170A: Fundamentals of Digital Media Production

Summer 2021
Online
Asynchronous

Instructor: Chris Kerich
ckerich@ucsc.edu
Office Hours Location: Zoom, ID 989-383-3985
Office Hours: By appointment only

TA: Ryan Page
rypage@ucsc.edu

I. Description

From the Course Catalog
"Introduction to the conceptual and technical fundamentals of making digital media. Covers principles of digital image manipulation, basic web authoring, and interface design through projects that introduce production techniques and methods."

From Me
In the modern age, digital media exists in an ecosystem. Learning one tool or program is useless if you can't integrate it with all of the other components of the digital media ecosystem. To this end, this course is designed to teach four different core methods of digital media production, and to show how these different methods can be used to supplement and enhance each other.

By the end of this course, students will be able to use image editing software, sound editing software, game creation tools, and creative coding software. They will also have an understanding of how these different individual pieces all participate in the overall digital media ecosystem. Because this is also an arts production course, students will develop their skills in giving and receiving constructive critique.

II. Format and Procedures

Attendance
This course is being taught asynchronously, meaning there is no lecture for you to attend. Instead, attendance will be graded based on participation in weekly critique posts and in one critique session held over Zoom.

Readings
While this is primarily a production course, there will be a selection of readings that will further contextualize the work we’re doing in class to the world at large, alongside a set of tutorials to
further help practice the tools that are introduced in class. All readings will be available online, or on Canvas. They are mandatory, and will help enrich your experience in the class.

**Software**

All the software we will use for this class is free and cross-platform, meaning it will work on both PCs and Macs (and in some cases, even on Linux). If you have access to other software that fulfills a similar purpose (for example, if you want to use Photoshop instead of GIMP), you’re welcome to do so. Do note that if you use different software that all the tutorials are specifically for the software listed below:

GIMP: [https://www.gimp.org/](https://www.gimp.org/)
Processing: [https://processing.org/](https://processing.org/)
Twine: [https://twinery.org/](https://twinery.org/)

**III. Grading**

The structure of the course will be smaller, weekly assignments that will practice using the various technologies we are engaging with, culminating in a larger final project. There will also be short weekly reading response papers, as well as a weekly critique, and one scheduled Zoom critiques. The grade breakdown is as follows:

**Attendance and Participation**: 25% - 10% critique posts, 8% weekly reading response papers, 7% zoom critique session

Due date: Critique post - Tuesday after weekly project due date
Reading response paper - Sunday of the week it is assigned for
Zoom critique session - do one by the end of the quarter

**Four Weekly Assignments**: 9% each

Due Date: Sunday of the week it is assigned for

**Final Project**: 39% - 10% proposal, 20% project, 9% 2-page artist’s statement paper

Due Dates:
Proposal - August 22nd
Project - August 29th
Artist’s Statement - August 29th

Conventional grading does not work during a pandemic. As such, this class is adopting a pseudo pass-fail model. Any work that is considered passing will receive an A, and any work that is not considered passing will first receive an opportunity to revise, and then if it is still unsatisfactory, will receive a C-. If no work is turned in for an assignment at all, it will receive a 0.
IV. Assignment Descriptions

Each week you will be required to turn in a weekly reading response paper. These are meant to be very short, less than a page. These don’t need to be polished, or complete in any sense. You should really think of them as a scratchpad for thinking through what you’ve read that week.

For each weekly project, the project files will be submitted to Canvas. In some cases, it may be most beneficial to upload all the files to your Google Drive, and then link to them as a submission. You should also make a post in the Canvas critique thread linking to your project as well.

By the following Tuesday that a weekly project is due, you should have posted two critique posts replying to two other students’ projects. Once during the quarter, you must also sign up for a critique session that will be held over Zoom. I will provide a variety of times, so hopefully those of you in other time zones will be able to find one that works. The link to this poll will be available on Canvas.

**Weekly Project 1: Image/Sound, Due August 1st**
Choose one of the following:

For this assignment, you will explore digital image editing. Using an image editor of your choice, it could be GIMP, create a digital image out of components sourced from other images. It’s ok if there is some original painting, but the focus should be on the combination of other images to create a new image with a new meaning. Try to make something that has deeper meaning, and isn’t just aesthetically beautiful!

In content, it can be anything that fits the constraints: a scene, a meme, a poster, etc.

Turn in the image exported as a .png to Canvas. Also include the source images that you used to compose the image. Make sure to also link to it in the critique discussion thread for this week.

**OR**

For this assignment, you will explore sound recording and editing. Using Audacity, create a sound art piece out of sounds that you record yourself. Your final piece must be no longer than 3 minutes, and should have multiple tracks and have some editing. This assignment should be a complex and layered sound piece, and not just a straightforward, say, interview with no additional effects. Try to make something that has a deeper meaning, and that doesn’t just sound pleasing!

In content, it can be anything that fits these constraints: an interview, a song, a poem, etc.

Turn in the piece exported as an .mp3 to Canvas. Make sure to also link to it in the critique discussion thread for this week.

**Weekly Project 2: Games, Due August 8th**
For this assignment, you will make a video game using very minimal coding. Using Twine or Bitsy, create a short game that should be able to be played in 5 minutes or less. Neither of these
tools require any coding in order to create a game. You can feel free to do more complicated things with them if you wish, but it can be a useful exercise to see what kind of artistic work you can do without it. As always, try to make something with a deeper meaning, and that isn’t just “fun” to play!

Turn in the project (most likely an .html file) to Canvas. Make sure to also link to it in the critique discussion thread for this week.

**Weekly Project 3: Code, Due August 15th**

For this assignment, you will explore artistic coding. For this project, I’d like you to try to make a Processing project from scratch, instead of basing it off of an existing project. Feel free to look at other projects for inspiration or coding tips, though! It may seem a bit difficult at the start, but as long as you approach it step by step, I’m sure you can do it.

For inspiration, consider trying to replicate one of artist Sol Lewitt’s famous instruction paintings seen here: [https://massmoca.org/sol-lewitt/](https://massmoca.org/sol-lewitt/). However, any route you choose for the content will be acceptable for this project!

Processing projects can be a bit complicated to turn in. I would suggest uploading the entire project folder to your Google Drive, and then turning it in by linking to that folder on Canvas. Make sure to also link to it in the critique discussion thread for this week as well.

**Weekly Project 4: Games + Code, Due August 22nd**

For this assignment, we are returning to games, but this time with the coding knowledge we have gained. For this project, I’d like you to make another < 5 minute game, but this time incorporating some of the coding strategies we used previously- whether that be advanced dialogue scripting in Bitsy or Twine variables and coding, the project for this week should have an increased layer of complexity and depth. You are welcome to expand on your previous assignment for this project if you wish. You are also welcome to use other game creation software if you’re comfortable doing so- Unity, Godot, RPG Maker, etc, so long as you incorporate a coding aspect.

Turn in the game, in whatever form it might be, to Canvas. Make sure to also link to it in the critique discussion thread for this week as well.

**Final Project, Due August 29th**

For the final project, you are free to use whatever tools you’d like! The only constraint is that they should be digital in nature. Your subject can also be whatever you’d like. The final project should be substantial, and reflect a significant amount of work.

Unlike the previous projects, for this project you will need to turn in a final project proposal. This proposal should be a video or audio piece, < 3 minutes, and describe your intentions and inspirations for the final project. We unfortunately won’t have an opportunity to critique final projects, but we can critique the proposals- make sure to post it and do critiques as usual.

For this project, you will be turning in a more substantial piece of writing as well. You will also produce a 2 page artists’ statement that details the themes and ideas you are exploring in the piece and your reasons for producing it the way that you did.
IV. Land Acknowledgement

While it may seem like this class is taking place on “no” land, the internet infrastructure we use for it is buried in, and built on, stolen indigenous land. I’m largely producing and conducting the course from Santa Cruz, California and Calgary, Alberta so I’d like to acknowledge that I am using the land of the Awaswas, the Blackfoot Confederacy, the Tsuut’ina, the Îyâxe Nakoda Nations, the Métis Nations and all other indigenous people who made this land their home. Many land acknowledgements indicate wrongdoing of the past but do not make meaningful steps towards reparations. As such, I will be donating a portion of my salary for teaching this class to the Amah Mutsun Tribal Band, of which the Awaswas are a member, and to the Métis Local 87, the local branch of the Métis Nation in Calgary.

V. Academic Integrity

Academic misconduct includes but is not limited to cheating, fabrication, plagiarism, or facilitating academic dishonesty. Acts of academic misconduct during the course, including plagiarism, can and usually do result in failure of the course, at the sole discretion of the instructor of record. Your case will be reported to the College Provost as per the Academic Integrity guidelines found on the web at: https://www.ue.ucsc.edu/academic_misconduct

Information on subject specific research guidelines is available at: http://guides.library.ucsc.edu/

VI. Accommodations for Students

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, I would also like us to discuss ways we can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to please contact the DRC office, located in Hahn 125 by phone at 831-459-2089 or by email at drc@ucsc.edu.

VII. Difficult Material Statement

In Film and Digital Media courses you will often be assigned films or other material that could contain difficult ideas, uncomfortable language, or graphic depictions of sex or violence. You will be asked to treat these portrayals critically, to consider what is being expressed by the maker, or to examine the potential social impact, and to evaluate the works in a given context. Instructors are always happy to speak with you about your work, and might direct you to CAPS (Counseling and Psychological Services) at 831-459-2628 or the Disability Resource Center (drc@ucsc.edu or 831-459-2089) should you need additional support in order to do your best work.

VIII. Inclusivity Statement

As an instructor at UC Santa Cruz, I value equality of opportunity, human dignity, and racial/ethnic/cultural diversity. Be assured that I will promote a safe and conducive environment for learning. In accordance with University policy, I will not tolerate discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status,
familial status, sexual or gender orientation, disability, or status as a disabled veteran or a veteran of the Vietnam era. In addition to the University’s policy, and within the bounds of the course, I do not discriminate on the basis of political or religious beliefs, and I also make every effort to avoid discrimination on the basis of class or income. This means that you do not have to agree with me or the assigned readings in order to do well in this course. You are, however, obligated to demonstrate an understanding of the course material. If there is something I can do to make the class more hospitable, please let me know.

**IX. Title IX**

The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors.

The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. Information about the Title IX Office, the online reporting link, applicable campus resources, reporting responsibilities, the UC Policy on Sexual Violence and Sexual Harassment and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment can be found at titleix.ucsc.edu.

The Title IX/Sexual Harassment Office is located at 105 Kerr Hall. In addition to the online reporting option, you can contact the Title IX Office by calling 831-459-2462.

**X. Course Schedule**

**Week 1: July 26th - August 1st**

**Image Editing**

Agenda: Intro to image editing/Basics of images editing/Layer based editing/Digital painting/Layer Masks/Selections/Clone Brush/Plugins

Resources:
- GIMP: [https://www.gimp.org/](https://www.gimp.org/)
- GIMP docs: [https://docs.gimp.org/2.10/en/](https://docs.gimp.org/2.10/en/)
- GIMP tutorials: [https://www.gimp.org/tutorials/](https://www.gimp.org/tutorials/)
- Snowball the Monster Cat: [http://hoaxes.org/photo_database/image/snowball_the_monster_cat](http://hoaxes.org/photo_database/image/snowball_the_monster_cat)
- Helicopter Shark: [http://hoaxes.org/photo_database/image/helicopter_shark](http://hoaxes.org/photo_database/image/helicopter_shark)
- The Vanishing Commissar: [http://hoaxes.org/photo_database/image/the_commissar_vanishes](http://hoaxes.org/photo_database/image/the_commissar_vanishes)
Sound Editing

Agenda: What is sound editing?/Sound art/Live audio recording example/Transcription/The waveform/Editing mistakes/Multitracking and synchronization/Effects

Resources:
- Audacity: https://www.audacityteam.org/
- Audacity docs: https://manual.audacityteam.org/index.html
- Audacity tutorials: https://manual.audacityteam.org/man/tutorials.html
- Audacity’s Editing and Mixing Tutorials (https://manual.audacityteam.org/man/tutorial_editing_an_existing_file.html) and (https://manual.audacityteam.org/man/tutorial_mixing_a_narration_with_background_music.html). Note that most Audacity tutorials assume you will be recording directly into Audacity, but you can record sound with any device and then import it into Audacity later.

Homework: Do Weekly Project 1 and read Read Hito Steyerl’s “In Defense of the Poor Image” (https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/) and Jonathan Sterne’s “The mp3 as cultural artifact” (on Canvas) + do the reading response. Don’t forget to do your critique posts too!

Week 2: August 2nd - August 8th

Games

Agenda: Intro to Twine & HTML/Hypertext examples/Passages/Links/Intro to Bitsy/Rooms/Palettes/Sprites

Resources:
- Twine 2: https://twinery.org/
- Twine 2 references/tutorials: https://twinery.org/wiki/
- Twine 2 Harlowe specific manual: https://twine2.neocities.org/
- Twine 2 Sugarcube (alternative story format) manual: http://www.motoslave.net/sugarcube/2/docs/
- Even more Twine 2 documentation: https://twinery.org/cookbook/
- Free Twine game examples: https://itch.io/c/314317/twine-examples
- Rat Chaos by Winter Lake: https://debacle.us/ratchaos/
- Horse Master by Tom McHenry: https://tommchenry.itch.io/horse-master
- Depression Quest by Zoe Quinn: http://www.depressionquest.com/dqfinal.html
● Bitsy tutorial: [https://www.shimmerwitch.space/bitsyTutorial.html](https://www.shimmerwitch.space/bitsyTutorial.html)
● Free bitsy games: [https://itch.io/games/free/tag-bitsy](https://itch.io/games/free/tag-bitsy)


**Week 3: August 9th - August 15th**

**Creative Code Part One**

Agenda: Intro to programming/Programming for the arts/The basics: shapes, colors, movement/Variables/if statements/Loops/Arrays/Objects/Methods/Basic Design Patterns

**Resources:**
- Processing: [https://processing.org/](https://processing.org/)
- Processing docs: [https://processing.org/reference/](https://processing.org/reference/)
- Processing examples: [https://processing.org/examples/](https://processing.org/examples/)
- Processing tutorials: [https://processing.org/tutorials/](https://processing.org/tutorials/)
- Hello Processing video with Processing project examples: [https://vimeo.com/320513063](https://vimeo.com/320513063)
- Processing libraries: [https://processing.org/reference/libraries/](https://processing.org/reference/libraries/)
- Sol Lewitt wall drawings: [https://massmoca.org/sol-lewitt/](https://massmoca.org/sol-lewitt/)
- More (open source) Processing projects: [https://www.openprocessing.org/browse/](https://www.openprocessing.org/browse/)

**Homework:** Do Weekly Project 3 and look at two or more sections of [https://hackcur.io/](https://hackcur.io/) and read/watch Allison Parrish’s talk “Programming is Forgetting: Toward a New Hacker Ethic” ([http://opentranscripts.org/transcript/programming-forgetting-new-hacker-ethic](http://opentranscripts.org/transcript/programming-forgetting-new-hacker-ethic/)) + do the reading response

**Week 4: August 16th - August 22nd**

**Games - With Coding**

Agenda: HTML/Applying programming to Twine/Javascript coding/variables in Twine/dialogue coding in Bitsy
Resources:
- W3Schools HTML basics: https://www.w3schools.com/html/
- CSS and Twine: https://twinery.org/wiki/twine2:change_the_font_colors_or_appearance
- A basic Twine RPG setup: http://lambdamaphone.blogspot.com/2015/02/using-twine-for-games-research-part-ii.html
- Snowman Docs (Twine 2 story format built for coding): https://videlais.github.io/snowman/2/
- Big list of Bitsy hacks: https://github.com/seleb/bitsy-hacks

Putting Everything Together

Agenda: Images & Sound in Processing/Images & Sound in Twine/Processing in HTML/Bitsy in Twine

Resources:
- Images for Processing: https://processing.org/tutorials/pixels/
- Sound for Processing (using Minim): http://code.compartmental.net/tools/minim/
- Images and Sound in Twine tutorial: https://twinery.org/wiki/twine2:add_an_image_movie_sound_effect_or_music
- Bitsy in Twine tutorial: https://spdrcstl.com/blog/bitsy-twine-tutorial.html

Homework: Do Weekly Project 4, read the intro and chapter one of Remediation by Jay David Bolter and Richard Grusin (on Canvas, p.2-50) + do the reading response.

Week 5: August 23rd - August 27th

Homework: Work on those final projects!