SJSU SAN JOSÉ STATE UNIVERSITY

College of Humanities and the Arts · Art & Art History

Digital Media Art

ART 101

Spring 2026 Section 01 In Person 3 Unit(s) 01/22/2026 to 05/11/2026 Modified 01/21/2026

Course Description and Requisites

Experimental applications in creative coding as an art practice. Focus includes programming interactivity, generative graphics, intro to data visualization and user interface and user experience strategies.

Prerequisite: ART 074, ART 075 or instructor consent

Misc/Activity: 6 hours activity

Letter Graded

Classroom Protocols

General Learning Modes and Protocols

Strategies include lecture, group discussion, reading and information seeking, presentation, and structured coding or programming assignments. Collegial approaches are encouraged between students, and between student and faculty, so that learning is a joint endeavor. IN addition online learning and offsite event (field trips) will also be a optional method for class participation and engagement.

This class will be conducted in an atmosphere of mutual respect. I encourage your active participation and welcome both respectful discourse and reasoned debate. However, your language and conduct during the class period must demonstrate respect for everyone's race, gender identity, or expression, sexuality, culture, beliefs, and abilities.

Readings, Discussions:

There will be reading assignments related to each project given out over the semester. We will have class discussions about the material. You will be expected to contribute to the issues brought up. Remember, reading the material is not enough; you have to communicate your thoughts on the matter in class.

Participation:

Participation is a large component of the class. Involvement in the readings, discussions, critiques, class collaborations, field trips and final presentations are critical for each student and the class to excel. You will be graded on your engagement in the ideas and your interaction with the instructors and other students.

Presentation:

Although related to your participation, you are graded several times a semester with presenting your work to the class. This is both in terms of completed project reviews, as well as on some exercises and project milestones. The presentation grade is to help improve your larger skill set of communication skills as an artist. You will be asked to verbally and visually explain your art, and to also get feedback from an audience.

Collaboration:

Students may collaborate with each other on the Final projects. However the resulting collaboration will be evaluated expecting a higher degree of achievement. Students doing collaborative projects must plan out what their roles will be and keep a journal about the project so they can be graded individually in terms of their technical and conceptual skills.

Important: Collaborations must be approved by the instructor and will not be accepted otherwise.

Class Dynamics and consideration:

For the class to function well and for everyone to understand material and participate in the class accordingly, that every effort should be made to be considerate for both the instructor and other students while in class.

So please come to class understanding the following:

- You will be prepared with your laptop computer and all teaching material ready
- No food except when instructor allows it. Drinks ok.
- No playing of video games, movies, & music outside of the class context
- No excessive socializing when class is in session.
- No Disruptive behavior, when conflicting with the class instruction or activities.
- Leave the classroom better then you found it; please don't leave papers, other class projects or any kind of mess behind. Be fancy and put some chairs under the desk, and tidy up the place.

Disregarding these rules gives the instructor the option to ask you to leave the class until the next session.

Additional Contacts:

Department Advising: For information about majors and minors in Art & Art History, for a change of major/minor forms and a list of advisors https://www.sjsu.edu/art/resources/advising.php or the Art & Art History department office in ART 116, 408-924-4353, art@sjsu.edu

Library Liaison Contact Information for Art and Art History
The Art and Art History Department has a Library Liaison.
Please see the contact information below:

Kate Steffens, MLIS – *(she/her/hers)*
Special Collections Librarian
Dr. Martin Luther King Jr. Library
San José State University
kate.steffens@sjsu.edu

Program Information

Department Name: Art and Art History
Department Office: ART 116
Department Website: www.sjsu.edu/art
Department Email: art@sjsu.edu
Department phone number: 408-924-4325

Course Goals

This course addresses various coding and digital media fundamentals over the course of the semester including: introduction to programming and the nature of code, process, algorithms, data mapping, digital media formal aesthetics, interactivity, web application deployment, relationship between interface and content.

Course Learning Outcomes (CLOs)

Upon successful completion of this course students shall:

CLO1- Develop strategies for students to create their own custom software as art.

CLO2 - Develop criteria for evaluating the design and production of interactive digital media.

CLO3 - Identify the broad trends of interactive digital media and its aesthetics.

CLO4 - Plan and practice writing simple programs in several different programming languages and development environments.

CLO5 - Articulate and recite introductory programming concepts related to artist making code in different programming languages/frameworks like Processing, Javascript, PHP.

CLO6- Build HTML/CSS based webpages to document their artwork and creative process

Course Materials

Required Texts/Readings:

There are no required technical books that are used as specific reference material over the semester. However there are many online reference and reading sources the will be introduced. In addition, various online text resources will be available on the class website for art related reading, in-class quizzes, discussions & assignments. Below is a selection of what we will be reading and discussing in class over the semester. The instructor reserves the right to add or change readings with proper notice to accommodate the course content and pedagogy as well to be more relevant to the direction of the class incorporating current events, trends, etc.. This list is provided as a reference only.

Roman Verostko, "Algorithms and The Artist" , 1995

http://www.verostko.com/alg-isea94.html

Lev Manovich, "Information as an Aesthetic Event", 2007

http://manovich.net/index.php/projects/information-as-an-aesthetic-event

Lev Manovich, Data Visualization as New Abstraction and Anti-Sublime, 2002

http://manovich.net/index.php/projects/data-visualisation-as-new-abstraction-and-anti-sublime

Bee, Worker, "Skeuomorphism vs. Flat Design vs Material Design"

https://99designs.com/blog/trends/skeuomorphism-flat-design-material-design/

Laurel, B., (2014). Computers as Theatre (2nd Edition). New York, Pearson Education

Oram, A. & Wilson,G., (2007) Beautiful Code, California, O-Reilly Media

Maeda J., (2004), Creative Code: Aesthetics + Computation, New York, Thames & Hudson

Rheingold, Howard (2002) Smart Mobs

Additional Recommended Text:

Learning Processing by Daniel Shiffman (online and text book)

The Nature of Code by Daniel Shiffman (available free online)

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.

Assignments:

Coding Exercises (6-7)

You will be turning in a series of exercises over the semester. They will all be in context with the current project we will be working on. The code example you will make will be used to address the material introduced in class and an emphasis on techniques and comprehension. Various individual approaches will be discussed. (Details TBA).

In-Class (Workshop) Exercises (2-3)

There will be 1 or 2 in class exercises assignments over the course of the semester dealing with various material and concepts. They are often collaborative based and will require in person work to complete the assignment. (Details TBA).

Readings (3)

There is several reading assignment over the semester that you will be expected to absorb and then address questions related to the material. The readings will be the starting point for the ideas that are explored in the projects. (Details TBA).

Project 1 – Algorithmic Brushes, Stamps and Drawings

Create your own drawing tool to explore the formal attributes of code, computational systems, methods, process and algorithms. Use different hacking techniques to create the work.(Details TBA).

Project 2 – Timelapse Algomations

Leveraging basic coding concepts of OOP and the use different coding techniques to create work for a time-based piece. (Details TBA).

Mini Project 3– Data Vis, Clocks and Dashboards

This project explores various ideas of mapping data and how to visualize

and access its relationships. (Details TBA).

Project Set 4– The Final

This Project is about the creative use of captured, tabulated, networked or 'live' data sets to visualize and/or the consideration that the form and language of the interface has an effect on its content. (Details TBA).

Presentation:

You will be need to present your work, (both exercises and projects) multiple times over the semester. These are oppurtunitues of using your presentation and communication skills that you need to develop as an artist. Different approaches and tactics will be given to give each student experience with presenting their work.

Documentation:

For each coding assignment , you will publish and expand a online portfolio site, located on the class server. This is where all your material needs to be, for it to be graded. Unless otherwise noted, any material thru email or offsite accounts will not be accepted. Details TBA

Participation Log

You will be asked to log your participation and contribution to the class of the course of the semester. This will be used in part to determine your participation grade. Details TBA

IMPORTANT:Documentation and Tangibles Required for Grading:

-- All project to be accepted for grading must be posted on the class website and documented adequately to allow the instructor to find , assess and grade. Failure to document your work will result in the material being counted as incomplete.**

-- You must present your work in class on the assigned date(s) to get full credit for the assignment. Failure to do so will result in a lowering of the grade related to presentation and participation.

-- Any assignment that is submitted and or presented after the due date assigned in canvas may have its points deducted. The typical late penalty is 1 letter grade down, (i.e A- changes to B-).

-- Any Final Project submission not presented in class on the date or failure to notify the instructor of any specific circumstances for final exam meeting will not be accepted and will result in incomplete.

✔ Grading Information

Grading Policy / Rubric

Each assignment is evaluated including the following criteria:

1. 1. Innovative Response and Conceptual Approach
   2. Formal and Technical Achievement
   3. Presentation and Communication of Process and Documentation

With this criteria, your assignments will be assessed with the following rubric:

A = 100 - 90% ~ Excellent.

1. The student is able to take the essence and spirit of the conceptual ideas for the assignment and interpret, synthesize and contextualize with facility. The final work not only meets the criteria but it exceeds it.

2. The student demonstrates a clear understanding of the technical challenges of the assignment. They are able to demonstrate real facility with executing the technical aspects of the assignments. All technical requirements are met or exceeded.

3. The student's work is presented and communicated with clarity for every step of the assignment. The student shares tangible progress in presentation and publishing up until the final version is presented. All correspondence with instructor and other classmates is clear and in a timely matter.

B = 89 - 80% ~ Good.

1.The student demonstrates a sincere attempt to engage in the conceptual ideas of the assignments. Most of the details and nuance of the conceptual idea behind the assignment is addressed in the work.

2.The student demonstrates a clear capability with the tools and material. The majority of the assignment is well crafted, and assembled to completion. Some parts could be refined and with further work the assignment could better reflect the intent of the idea. Most technical requirements are met.

3. The student makes clear attempts to show progress on their assignments to not just the instructor but to the class as well. There is regular participation in all the phases of the assignment and they show and present their final versions of assignments in a timely matter.

C = 79 - 70% ~ Satisfactory.

1. The student demonstrates a limited amount of understanding of the assignment and the idea(s) that are requirements of the work. More thought and more consideration of how the ideas of the assignment could be used with their own experience and perspective. The conceptual aspect of the assignment is incomplete and/or underdeveloped.

2. The student demonstrates only a modest amount of skill in the production of the assignment. Several technical details key to the assignment or either missing, or represented in the most basic implementation. Some technical requirements met.

3. The student shows limited engagement in the process of the assignment. There is a modest amount of participation to share progress with where they are in the process of the assignment. Their presentation and/or publication of the assignment is also lacking in communicating what they accomplished.

D = 69 - 60% ~ Unsatisfactory.

1. The Student only shows the slightest understanding of the assignment and can only demonstrate a cursory understanding of the intent of the assignment. There is a general failure to follow the intent and nuance of the assignment and has made something that can only be described as something that needs a great deal of work before its considered something that is complete and meeting the requirements.

2. The works is clearly either incomplete or demonstrates a complete lack of understanding the tools and approach to completing the assignment. There is no evidence that the student has gained much skill in the required tools needed to complete the assignment. Technical requirements are not met.

3. The student all but abandons any attempt to demonstrate their work with the instructor and class with their intension and ideas put forth in the assignment. There is no sharing of rough drafts or first attempts, nor is there much attempt to get feedback or share their thoughts on the assignment with anyone.
Their presentation of their work is unsatisfactory and hard to evaluate as to what they accomplished.

F = < 60% ~ Fail.

The student does not submit the assignment, or the work is clearly incomplete both conceptually and/or technically. The publishing of the work is not possible to find, or submitted to the place requested.

Class Grade Scale

A plus = 100.0 to 97.0 points

A = 96.9 to 94.0 points

A minus = 93.9 to 90.0 points

B plus = 89.9 to 87.0 points

B = 86.9 to 84.0 points

B minus = 83.9 to 80.0 points

C plus = 79.9 to 77.0 points

C = 76.9 to 740 points

C minus = 73.9 to 70.0 points

D plus = 69.9 to 67.0 points

D = 66.9 to 51.2 points

D minus = 63.9 to 60.0 points

F = 59.9 points or lower

Note: For final grades translated to percentage in Canvas, the values are rounded up if .5 or greater. For example: 89.45 is still 89% (B+) , but 89.50 is rounded up to 90% (A-)

Assignment Grading *

Reading — 90

Workshops & Exercises -- 175

Project 1 – 90

Project 2 -- 120

Mini Project 3 -- 110

Project 4 -- 270

Presentation -- 35

Log for Participation in Lectures, Readings, Critiques, Email, etc. -- 70

Portfolio documentation -- 40

Class Total: 1000 points = 100%

Extra Credit (research, field work) -- TBA, Instructor consent is required.

* Some Exercise and Projects occasionally change to fit the scale of time allowed and also the challenge they entail. Thus these assignments will have their grade percentage increased or decreased based on the level of work that changes. Any changes will be announced and explained by the instructor before the assignment is introduced.

University Policies

Per University Policy 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 the Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Art101 Spring 2024 Schedule Section 1

Week		Topics, Readings, Assignments, Deadlines	

1		First day , Class Introduce & Reading #1 & Lecture	
2		Reading 1 Discussion & Workshop 1 Reading 1 Review, Project 1 Lecture and in class work intro Ex. 1	
3		Ex1 1 lecture & in class work Ex 2 Lecture Introduce Documentation Methods	
4		Project 1 due and intro Ex 3 More on Ex 3 lecture and in class work intro Ex 3.	
5		More on Ex 4 lecture and intro Project 2 More on Project 2 and Lab	
6		Project 2 due & Reading #2 & Project 3 Intro Reading 2 Discussion and in class work with Project 3	
7		Project 2 due & critique, Introduce Reading #3 intro Ex.3 Ex. 3 lecture & Lab	
8		Ex. 3 lecture & Lab Ex. 3 due, intro Ex 4	
9		Ex. 4 lecture & discuss Reading Discussion #3 intro Project 3 Ex. 4 due More on Project 3	
10		Spring Break Spring Break	

11		Project 3 is due More on Ex. 5 and Lab	
12		Present Final Project (#4) presentation & plan One on One with Instructor	
13		Ex. 5 is due and Show progress on Final to Class Show progress on Final to Class	
14		One on One progress on Final & Lab One on One progress on Final & Lab	
15		-- Show progress on Final Project & lab -- Show progress on Final Project & lab	
16		Show progress on Final Project & lab -- Last normal class 1 on 1 Conference day, time tba – Optional	
Final Exam		tba	