



Overview and Description:

This course focuses on building core competencies in web design and development. It discusses and works with the latest version of HTML (HTML 5) and PHP (Version 5.x). Students will be learning to use Cascading Style Sheets (CSS Levels 1,2 and 3) with any HTML page they create in this course. Students will learn the fundamentals of JavaScript, including object-oriented JavaScript. AJAX - using both XML and JSON are also covered. Open source libraries such as jQuery Core 2.0 and jQuery UI (1.10.x) will be covered, as they assist in building cross-browser applications rapidly and efficiently. The PHP language will be presented and covered. The course will use MySQL 5.x as its relational database system (RDMS).

This course has been designed to be very hands-on with in-class workshops in most classes. Please have a laptop available during this course.

Instructor, Contact Email and Office Hours:

Instructor

Andrew Sheehan

E-mail

[asheehan@bu](mailto:asheehan@bu.edu)

Office hours

By appointment.

Official BU Calendar

[Official Academic Calendar for 2014-2014](#)

BU Blackboard: MET CS601 relies on the BU LMS system, learn.bu.edu. You need to have an account to have access to our course with all its material. Please attempt to login as soon as you can and verify that your account works.

Topic Coverage

1. HTML 5
2. Cascading Style Sheets
3. JavaScript
4. jQuery 2.0 or better
5. Ajax, XML, JSON
6. PHP
7. MySQL
8. Bootstrap, NodeJS, CakePHP

Course Objectives

- To understand and develop HTML.
- Develop an understanding and appreciation of CSS.
- To understand and use PHP.
- Use XML and JSON.
- Use encryption to secure Personally-Identifiable information with MySQL and/or PHP.
- Use jQuery and jQuery UI.
- Show competency MySQL.

Course Books

(REQUIRED) "Introduction to Web Development Using HTML 5" ISBN: 978-1-4496-8654-3

Recommendations on Course Software

- PHPStorm
- Apache
- MySQL
- PHP
- MySQL Workbench

Course Policies

- Homework will not be accepted after its due date.

Grading Policies

Homework 20.00%

Several assignments will be given throughout the semester.

Quizzes and Participation 20.00%

Quizzes are given throughout the summer. **They cannot be made up.**

Midterm Examination 20.00%

Covers all material up to the date of the midterm.

Project 20.00%

Completion of a project and presenting it at the end of the course.

Final Examination 20.00%

Covers all material presented in the course.

- *All homework assignments are due one (1) week from the date it was assigned, unless indicated by the professor.*

Academic Honesty

The course is governed by the Boston University Academic Conduct, for Metropolitan College.

You need to be aware of its contents: www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code

Course Schedule

Schedule of Events * (Subject to change)

Week	Dates	Topics	Readings	Homework	Final Project Dates
Week 1	January 21, 2015	HTML	Chapters 1,2,3,4,6,7,18	Setup/Configure your laptop.	
Week 2	January 28, 2015	Quiz #1 CSS. Media Queries. Version Control using Git Pure by Yahoo	Chapters 7,8 Instructor-supplied materials	Homework #1 Due	Stage 1: Development Environment Setup/Configuration Due.
Week 3	February 4, 2015	JavaScript	Chapter 10	Homework #2 Due	
Week 4	February 11, 2015	Quiz #2 Event Handling, Functions and Objects.	Chapter 11	Homework #3 Due	Stage 2: Concept Due
Week 5	February 18, 2015	Bootstrap. Foundation. Semantic UI	Instructor-supplied materials	Homework #4 Due	
Week 6	February 25, 2015	Quiz #3 jQuery, MySQL	Chapter 12	Homework #5 Due	Stage 3: Database Design Due
Week 7	March 4, 2015	Ajax, XML and JSON	Chapter 13	Homework #6 Due	
Week 8	March 11, 2015	Spring Break (No Classes)			
Week 9	March 18, 2015	Midterm Examination			
Week 9	March 25, 2015	Angular JS, jQuery UI	Instructor-supplied materials	Homework #7 Due	
Week 10	April 1, 2015	Quiz #3 Code Igniter, CakePHP, Yii	Instructor-supplied materials	Homework #8 Due	
Week 12	April 8, 2015	NodeJS	Instructor-supplied materials	Homework #9 Due	Stage 4: Functional Mockup Due
Week 13	April 15, 2015	Captcha. jQuery Mobile. Web Sockets with PHP	Instructor-supplied materials	Homework #10 Due	
Week 14	April 22, 2015	No Class (Patriot's Day Class Substitution)			
Week 15	April 29, 2015	Project Presentations			
Week 16	May 6, 2015	Final Examination			