Life Long Learning (S)** -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.
12. **Project Management and Finance (S)** -Demonstrate knowledge and understanding of engineering management and financial principles and apply these to one's own work, as a member and/or leader in a team, to manage projects in multidisciplinary settings, and identify opportunities of entrepreneurship.



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*Course Coordinator/ Teacher*

Date: 09.07.2020

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*Head of the Department*

Date: