

## Course Outlines of CSE 391: Programming for the Internet

### Faculty Information:

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### Course Description:

This course is a survey of current Internet technologies and state-of-the-art web programming methods. Using client/server structures, topics studied will be drawn from JavaScript, JSP, ASP, PHP, Cold Fusion, Flash, Document Object Model, HTML, Cascading Style Sheets, XML, CGI, TCP/IP and the .NET platform. Programming tools may include PERL, various UNIX shell scripts, Windows batch files, Java and other languages as needed.

### Pre-requisites:

- 1) CSE 220: Data Structures
- 2) CSE370: Database Systems

### Course Outcomes:

CO 1	<b>Review</b> the fundamental concepts of internet programming and the structure of http protocol
CO 2	<b>Design</b> the page for a basic profile and understand the application for JavaScript and CSS in terms of different html tags.
CO 3	<b>Explain</b> the diverse way of applying the JavaScript in client site system with help of basic language understanding.
CO 4	<b>Generate</b> the basic tasks with help of event call from JavaScript to see the outputs and familiarize with the basics of PHP.
CO 5	<b>Compare</b> the current understanding of PHP language with its explained advance features.
CO 6	<b>Apply</b> MYSQL as a DBMS to run a website
CO 7	<b>Interpret</b> advanced SQL queries and PHP/SQL functions
CO 8	<b>Describe</b> emerging technologies (i.e frameworks, AJAX,XML) and importance of Internet security

### Course Outlines:

Sr. No.	Topic details	Time allocation
1	Introduction to the fundamental concepts of internet programming and the structure of Internet and web protocols such as TCP/IP, HTTP, caching, cookies and the basics of HTML.	Week 1
2	Utilizing the basics concepts of CSS (inline, document, external) and JavaScript (data types, control, functions, strings and arrays, classes) to create a webpage.	Week 2,3
3	Explore dynamic programming using diverse tools JavaScript(form elements, event-driven programming) in client site system.	Week 4,5
4	Basic tasks with help of event call from JavaScript. Introduction to PHP : useful functions working with forms, cookies, files, time and date a basic form checker	Week 6,7
5	Advance PHP: PHP objects and sessions	Week 8
6	Introduction to MySQL: MySQL database, data table, basic queries Develop a basic PHP/mysql application.	Week 9,11

7	Advanced mySQL/PHP: more on SQL queries and PHP/SQL functions.	<b>Week 12</b>
8	Emerging technologies: Frameworks, Ajax, Basic Ajax syntax and examples, Introductory XML and final project related work.	<b>Week 13</b>

### Course Assessment Methods:

#### Homework

Homework/ assignment shall be designed to ensure that the students have the required knowledge to analyze and design control systems. Specifically, they will support the students' progress in the project/

#### Quizzes

Quizzes will be designed to test the students' understanding in the course and to assess various course outcomes

#### Examinations

The exam shall contain problems designed to test knowledge and comprehension, to analyze control systems and/or to apply the engineering problem solving method.

#### Project

The project shall evaluate the overall capability student to apply the knowledge acquired from the4 course given that it must cover 4-5 COs depending on the instructor's preference.

### Assessment Methods vs. Course Outcomes:

Assessment Methods	CO 1	CO 2	CO 3	CO 4	CO 5	CO 6	CO 7	CO 8
Classwork	X	X						
Assignment	X			X	X	X	X	
Homework		X	X					
Lab work		X	X	X		X	X	
Quizzes			X			X		X
Examinations				X				X
Project and Term Paper								X

### Textbook:

- [WS] Web Standards: Programmer's Reference, Steven M. Schafer, Wiley Publishing, 2005.
- [HTML5] HTML5: The Missing Manual, Matthew MacDonald, O'Reilly Media Inc., 2014.
- [J&J] JavaScript & JQuery, Jon Duckett, John Wiley & Sons, Inc., 2014.
- [PHP] Programming PHP, Rasmus Lerdorf, Kevin Tatroe, and Peter MacIntyre, O'Reilly Media Inc., 2006.
- [AJAX] Teach Yourself Ajax in 10 Minutes, Phil Ballard, Sams Publishing, 2006 .
- <https://docs.oracle.com/javase/specs/>

### Supporting Tools:

Lecture Notes and other material will be made available on the course website.

### Course Policies:

#### Class Policy

- Classroom and laboratory attendance are mandatory. You should come to the classroom before the instructor. Late comers may/ may not be allowed to enter the classroom. Students, who are absent over 30% of the class time will not be allowed to enter the final examination
- You should turn off your cellular phone before entering the classroom. You should not leave the classroom to make or take cellular phone calls
- You should bring a notepad and/or a writing instrument to every class and take detailed notes.
- You should pay attention to the instructor and participate in class discussions.
- You should not do other work during class time.

**Honor Code**

Any form of cheating, plagiarism, and/or academic dishonesty will result in an "F" grade in the course.

**Late Work and Examinations**

Late assignments will not be accepted. Students who know that they are going to miss class should make arrangements in advance. Exams will be closed book. There will not be any make-up for quizzes and midterm exams except the cases of hospitalization or detention

**Grading Policies:**

Student's grades are assigned according to the grading scale of the Brac University Undergraduate Study and Examinations Regulations. In addition, the faculty are allowed to take into consideration the class average and standard deviation to reflect the actual class performance for student grade assignment. The grades at the university will be indicated in the following manner:

Marks	Grades
97-100	A+ (4.0)
90-96	A (4.0)
85- <90	A- (3.7)
80- <85	B+ (3.3)
75- <80	B (3.0)
70- <75	B- (2.7)
65- <70	C+ (2.3)
60- <65	C (2.0)
57- <60	C- (1.7)
55- <57	D+ (1.3)
52- <55	D (1.0)
50- <52	D- (0.7)
<50	F (0.0)
P	Pass
I	Incomplete
W	Withdrawal
R	Retaken

**Course Assessment Methods:**

Guidelines for CSE course teaching in BRAC University. The following assessment methods are based on Theory Course only.

Section	Marks (%)
1. Quizzes/Class Tests/Assignments/	20 %
2. Mid Term Examination	20 %
3. Project & Term Paper	30 %
4. Final	30 %
<b>Total</b>	<b>100 %</b>

**Prepared By:** Muhammad Abdur Rahman and Ahanaf Hassan Rodoshi

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**Updated By:** Zaber Mohammad and Muhammad Abdur Rahman

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