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 at bu
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


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)*

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