Course
Outline

ULAB
UNIVERSITY OF LIBERAL ARTS BANGLADESH

Basic Information

Faculty	Mohammad Rifat Ahmmad Rashid, PhD Assistant Professor, Department of CSE
Office Hour	**Sun/Tues**-11.00am - 1:30pm **Mon/Wed** – 11:30 am – 1:00 pm **Thurs**-10.00am - 4.00pm Note: Also available by appointment (e.g. email) at other hours
Contact Details	rifat.ahmed@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 Code	CSE-480(1)	Credit	03	Term	Spring 2020		
Number of Lectures	24	Number of Tutorials		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)

1. **Recognize, recall** and **understand** latest practices and performance implications of client-side languages
2. **Understand** and **outline** different processes for transmitting data
3. **Design** and **develop** real-life Web Application
4. **Use** available libraries, APIs and functions in Client-Side Language

5. **Possess** positive approach to adapting and learning new languages/features and **apply** them to **create** 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
ILO1	MJ		MJ		MJ						MJ	
ILO2	MJ			MN							MN	
ILO3	MJ	MJ	MJ	MJ	MJ						MJ	
ILO4	MJ	MJ	MN	MJ	MJ						MJ	
ILO5	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 it's 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
			Total	24

7. A. Assessment Schedule

Assessment 1	Quiz 1, 2, 3	Session	Week 3, 5, 8
Assessment 2	Assignment 1, 2, 3	Session	Week 5, 7, 9
Assessment 4	Midterm	Session	As per ULAB schedule
Assessment 6	Final Project	Session	Week 11
Assessment 7	Final	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**	**Assessments**
95% and above	A+	4.00	Outstanding
85% to below 94%	A	4.00	Superlative
80% to below 84%	A-	3.80	Excellent
75% to below 79%	B+	3.30	Very Good
70% to below 74%	B	3.00	Good
65% to below 69%	B-	2.80	Average
60% to below 64%	C+	2.50	Below Average
55% to below 59%	C	2.20	Passing
50% to below 54%	D	1.50	Probationary

below 50%	F	0.00	Fail
--	I	0.00	Incomplete
--	W	0.00	Withdrawn
--	AW	0.00	Administrative Withdrawal

8. 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

Multimedia projector, white board and marker, and internet connection.

Course Policies and Procedures

- Failing to attend more than 5 classes will result in an automatic fail
- Students are advised to keep the cell phones in to silent mode
- Cheating and plagiarism are strictly prohibited
- There will be no makeup quiz
- ULAB regulations will be followed in conducting exams and evaluating answer scripts and grading

Appendix-1: Program Learning Outcome (PLO)

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

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 *Head of the Department*

Date: Date: