



MET CS601: Syllabus

Overview of CS601: Web Application Development (Client side only)

This class focuses on HTML, CSS and JavaScript. Students should bring their laptops to every class for the hands-on laboratories.

Instructor

asheehan@bu.edu Office hours are by appointment. Please reserve and time and place with me.

Classroom Location

"CAS" - 725 Commonwealth Avenue, Room 426

Required eBooks

- HTML and CSS Design and Build Websites (Free PDF/online)
<https://medium.com/easyread/e-book-node-js-notes-for-professionals-book-e13db79d7b08>
- Exploring ES6
<http://exploringjs.com/es6.html>
- ReactJS - Notes for Professionals
<https://books.goalkicker.com/ReactJSBook/>
- TypeScript Deep Dive (Free PDF/online)
<https://basarat.gitbooks.io/typescript/content/docs/getting-started.html>
- jQuery
<https://books.goalkicker.com/jqueryBook/>
- Eloquent JavaScript
https://eloquentjavascript.net/Eloquent_JavaScript.pdf

Course Policies

- Homework will not be accepted after its due date.
- If you do not participate in class (or do not show up or come), you probably will not succeed in the exams, as they are challenging.

Grading Policies

- Homework/Laboratories: 25%
- Midterm Examination: 25%
- Term Project: 25%
- Final Examination: 25%

Schedule

Week	Topics	Readings
January 22	<ul style="list-style-type: none">• Course Introduction• Introduction to HTML Basic Elements, Lists, Headers, Links, Tables and Images	<ul style="list-style-type: none">• Duckett: Chapters 1-6
January 29	<ul style="list-style-type: none">• HTML Fundamentals: Forms, Audio and Video• Cascading Style Sheets and Selectors	<ul style="list-style-type: none">• Duckett: Chapters 7,8,9,10
February 5	<ul style="list-style-type: none">• Fundamentals of JavaScript: Expressions, Control Structures and Algorithms• Functions (Arrow and Standard)• Modules• Binding Events with jQuery	<ul style="list-style-type: none">• Eloquent: Chapters 3,5 and some 15• jQuery eBook: Chapters 1,2,4,5 and 6
February 12	<ul style="list-style-type: none">• Introduction to TypeScript	<ul style="list-style-type: none">• Eloquent: Chapter 15

	<ul style="list-style-type: none"> • Compiling with Babel 	<ul style="list-style-type: none"> • See: https://babeljs.io/ • TypeScript Link: The first 3 Sections
February 19	Holiday Class Substitution (Monday class held on Tuesday)	
February 26	<ul style="list-style-type: none"> • Flexbox, Floating Elements and Design • Continuation of Babel, TypeScript • Bundling assets with Webpack 	<ul style="list-style-type: none"> • See: https://webpack.js.org/concepts
March 5	<ul style="list-style-type: none"> • Data Structures: Arrays, Sets and Maps • ES5 Classes and Objects 	<ul style="list-style-type: none"> • Eloquent: Chapters 4,6 • Set and Map: developer.mozilla.com
March 12	University - Spring Break	
March 19	<ul style="list-style-type: none"> • Review and Practice for Midterm Exam 	
March 26	Midterm Examination (All material up this week)	
April 2	<ul style="list-style-type: none"> • Ajax with jQuery • The Fetch API • The Promise API • JSON and XML Processing 	<ul style="list-style-type: none"> • https://developer.mozilla.org/en-US/docs/Web/API/Fetch_API • Ch. 16 of jQuery PDF • Eloquent: Chapter 18
April 9	<ul style="list-style-type: none"> • REST and Spread Operators • Destructuring • Using create-react-app (Small Intro to Node and NPM) • Introduction to ReactJS: Framework, Components, State vs Props and Lifecycle Methods 	<ul style="list-style-type: none"> • Chapters 1-6 in ReactJS Notes • http://exploringjs.com/es6/ch_destructuring.html
April 16	<ul style="list-style-type: none"> • More ReactJS (Building applications with ReactJS) • React Router 	

	<ul style="list-style-type: none">• Services (Data Fetching and Rendering: Axios, Fetch) with ReactJS
April 23	<ul style="list-style-type: none">• Continuation with ReactJS with building applications• Comprehensive review of the course• Student Presentations (Early Presentations)
April 30	All Students Present Term Project (Deadline)
Final Exam Week	Comprehensive Final Examination



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