

# Boston University

## MET CS401 - Introduction to Web Application Development

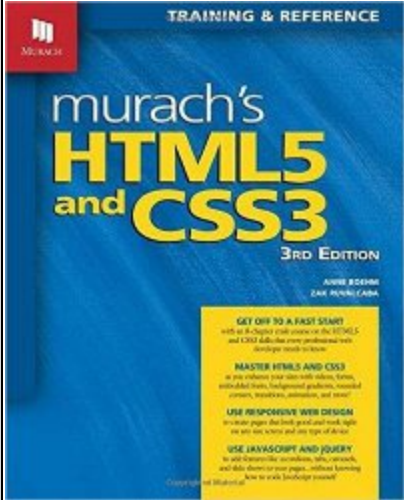
### Instructor Information

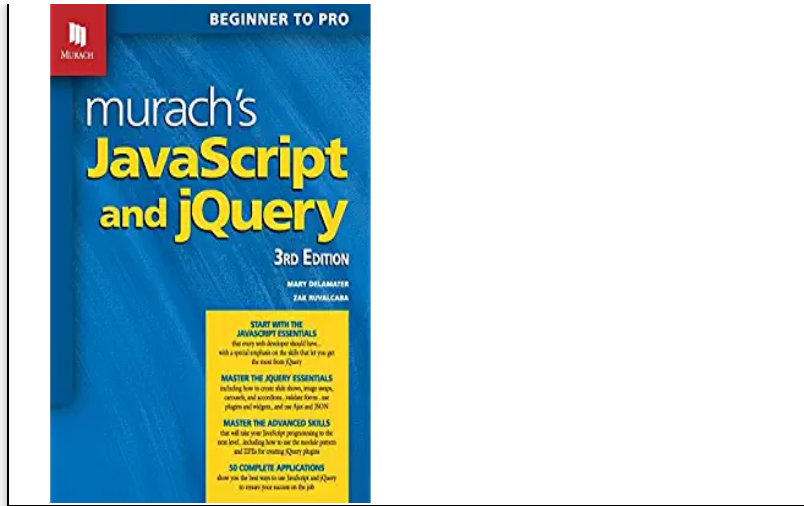
Larry Robertie - [Bio](mailto:robertie@bu.edu)  
[robertie@bu.edu](mailto:robertie@bu.edu)  
 617-538-7515  
 Office hours by appointment



### Required Course Materials

#### Textbook:

	<p style="text-align: center;">Required</p> <p><i>Murach's HTML5 and CSS3, 3rd Edition, Zak Ruvalcaba and Anne Boehm, Mike Murach &amp; Associates, ISBN-13: 978-1890774837</i></p> <p><b>Why:</b> This is one of two main texts. Readings will primarily come from this book, as well as test questions.</p>
	<p style="text-align: center;">Required</p> <p><i>Murach's JavaScript and jQuery, 3rd Edition, Mary Delamater, Zak Ruvalcaba, ISBN-13: 978-1-943872-05-3</i></p> <p><b>Why:</b> This is one of two main texts. Readings will primarily come from this book, as well as test questions.</p>



Recommended



Dane Cameron, (24 May 2014) A Software Engineer Learns HTML5, JavaScript and jQuery: A guide to standards-based web applications, Cisdal Publishing

**Why:** This is a great book for someone fammilliar with programming. It goes beyond the how to mechanics of code and explains "why" certain things behave the way they

do. The Amazon Kindle version is \$5.

Recommended



Joel Murach, Ray Harris Murach's PHP and MySQL, 2nd Edition – December 1, 2014 Mike Murach & Associates, ISBN-13 978-1890774790

**Why:** Although this course is not designed to deeply explore the "server side" of web development, quite honestly the client side stuff only takes you half way to a full and rich web site. This book explores the use of a server side scripting language

(PHP) and Database (MySQL). Both are free on almost all web server offerings, and they afford the student a good way to learn and experiment.

The first six chapters of this book present a very decent introduction to server side technology.

Other Resources:

<http://www.robortie.com/rU> - class web site

<https://repl.it> - Web IDE

<http://www.000WebHost.com> - free web hosting

<http://www.hostmonster.com/> - paid web hosting

<http://www.ipower.com/> - paid hosting (wind powered)

<http://www.aptana.com/> - opensource Web IDE

[BU Academic Alliance](#) - Free Microsoft Web Expressions or Visual Studio

<http://www.mozilla.com/en-US/firefox/fx/> - Firefox Web browser

<https://addons.mozilla.org/en-US/firefox/addon/firebug/> - Firebug web development tool for Firefox

<http://www.apachefriends.org/en/xampp.html> - install development environment locally

<http://www.w3schools.com/> - W3Schools Web Tutioials

<http://php.net/manual/en/langref.php> - The official PHP reference manual

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## Course Description

Focuses on building core competencies in web design and development. It begins with a complete immersion into HTML. Students are exposed to Cascading Style Sheets (CSS), as well as Dynamic CSS. The fundamentals of JavaScript language including object-oriented JavaScript are covered comprehensively. AJAX with XML and JSON are covered, as they are the primary means to transfer data from client and server.

### Prerequisites:

The prerequisites to this course are introductory programming classes.

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## Goals and Objectives

### By successfully completing this course you will be able to:

- Understand web programming *concepts*.
- Demonstrate client-side competency with knowledge of HTML and CSS.
- Develop web applications skills using software such as Dreamweaver.
- Create dynamic web pages with JavaScript and Ajax.
- Understand the basics of XML.
- Understand the basics of PHP and MySQL.
- Gain hands-on exposure to the web site design and development process.
- Develop a basic website.

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## Instructional Methods

Lecture, demonstration, problem solving, and discussion.

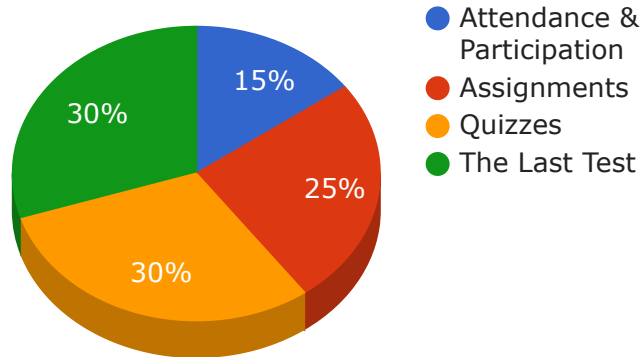
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## Grading

Course Grading Criteria

Event	% of Grade
Attendance & Participation	15%
Assignments	25%
Quizzes	30%
The last test	30%

Grade Distribution



**Note: there will be no "extra credit" assignments, any assignment passed in late will receive an automatic 20% reduction in grade, no assignment will be accepted beyond one week late.**

**No quiz, or the last test, will be accepted past its due date/time.**

Standard Grading

Letter Grade	Numerical Equivalent	Grade Points
A	95-100	4.00
A-	90-94	3.67
B+	86-89	3.33
B	83-85	3.00
B-	80-82	2.67
C+	75-79	2.33
C	70-74	2.00
C-		
D	64-69	1.00
F	less than 64	0.00
IP	In Progress (incomplete)	

W

Withdrawn

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## Attendance

- Be on time for all class meetings
- Any student who misses three classes may be at risk for failing the course.
- Each student is responsible for reading chapters from the text, as well as other reading materials as assigned by the instructor.
- Texting or use of cell phones in class is **prohibited**

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## Code of Conduct

The course is governed by the Academic Conduct Committee policies regarding plagiarism (any attempt to represent the work of another person as one's own). This includes copying (even with modifications) of a program or a segment of code without attribution. You can discuss general ideas with other people, but the work you submit must be your own. Collaboration is not permitted unless you are otherwise instructed.

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## Schedule

Topic	Reference
Class Intro	"The Stack"
Coding a web page, HTML5	chapters 1,2, & 3
CSS Design and deploy a web site	chapters 4, 5, & 6 chapter 18
Lists and links, Images, Tables, and Responsive Design	chapters 7, 9, and 8
Tables & Forms, Audio, Video, Fonts, and Printing	chapters 10, 11, 12, & 13
CSS3 transitions, transforms, animations, and filters	chapter 14
Introduction to JavaScript	chapter 2, 3
JavaScript Objects, Functions, and Events	chapter 4
DOM Scripting, Testing your JS	chapter 5 & 6
Create and use JavaScript Objects	chapter 11
jQuery	chapters 17
Server side scripting (PHP) & Database (MySQL) AJAX	The last test

Note: When appropriate, this schedule will be condensed to accommodate the 12 week summer session. All topics will be covered. Schedule subject to change as needed.

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