San José State University
Department of Art and Art History
Art 101, Digital Media Art, Section 02, Fall 2019

Course and Contact Information

Instructor: Lark Alder

Office Location: Art Building 325

Telephone: N/A

Email: Lark.buckingham@sjsu.edu

Office Hours: Thursday 1:30 – 2:45pm

Class Days/Time: Tu/Thur 3:00pm – 5:50pm

Classroom: Art 241

Units: 3

Additional Contact Information

* E-mail is generally the best method of contact during non-office hours.
* Please allow 48-hours for an e-mail response.
* Emergency: 911 Campus Escort: 42222
* Individuals with disabilities may contact the Disability Resource Center (DRC), Administrative Building 110, 408/ 924-6000, for a variety of formats such as Braille, large print, sign interpreters, assistive listening devices, audio tape and accommodations for physical accessibility.

Course Format

This is a technology-intensive studio class. Lectures and labs are required. All course materials, submissions, and communication will be through the Canvas Leaning Management System course login website at http://sjsu.instructure.com.

Course Description

Experimental applications of digital media art practice with a focus on information systems and structures.

Course Goals

This course addresses various coding and digital media fundamentals over the course of the semester including: introduction to programming, digital media formal aesthetics, critical engagement with technology, interactivity, web application deployment, and relationship between interface and content.

Course Learning Outcomes (CLO)

Student Learning Objectives

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

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

CLO2 - Develop criteria for evaluating how to design and produce interactive digital media.

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

CLO4 - Plan and practice writing simple programs in a several different programming languages/authoring systems.

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

Required Texts/Readings

Required Readings

No required textbook. Readings will be available on Canvas in pdf format. The list below is a selection of articles we will be reading. The instructor reserves the right to change readings to accommodate course pace and content.

- “First Word Art / Last Word Art,” Michael Naimark, 2001
- “Program or Be Programmed,” Douglas Rushkoff, 2011
- “Algorithms and the Artist,” Roman Verostko, 1994
- “The Dads of Tech,” Astra Taylor, Joanne McNeil, 2014

- Excerpt from Critical Play, Mary Flanagan, 2009

Additional Recommended Text

Make: Getting Started with p5.js: Making Interactive Graphics in JavaScript and Processing, by Lauren McCarthy, Ben Fry, and Casey Reas

Web Design and HTML, CSS JavaScript and jQuery Set, (2 books), by Jon Duckett

Learning Processing, by Daniel Schiffman (Note: We are learning p5.js (JavaScript) in this class – not p3 / Processing, which is based on Java. Regardless, this book is a good reference for learning)

Course Web Materials

ART 101 Course materials can be found on the Canvas Leaning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking Canvas and your email for updates. Please make sure your Canvas contact works by viewing the syllabus announcement during the first day of class.

Library Liaison

Gareth Scott
email: gareth.scott@sjsu.edu
phone: (408) 808-2094
King Library 4th Floor

Art and Art History Resources: **https://libguides.sjsu.edu/Art**

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

This course will be following a flipped classroom model for learning. Activities traditionally expected in the classroom v. homework will be flipped. **You are expected to watch video tutorials outside of class. Class will focus on creative lab time to complete assignments (traditionally thought of as "homework").** Class will also be used for review/clarification of the video tutorials, and discussion of artists and readings.

This optimizes time for peer and instructor support (a great way to minimize frustration while learning to code). All shorter assignments can be completed in class. Culminating projects for each node might require work outside of class. Video tutorials will be relatively short. Students will be expected to code along with the video: the code itself will not be provided.

There are 6 nodes in this class, each with short exercises and a culminating project (with exception of Node 2: Randomizer.)

Node 1: Avatar – you will create an animated Avatar (aka face-or-thing) that responds to user input.

Node 2: Randomizer (pair project) – this is a short group exercise to create a randomizer for group critiques.

Node 3: Drawing Machines – create a program that creates unique, compelling visual output based on user interaction.

Node 4: P5 on the Web (Ghosts in the Internet) – this project integrates p5 sketches into HTML/CSS on a live webpage (hosted via GitHub). Thematically, it asks you to play with the idea of autonomous beings that occupy the internet. This can be interpreted however you want.

Node 5: Computer Music / Art Synths – make a musical instrument: write a program that creates code-generated sound.

Node 6: Play (pair project) – create a critical / art game or mod.

Node 7: Final Project – build on skills learned in the course to create a final project of your choice.

Grading Information

Students are required to submit all course assignments on Canvas. Students must also be present for project critiques: **critiques are not optional.**

Determination of Grades

All assignments must be presented on the due date. For each day the work is late (marked each 24 hours by the day and time of original deadline), 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 might not have the opportunity for a critique.

All projects are evaluated based on their conceptual content, technical proficiency, and presentation according to the criteria provided below.

Relative weight of course requirements:

Assignment type breakdown:

15 Short assignments @ 2 points each = 30%

5 Projects @ 10% each = 50%

1 Final Project = 20%

Total = 100%

Extra Credit:

Attend a talk / art show and submit 1 page response = 2%

3 Short assignments* = 6%

* (there are 18 assignments total, so you can miss up to three, or receive 6% extra credit)

Node breakdown:

Node 1: Avatar
1.0-1.4: Five short assignments = 6%
1.5: Avatar final project = 10%

Node 2: Randomizer (pair project)
2.0-2.1: Two short assignments = 4%

Node 3: Drawing Machines
3.0-3.2: Three short assignments = 6%
3.3: Drawing Machine final project = 10%

Node 4: P5 on the Web (Ghosts in the Internet)
4.0-4.1: Two short assignments = 4%
4.2: Ghost in the Internet final project = 10%

Node 5: Sound: Computer Music / Art Synths
5.0-5.2: Three short assignments = 6%
5.3: Computer Music final project = 10%

Node 6: Play (pair project)
6.0-6.1: Two short assignments = 4%
6.2: Play final project = 10%

Node 7: Final Project
7.0: Short assignment (project proposal) = 2%
7.1: Final project = 20%

Total with extra credit = 106% (including extra credit for all short assignments completed)
TOTAL = 100% (Taking into account that you can miss up to 3 short assignments)

Grading Criteria:

A: Excellence

The student fully commits to their project, both conceptually and technically. The final work created not only meets the criteria but it exceeds it. The student demonstrates a full understanding of the course content, and is able to apply that understanding in making original work with their own personal style.

B: Above Average

The student shows an understanding of the expected criteria for the assignment, and a sincere attempt to engage the conceptual framework. The quality of the project is good but not stellar. Technical understanding is demonstrated but has room for improvement.

C: Average

The student demonstrates a limited understanding of the conceptual framework of the assignment, and/or technical execution is underdeveloped with issues that could have been addressed in class or during office hours. The work would improve if more time and/or attention was dedicated to the project.

D: Below Average

The student only shows the slightest understanding of the intent of the assignment. There is a general failure to follow the intent and nuance of the assignment. The project can only be described as something that needs a great deal of work before it is considered something that is complete and meeting the requirements.

Numeric grade equivalents:

93% and above	A
92% - 90%	A-
89% - 88%	B+
87% - 83%	B
82% - 80%	B-
79% - 78%	C+
77% - 73%	C
72% - 70%	C-
69% - 68%	D+
67% - 63%	D
62% - 60%	D-
below 60%	F

Please note: Except in cases of documented emergencies, incomplete grades are not given in this course.

"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 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

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.

Department Advising

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

Classroom Protocol

Students are expected to be punctual for class and actively engaged during all class meetings. Cell phones, smart phones, or other devices that detract from full attention should be turned off or silenced.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on the Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/."

Course Schedule

Art 101, Section 02: Digital Media Art, Fall 2019

This syllabus is subject to change. The instructor will let you know when there are changes in the schedule.

>>> ***In addition to activities listed, we will be regularly viewing examples of Digital Media Art, and have discussions based on readings.***

Week	Date	Node	Class Topics	Assignments
1	8/22	Course Intro	Overview of syllabus How to think like a computer	***Unless otherwise specified, assignments are due at midnight before the next class** **Read "First Word Art / Last Word Art," Michael Naimark, 2001** **Complete student info form**
2	8/27	1: AVATAR aka. face-or-thing	Drawing in p5: calling functions How tell the computer what to do	1.0 - Make your avatar (face-or-thing): use 10 different drawing functions and built-in width/height values
	8/29		Functions: restructure your drawing into functions	1.1 - Re-organize your avatar code into functions to eliminate repetition. Create 3 or more functions and use arguments at least once.
3	9/3		Variables Setup and draw loops Console.log & string operations Intro to operators	1.2 - Replace a value with a dynamic variable tied to the microphone: make your avatar react to sound input ! 🎤🎙️
	9/5		Logical statements and operators Conditional / if statements User interaction: Mouse position	1.3 - Have shapes/colors change when your mouse moves
4	9/10		Classes	1.4 - Restructure your avatar into a class (or make new one), and create multiple instances of your class (multiple avatar objects)

	9/12		Animation! Tie it together Interaction: mouse and keyboard clicks Ease / accelleration Quiz / Review	1.5 - Finalize animated avatar with animation based on user interaction (bouncing, falling, growing with mouse over / click / keyboard / mic input, etc)
5	9/17		**Present Avatars**	
	9/19	2: RANDOMIZER	Arrays & Objects Text in p5	2.0 - (Pair project) Make randomizer of class roster for critiques and assigning groups
6	9/24		Deleting items from arrays Timers in JavaScript **Demo Randomizers**	2.1 - Complete Randomizer (due at end of class) Read: “Algorithms and the Artist,” Roman Verostko, 1994
	9/26	3: DRAWING MACHINES	Algorithms and art User interacton: Mouse/keyboard inputs Create jpg with saveCanvas()	3.0 - Make a simple drawing machine
7	10/1		Random and noise- order v disorder	3.1 - Add randomness to your drawing machine
	10/3		Loops 2d array (grid) Pair class exercise in recreating drawings using loops	3.2 - Add loops to your drawing machine
8	10/8		Quiz/Review Lab Add creative vision / critical content to your drawing machine	3.3 - Complete drawing machine

	10/10		**Demo/Critique: Drawing Machines** Draw with each others machines Intro to GitHub	Create GitHub account and follow tutorial to set up GitHub *personal page* (repository ends with github.io). Read: “The Dads of Tech,” Astra Taylor, Joanne McNeil, 2014
9	10/15	4: P5 ON THE WEB (Ghosts in the Internet)	GitHub Using Atom HTML / CSS Review Adding p5 sketch to your webpage	4.0 - Create a separate repositories to host your drawing machine and avatar as GitHub *project pages*
	10/17		DOM: Document Object Model Communication between HTML/CSS and your p5 sketch	4.1 - Create a webpage (in a new repository) playing with the P5 Dom library: Theme is AIs / entities that live in the internet
10	10/22		P5 Canvas as background Multiple p5 canvases - instantiation	4.2 - Complete Ghost in the Internet webpage
	10/24		**Critique: Artist in the Internet** Collaborating on GitHub: Create a pull request to add your project to the class GitHub page	Read: “Program or Be Programmed,” Douglas Rushkoff, 2011
11	10/29	5: SOUND: Computer Music / Art Synths	Relation between sound and image Intro to p5 Sound Library Playing sound files Finding and downloading music and sound effects online	5.0 - Create new repository for sound projects. Use sound files to accompany image in sketch
	10/31		Sound synthesis	5.1 - Create synthesized sounds with keypress - at least 10 different sounds
12	11/5		Face detection as input Using JSON and Data sets	5.2 - Play with face detection / provided data sets. Submit proposal for Art Synth

	11/7		Lab / Review	5.3 - Complete Computer Music / Art Synth - Add project to class website before class
13	11/12		Demo/Critique: Art Synths	Read: Excerpt from Critical Play, Mary Flanagan 2009
	11/14	6: PLAY	Game Mods Creating states in games Brainstorm game ideas in pairs	6.0 - (Pair project) Create title page for your game Outline game play and write pseudo-code (Begin creating assets for game)
14	11/19		Revisit classes Spawn objects Review	6.1 - Complete class exercise of alien invaders (Complete assets for game)
	11/21		GAME JAM	6.2 - Finish games! Add to course website before class
15	11/26		**Demo/Critique: Play games** Assign Final Projects	7.0 - Proposal for final project (can be group project)
	11/28		***No class - Indigenous People's Day***	
16	12/3	7: FINAL PROJECTS	Present final project ideas Demos by request Lab	
	12/5		Demos by request Lab	
17	12/10		***Last Day of Instruction*** **Critique and class party pt 1**	7.1 - Final projects due at midnight BEFORE class. Create pull request to add to course github page

	12/11		**WEDNESDAY FINAL: 2:45pm - 5:00pm** **Critique and class party pt 2**	