Art 406 / 606: Artist’s Machine

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Office Hours by appointment only (through email).

Course Description

Exploration of artist-constructed machines (i.e. micro-electronics, robotics, kinetic sculpture and interactive installation) as media for artistic expression. Balance of theory and practice with specific emphasis on making of electronic objects and positioning these in various contexts. No prior knowledge of electronics required.

Learning Objectives

prepare, construct and present materials for critique, exhibiting basic knowledge of electronics and electricity.
demonstrate an understanding of micro-controllers and physical computing technologies.
exhibit an understanding of the value of active experimentation to discover new forms of analog and digital technologies.
compare and contrast new media and technological artworks as they affect one's culture and society.

Required Materials

You will be assigned a Sparkfun Inventor’s Kit (SIK) for use in this course. It is your responsibility to keep all components of the SIK in the kit, and return the complete kit on the last day of class. Failure to do so will result in a 10% reduction in your final grade.

You will be responsible for all other materials required to complete the assignments. This may require spending your personal money on materials and supplies that are specific to your project.

Course Calendar
Projects are introduced and due throughout the semester. The calendar may be updated and changes may be made during the semester. I publish the calendar via Google Calendar. You will receive an invitation. Let me know if you are unable to access it.

Visiting Artists & Designers

Art Department website with information and URL links: https://www.art.udel.edu/

You are required to attend the lecture by Elisa Maezono on Tuesday, November 7, 5-6pm.

Assignments

More information will be provided about all of these via assignment sheet.

5 Points: Blink Prototype (SIK Circuit 1)
10 Points: RGB LED (SIK Circuit 3)
15 Points: Push Button LEDs (SIK Circuits 4 + 5)
15 Points: Sensor Activated Servo (SIK Circuits 6/7 + 8)
15 Points: Variable Resistor Buzzer (SIK Circuits 9/10 + 11)
70 Points: Motorized Child’s Toy (SIK Circuit 12)
70 Points: LCD Device (SIK Circuits 5 + 15)
350 Points: Mid-Semester Project
350 Points: Internet/Web of Things Project
50 Points: Final Documentation
50 Points: Participation in class critiques and discussion
Total Possible Points: 1000

Final Documentation

You must turn in digital documentation for all projects at the end of the semester. This means you need to be documenting your work throughout the semester. There is a lighting setup in Taylor Hall and in the SMDC. If you need additional information about this, please ask me. Please adhere to the following specifications:

All files must be in a single directory (folder) titled: lastname_Course Number_Semester
For example: Pigford_Art406_Fall2017
Each Assignment must be a separate directory
Include all photo/video documentation, plus any additional files (i.e. Arduino Sketches)

Attendance
Attendance is important for all classes. Do not miss class and do not be late to class. If you do, you are responsible for asking your fellow classmates about what you missed. You are allowed two unexcused absences. Three unexcused absences will automatically reduce your final grade one full letter. Each additional unexcused absence drops the final grade another letter. Signed notices from a doctor, including a phone number, are required to qualify an absence as excused. If you have a special situation that prevents you from attending class you must contact the Dean’s office and they will contact me directly, at which point it will be determined if your absence(s) qualify as excused.

Familiarize yourself with the University’s Policy:


Academic Honesty

http://www.udel.edu/stuguide/10-11/code.html#honesty
http://www.udel.edu/provost/fachb/III-1-d-dishonesty.html

It is the official policy of the University of Delaware that all acts or attempted acts of alleged student academic dishonesty be reported to the Office of Judicial Affairs. At the faculty member’s discretion and with the concurrence of the student or students involved, some cases, though reported to the Office of Judicial Affairs, may be resolved within the confines of the course. All others will be adjudicated within the Undergraduate Student Judicial System.

It is essential that every faculty member make it clear to students that academic dishonesty will not be tolerated. A brief discussion at the beginning of each term should affirm the importance of academic integrity and indicate that the instructor is aware of the problems of academic dishonesty and is sensitive to it, is willing to clarify as carefully as possible what constitutes plagiarism, and will take action not only to prevent cheating but to bring charges against students suspected of violations.

Grade Evaluation

Each project includes a rubric on how it will be graded. All assignments include making a presentation, as described in the assignment. Assignments will each have an assessment rubric, however the following is a general guide to grade evaluation:

A = Exceeds Minimum Conceptually and Functionally
B = Exceeds Minimum Functionally (Weak Conceptually)
C = Meets Minimum Functionally and Conceptually
D = Obvious lack of attention to project
F = Failure to complete assignment

Final letter grades will be determined according to the University of Delaware’s Official Grade Scale.

The requirements and objectives for this course are clearly stated in this syllabus. This is the criteria you will be graded on. If you are not clear about the criteria or what you will be graded on, please ask. I encourage you to discuss your grades with me at any time. Federal law prohibits me from discussing your academic standing (including grades) with anyone except you. I am also prohibited from sending email with personal information, such as grades and academic standing.

Letter Grade Descriptions

The following Letter Grade Descriptions detail the criteria for earning grades. Plus and minus grades fall between the straight letter grades in achievement. To receive a grade of C or better on any assignment, it must be turned in on time unless a PRIOR arrangement has been made or there is an emergency situation.

A Outstanding work relative to the level necessary to meet course requirements. This work goes FAR beyond completing the requirements of the assignment and shows unusual mastery of the skills and innovative and creative thinking.

B Significantly above the level necessary to meet course requirements. A “B” is a very good grade, but not outstanding.

C Average achievement that meets the course requirements in every respect, but does not go beyond. A “C” is an average grade, meaning you did not succeed beyond the average effort of your classmates.

D Worthy of some credit even though it fails to fully meet the course requirements. Basically, it means that you squeaked by... “D” is for “dangerously close to failing.”
F Represents failure and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an “I”. Keep in mind that a student can turn in work, attend class and still fail the course if the work is not worthy of credit according to the clearly stated criteria for passing work. An “F” carries zero grade-points and the credits for the course do not count toward any academic degree program.

A letter grade of an “I” stands for an Incomplete Grade and is assigned at the discretion of the instructor when, due to extraordinary circumstances, e.g., hospitalization, the student was prevented from completing the work of the course on time. Student must have been passing the course before the emergency incident. Requires a written agreement between the instructor and student specifying the time and manner in which the student will complete the course requirements. In no event may any such written agreement allow a period of longer than 6 months to complete the course requirements.