ART 150 // Introduction to New Media Arts

M/W 3-5:40pm
Instructor: Alan Perry, aperry2@saic.edu OR aperry30@uic.edu
Office hours by appointment
New Media Lab Specialist: Shane Hope, shope@uic.edu

Activities are subject to change based on the progression of the class. No due dates / readings / homework will be changed without prior notification.

DESCRIPTION

Introduction to New Media Arts is a studio-based course which provides an overview of the theories and practices of New Media Arts. Students will learn fundamental practices of electronic arts including but not limited to circuit design, basic to intermediate electronics, hacking, and programming for interactivity. Through hands-on workshops, students will explore basic electronic techniques and use of programmable microcontrollers (Arduino) to control interactive art, sound, light, and environments. Students will also be introduced to and are encouraged to draw inspiration from various artists and their work through lectures rooted in the history, theory, and current practices of responsive and new media art. This course encourages experimentation, research, and copy<it>right ethics through sharing sources, skills, and insights on a class blog and IRL. There are no prerequisites for this course.

****Having your own Mac OS / Windows / Linux computer is a requirement for this class****

SCHEDULE

PART 1

Introduction to Creative Coding

Week 1

M. Introductions, course syllabus. **Lecture**: Instructions as artwork. **Homework**: download and install Processing.

W. **BRING YOUR COMPUTER. Workshop**: Coding with Processing: reference, variables, shapes, colors, mouse input, and for loops. **Project 1 (Drawing Machine) assigned.**

Week 2

M. *Labor Day, no classes.*

W. **BRING YOUR COMPUTER. Workshop**: Images, translate, text, and animation.

End of week: Last Day to drop classes without receiving a Withdrawal / "W" grade.

Week 3

M. **BRING YOUR COMPUTER. Studio day**. **Homework:** Jorge Luis Borges – the Garden of the Forking Path. Check the week3 folder on the course website for the PDF.

W. **BRING YOUR COMPUTER. Workshop:** Custom functions. **Studio day.**

Week 4

M. **BRING YOUR COMPUTER. Reading Discussion about *The Garden of the Forking Path*. Studio day. Homework:** Drawing Machine Due BEFORE CLASS on 9/19 @ noon. Zip & email file to instructor at aperry30@uic.edu.

W. **Workshop/Digital Output TBD**. **Drawing machine critique/discussion.**

PART 2

Introduction to Creative Electronics

Week 5

M. **Lecture**: Basic electronics, circuits, switches, and resistors. **Project 2 (Creative Switch) assigned. Studio day:** sketch ideas for project 2.

W. **BRING YOUR COMPUTER. Studio day. Individual meetings.**

Week 6

M. **Workshop**: Transistors and motors. **Studio day.**

W. **Project 3 (Artist Presentation Project) assigned. Studio day.**

Week 7

M. **Assignment 2 (Creative Switch) critique/discussion. Homework:** install Arduino IDE.

W. CLASS CANCELLED

Week 8

M. **Lecture:** Contemporary New Media Artists. **Workshop:** Arduino, Fritzing, Blink, and Pulse-Width Modulation. **Presentation schedule assigned.**

W. **Project 4 (Final Proposal) assigned. Workshop:** Photoresistors, potentiometers, the serial monitor.

PART 3

Exploring the New Media Landscape

Week 9

M. **Artist Presentations Day One. Workshop:** Servos, piezo speakers, PIR sensor, force resistive sensor.

W. **Artist Presentations Day Two. Project 4 (Final Proposal) Due. Workshop:** Piezo speakers, stepper motor, neopixels.

Week 10

M. **Artist Presentations Day Three. Studio day / Individual meetings on Final Proposals.**

W. **Artist Presentations Day Four. Studio day.**

End of Week: Fall 2019 Withdraw Deadline

PART 4

Production Mode

Week 11

M. **Studio day.**

W. **Studio day. Individual Meetings group A.**

Week 12

M. **Studio day. Individual Meetings group B.**

W. **Studio day. Individual Meetings group A.**

Week 13

M. **Studio day. Individual Meetings group B.**

W. **Studio day. Individual Meetings group A.**

Week 14

M. **Studio day. Individual Meetings group B.**

W. **Studio day.** Thanksgiving Break – absences not counted.

Week 15

M. **Studio day.**

W. **Final project due. Final Project Critique.**

Week 16

Finals Week. Documentation and other "paperwork" due. **Final grades will not be released until this is completed by the student.**

ASSIGNMENTS

Assignment #1 /// PROCESSING DRAWING MACHINE /// 10% of final grade /// due September 19th

Using Processing, create a "drawing" machine/program that uses mouse input/interaction and at least one for loop and one conditional statement. This can be a game, animation or purely aesthetic. You can visualize whatever you want, but try to not to simply copy and paste code from various sketches… understanding what the code is doing is super important!

Requirements & Deliverables

- At least one example of mouse interaction
- At least one for loop (for(int i; i < 10; i++)….)
- At least one conditional statement (if/then)
- Email your code and one image from your sketch to the instructor

Assignment #2 /// CREATIVE SWITCH /// 10% of final grade /// due October 7th

This assignment explores your ability to use your newfound electronic knowledge to create a custom switch. Using materials that have not previously used or demonstrated in class, create your own switch or button. This can be a soft circuit button, out of materials found at home, etc. A good example is wiring a zipper to turn on LED's. We will be going over several examples of unconventional switches. Use your switch to turn on at least 2 LED's (you may use more LEDs if desired). Or, you can make two switch circuits that each light one LED. This assignment may be turned in as "bare bones" or on a circuit board with exposed wires.

The emphasis here is on creating small sculptures or design objects, which incorporate an original or unique switch method that you design.

You should spend a good amount of time on brain storming and on construction. The components of the circuit may be relatively simple – it's really the mechanics of the switch (how it opens and closes) that will be your "ingenious" solution.

The switch should be functional!

Requirements & Deliverables

- Completion of assignment for in class critique
- Turn on at least 2 LED's
- Documentation: 5 detailed high resolution images of your piece to be emailed to the instructor on due date of the project. There should be a parts list, a description/elaboration of what the images show and a description of how the switch circuit is constructed and works. Someone should be able to construct and understand the switch by using your email as a guide.

Assignment #3 /// ARTIST PRESENTATION /// 10% of final grade /// due October 17th to October 28th

Due on the day you present (weeks 8-10)

Based on a list provided in the syllabus and the slide PDF for this assignment, choose an artist / designer / collective on which to base an 8- to 10-minute presentation on. You are expected to discuss their work, aesthetic, background, concepts and any other information you deem relevant or find interesting.

Some new media artists:

- Rosa Menkman
- Myron Krueger
- Morehshin Allahyari
- Jeremy Bailey
- Ken Rinaldo
- Addie Wagenknecht
- Evan Roth
- Graffiti Research Lab/F.A.T. Labs
- Aram Bartholl
- Rafael Lozano-Hemmer
- Steve Mann
- Natalie Jeremijenko
- Eva and Franco Mattes
- Christopher Baker
- Jacob Tonski
- Claudia Mate
- Casey Reas
- Julian Oliver
- Daniel Rozin
- Jennifer and Kevin McCoy
- Lauren McCarthy

Places on the web to find other new media artists:

- ARS Electronica
- newmediaart.eu
- Prosthetic Knowledge (tumblr)
- Rose Goldsen Archive of New Media Art
- bitforms gallery
- Rhizome's Artist Profiles

Requirements and Deliverables

8-10 minute presentation of the artist.

- Brief intro about their background
- Talk about at least two pieces
- What makes the work effective or not? Do you have criticisms? Was the concept of each piece evident through material choices and presentation?
- Use Powerpoint / Google Slide / PDF / Prezi, etc., to prepare and deliver lecture
- Email slides as a Powerpoint or PDF document to instructor by noon on the day the assignment is due

Assignment #4 /// Final Project Proposal /// 20% of final grade /// due October 24th

A 1-2 page proposal with a drawing, sketch, or model (with approximate dimensions) attached for your final project due via email. In your proposal, please discuss what you would like to work on for your final project, why you want to produce this piece, and your conceptual reasoning behind wanting to create the work. Please include a list of parts and materials that you think you might need to execute this project. You will each meet with the instructor individually to discuss your final projects on the due date to gain approval to begin working on project and to receive feedback to help you find parts and give you conceptual feedback and other helpful resources.

Requirements and Deliverables

- 1-2 Page Proposal
    - Conceptual reasoning (why?)
    - Description of expressive qualities of the piece (how?)
    - Physical description of artwork (what?)
- Drawing/Sketch/Model
- List of Parts Needed

Assignment #5 /// FINAL PROJECT /// 30% of final grade /// due December 5th

In consultation with the instructor, develop a final project that shows significant understanding of topics and exercises covered in the course, utilizing the skills obtained in lab exercises and inspired by course content. The final project will consist of this artistic work accompanied by a minimum 1-2 paragraph synopsis and short presentation of your project in class. The project may be of any kind of experimental art piece, interactive sculpture, wearable, or responsive installation and is up to your design. The piece may also be an expansion of a previously attempted project from the course so long as it is sufficiently advanced. This can be a collaborative project, however, collaboration must be pre-approved. Be prepared to have ideas in mind for your final project in mind by the time you start to work on artist presentations. I know this sounds early but bear in mind you will need to order electronic parts and will need time to construct the object(s) and work out issues or unforeseen problems. I am open to you

coming up with creative ways to execute your projects so please feel free to ask questions or suggest ideas.

You will be graded on the creativity and functionality of your piece as well as your synopsis and final presentation during our final class critique. Your synopsis should discuss the work that you have produced. Please be sure to conceptually discuss your reasonings for your final piece as well as any inspirations that may have lead you to create the work and any other information you find important to your final project.

Requirements & Deliverables

- Must incorporate the Arduino
- Completion of Project for in class critique due date.
- Email at least 5 documentation images of your completed project to the instructor. These images should include in-progress documentation.
- Documentation: make a short (<5min) video documenting your project. The bare minimum of the video should show how the piece functions. Add a Dropbox, Google Drive, Vimeo etc. link to the video in your blog post.
- If you used another person's code or 3D printable files, credit and link to them in your documentation.
- Final grades will not be released until all documentation is received / posted. Make sure you post everything by finals week.
- 100- to 300-word Artist Statement.
    - Why did you make this?
    - What materials did you use?
    - What inspired you?
    - What do you want your audience to know?

READING MATERIALS

Various articles and excerpts from journals, conferences, and books covering topics such as critical theory, experimental new media art, and computer graphics will be handed out in class as reading assignments.

Suggested readings and supplemental materials will be provided by the instructor. There are no required books you need to purchase for this class.

GRADING

Grading is based on expectations of class participation, reading responses and quality of work created.

In Class Participation: 20%
Class participation includes lab time, workshops, critiques, discussions, and an overall active engagement in class.

Conceptual Assignments: 30%
These assignments will be discussed in class and will be posted on the course website with adequate time for completion. As part of each assignment, students are expected to hand in documentation which will count as part of the assignments grade.

Final proposal: 20%

The final project proposal paper and presentation will become the foundation and groundwork of your final project. Detailed responses to the prompts will allow the instructor to assist you in preparing for your final.

Final: 30%
The final project will consist of an artistic work or installation of your choosing utilizing the skills obtained in lab exercises and inspired by course content. You are also expected to hand in documentation for the final project.

ATTENDANCE

Attendance is mandatory. Lectures and demos will start at the beginning of class, so it is important that you are punctual. Latecomers are disruptive to class, be considerate and show up on time.

Students are expected to utilize work time during class productively. If a student leaves class early without approval from the instructor, they will be marked as absent or tardy – even if it is a “work in class” day or the instructor’s lecture is completed before the class period ends.

One-Three absences = no penalty except for loss of instruction.

Four absences = grade lowered one letter grade.

Five absences = grade lowered an additional letter grade.

Six absences = automatic failure.

Three late arrivals or early departures are counted as one absence

If you are absent on critique days, you will be marked down one letter grade. Critiques are an important and worthwhile venue to receive feedback and suggestions from peers.

LAB POLICIES

There is a required laboratory fee for this course, which is used for course materials and supplies that you can keep.

Eating or drinking must be kept clear of the workspaces. Only drink using a closed container.

Never eat or drink while soldering!

Please be considerate and clean up after yourself! This includes empty drinks, all small pieces of plastic, and misc. clippings. This is a shared lab space and we need everyone's help to keep it clean and in order.

LAB HOURS

Lab hours will be posted on the New Media Lab FRONT DOOR.

DISCLAIMER

Projects created in this course may be used by the Department for purposes of promotion for students, the Department, or the University in general. The Department may also use these materials for instructional purposes in future courses. The Instructor may also use your projects as examples of work completed in the class.

IN -CLASS PHONE/LAPTOP POLICY

Use of computers/mobile devices for texting, email, chatting, internet browsing, or any activity unrelated to what we are doing in class at that moment is a distraction to yourself and others in the class. Internet browsing and computer use will be a part of this class. Use this privilege for class research purposes only. This policy will be strictly enforced.

SECURITY

Do not leave personal belongings, cameras, equipment or other valuables unattended as this is an open access building and there have occasionally been incidents of theft. Consider getting renters insurance, as some policies will cover theft and it's not that expensive per year.

Do not prop open doors when they are locked after regular hours, especially the main door to the building. Consider instead posting a note or texting so a visitor can call to let you know of their arrival.

If you see a suspicious person who does not seem to be School student or faculty, call UIC Police and ask them to check on the situation. There are red "Call Police" buttons positioned throughout the building.

UIC POLICE NUMBER: 1-312-355-5555 or 312-996-2830

ACCOMMODATION FOR DISABILITIES

Guided by the belief that people with disabilities are assets to the University, UIC is committed to full inclusion and participation of people with disabilities in all aspects of University life. We seek to provide an academic, social, and physical environment that makes disabled people integral to the diversity of perspectives that is vital to an academic community. UIC supports the principles of universally accessible design, alternative communication formats, and the expression of disability community and pride. At all levels of the University, UIC promotes equal opportunity, fair treatment, and the elimination of barriers for qualified individuals with disabilities.

For additional information or assistance with the equal opportunity, affirmative action, and harassment policies and procedures of the University of Illinois at Chicago, please contact the Office for Access and Equity. During the first week of the semester, a student needing accommodations for any type of disability should make an appointment with the instructor to schedule a meeting to discuss the situation and possible solutions.

RESPECTFUL LANGUAGE

This is a space of inclusivity and respect. Racist, sexist, homophobic, transphobic or any other bigoted language will NOT be tolerated.

UIC COUNSELING CENTER

The UIC Counseling Center is a primary resource providing comprehensive mental health services that foster personal, interpersonal, academic, and professional thriving for UIC students.

If you feel that you are in crisis, please refer to the list of crisis services offered through the UIC Counseling Center here.

1200 West Harrison St., 2010 SSB, (MC 333), Chicago, Illinois 60607

Phone: (312) 996-3490

Fax: (312) 996-7645