MI 349

Web Design & Development

Department of Media & Information - Michigan State University

Semester	Credits	Instructor	Hybrid (D2L+In-person)
Fall 2025	**3**	**Jeff Siarto**	**Tue - 12:40-2:30 (740) - BCP M210** **Tue - 3:00-4:50 (741) - Case 337**

MI 349 - Web Design and Development is a foundational course on producing modern, professional websites using industry standard software and open source tools. The course takes a holistic approach to web design, covering all aspects of web development from ideation and visual design, production using web standards (HTML, CSS, and JavaScript), and continuous deployment with Github and popular cloud services. Students will leave the course with an original portfolio piece and a solid understanding of the processes, technologies, and roles involved in creating professional desktop and mobile websites.

Overview

Course Objectives

The goal of all my classes is to have students leave with actionable technical skills they can apply to their career. We are going to *do stuff* in this class and there will be opportunities around every corner to practice and hone your skills. How much value you get from the course is up to you—there are very few shortcuts in technology (even with AI)—you have to put in the time and practice. *Repetition is the way.*

By the end of the course, students should be able to:

1. Use HTML, CSS, and JavaScript to create usable, accessible websites.
2. Understand and use professional software tools (commercial, open source, AI) common in our industry to be more effective participants in the web development community.
3. Develop and apply their own personal design and software development process.

4. Know where they fit in among a larger development team. Understand and navigate the different roles and responsibilities of designers, UX professionals, developers, and project managers.

Instructor

- Jeff Siarto (He/Him): siartoje@msu.edu
- **Office hours:** Wed/Thu, 10am-2pm - CAS 440

Prerequisites

- Check the Student Information System for college, department, and course specific prerequisites.

Time and Location

- Hybrid (D2L + 1 in-person session per week) with weekly content.
    - 740: Tue - 12:40-2:30 - Business College Pavilion M210
    - 741: Tue - 3:00-4:50 - Case Hall 337

Required Materials and Software

Some of these services offer free or heavily discounted rates for college students. You don't need the upgraded services for this class, but some students find it helpful to have extra time within Codespaces or more credits/prompts for AI coding.

- MSU D2L
- GitHub (w/ Codespaces and Copilot AI)
- Visual Studio Code
- Netlify
- Figma

Instructional Style

MI 349 is a hybrid course with weekly content releases and assignments. Each module will have required reading to give you a solid foundation before you jump into the course videos. Video lectures consist of 15 to 30-minute practical guides that step you though an example development related to the module's topics. The expectation is that students will do some amount of self-study—using search tools, documentation, and trial/error to solve

problems and troubleshoot code. You should expect to spend 1-3 hours in self-study for every hour of instruction.

Each week (with a few exceptions, see schedule) the class will meet together in person to discuss the weekly topics, talk about industry news, work together on code and get one-on-one help. **Attendance for in-person sections is required.**

Student Expectations

Programming Experience

You do not have to have any formal programming experience to have success in this class. Some experience with programming basics and exposure to HTML, CSS, and JavaScript is beneficial, but not required.

Computer and Operating System Proficiency

A high-level of computer proficiency will be required for this class. You will need to create new plain text files in a text editor, export PDF files, connect to remote servers, interact with the terminal/shell, use Git and GitHub, use advanced features of your web browser, and install open source software. All examples will be performed on a Mac—you should understand how to translate those commands to your platform (Windows, Linux) (e.g. Copy/Paste, New files and folders, etc).

Professionalism

The quality and professionalism of your work should be clear in your deliverables. Here are some tips for making sure your labs and projects meet class standards:

- Start your labs early and commit often. It is very easy to underestimate the amount of time it will take you to complete a programming or design assignment. Starting the same day will often lead to rushed work and a lack of quality.
- Basic design fundamentals (which we cover in the Figma modules) should be followed at all times when creating user interfaces. Details like contrast, alignment, and readability will be more heavily emphasized in this class. The design and usability of the work you submit matters.
- Create original content for your assignments. All text, images, and video (unless you're embedding from YouTube) should be created by you. The use of copyrighted images (anything from Google Image Search) or material is not allowed.
- Write helpful commit messages and be a good GitHub citizen.

Attendance & Course Engagement

MI 349 is a hybrid course which means we have 1 in-person session per week (vs 2 in a typical MSU course). Most of the content is delivered through D2L and the in-person session is reserved for group activities, discussion, live demos, and 1-on-1 help. **Attendance for in-person sections is required.**

Course Schedule

This is a general schedule for the course and outlines topics for each week of class. Please see D2L for official module objectives, assignments, readings, and video lessons.

Critical Dates

- First class: August 25, 2025
- Last day to drop for a refund: September 18, 2025
- Last in-person class: December 1, 2025
- Final project deadline: December 7, 2025

Topics

Aug 25, 2025	Sharp Tools
Sep 1, 2025	Figma: Design Basics
Sep 8, 2025	Figma: UX Prototyping
Sep 15, 2025	How the Web Works
Sep 22, 2025	It's All Semantics
Sep 29, 2025	Separation of Concerns
Oct 6, 2025	Style (Jeff's Version)
Oct 13, 2025	Responsive Design
Oct 20, 2025	Design Challenge (Fall Break)
Oct 27, 2025	Frameworks and Content Management
Nov 3, 2025	Site Builders and AI Tools

Nov 10, 2025	JavaScript Enrichment
Nov 17, 2025	Top 10 Things We Didn't Cover
Nov 24, 2025	Final Project Sprint (Thanksgiving)
Dec 1, 2025	Final in-person class.
Dec 7, 2025	Final projects deadline.

Course Policies

Assignments

You will find a variety of assignments and opportunities for learning (and points) in this class. There are 1000 total points you can earn throughout the semester and they are broken up into three categories: weekly labs, class participation, and the final project—each is explained in detail below.

Lab Exercises

Each week there will be a module of new content and an associated lab that will test your knowledge of the material. The labs will typically consist of design work in Figma or programming/markup/design projects in a typical VS Code-GitHub-Netlify project format. Labs make up 40% of your overall grade and have a weekly time limit. It's recommended that you start the labs as early in the week as possible, as they can take anywhere from 3 hours to multiple days to complete (depending on your preparation and schedule). Students often need multiple "sessions" of work (blocks of 2-4 hours) to properly complete lab assignments, and starting early will allow you to seek help in your group or during office hours.

Class Participation

Attendance is required. At the beginning of the semester, you'll break up into groups of 3 or 4—you'll work with this team throughout the semester. During class, you'll work on mini-projects, pair coding, and have discussions within this team. You will also complete the final as a group, with each group member assuming roles and responsibilities typically found in a small agile web development team. Participation makes up 20% of your overall grade.

Final Project

At the end of the course your group will complete a final project website that incorporates all the skills you've gained throughout the semester. The project will make up the remaining 40% of your final grade. More details about the project scope and detail will be made available later in the semester.

Grading

- Participation: 200 points
- Labs: 400 points
- Final Project: 400 points
- **Total: 1000 points**

Late Work

Late work incurs a **10% daily penalty**—after 10 days the assignment will be marked with a 0 regardless of submission status. Please try to organize your time and your classes so that you complete work when it's due. If you need help with an assignment, please make sure you reach out to the Discord group or attend office hours.

Final Grades

Your final GPA will be calculated on the following scale:

93%+	**88-92%**	**83-87%**	**78-82%**	**73-77%**	**68-72%**	**63-67%**
4.0	3.5	3.0	2.5	2.0	1.5	1.0

Policy on rounding and "grade bumps": I will round up to the nearest 1/10 of a percentage point. This means if you get a 91.9%, I will round this up to a 92% and you would move from a 3.5 to a 4.0. I will not round up 91.8% to 92%–you must be within 0.1% of the nearest whole percentage to be rounded up.

Attendance

Attendance is required for in-person sections.

Communication

The primary communication protocol for MI 349 is email. All email will be responded to within 48 hours (slower response on weekends should be expected) unless advanced notice of an extended time period away from email is given. Please be detailed in your messages and include screenshots or links to help diagnose your issue or concern. Some issues (especially code and deployment problems) are too complex to be solved via email and may require office hours (virtual or in-person).

Limits to Confidentiality

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues based on external legal obligations or that relate to the health and safety of MSU community members and others.

Commercial Use

The University prohibits students from commercializing their notes of lectures and University-provided class materials *without the written consent of the instructor*. Instructors may allow commercialization by including permission in the course syllabus or other written statement distributed to all students in the class.

Netiquette

For any online communication in the class, including emails, discussion forum comments, Zoom use, and chat in Discord you are expected to follow the MSU's guidelines for productive conversation.

Honors & Entrepreneurship (H/E) Options

Honors and Entrepreneurship options are available in this class, but are 100% student-driven. If you're interested in either option you must submit a project proposal, deliverables, and completion date to siartoje@msu.edu within the first 30 days of class (first 14 days for summer session classes).

Once the proposal is approved by the instructor, students may complete the required forms to initiate the H/E-option. **Note: in both cases, students are required to complete online forms for H/E-options. Failure to complete these forms at the beginning of the semester could result in you not getting transcript credit for your H/E option project even if you completed the work.**

Letters of Recommendation

In order to be eligible for a letter of recommendation, a student:

- must have directly worked on a project or course of study with this instructor outside the scope of this class.
- must not be currently enrolled in a class with the instructor.

Academic Honesty and Integrity

Academic honesty, creative integrity, and professional ethics are taken very seriously in this class—there is a zero tolerance policy for plagiarism. While students have some leeway in using designs, code, and images from other sources under educational fair use, professional violations in the workplace can put you and your employer at-risk for litigation and retribution. You are required to source and cite all your work per MSU's academic integrity policies. We will discuss digital copyright laws in this class and you'll be expected to follow industry best-practices in your own work.

Please make sure you're familiar with MSUs academic honesty and integrity policies.

Use of Artificial Intelligence (AI) Tools

With the release of agents such as Claude, Stable Diffusion, GitHub Copilot, and ChatGPT—artificial intelligence has entered a new era of rapid and widespread impact. AI tools can be described as "having an exceptionally fast and knowledgeable 24-hour assistant that occasionally makes mistakes with 100% confidence". While this may strike some educators as an existential threat, I'm just trying to help you learn faster so we can get to the truly challenging design and entrepreneurial problems that are (as of now) best solved by humans, for humans.

The AI assistants above (and also those not mentioned) are probably not good enough to complete your projects for you (and you probably wouldn't want this), but are still capable of providing 24-hour technical advice when you get stuck while learning.

Any text, generated images, or computer code taken from these tools must be cited (in a comment if used for code; in a proper citation with the cited text in quotes if writing; in an image caption or footer for images/graphics) per class guidelines. Images and text must also be accompanied by the prompt(s) used to generate output. You should also retain any conversations and "work" that happens within the AI tools themselves (for example: saving conversations in Claude). Verbatim use of AI agent output to complete full projects is not permitted.

We will be using AI tools in this class to complete some work—Claude and CoPilot/GTPs are not going away, and it's important to understand how to effectively use these tools in

your day-to-day work. That said, the more you understand about the foundational tech (HTML, CSS, and JS), the more useful AI tools become.

Diversity & Inclusion

MSU welcomes a full spectrum of experiences, viewpoints, and intellectual approaches because they enrich the conversation, even as they challenge us to think differently and grow. However, we believe that expressions and actions that demean individuals or groups compromise the environment for intellectual growth and undermine the social fabric on which the community is based.

Getting Help

If you are struggling with this class, please schedule office hours or contact me by email at siartoje@msu.edu. Or:

- Meet with your academic advisor if you are struggling in multiple classes, unsure whether you are making the most of your time at MSU, or unsure what academic resources are available at MSU.
- Visit https://caps.msu.edu for online health assessments, hours, and additional information.

Technical Assistance

For course-specific help with the required tools and software above, you can email me or contact me via Discord for assistance. It's strongly encouraged that students research their tech issues on the web and troubleshoot on their own before contacting the instructor.

For help with **MSU computing services, labs, and software**, follow the links below:

- Visit the MSU Help site at http://help.msu.edu
- Visit the Desire2Learn Help Site at http://help.d2l.msu.edu
- Call the MSU IT Service Desk at (517) 432-6200, (844) 678-6200, or e-mail at ithelp@msu.edu

Instructor Office Hours

Individual support is offered for students that need additional help. Check the posted office hours and reach out to the instructor. The earlier you seek help, the more time and tools are available to help you be successful in this class.

- **Fall 2025 office hours:** Wed/Thu, 10am-2pm - CAS 440

Student Health and Wellness

- Masks are not required in classrooms on campus. No faculty member can require you to wear or remove a mask in their classroom.
- If you are feeling ill or have tested positive for COVID-19, you should self-isolate and avoid close contact with all others. There is no requirement to report your case to the university.
- If you have additional questions about MSU's current COVID-19 policy, please refer to: https://msu.edu/together-we-will/faqs.

Counseling & Psychiatric Services

Drop by Counseling & Psychiatric Services (CAPS) main location for a same-day mental health screening. (3rd floor of Olin Health Center at 463 E. Circle Drive)

Call CAPS at (517) 355-8270 any time, day or night.

24-Hour MSU Sexual Assault Crisis Line (517) 372-6666 or visit https://centerforsurvivors.msu.edu

Accessibility for Students with Disabilities

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu(this link opens in a new window/tab).

Once your eligibility for an accommodation has been determined, you will be issued a verified individual services accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc). Requests received after this date will be honored whenever possible.