ART 150 - INTRODUCTION TO NEW MEDIA ARTS
COURSE SYLLABUS

Spring 2025
Tuesdays, Thursdays 3:00pm - 5:30pm

Instructor:
Juan Eduardo Flores
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Office Hours by Appointment

Lab Specialist:
Shane Hope
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Course 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 and interaction design including but not limited to circuit design, basic to intermediate electronics, and programming for interactivity. Through hands-on exercises, students will explore basic electronic techniques and use programming to control interactive art that uses sound, light, and movement in physical environments. Students will also be introduced to various professional new media artists and their work through survey lectures rooted in the history, theory, and current practices of responsive and new media art.

Course Objectives
Students will:

- Draw inspiration from the history of artists and designers who explore ideas and applications of interactivity.
- Research digital and experimental art works, trends, and topics.
- Gain practical experience with basic electronics, coding, and other techniques relating to physical computing art production.
- Develop experimental art, interactive objects, and responsive environment projects based on conceptual assignments.
- Be aware of critical artist decisions when creating art related to technology.

Course Requirements and Student Responsibilities
No prior electronics or programming experience is required to take this class
This course requires a laptop to be used for computer programming assignments. Students will be asked to install all necessary free software. Students will be given electronic and soldering kits, as well as other electronic components and are expected to bring them to class when needed.

In order to get the most out of this course, students are encouraged to spend time learning and practicing the technical topics discussed in class in their own time. A curation of learning resources will be given to help guide any additional exploration. A class website will be provided as the central source to go over anything discussed in class for your convenience.

Class Semester Plan
Semester Plan is subject to change depending on student and class needs

Week 1 - Introductions, What is New Media? Historic and Contemporary Examples	
Jan 14th	Getting to know each other. Class overview. Showcasing New Media Artists.
Jan 16th	What is New Media?
Week 2 - New Media Topics, History, Exploring/Playing with the Possibilities	
Jan 21st	New Media Topics. Play with Inputs and Outputs
Jan 23rd	New Media Topics. Analog vs. Digital Signals. Internet of Things.
Week 3 - Introducing Basic Electronic Components	
Jan 28th	Basic Electronic Components, The Basic Circuit (Power Source, Load, Switch), Measuring DC Voltage and Testing for Continuity. Ohm's Law
Jan 30th	Start Sculptural Vibration Motor Circuit Workshop. Soldering Workshop.
Week 4 - Vibration Motor Workshop	
Feb 4th	Continue Sculptural Vibration Motor Circuit Workshop
Feb 6th	No Class: Reading: Information Arts by Stephen Wilson
Week 5 - Electronic Circuit Topics and Demos	
Feb 11th	Capacitors, Potentiometers, Variable Resistors
Feb 13th	DC Motors and Drivers, Transistors, Diodes, Types of Switches. Making a Custom Switch.
Week 6 - Arduino Introduction	
Feb 18th	Introducing the Arduino IDE, Serial Monitor, Blink Example, Variables, Potentiometer Analog Input Programming Topics: - Variables - Printing to Serial Monitor

	- Debugging
Feb 20th	Pulse Width Modulation, Fade Examples, Servo Motors. Programming topics: - Iteration. For Loops vs. loop() - random()
Week 7 - Custom Interactions, Introducing Sensors	
Feb 25th	Button Interactions, Pull down/up resistors. Introducing the Midterm Project. Programming topics: - Conditional statements (if / else if / else)
Feb 27th	Adding Sensors / Input. Making Custom User Interfaces. Writing Custom Functions Programming topics: - Functions, Modularity, Abstractions, Code Reusability
Week 8	
Mar 4th	Introducing Research Presentation Assignment. Midterm Studio Time
Mar 6th	Midterm Studio Time
Week 9 - Midterm Critique	
Mar 11th	Midterm Studio Time
Mar 13th	Midterm Critique
Week 10 - Sound Input / Output	
Mar 18th	Microphones, Vibration, Tone Generation
Mar 20th	Sound / Light / Movement
Spring Break (No Classes : Mar 25th and 27th)	
Week 11	
Apr 1st	Final Project Proposal Due, Class Research Presentations
Apr 3rd	New Sensor Demonstration (TBD), Class Research Presentations
Week 12	
Apr 8th	New Sensor Demonstration (TBD), Studio Time
Apr 10th	New Sensor Demonstration (TBD), Studio Time
Week 13 - Final Project Studio Time	

Apr 15th	Studio Time
Apr 17th	Studio Time
Week 14 - Final Project Studio Time	
Apr 22nd	Studio Time
Apr 24th	No Classes
Week 15 - Final Project Critiques / Documentation / Submission	
Apr 29th	Final Project Critiques
May 1st	Final Project Critiques

Lab Policies
There is a required laboratory fee for this course, which is used for course materials and supplies (including your electronics and soldering kits).

Eating or drinking must be kept clear of the workspaces. Only drink using a closed container. Never eat or drink when soldering. Always wash your hands after soldering before eating or drinking. Safety equipment like safety goggles will be provided. The lab is a shared space and should be respected, cleaned, and generally taken care of for other fellow students.

Attendance Policy
This is a studio course built on active participation, making together, thinking together, and learning from one another. If you are not in class, then you cannot participate. Therefore, students are expected to attend all scheduled classes for the full duration of the course. Three unexcused absences will lower your final grade by one full letter. Excessive absences would be considered four or more and may be cause for failure in the course. Two tardies, or leaving class early, or stepping out for long durations during class time (20 minutes or more) constitutes one absence. Any absence beyond two, that is not an excused absence, will affect your grade. Excused absences are only missed classes due to the death of an immediate family member, observation of a religious holiday, hospitalization, contagious sickness, or a victim of a crime, all of which should be accompanied by appropriate documentation provided to your professor within a week of the absence. All other reasons for missing class are considered unexcused.

Please note that if you communicate with your professor in advance about a class to which you will be absent or tardy, that does not mean the absence or tardy is excused. Only the reasons written above, with documentation, yield an absence as excused. Also, if you have a friend in the same class who is, on your behalf, letting your professor know that you are running late, you will still be marked tardy.

Please also note that it is your responsibility to track your attendance, to remain aware of it, and to communicate with your professor if you become concerned. Your professor will be taking attendance every class period, but it is not their obligation to communicate with you if your grade is being affected by your attendance.

Course Grading Breakdown

- 10% Participation – workshops, critiques, discussions, engagement in class
- 50% Studio projects – midterm and final
- 15% Research Presentation – a 10 min presentation given to the class
- 15% Discussion Board – Assignments, reading responses, experiment posts
- 10% Portfolio – documentation of your projects and their development. Project proposals and statements.

Grading Art Assignments

The goal is to think creatively with the technical topics discussed and practiced in class, not to become technical masters, however the more you practice the more you will start to know what is possible. These technical skills are like learning several new languages, so it takes time to get acquainted with them. A grading evaluation of an art project is never perfect, however this scale will be considered:

A: Work is of exceptionally high quality both technically and conceptually. The student and work exhibits ambition that is successfully realized far beyond the level required and could not be improved in any way. The student takes big risks! The student is always on time and prepared, vocal in class, inquisitive, and clearly invested in what they are thinking about and making both in class and outside of class. The student takes copious notes and refers to their notes regularly. Projects must show significant growth between class periods. The student must display significant growth over the course of the semester through risk, experimentation, and care for their work and what they are learning.

B: Work is of good effort with creative ideas, but not accomplished to fully embody the initial conceptual or formal impetus. The student and their work display little risk in creative execution of projects and remains steadfast in their familiar ways of working and thinking. Ideas are safe and predictable. The student takes notes randomly and hardly refers to them. The student is on time but scattered and less prepared.

C: Work is average, the assignments have been fulfilled and on time but with minimal effort. Barely meets the requirements of the assignment with little or no regard for the depth of the artist's known potential. Predictably late and unprepared for class, often not taking any notes or making effort to remember what was said in class. The student is quiet during conversations and little work is being done outside of class.

D: The work does not meet the assignment's criteria, and/or is incomplete at critique time. The student has poor attendance, is absent minded in lectures and conversations, and shows little to no work being done outside of class.

F: Failure to complete projects, or to participate in critique, or failure to arrive prepared for class routinely.

Academic Misconduct

Academic misconduct includes both plagiarism and cheating, and may consist of: the submission of the work of another as one's own; unauthorized assistance on a test or assignment; submission of the same work for more than one class without the knowledge and consent of all instructors; or the failure to properly cite texts or ideas from other sources.

Academic integrity is expected in all coursework, including online learning. It is assumed that the person receiving the credit for the course is the person completing the work.

Classroom Policy on AI Tools
Use of AI for code generation will be discussed in class as a possible learning tool and all ethical questions related to it. Throughout the course students will be asked to explain what each line of code does and are expected to have a general idea of what each line of code is doing. Using AI to avoid learning is highly discouraged.

Image Reproduction
Projects created in this course may be used for educational purposes, including instruction in future courses and promotion of the School, College or University. If you have concerns about sharing or distributing any of your work for these purposes, please discuss with your instructor.

Security
Do not leave personal belongings, cameras, equipment or other valuables unattended. Though we trust the people in our school community, this is an open-access building and there have occasionally been incidents of theft. Do not under any circumstances prop open doors when they are locked after regular hours. Consider instead posting a note so a visitor can call to let you know of their arrival.
If you see a suspicious person who does not seem to be a 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: (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.

Office for Access and Equity
Address: 809 S. Marshfield Ave., 717 Marshfield Building, MC 602, Chicago, IL
Phone: 312-996-8670
Email: oae@uic.edu
Website: http://oae.uic.edu/

"UIC is committed to full inclusion and participation of people with disabilities in all aspects of university life. If you face or anticipate disability-related barriers while at UIC, please connect with the Disability Resource Center (DRC) at drc.uic.edu, via email at drc@uic.edu, or call (312)

413-2183 to create a plan for reasonable accommodations. In order to receive accommodations, you will need to disclose the disability to the DRC, complete an interactive registration process with the DRC, and provide me with a Letter of Accommodation (LOA). Upon receipt of an LOA, I will gladly work with you and the DRC to implement approved accommodations."

Religious Holiday Observance
In accordance with Illinois state laws and with respect for cultural diversity, we will make every effort to avoid scheduling examinations or requiring student projects be turned in or completed on religious holidays. Students who wish to observe their religious holidays must notify the instructor by the tenth day of the term that they will be absent unless their religious holiday is observed on or before the tenth day, in such case students must notify instructor at least five days in advance of the date when they will be absent.

Inclusivity Statement:
"UIC values diversity and inclusion. Regardless of age, disability, ethnicity, race, gender, gender identity, sexual orientation, socioeconomic status, geographic background, religion, political ideology, language, or culture, we expect all members of this class to contribute to a respectful, welcoming, and inclusive environment for every other member of our class. If there are aspects of the instruction or design of this course that result in barriers to your inclusion, engagement, accurate assessment or achievement, please notify me or your TA as soon as possible."

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.

Counseling Center
Address: 1200 West Harrison, Suite 2010, Student Services Building, MC 333, Chicago, IL
Phone: 312-996-3490
Website: https://counseling.uic.edu/