

San José State University
Department of Art & Art History
Art 109, Web Development in HTML, CSS and JavaScript
Fall 2021

Course and Contact Information

Instructor:	Chelsea Thompto
Office Location:	Art 311
Telephone:	email preferred
Email:	chelsea.thompto@sjsu.edu
Office Hours:	Mondays 10:00am - 12:00pm
Class Days/Time:	M/W 12:30pm - 3:20pm
Classroom:	Online (Zoom Link on Canvas Page)
Prerequisites:	Art 75 + Art 101

Course Format

This course will be taught online due to COVID-19 and the SJSU Adapt plan (more information can be found at the [SJSU Adapt Website](#)). The course will take place primarily over [Canvas](#) and [Zoom](#) and will use a combination of synchronous and asynchronous activities. This course is technology intensive, students will need regular access to a computer able to run the Adobe Suite or equivalent software (the Adobe Suite is free for students, more information can be found at <https://www.sjsu.edu/ecampus/teaching-tools/adobe/index.html>) and which is suitable for web development using [Atom](#) and [Firefox Browser Developer Edition](#) or [Google Chrome](#). The course will use a variety of other software that is available for free online, links and information on these programs will be outlined during the course.

Course Description

Web Development in HTML5, CSS3, and JavaScript teaches programming, tools and methodologies for the creation of websites, web applications and net-based digital media artworks through weekly intensives, workshops and programming labs. This class will focus on artistic interventions in these technologies. Students will create websites, user interfaces, style sheets, animation and web-optimized content using industry-standard tools and techniques. The class will culminate in a project inspired by net art and networked installation environments.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. Create and style websites using W3C-compliant HTML and CSS.
2. Generate web-optimized images, audio, and video content for websites
3. Design and code human interfaces for responsive websites and web applications

4. Deploy websites using version control via web servers
5. Recognize industry-standard protocols for web development and deployment
6. Practice introductory programming in the JavaScript programming language
7. Deploy JavaScript to create interactive and responsive websites
8. Identify and discuss digital/internet visual art and visual culture, net art, telepresence, and networked artworks
9. Exhibit projects in an online and/or physical exhibition space

Required Texts/Readings

Textbook

Haverbeke, Marijn. *Eloquent JavaScript* (3rd Edition) Full text available for free online at <https://eloquentjavascript.net/>

Other Readings

This class will engage with a variety of academic journal articles, news articles, and webpages. All required readings will be freely accessible via the class Canvas page.

Other equipment / material requirements

A computer (laptop or desktop not tablet/phone) and access to the internet is required to complete programming assignments. Adobe Creative Suite or equivalent is required for development of web graphics, digital video and audio files in the creation of website content and [Blender](#) is required for the three.js section.

Library Liaison

Gareth Scott

Email: gareth.scott@sjsu.edu

Phone: (408) 808-2094

Dr. Martin Luther King, Jr. Library

4th Floor Administration Offices

Department Advising

For information about majors and minors in Art & Art History, for a change of major/minor forms and a list of advisors: <http://www.sjsu.edu/art/> or the Art & Art History department office in ART 116, 408-924-4320, art@sjsu.edu

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in [University Policy S12-3](#) (<http://www.sjsu.edu/senate/docs/S12-3.pdf>).

This class will be an exploration of how and why artists engage with web technologies with a particular focus on both the required technical skills and the contemporary cultural and theoretical contexts surrounding making art on/in/for/about the internet.

This course will consist of technical exercises, media responses, quizzes, and creative projects. We will start by reviewing HTML and CSS by creating basic websites. This will culminate in our first creative project. We will then begin exploring JavaScript and some basic coding principles, this will coincide with our second creative project. We will then explore some JavaScript libraries useful for artists which will be paired with project three. Throughout these explorations, we will discover and discuss related artists, projects and theories through both in class discussions and media responses. The final project will be a synthesis of technologies and ideas taught throughout the course.

Technical Exercises - 20% of grade

- 10 total 2% each
- Each covering a specific technical task

Media Responses - 20% of grade

- 5 total 4% each
- Each requires students to listen/read/watch/engage with an assigned piece of media and write a response. Some responses may also require you to write a follow-up response to your classmates.

Quizzes - 15% of grade

- 3 total - 5% each
- One quiz for each of the following: HTML, CSS, and JavaScript. Covering basic concepts and terms.

Projects - 30% of grade

- 3 total - 10% each
- Projects will build off technical skills but will require creative independence and evidence of critical thinking.

Final Project - 15% of grade

- 1 project
- Culminating project that pulls together skills from throughout the course with outside interests. Requiring independent research and critical thinking.

NOTE that [University policy F69-24](http://www.sjsu.edu/senate/docs/F69-24.pdf) (<http://www.sjsu.edu/senate/docs/F69-24.pdf>) states that “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”

Grading Policy

Students are required to submit all course assignments on Canvas. Students must also be present for project critiques: **critiques are not optional**. All projects are evaluated based on their conceptual content, technical proficiency, and presentation according to the criteria provided below. There is no extra credit in this class.

Late Work Policy

All assignments must be presented on the due date. For each day the work is late, the work decreases by half a grade (a B+ goes to B-, a B- to a C+, etc.). Remember finished is better than perfect: It is better to turn something in than nothing at all. Late projects will not have the opportunity for a critique, and no late work will be accepted 2 weeks after the deadline. Extensions will only be granted under unusual, extenuating, or emergency circumstances.

Relative weight of course requirements:

10 Technical Exercises	2% each	20%
3 Quizzes	5% each	15%
5 Media Responses	4% each	20%
3 Projects	10% each	30%
1 Final Project		15%
Total		100%

Rubric and Grading Criteria

Rubrics and guidance will be provided for each task. Technical exercises and quizzes will be graded primarily on engagement with the processes and technical skills. Media Responses will be graded on quality of their engagement with the conceptual and theoretical aspects of the media provided and on writing quality overall. Projects, including the final project, will be graded both on their technical dimensions and on their engagement with contemporary issues, concepts, and theories.

Numeric grade equivalents:

Grade	Percentage
<i>A plus</i>	97 to 100%
<i>A</i>	93 to 96%
<i>A minus</i>	90 to 92%
<i>B plus</i>	87 to 89 %
<i>B</i>	83 to 86%
<i>B minus</i>	80 to 82%
<i>C plus</i>	77 to 79%
<i>C</i>	73 to 76%
<i>C minus</i>	70 to 72%
<i>D plus</i>	67 to 69%
<i>D</i>	63 to 66%
<i>D minus</i>	60 to 62%

Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See [University Policy F13-1](http://www.sjsu.edu/senate/docs/F13-1.pdf) (<http://www.sjsu.edu/senate/docs/F13-1.pdf>) for more details.

Classroom Protocol**Group Agreements**

We may discuss controversial issues, difficult subjects, and matters that are personally important to someone in the class. We will work together to craft group agreements (code of conduct) outlining our

agreed-upon guidelines for creating a respectful class environment. It is expected that students will act in accordance with group agreements for the remainder of the semester.

Participation:

Participation in class discussions, critique, and giving feedback to your peers on their work is **mandatory**. On Presentation days you must be able to explain and give a clear presentation of your work. Students are expected to participate in discussion and peer support in the class Discord server.

Online Class Protocol:

All classes will meet via Zoom during the regular class hours. Students may ask questions in the Zoom chat or use the “hand raise” icon to get the professor’s attention. Students are asked to remain on mute while not speaking, should arrive punctually for the Zoom classes, and adhere to the Netiquette guidelines outlined in Canvas. Federal, state, CSU system, and campus regulations on conduct including harassment and discrimination against other students or faculty apply to the online environment, just as in face-to-face instruction.

Notes on Zoom Privacy:

Meeting Transcripts

Zoom allows participants to communicate with group messages to all of the meeting participants and/or to send private messages to individual participants. Although it seems reasonable that private messages stay between two people, please be aware that private chats sent to the host will be included in the transcript (but not private messages sent between student participants).

Meeting Attendance Report

Zoom provides a roster of people who attended the meeting along with the times they joined and left the meeting.

Meeting Recordings

Parts of classes (lectures only) will be recorded in Zoom and posted to Canvas. Only the active speaker will be captured in Zoom recordings. If you would like to remain anonymous, you have the option to remain silent during recording sessions or remove identifying information (name and picture). Though you may watch the videos online, you are not permitted to download the videos.

Cameras

If possible, it is expected that students enable their cameras, especially during small group breakouts. However, enabling your webcam does not affect your success in the course. Please let the professor know if you have special needs or requests around video, eg. technological barriers and privacy of family members.

Equity and Inclusion

As an instructor, I strive to create an equitable and inclusive learning environment in the classroom. It is my honest belief that teaching is made more impactful and relevant through a conscientious effort towards centering inclusionary and equitable thinking and practices. This starts by treating each other with respect in order to create a [safe and brave](#) space for making and learning; meaning that we will all respect each other's multiple and intersecting identities including but not limited to: race, ethnicity, nationality, gender identity, gender expression, sexual orientation, ability, and religious or political affiliation.

If you have any concerns about the class, be it the way I am teaching, behavior you have witnessed, problems you think might arise, or anything else, please feel free to contact me to discuss.

Additional Note

This syllabus is subject to change, in the event of unforeseen circumstances, or in the case that changes will significantly enhance the quality of the course.

University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo) (<http://www.sjsu.edu/gup/syllabusinfo>), which is hosted by the Office of Undergraduate Education. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

This schedule is subject to change with fair notice and notice will be made via email and Canvas. Individual check-ins and virtual studio Q&A sessions will be scheduled throughout the semester during class times. Topics covered during synchronous meetings will be made available for asynchronous engagement. Technical exercises, reading responses, sketchbook/prep work and other assignments will be due the Sunday evening after they are assigned at midnight. Example: Assigned 2/1 would be due 2/7 at midnight.

Week	Date	Topics, Assignments, Deadlines
		<u>Week 1 Introduction</u>
1	8/23	<ul style="list-style-type: none"> - Welcome <ul style="list-style-type: none"> - Introductions - Tools - Resources
		<u>Weeks 1, 2 and 3: HTML</u>
1	8/25	<ul style="list-style-type: none"> - HTML and Intro to Internet Art <ul style="list-style-type: none"> - Basics/Review - Glitch.com and text editors - HTML Intro Quiz (in class) - Assigned <ul style="list-style-type: none"> - Tech Exercise 1: Workspace Setup - Media Response 1
2	8/30	<ul style="list-style-type: none"> - Image optimization for Web Developers <ul style="list-style-type: none"> - Image formats (png, svg, jpg, gif) and image optimization - Assigned <ul style="list-style-type: none"> - Tech Exercise 2: Images for the Web

2	9/1	<ul style="list-style-type: none"> - HTML and Intro to Project 1 <ul style="list-style-type: none"> - Elements and Tags - Adding Media - Assigned <ul style="list-style-type: none"> - Tech Exercise 3: Basic Webpage
3	9/6	NO CLASS: LABOR DAY
	9/8	<ul style="list-style-type: none"> - DOM – Document Object Model + HTML and Internet Art Continued <ul style="list-style-type: none"> - Assigned <ul style="list-style-type: none"> - Project 1 Prep 1 - Project Starts - Quiz 1: HTML
		<u>Weeks 4 and 5: CSS</u>
4	9/13	<ul style="list-style-type: none"> - CSS and Project 1 Continued <ul style="list-style-type: none"> - Selectors, properties, IDs, and more - Assigned <ul style="list-style-type: none"> - Tech Exercise 4: CSS
	9/15	<ul style="list-style-type: none"> - CSS <ul style="list-style-type: none"> - Mobile first design, fluid widths, and other design considerations - Assigned <ul style="list-style-type: none"> - Project 1 Prep 2
5	9/20	<ul style="list-style-type: none"> - Artists as (digital) Tool Makers <ul style="list-style-type: none"> - Assigned <ul style="list-style-type: none"> - Media Response 2
	9/22	<ul style="list-style-type: none"> - Project 1 Work Day and In Progress Crit
		<u>Week 6: Website Deployment and Wireframing</u>
6	9/27	<ul style="list-style-type: none"> - Wireframing <ul style="list-style-type: none"> - Planning for larger projects. - Assigned <ul style="list-style-type: none"> - Quiz 2: CSS
	9/29	<ul style="list-style-type: none"> - Website Deployment <ul style="list-style-type: none"> - Working with GitHub desktop, repos, commit, push - Transferring from Glitch.com - Assigned <ul style="list-style-type: none"> - Tech Exercise 5: Wireframe and Migration - <u>Project 1 Due - multi page HTML + CSS website using Glitch.com</u>
		<u>Weeks 7 and 8: JavaScript Introduction</u>
7	10/4	<ul style="list-style-type: none"> - Introductory JavaScript and Project 2 <ul style="list-style-type: none"> - Introductory programming concepts in JavaScript

		<ul style="list-style-type: none"> - Assigned <ul style="list-style-type: none"> - Media Response 3 - Project 2 Prep 1 - Project Starts
	10/6	<ul style="list-style-type: none"> - Introductory JavaScript <ul style="list-style-type: none"> - Introductory programming concepts in JavaScript - Assigned <ul style="list-style-type: none"> - Tech Exercise 6: JavaScript Intro
8	10/11	<ul style="list-style-type: none"> - Introductory JavaScript <ul style="list-style-type: none"> - Data types, operators, concatenation, properties, methods, objects - Assigned <ul style="list-style-type: none"> - Project 2 Prep 2
	10/13	<ul style="list-style-type: none"> - Introductory JavaScript <ul style="list-style-type: none"> - Data types, operators, concatenation, properties, methods, objects - Assigned <ul style="list-style-type: none"> - Tech Exercise 7: JavaScript Data Types - Quiz 3: JavaScript 1
		<u>Weeks 9 through 13: JavaScript Libraries</u>
9	10/18	<ul style="list-style-type: none"> - Introduction to Libraries and Artists As Space Makers <ul style="list-style-type: none"> - Using libraries in JavaScript - Assigned (Due At the end of Spring Break) <ul style="list-style-type: none"> - Media Response 4 (New Art City)
	10/20	<ul style="list-style-type: none"> - Paper.js <ul style="list-style-type: none"> - Intro to Paper.js - Assigned (Due At the end of Spring Break) <ul style="list-style-type: none"> - Tech Exercise 8: Paper.js - Project 2 Due
10	10/25	<ul style="list-style-type: none"> - Project 2 Critique <ul style="list-style-type: none"> - Assigned <ul style="list-style-type: none"> - Critique Response and Reflection
	10/27	<ul style="list-style-type: none"> - Three.js and Project 3 <ul style="list-style-type: none"> - Intro to Three.js - Intro to Project 3 - Setup: 3D models for the web - Assigned <ul style="list-style-type: none"> - Project 3 Prep
11	11/1	<ul style="list-style-type: none"> - Three.js <ul style="list-style-type: none"> - Practice: 3D models for the web - Assigned <ul style="list-style-type: none"> - Tech Exercise 9: Three.js Part 1
	11/3	<ul style="list-style-type: none"> - Three.js

		<ul style="list-style-type: none"> - Creating a 3D space in Three.js - Assigned <ul style="list-style-type: none"> - Project 3 Prep 2
12	11/8	<ul style="list-style-type: none"> - Three.js <ul style="list-style-type: none"> - Animation/Interaction in Three.js - Assigned <ul style="list-style-type: none"> - Tech Exercise 10: Three.js Part 2
	11/10	<ul style="list-style-type: none"> - Project 3 <ul style="list-style-type: none"> - Assigned <ul style="list-style-type: none"> - Project 3 Due
		<u>Weeks 14 through 16: Final Project</u>
13	11/15	<ul style="list-style-type: none"> - Project 3 Critique <ul style="list-style-type: none"> - Assigned <ul style="list-style-type: none"> - Critique Response and Reflection
	11/17	<ul style="list-style-type: none"> - Final Project Introduction <ul style="list-style-type: none"> - Overview and inspirational artists - Assigned <ul style="list-style-type: none"> - Final Project Prep 1 - Media Response 5
14	11/22	<ul style="list-style-type: none"> - Final Project <ul style="list-style-type: none"> - Putting it all together - Assigned <ul style="list-style-type: none"> - Final Project Prep 2
	11/24	NO CLASS: THANKSGIVING
15	11/29	<ul style="list-style-type: none"> - Final Project <ul style="list-style-type: none"> - In Progress Crit
	12/1	<ul style="list-style-type: none"> - Final Project <ul style="list-style-type: none"> - Technical Workshop
16	12/6	<ul style="list-style-type: none"> - Final Project <ul style="list-style-type: none"> - Final Q and A - Assigned (Due At Final Exam Time) <ul style="list-style-type: none"> - Final Project
17	12/14	Finals Meeting: 12:15 - 2:30 PM