Syllabus

Welcome to CM523 - Design & Interactive Experiences!
This course introduces students to principles of interactivity through hands-on experience designing and building an interactive project (website/app). Students will learn to apply design thinking for interactivity while building a device-agnostic package using modern web technologies: HTML, CSS, JavaScript and related libraries, plug-ins, frameworks and tools as necessary. Students will experience the full design and development process (concept ideation, prototyping, user testing and iteration) in building a functional project. Topics on media technology, animation, accessibility, interface design, information architecture, interaction design, networking, performance, prototyping, responsive design and usability will be covered. **No prior coding or development experience is required.**

Meets:
Wednesdays 6:30-9:15 pm
In-person: COM 214
Instructor:
Ashley Kolodziej (she/hers)
Direct message: in Pronto
Email: kolodz10@bu.edu
Office hours:
Monday, Thursday, and Friday 2-5pm by appointment - Request here

Objectives

Students will learn:

- How to apply the fundamentals of graphic design learned in COM CM 323 or COM CM 501, COM CM 510, or COM CM 741 to the specialization of web and interaction design
- How to rapidly create and test wireframes and prototypes using Figma
- The fundamentals of modern frontend web development, including HTML, CSS, JavaScript and related technologies
- How to apply these fundamentals to the full design and development process (concept ideation, prototyping, user testing and iteration) while building a functional project
- Strategies for effective and inclusive communication and experience design for the web, including accessibility, performance, and usability.

Recordings

This class meets in an in-person format. In order to support your ability to learn, and in recognition of the fact that this class covers complex material that is near impossible to learn and understand without seeing my live demonstration of code examples, I have received permission to record class lectures this semester. **This is not a substitute for in-person learning or attendance.** We use class time for live demos, answering questions together, critique / feedback, and debugging, as well as connecting for group project work. If you choose not to attend class regularly and receive this feedback, that will be reflected both in the quality of your project work as well as the attendance component of your grade.

You can expect the following from this class and from me as your professor:

- There will typically be 1 assignment per week, plus practice problems, which reinforce the concepts we talk about each week.
- In the class schedule, you will see recommended work for the week. These assignments will be what we review in class together.
- Class time will be split between review of the week's assignments and material, discussion of topics in web design as a class, critique or project check-ins, and lecture.
- Class recordings will be available on MyMedia by the Saturday following class.
- I typically grade items in my Gradescope grading queue on Sundays, and release grades shortly after each milestone in the class.

Laptops & Software

Students will use their own laptops in class. Before the first class, please log into Blackboard and install the software listed in the Software & Development Setup module. If you do not own a laptop, laptops are available to be reserved ahead of time during class hours.

Textbooks

There are no required textbooks for this class; the most up-to-date information will be available in lectures and can also be found online.

Requirements

Students will:

- Complete a series of code-based practice assignments to reinforce development skills using GitHub.
- Use chat tools and work in groups to learn development thinking and solve code-based problems related to lecture topics, including debugging, problem-solving, and identifying reliable sources of troubleshooting information online.
- Complete a final project which demonstrates a mastery of design, concept, HTML, CSS, and JavaScript, usability, accessibility, and well-commented, performant code.

Grades

Grades are weighted as follows:

Assignments (11) 30%	**Midterm** 25%	**Final Project** 35%	**Practice (3)** 10%

Coding assignments not turned into Gradescope will not be graded. This includes emailing or Slacking assignments directly to me. This is because it is very easy for me to lose your grade among my emails. **Please do not email or Pronto work directly to me, it's important!**

Letter grade numeric values:

A 100–94	**A–** 93–90	**B+** 89–88	**B** 87–84	**B–** 83–80	**C+** 79–77	**C** 76–74	**C–** 73–70	**D** 69–60	**F** 59–0

Positive Classroom Experience

I want to make sure you have the most positive experience in the classroom as possible. At your discretion, please alert me to anything related to preferred pronouns, preferred name or nickname, or any extenuating circumstances or trigger warnings (personal, medical, etc.) that might affect your classroom experience. In turn, please do the following:

- Silence phones during class.

- Take good care of yourself; remember to eat beforehand or bring a small meal to eat during the break. If you need to eat or drink during class, be courteous - clean up after yourself, and ensure your snacks are quiet.
- Please do not text, email, talk, or browse online during class. These things distract others around you, and impact your ability to learn and retain information.
- Everyone comes to class with a different set of life experiences. Be respectful of this. Constructive criticism, honest questions, and debate are welcome. Meanness is not.

Strategies for Success

- Take notes, repeat/rewatch demonstrations from lecture, and work through the practice problems.
- During class, if a process or concept is unclear, ask to see it demonstrated again.
- Recognize you are growing, and programming is a new way of thinking. Be gentle with yourself and expect to not get it quite right the first, second, or even fifth time.
- Provide constructive, meaningful feedback during code review, and don't be afraid to ask questions about others' work.
- Design and development are learned skills, and everyone you see in this class is here to learn them. No one is born an excellent designer or brilliant frontend developer.

Class Schedule

Assignments and recommended practice sets for each class are noted below. These may change slightly throughout the semester depending on class and overall learning.

Date	*Topics covered & classwork:*	*Due next class:*
Before the first class:		Begin items in Software & Development Setup on Blackboard. We'll troubleshoot in Class 1 if you get stuck!
Class 1 9/4/24	**Welcome & Introduction to HTML** What to expect from this class Digital design: How is it different? First steps in code Why semantics matter: Accessibility	**Complete Assignment 1: Test Your Connections** **Complete Practice 1: Breaking Down Design** Complete items in Software & Development Setup module on Blackboard Complete Class 1 module on Blackboard
Class 2 9/11/24	**The Design Process** Intro to Figma & wireframing Intro to Debugging HTML: Connecting content to layout	**Complete Assignment 2: Recipe Wireframe in Figma** **Complete Assignment 3: Your Favorite Recipe, Part 1** Complete Class 2 module on Blackboard
Class 3 9/18/24	**Introduction to CSS** Principles of Web & Interaction Design Mockups & Prototyping in Figma CSS Basics: Selecting, Specificity, and the Box Model Inspecting and debugging CSS	**Complete Assignment 4: Recipe Mockup in Figma** **Start Assignment 5: Your Favorite Recipe, Part 2** Complete Class 3 module on Blackboard Find a final project partner (if working as a group)
Class 4 9/25/24	**Typography & Color for Digital Devices** Intermediate CSS: Typography, Shapes, Colors & Backgrounds	**Continue Assignment 5: Your Favorite Recipe, Part 2** **Complete Practice 2: Breaking Down CSS** Complete Class 4 module on Blackboard
Class 5 10/2/24	**Responsive Web Design** Midterm Preview Responsive Web Design: What's Next?	**Complete Assignment 6: Project Proposal** Complete Class 5 module on Blackboard

Class 6 10/9/24	**Midterm Exam - Take Home**	**Complete Assignment 5: Your Favorite Recipe, Part 2** *This is a take-home exam - we will not meet for this class. I'll explain how this works in Class 5.*
Class 7 10/16/24	**What is User Experience (UX)?** Intro to the Student Site Boilerplate Advanced CSS: Flexbox & Grid Animations & Transitions UX and User Research	**Complete Assignment 7: Final Project Prototype 1 & User Test using Figma** **Start Assignment 8: Project Prototype in Figma** Complete Class 7 module on Blackboard
Class 8 10/23/24	**Introduction to JavaScript** What's possible with JavaScript? Variables, Data Types & Operators DOM Traversal & Manipulation Exploring the console	**Complete Assignment 8: Project Prototype in Figma** **Complete Practice 3: Practical JavaScript** Complete Class 8 module on Blackboard
Class 9 10/30/24	**Critique: Project Prototype** Logic, Comparison, and Loops The DOM, continued	**Complete Assignment 9: Weekly Build Check-In 1** *Begin project builds. Aim for adding rough HTML, CSS, and begin JS functionality based on the practice.* Complete Class 9 module on Blackboard
Class 10 11/6/24	**JavaScript Functions** JavaScript Event Listeners The "this" keyword Code Collaboration: Merging and Updating Branches	**Watch Tutorial: Advanced JavaScript** **Complete Assignment 10: Weekly Build Check-In 2** *Continue project builds. This week, your goal should be to get functionality working reasonably well.* Complete Class 10 module on Blackboard
Class 11 11/13/24	**Finding & Working with Third-Party APIs in JavaScript** Reading and formatting JSON Fetching Data & Debugging Results Showcase: What's possible with	**Complete Assignment 11: Weekly Build Check-In 3** *Continue project builds. Work towards acceptable style and good content/functionality.* Complete Class 11 module on Blackboard

	third-party APIs?	
Class 12 11/20/24	**Advanced Web Development Topics** Project Build Check In 2 Animation and User Interfaces Possibilities with SVG & Canvas Working lab, demos, & debugging	**Working time - Final projects** **Complete and submit Final Project for next class** *Continue project builds. Work towards polished style, content, and functionality. Resolve bugs.* Complete Class 12 module on Blackboard
11/27/24	**No class meeting today - Happy Thanksgiving!**	
Class 13 12/4/24	**Team Project Presentations** What can you do from here?	Recommended as a follow up to this class - The Odin Project: Getting Hired

Policies

Artificial Intelligence

For code: In this class, you can use ChatGPT or GitHub Copilot. Both of these tools use artificial intelligence to help explain code, and will allow you to generate simple code using a chat-style interface. **When using any AI tool, you must include an explicit and affirmative declaration at the top of your file, using a code comment, that the assignment was prepared, reviewed, or edited with the assistance of AI, as well as the prompts which led you to your answer.** We will practice this together in class, as well as discuss the pros and cons of such tools.

For imagery: You may use Adobe generative features, such as Adobe Firefly Beta, for supplementary image generation only. For example, you may use image generation to create product images for a filtering page for your final project, so that you have assets to work with. You may not use these tools to create full mockups or otherwise design any layout in this class, as your original design work is an important part of your grade and learning. **When using Adobe Firefly, you must credit Adobe and provide a link to the prompt.**

Plagiarism

Plagiarism is the act of representing someone else's creative and/or academic work as your own, in full or in part. It can be an act of commission, in which one intentionally appropriates the words, pictures or ideas of another, or it can be an act of omission, in which one fails to acknowledge/document/give credit to the source, creator and/or the copyright owner of those works, pictures or ideas. Any fabrication of materials, quotes or sources, other than that created in a work of fiction, is also plagiarism. Plagiarism is the most serious academic offense that you can commit and can result in probation, suspension or expulsion. *Boston University College of Communication Plagiarism Policy*

Plagiarism and AI tools: Omitting the declaration of usage of AI tools in your work is considered plagiarism. Please be sure to cite your usage of AI tools. You can always ask me how to do this if you're unsure.

A special note on plagiarism as a web designer and frontend developer: There will be projects in this class and in your career as a web designer and frontend developer where you will use existing resources others have produced, such as typefaces, photographs, and illustrations, to support and create your own unique design, or look to other people's design ideas for inspiration.

Similarly, as a frontend developer, it is expected that you will look to online resources and code examples to help you problem-solve and get started writing your code and solving your own unique problem.

Your job during these projects is to create **a new and unique visual and functional idea** that was not present previously through the combination of these elements, the skills you learn in class, and your own knowledge and concepts.

Plagiarism:

- Using or modifying a design template or design work you found on the internet.
- Using assets you do not have the rights to use in your work.
- Using the same colors, typeface, or imagery as someone else who solved the same design problem as you are solving.

- Copying code or a concept without crediting the original author or modifying the codebase to work in a different, unique idea of your own.
- Copying code directly from a classmate.

Inspiration / Reasonable Modification:

- Analyzing someone else's design choices, understanding why they work, and applying concepts you see in that and other works to your own design problem (ie, using a cool color palette to evoke a winter feeling vs. using the same color palette as Frozen).
- Using code you've found as a starting point, commenting with the original author, and providing comments on how it works and why you have used it as part of your larger functional problem.
- Working together in your group to solve a problem together, in which everyone contributes code or ideas and helps each other out.

I am only able to grade you on your work, not someone else's. Always ask yourself what is left after you take out someone else's design or code ideas you've chosen as inspiration. If there is little to nothing left after, I will have little to nothing left to grade in your work as well.

Universal Academic Conduct Code

All BU students are bound by the Academic Conduct Code. Please review to ensure you are acting responsibly and ethically in regard to your academics.

Sexual Misconduct

Boston University is committed to fostering a safe, productive learning environment. Title IX and our school policy prohibit discrimination on the basis of sex, which regards sexual misconduct – including harassment, domestic and dating violence, sexual assault, and stalking. We understand that sexual violence can undermine students' academic success, and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. Confidential support and academic advocacy resources can be found at the end (Section XII) of the BU Sexual Misconduct Policy and on the Supportive Measures page.

Equal Opportunity Policy

BU has strict guidelines on classroom behavior and practices when it comes to treatment of students and guests on the basis of race, color, religion, sex, gender identity, sexual orientation, age, mental or physical disability, genetic information, military service, national origin, or due to marital, parental, or veteran status. Discrimination for any of these reasons is prohibited. Please refer to the Equal Opportunity/Affirmative Action Policy for more details.

Recording of Classes

Classroom proceedings for this course might be recorded for purposes including, but not limited to, student illness, religious holidays, disability accommodations, or student course review. Recordings will be published to Kaltura (mymedia.bu.edu). Note also that recording devices are prohibited in the classroom except with the instructor's permission.

Student Athletes

All student-athletes should be provided with a sheet from Student-Athlete Support Services regarding absences throughout the semester. These sheets should be handed in as soon as possible to avoid potential conflicts and so arrangements can be made to provide for missed lecture notes, classwork, or discussion.

Disability & Access Services

If you are a student with a disability or believe you might have a disability that requires accommodations, please contact the Office of Disability and Access Services (DAS) at 617-353-3658 to coordinate any reasonable accommodation requests. DAS is located at 25 Buick Street, on the third floor.

Faculty Mentorship

All COM students are automatically assigned a faculty member within their department, who can help with professional and educational mentoring, as well as advice on how to take advantage of resources within your field. You can check who your mentor is on the MyBU Student Portal. If you would like to request a different faculty member to be your mentor, please inquire within your department administration office.

Additional Support & Resources

Taking an incomplete - is it right for me?
https://www.bu.edu/advising/academic-policies/taking-an-incomplete/

Support services:
https://www.bu.edu/com/resources/current-students/student-support/

In addition to the resources on this site, please know that we are here to help you find the resources to help you get through stressful times.

COM Diversity, Equity, and Inclusion:
https://www.bu.edu/com/about-com/diversity-equity-inclusion/

BU Newbury Center for First-Generation Students:
http://bu.edu/newbury-center

COM Writing Center:
https://www.bu.edu/com/for-current-students/the-com-writing-center/

BU Dean of Students office:
https://www.bu.edu/dos/

Any student who is experiencing food or housing insecurity and believes this may affect their performance in the course is urged to contact the Dean of Students for support.

In addition, please notify the professor if you are comfortable in doing so. This will enable us to provide any resources that we may possess.