

SI539 - Web Design: Responsiveness and Accessibility Winter 2024

Course Description

This course provides practical and theoretical coverage to learning responsive, accessible front-end programming for Web Design. Topics covered include HTML5, CSS3, JavaScript, Handlebars, Bootstrap, and the POUR design principles of accessible design. ***We will not be covering server-side development in this course.***

Learning Objectives

The purpose of this course is to provide students with all necessary skills for building and deploying web sites as well as utilize existing software tools. The Learning Objectives for SI-539 are to help students develop solid competency in:

- Understanding the interactions between web browsers and web servers using Hypertext Transport Protocol (HTTP)
- Understanding the importance of standards-based practices in web development
- Understanding the importance of separating structure and semantics from presentation, as well as how this is accomplished in professional web development
- Creating web pages using Hypertext Markup Language (HTML5)
- Styling web pages using Cascading Style Sheets (CSS3)
- Using JavaScript for basic validation and interaction.
- Using other software tools to augment and review the syntax, semantics, and accessibility of your site.

After completing this course, students will have a working personal portfolio website.

Staff

Instructor: Jackie Wolf (she/her/hers)

GSIs: Luke Bratic, Sreelakshmi Surabiyil Bindu, Maryam Namakforoosh, Jessica Browning

Note: *Why don't I include our emails? Because you should **always** use the course mailing list 539Instructors@umich.edu*

Course Format

Attendance

This is designed as an in-person course and it is expected that students will be available **in-person** for **all lectures and discussions**. Of course we understand that things do arise and we want students to focus on their health and well-being.

Therefore, efforts will be made to record all lectures, but the quality is often degraded from the in-person experience.

Class Recordings

We will be doing audio and video recording of all sessions to enable those who cannot attend class in person on a given day to access the content. These recordings will not be made available publicly. Recordings of all sessions will be available on Canvas only to students registered for this class. As part of your participation in this course, you may be recorded. If you do not wish to be recorded, please contact the professor during the first week of class to discuss alternative arrangements. The camera only picks up the front of the room (instructor and slides), but this may require you to sit in a particular place in the room, outside the cameras' view. Our classroom, G322 Dent does not have a ceiling mic that picks up student voices, in addition the instructor's microphone records audio in the room. Students may not copy and share the lecture videos with those not in the class, or upload them to any other online environment (this is a violation of the Federal Education Rights and Privacy Act (FERPA)).

Lecture recordings can be found on Canvas under the navigation tab "[Media Gallery](#)".

Personal recordings are prohibited except with permission. Students are prohibited from recording/distributing any class activity without written permission from the instructor, except as necessary as part of approved accommodations for students with disabilities. Any approved recordings may only be used for the student's own private use.

Lectures and Discussion Sections:

Lectures

In the past the lectures were a comprehensive coverage of the readings. This year it will be expected that students **complete all of the readings prior to lecture** and the lectures will highlight the material. This course is developed as a residential course, so lectures will be "live" (not hybrid). However, I will use Lecture Capture to provide

recording. Please note, in lecture I often toggle between projectors and/or working with students in the lecture hall so the recordings will often be suboptimal.

We will be taking attendance sporadically during lecture, and must receive an email from you **before class starts for an excused absence.**

Workload

The workload for this course will be approximately **8-10 hours per week**. In the first half of the term that workload will probably be 4hr/4hr split between readings and lectures vs coding. As the term progresses there will be significantly less reading and more coding.

Discussion Sections

TL/DR: Completion of discussion materials is required and you may ONLY attend the discussion section you are enrolled in.

Discussion sections will be an integral part of getting support in this class and students may only attend the discussion section for which they are enrolled. **The lowest 3 discussion sections will be dropped by default**, but make sure to attend regularly to avoid losing points if you are unable to attend later in the term.

Office Hours:

Office hours will be offered virtually and in-person. Office hours are a great time to ask questions about assignments, or simply stop by to say “Hi”. Typically, more can be accomplished in 5 minutes at office hours than 2 hours on email (which is why we don’t use email much in this course). Please realize that office hours will get crowded right before the due dates.

Office Hour Schedule

- **Jackie Wolf (Instructor):**
 - Thursdays 2-3pm 1282 NQ
 - Virtually by request
- **Luke (GSI) -**
 - Wednesdays 3:30pm - 4:30pm 1274 NQ
 - Fridays 12:00pm - 2:00pm Virtual
 - Please use [this document](#) to sign-in and access the Zoom call
- **Sreelakshmi (GSI)**
 - Wednesdays 10:30 AM to 12 PM - in person at NQ 1278

- Fridays 2 PM to 4 PM - virtual using ITS queue
<https://officehours.it.umich.edu/queue/1506>
- **Jessica (GSI)**
 - Mondays 10:30am - 11:30am ([Virtual](#))
- **Maryam (GSI)**
 - Wednesdays 3:00pm - 5:00pm ([Virtual](#))
 - Fridays 12:30pm - 2:00pm (1278 NQ)

Office hour protocol

1. Make sure that your most recent code is on Github and that you have run the autograder on your most recent version.
2. If there are students with similar issues during OH feel free to help each other out.

We aren't going to give out the answers to the homework in office hours but we will help you find the answers as we talk through the issues you are having.

Communication:

TL/DR: The first place to get assistance is Piazza or Office Hours. The instructor mailing list should only be used if you do not get a response on Piazza, or the question is of a personal nature.

Piazza:

Much of the communication for the course will be handled through Canvas and Piazza. ***Students are expected to keep up with all email that comes to them from the course mailing list and check the channel on a regular (2x week minimum) basis.***

Piazza is the preferred place to get help in the class and you must post there before emailing the instructors. It is completely acceptable and encouraged for a student in the course to attempt to help other students in the forums. The instructional staff will read all posts and correct any incorrect advice that one student gives another. [Use our Piazza signup link to join.](#) ***Instructors will check the boards each evening Sunday - Thursday.***

Mailing List:

We will respond within 48 hours on weekdays. The teaching team does not respond to emails on weekends, so students who need a response by a certain time need to plan accordingly.

If you can not find an answer to your question on Piazza, please use 539Instructors@umich.edu for emailing questions. It is important that you use this email address and do not email GSIs directly. (*Full disclosure, if you email a GSI it is expected that they will share the email with the other members of the staff.*) If it is a personal matter, you can email Jackie directly at jgjwolf@umich.edu. If you do not hear back from an email within 2 business days, do not hesitate to contact us again.

Course Resources

- **A laptop:** if you do not have a laptop to use in class (whether because you have a desktop computer or because you use University computers for your coursework), that is fine – but please let Jackie know by the end of the first week of class so we can make sure you have the same participation options.
 - [UM Laptop loan program](#)
- **Readings:** All of the readings are online. You can find the weekly reading assignments in the Modules section of Canvas.

Student Mental Health and Well-being

TL/DR - Don't wait to seek out help! You are worth more than a course. UMSI has an embedded CAPS Psychologist, Ashley Evaritt (evaritt@umich.edu), who is available to current UMSI students. More information about how to schedule an appointment with Ashley can be found using this [link](#).

University Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressures and challenges associated with relationships, mental health, alcohol or other drugs, identities, finances, etc. If you are experiencing concerns, seeking help is a courageous thing to do for yourself and those who care about you.

If the source of your stressors is academic, please contact me so that we can find solutions together. Ashley Evaritt, a Counseling and Psychological Services (CAPS) counselor, is embedded in UMSI, schedule an appointment with her by copying and pasting the following url into your browser: <https://bit.ly/Evaritt-CAPS-UMSI> For personal concerns, U-M offers a variety of resources, many which are listed on the [Resources for Student Well-being webpage](#). You can also search for additional well-being resources on that website.

Students who need Accommodations

Are you familiar with [Services for Students With Disabilities?](#) They offer more than you may realize. **If you are having trouble working with SSD I am happy to accept requests without that documentation at the start of the term.**

The University of Michigan recognizes disability as an integral part of diversity and is committed to creating an inclusive and equitable educational environment for students with disabilities. Students who are experiencing a disability-related barrier should contact Services for Students with Disabilities (<https://ssd.umich.edu/>) 734-763-3000 or ssdoffice@umich.edu). For students who are connected with SSD, accommodation requests can be made in [Accommodate](#). If you have any questions or concerns please contact your SSD Coordinator or visit SSD's Current Student webpage. SSD considers aspects of the course design, course learning objects and the individual academic and course barriers experienced by the student. Further conversation with SSD, instructors, and the student may be warranted to ensure an accessible course experience. The instructional team will treat any information that you provide in as confidential a manner as possible.

IMPORTANT:

To me a student is often disabled by the barriers that others have constructed. I want to remove those barriers. I have worked with SSD on flexible deadlines so they are now built into the course by default.

- For all exams where students need accommodations, they will need to contact the [SSD Testing Accommodation Center](#). I am happy to assist during office hours if help is needed navigating the website.
- Students must contact TAC at least 10 business days before an exam to reserve a testing site.

Academic Integrity:

TL/DR:

- Do not send or **receive code** via email, text, DM, etc.
- Do not post your code to Piazza. You can post the error messages.
- Do not collaborate or discuss the exams - this includes with previous students.
- Do share your screen when asked by the instructor to receive assistance, but never when giving assistance.

- **Violations of academic integrity will result in a negative score on the assignment and a lowering of your overall grade by one letter grade.**

Answers to FAQ

- Don't post screenshots of the code. Posting complete answers to homework problems is not acceptable. If you do post a screenshot of an error message you need to include alternative text.
- Study groups are welcome and strongly encouraged, as is talking through any and all programming problems you encounter. However, if you feel you are either giving or receiving all of the answers and it is impacting your learning negatively, please break up your study group, and/or contact the instructor confidentially.
- ***Use of any solutions provided from previous semesters is not allowed and will be treated as plagiarism.***

As a rule of thumb, if you work through a problem with others, generating the same code on each of your screens, when you get to the end of the problem set, you should be able to do both of the following:

- Explain how all of the code works to an instructor;
- Throw away your answer and reproduce it on your own, without any assistance from other students, in less than an hour

Collaboration

UMSI strongly encourages collaboration while working on some assignments, such as homework problems and interpreting reading assignments as a general practice. Active learning is effective. Collaboration with other students in the course will be especially valuable in summarizing the reading materials and picking out the key concepts. You must, however, write your homework submission on your own, in your own words, before turning it in. If you worked with someone on the homework before writing it, you must list any and all collaborators on your written submission. Each course and each instructor may place restrictions on collaboration for any or all assignments. Read the instructions carefully and request clarification about collaboration when in doubt. Collaboration is almost always forbidden for take-home and in class exams.

Plagiarism

All written submissions must be your own, original work. Original work for narrative questions is not mere paraphrasing of someone else's completed answer: you must not

share written answers with each other at all. At most, you should be working from notes you took while participating in a study session. Largely duplicate copies of the same assignment will receive an equal division of the total point score from the one piece of work. You may incorporate selected excerpts, statements or phrases from publications by other authors, but they must be clearly marked as quotations and must be attributed. If you build on the ideas of prior authors, you must cite their work. You may obtain copy editing assistance, and you may discuss your ideas with others, but all substantive writing and ideas must be your own, or be explicitly attributed to another. See the (Doctoral, MSI, BSI) student handbooks available on the UMSI intranet for the definition of plagiarism, resources to help you avoid it, and the consequences for intentional or unintentional plagiarism.

Use of AI

Used properly, generative AI can enhance our work; used improperly, it can border on plagiarism. If you use it for anything you submit for SI339 (assignments or in-class work) you must disclose it - [see this APA style guide on how to do so](#).

Generative AI can produce working websites - however the code produced generally does not use good semantic html and is mostly inaccessible. As the class objectives include teaching you how to create web pages using HTML and CSS - this is the reason why **generative AI tools are not permitted for writing any code for class exercises, discussion exercises, homework, or exams.**

The use of generative AI tools (e.g. ChatGPT, Dall-e, etc.) is permitted (with proper disclosure) in this course for the following activities:

- Brainstorming and refining your ideas;
- Finding information on your topic;
- Drafting an outline to organize your thoughts;
- Generating general text content for Common Class Project
- Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

- Any use of generative AI for **writing code** for class exercises, discussion exercises, homework or exams
- Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool (with proper disclosure).
- Writing a draft of any assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

Required Assignments:

- (150 pts) One **in-class Exam**
 - The assessment will occur during the lecture period and will be open book/open note but students may not collaborate or request help from others.
 - **Optional Make-up Exam: Friday, April 26 4:00 pm - 6:00 pm**
 - Students can take an optional final exam to make up for not doing well on or missing the earlier exam.
- (450 pts) **Six Homework Assignments (75 pts each)**
 - Homework is always due on **Sunday at 11:59pm**.
 - Homework that utilizes an autograder may be submitted up to 7 times.
 - Homework will be reviewed after any autograders for additional deductions for inefficient code, plagiarism, etc.
 - A 1% late penalty is applied for each **partial** day that the assignment is submitted late. **No homework may be submitted past 2pm on Tuesday**. There are no extensions on homework assignments, but there is partial credit.
 - **In the case of illness students may be able to drop one homework assignment**. The typical plan will be for you to review the assignment, meet up with the instructor during Office Hours to do an oral review of the work, and then have the assignment waived.
- (5pts) **Syllabus Quiz**
- (70 pts) **Reading Quizzes/Weekly Reviews (10 points each)**
 - There will be 10 weekly quizzes due **Sunday at 11:59pm**.
 - You can retake the quiz once several times - there is a waiting period of between attempts.
 - **We will drop three quizzes**.
- (25pts) **Lecture Attendance**
 - We will be taking attendance sporadically during lecture
 - We must receive an email from you **before class starts (1:30pm)** for an excused absence.
- (100 pts) **Discussion section participation (10 pts each)**
 - Discussion sections provide an important opportunity for us to discover what concepts still need practice.
 - You must attend the discussion section you are registered for.
 - **The three lowest scores will be dropped**.

- ***Any discussion sections completed without attending your section will be considered a violation of academic integrity.***
- **(100pts) Common Class Project**
 - Much of this project will be completed in class/discussion.
- **(100pts) Final Project**
 - Students may either create their portfolio or complete an accessibility review and do a presentation.

The creation of the portfolio is **challenging**. If throughout the semester you relied heavily on office hours there is a good chance that you will not be able to complete portions of this. And that is okay. The expectation is that what you are submitting is YOUR work and ONLY your work. The GSIs will help debug some issues, but only at a high-level. If you are struggling with a requirement, you should skip it and come back to it later if you have the time.

Late enrollment

Students who enroll after the start date have **72 hours after initial enrollment in Wolverine Access** to complete any non-group assignments. It is on the student to request access to these assignments on Canvas.

Grading

I do not curve - students will always benefit from helping each other. Grades will be based on percentage:

| Score | Grade | Score | Grade |
|--------------|--------------|--------------|--------------|
| 98% | A+ | 70% | C+ |
| 90% | A | 65% | C |
| 87% | B+ | 60% | C- |
| 80% | B | 57% | D+ |
| 75% | B- | 50% | D |

Regarding extensions and transparency:

TL/DR: Extensions have already been built into the course.

Things happen. Deadlines are missed. People get sick. Married. Have a job interview. Studies have shown that lack of transparency in grading and requirements hurts certain populations in academia since some people feel more empowered to advocate (or

negotiate) than others. We are aware of this and for that reason have already built accommodations into the syllabus with the generous grading scale and the ability to submit work for partial credit.

We will always work with SSD accommodations! In addition, if you have an extreme medical or family care issue or other type of situation that may be an extraordinary circumstance, alternate assignments will only be granted if you have a minimum B-average and after you have worked with the UMSI academic advisors to come up with a plan to catch up.

Regarding grading:

We grade all assignments with a strict rubric and the same rubric is applied to everyone. If you believe there is an error in the way you have been graded, please submit a regrade request via the [539 Grade Check Request Form](#). **All regrade requests must be submitted within 7 days of grades being released.**

Diversity and Professionalism (Taken directly from [Shriram Krishnamurthi](#))

The lack of sufficient diversity is an important problem in computer science. In this course, we want to help improve the situation, not make it worse. The responsibility to do that lies both with us, the course staff, and with you, the students.

Be A Considerate UMSI Citizen

Every now and then I hear disturbing statements from students about how they have been made to feel uncomfortable in class or in the department. I don't mean intellectual discomfort—e.g., the kind you might get from having a heated debate about a technical subject with a fellow student—but the personal kind. These range from inappropriate comments and invitations to unsolicited physical contact.

There's a term for many of these behaviors: harassment. And let there be absolutely no doubt about this: harassment is against the law and it is completely against the norms of this course and this department. (See Michigan's [Office for Institutional Equity](#).) We—the university, the department, and this course's staff—have absolutely zero tolerance for it.

Some people might think the recipient should laugh it off, or they may make (or think) snide remarks about political correctness or jokes about consent or what have you. They might think people just need to grow a thicker skin or learn to take a joke.

Unfortunately, the subject of harassment (and that's what these remarks and actions are, harassment, even if you decide you would classify them as jokes) is forced, by the nature of classes and campus life, to be around the harasser. That can make them uncomfortable to the point of wanting to stay away, or focusing more on the harasser than on what they are here to learn. That hurts their education. That is not okay at all: the harasser has no right to steal their hard-won education away from them. And often the harm goes much deeper: it hurts them psychologically in subtle and long-standing ways. And that's why these are not laughing matters.

I encourage you to think about this in positive terms. Your classmates are your colleagues. Someday you may be each others' start-up partners or co-employees; one of you may even be the other's interviewer or boss. So start treating one another like professionals, and I mean that in the best possible interpretation of that phrase.

In short: Be safe, be happy, and have fun without taking away anyone else's.

About Course Staff

Professionalism and respect for diversity are not just matters between students; they also apply to how the course staff treat the students. The staff of this course pledge to treat you in a way that respects our differences. However, despite our best efforts, we might slip up, hopefully inadvertently. When we do, please feel free to talk to us about it.

Sometimes, you may not be comfortable bringing this up directly to us. If so, you are welcome to talk to utilize the [UMSI Diversity, Equity & Inclusion feedback and reporting resources](#). As a department, we will take all complaints about unprofessional or discriminatory behavior seriously.

Discussing Problems

If you are running into personal difficulties in the course (e.g., being made uncomfortable by a fellow student), by all means come talk to me at any time. If you are having difficulties in other contexts and would like to talk about that, you are welcome to do so. In short, you are always open to come talk to me if you are facing any such issues.

However, please note the following. Due to other positions I hold in the department and university, ***I am what Title IX calls a Designated Reporter.*** That means if you report a Title IX violation to me, I am required to report it to the university. This will result in you being contacted by a university official.

I realize that not everyone may want to involve university officials, at least not right away. If you want your conversation to be kept in complete confidence, here are some [confidential resources to help you understand your rights and options.](#)