



Web Application Development – MET CS401, MET CS601 (All sections)

The focus of this class is on HTML, CSS and Javascript. Students need to bring their laptops. Classes involve hands-on coding.

Instructor

Andrew Sheehan

asheehan@bu.edu

Office Hours

Send an email with your request of a time and place and we can arrange a time.

Classroom Location

5 Cummington Mall, Room BRB 121

Course Policies

- Do not allow yourself to be swayed by the influence of AI technologies to do your homework. Do the assignments by your own hands.
- We do not work in groups. Work is done individually.
- Programming is learned by thinking, designing and lastly implementing. Not by copying.
- Homework submitted after the due date is frowned upon and your grade will suffer if you submit late.
- Your professor will not accept answers/submissions from students when the solutions are released.

Grading

- Homework: 20%
- Laboratories: 10%
- Quizzes & Attendance: 10%
- Midterm Examination: 30%
- Final Examination: 30%

Books

All books are recommended but not required.

- Response Web Design
 - i. "HTML and CSS: Design and Build Websites", Jon Duckett
<https://www.amazon.com/HTML-CSS-Design-Build-Websites/dp/1118008189>
 - ii. "Responsive Web Design with HTML5 and CSS: Build future-proof responsive websites using the latest HTML5 and CSS techniques, 4th Edition", Ben Frain
https://www.amazon.com/dp/180324271X/ref=sspa_dk_hqp_detail_aax_0?psc=1&sp_csd=d2lkZ2V0TmFtZTlzcF9ocXBfc2hhcmVk
- Javascript
 - iii. <https://exploringjs.com/es6.html>
 - iv. https://eloquentjavascript.net/Eloquent_JavaScript.pdf

Day of Week: Wednesday	Summer 2025 Schedule of Events and Topics
Week #1 21-May	<ul style="list-style-type: none"> • Course expectations/planning • Discussions on your local development environment • Introduction to HTML • Understanding inline and block elements, attributes • Lists, images, headers and internal/external links
Week #2 28-May	<ul style="list-style-type: none"> • Variables and Javascript data types • Introduction to declared functions • Review of control structures • Introduction to events • HTML Tables and Forms
Week #3 4-June	<ul style="list-style-type: none"> • Core CSS selectors • Function expressions, arrow functions
Week #4 11-June	<ul style="list-style-type: none"> • Using Audio and Video controls • ES6 Modules
Week #5 18-June	Midterm Examination
Week #6 25-June	<ul style="list-style-type: none"> • Using Bootstrap • Introduction to Flexbox • Understanding CSS Grids • Pseudo-classes and pseudo-elements

Day of Week: Wednesday	Summer 2025 Schedule of Events and Topics
Week #7 2-July	<ul style="list-style-type: none"> • Media Queries • Data Structures: Array, Set and Map • Operations on data; using map(), reduce(), filter() and others
Week #8 9-July	<ul style="list-style-type: none"> • REST and Spread • Object literals • ES6 classes • Introduction to Typescript
Week #9 16-July	<ul style="list-style-type: none"> • Promises • async/await • axios and fetch
Week #10 23-July	<ul style="list-style-type: none"> • Introduction to React • Using hooks (context, state, effect, reference, etc) • Understanding React Router • Basics of NextJS
Week #11 30-July	<ul style="list-style-type: none"> • Course review and project presentations
Week #12 6-August	Final Examination