

## Overview

This course teaches students modern web development using the latest standards; such as TypeScript 2.4, Webpack, Babel, ES6 (some ES7..), Modules and Promises. Students will have graded in-class laboratories that augment their homework.

## Instructor, Contact Email and Office Hours:

### Instructor

Andrew Sheehan

### E-mail

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

### Office hours

By appointment

### Official BU Calendar

<http://www.bu.edu/reg/calendars/>

**BU Blackboard:** MET CS601 relies on the BU LMS system, [learn.bu.edu](http://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 and CSS*
2. *Objects and Literals*
3. *Promises*
4. *Modules*
5. *jQuery Core and UI*
6. *Ajax*
7. *Babel*

## Course Objectives

- To build a complete website using HTML5, CSS and JavaScript.
- Gain an understanding the power of CSS.
- To use Ajax with jQuery.

## Course Books

- **REQUIRED** [HTML and CSS: Design and Build Websites, 1st Edition, by Jon Duckett](#) ISBN-13: 860-1200464207
- **REQUIRED** [Eloquent JavaScript: A Modern Introduction to Programming, 2nd Edition, by Haverbeke](#) ISBN-13: 978-1593275846  
(This book is free/online)

## Course Policies

- **Homework will not be accepted after its due date. We go over the solutions on the day it is due; thus, you cannot hand it in late.**
- I do not take attendance; but I do get to know my students. If you never/rarely show for class, I will know.
- If you do not participate in class, copy/paste solutions from the web, you probably will not succeed in the exams, as they are challenging.

## Grading Policies

### Homework 5.00%

Assignments will be given throughout the semester.

### Laboratories 10.00%

Laboratories will be given in almost every class. They are graded.

### Midterm Examination 30.00%

Covers all material up to the date of the midterm.

**Project 25.00%**

Completion of a project and presenting it at the last meeting day (in-class) of the course.

**Final Examination 30.00%**

Covers all material presented in the course.

## Academic Honesty

The course is governed by the Boston University Academic Conduct for Metropolitan College. Cheating and plagiarism will not be tolerated in any Metropolitan College course. Cheating will result in no credit for the assignment or examination and may lead to disciplinary actions. You need to be aware of the information contained within this link (not just for my course, but all): [www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code](http://www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code)

## Course Schedule

**Schedule \* (Subject to change)**

Week	Dates	Topics	Readings	Homework	Final Project Deliverables	
Week 1	September 11, 2017	<ul style="list-style-type: none"> <li>Introduction to HTML</li> <li>Debugging JavaScript</li> <li>Version Control with GIT/GitHub.com</li> </ul>	Duckett, Chapters: 1 through 5		<b>Discussion on the Final Project.</b>	
Week 2	September 18, 2017	<ul style="list-style-type: none"> <li>Expressions and operators</li> <li>The Date, String, Window and Document objects</li> <li>Grammar</li> <li>Control Structures</li> </ul>	Haverbeke, Chapters 1,2,3 and 4	Homework #1 Due	<b>Questions/Answers on Final Project.</b>	
Week 3	September 25, 2017	Introduction to CSS	Duckett - Chapters: 10 through 12		<b>Stage 1: Statement of Work Due.</b>	
Week 4	October 2, 2017	<i>Continuation on CSS</i> <ul style="list-style-type: none"> <li>CSS Fundamentals, Continued: Float, Margin and Padding</li> <li>Open Source CSS Modules: <a href="https://purecss.io">https://purecss.io</a></li> <li>CSS Extension (Open Source): SASS <a href="http://sass-lang.com/">http://sass-lang.com/</a></li> </ul>	Duckett - Chapter 13	Homework #2 Due		
Week 5	October 10, 2017	<ul style="list-style-type: none"> <li>Functions</li> <li>Closures</li> <li>HTML Tables and Forms</li> <li>Video and Audio</li> </ul>	Duckett - Chapters: 6,7 and 9 Haverbeke - Chapter 6 <a href="#">Closures</a>		<b>Stage 2: Sketch/Screen Shots of Progress</b>	
Week 6	October 16, 2017	<ul style="list-style-type: none"> <li>Arrays</li> <li>Using forEach(), map() and find()</li> </ul>	eBook: <a href="http://jqfundamentals.com">jqfundamentals.com</a> Haverbeke - Chapter: 14 <a href="#">map</a> <a href="#">forEach()</a>	Homework #3 Due		
Week 7	October 23, 2017	<i>Midterm Exam Prep</i>	Mock Midterm and In-class review	Homework #4 Due		
Week 8	October 30, 2017	<b>Midterm Exam</b>				
Week 9	November 6, 2017	<ul style="list-style-type: none"> <li>Object Literals and Prototypes</li> <li>Introduction to jQuery Core</li> <li>Events and Event Binding</li> <li>Callbacks</li> </ul>	eBook: <a href="http://jqfundamentals.com">jqfundamentals.com</a> Haverbeke - Chapter: 14 <a href="#">Objects</a> <a href="#">Callbacks</a>		<b>Stage 3: Screen Shots of your Progress.</b>	
Week 10	November 13, 2017	<ul style="list-style-type: none"> <li>Ajax using jQuery</li> <li>XML and JSON</li> </ul>	Haverbeke - Chapter 17	Homework #5 Due		
Week 11	November 20, 2017	<ul style="list-style-type: none"> <li>Promises</li> <li>Arrow Functions</li> <li>Spread Operator</li> <li>Destructuring</li> </ul>	<a href="#">Spread</a> <a href="#">Arrow Functions</a> <a href="#">Destructuring</a>		<b>Stage 4: Progress Submission</b>	
Week 12	November 27, 2017	<ul style="list-style-type: none"> <li>Modules</li> <li>Introduction to Webpack</li> <li>Babel</li> <li>Angular 4</li> <li>ReactJS</li> </ul>	eBook/Tutorials/Examples: <a href="http://surveys.com">surveys.com</a> <a href="#">Babel</a>	Homework #6 Due		
Week 13	December 4, 2017	<b>Course Review</b>				
Week 14	December 11, 2017	<b>Student Presentations</b>				
Week 15	December 18, 2017	<b>Final Exam</b>				