

# Art & Code & Interactivity

Fall 2013

ARTS 4964-01

Tuesday, Friday 2:00pm- 3:50pm

West Hall, 211

Shawn Lawson

Email: [lawsos2@rpi.edu](mailto:lawsos2@rpi.edu)

Phone: 518 276 2206

Office: West Hall 314B

Office Hours: Tue and Fri 4pm – 5pm, and by appointment

“ 2. Rational judgments repeat rational judgments.

3. Irrational judgments lead to new experience. ”

– Sol Lewitt. Sentences on Conceptual Art, 1969.

---

## Abstract:

Art & Code & Interactivity is primarily concerned with: learning how to build any interactive experience or artwork from concept to completion.

---

## Learning Outcomes:

By completion of the course...

- Students will be able to create interactive experiences with OpenFrameworks
- Students will be able to create hardware interfaces with Arduino
- Students will be able to break down a conceptual idea into manageable technical parts
- Students will be able to solve a project's unknown, unknowns

---

## Supplies:

Required:

- Programming Interactivity. 2<sup>ND</sup> Edition. Joshua Noble.

Suggested:

- Getting Started with Arduino. Massimo Banzi.
- C++ Language Tutorial. Juan Soulié. <http://www.cplusplus.com/doc/tutorial>
- <http://www.cprogramming.com/tutorial/>
- <http://pkmital.com/home/teaching/va-workshop-audiovisual-processing-for-ios/>
- <http://www.openframeworks.cc/tutorials/>
- <http://gitref.org/>
- <http://try.github.com/levels/1/challenges/1>

On-line through RPI Library:

- Programming Interactivity. 2<sup>ND</sup> Edition. Joshua Noble.

## **Important Points:**

---

### **Excuses:**

Excuses are only acceptable in the following four scenarios: death of family member, a note from doctor or documentation of hospitalization, viable religious observance, and presentation or exhibition of academic work or research at a conference, symposium, gallery, museum, etc. Singular sick days are excusable without documentation within a reasonable limit – for example: two. Illness spanning two or more consecutive class days is not excusable without documentation. Excuses must be declared and accepted before class time by phone, email, or in person.

### **Studio Format/ Work Load:**

This course does not require everyday attention, although it is a studio course and will require six to ten hours of work outside of class each week on average.

### **E-mail:**

E-mail is the most effective communication with me outside of class. I will use your RPI account to communicate with you.

### **Distractive Computing:**

No computing, exceptions are: following in class demos and work in class. Refusal to turn off monitors, close laptops, etc will result in receiving an absence for that day.

### **Monitors/ Laptops/ etc:**

All audio/visual devices other than the equipment being used to present work will be turned off. Refusal to turn off monitors, close laptops, etc will result in receiving an absence for that day.

### **Participation:**

You will be required to speak and present your work. You will also be required to speak about your colleagues' work. Part of each assignment grade will be based on your participation during critique.

## **Grading:**

---

### **Assignments:**

- Assignments are due at the beginning of class.
- Twenty-five percent of an assignment's total points will be deducted per day late. Days are calculated by the time an assignment is due.
- Voluntary extra assignments for an increase in a final grade will not be accepted.
- Redoing an assignment for a potentially higher score is acceptable only if the assignment was originally turned in on time and if the re-completed assignment is submitted within four days of the assignment's original deadline. The final assignment of the semester will not be available for redoing.

### **Attendance:**

- Attendance is mandatory and taken at the beginning of class.
- Only disputes brought to the instructor's attention within one week of the infraction will be considered and discussed.
- Each three absences equal reduction final grade by one letter.
- Attendance to Final Critique during exam week is mandatory. Failure to appear will result in the reduction of final grade by one letter.

Overall:

- All appeals must be brought to the instructor during office hours or at a scheduled time convenient to both parties. Keep in mind that an appeal has the potential to raise or lower your grade.
- Incompletes will only be granted for the death of family member during the semester or documentation of hospitalization representing a significant period of time.

Grade	RPI Range	Assigned Range	Expectations
A	4.00 – 3.68	100 – 96	Excellent: consistent effort, timely
A -	3.67 – 3.34	95.99 – 92	
B +	3.33 – 3.01	91.99 – 88	
B	3.00 – 2.68	87.99 – 84	Good: effort, timely
B -	2.67 – 2.34	83.99 – 80	
C +	2.33 – 2.01	79.99 – 76	
C	2.00 – 1.68	75.99 – 72	Satisfactory: some effort, timely
C -	1.67 – 1.34	71.99 – 68	
D +	1.33 – 1.01	67.99 – 64	
D	1.00 – 0.68	63.99 – 60	Passable: little effort
F	0.67 – 0.0	59.99 – 0	Failure

## Academic Integrity

---

Trust:

Student-Teacher relationships are built on trust. Students must trust that teachers have made appropriate decisions about the structure and content of the courses they teach. And, teachers must trust that the assignments which students turn in are theirs. Acts which violate this trust undermine the educational process.

Plagiarism:

All work produced in this course must be original and created by the student. First infraction will result in a failure for the course and a report to the Office of the Dean.

Collaboration:

Collaborative work and discussion is encouraged. Instructor must be notified of students' intention to collaborate on assignments well ahead of that assignment's deadline. Instructor will determine whether or not collaboration will be allowed. Upon assignment completion, there must be documentation of each member's contribution to the finished assignment. The instructor reserves the right to award members of the collaboration different grades.

## Project Assignment Schedule:

Projects are due on the date that matches the end of their time block. For example, the first assignment “GIT, OF, Vimeo” is due Sept 3rd. Readings are supplied for students’ use in relation to project assignments. Discussion about readings will not occur unless otherwise notified during the class time in which they are assigned.

Day	in Class	assignments	
27-Aug	Intro, inspirations, setups	GIT, OF, Vimeo,	
30-Aug	Up to Speed, expectations, GIT	Arduino	
3-Sep	Problem Solving to Code	10%	
6-Sep	Arduino	Hardware	
10-Sep	Arduino		7-Sep EMPAC Kris Verdonck
13-Sep	Work in Class		
17-Sep	Hardware Crit	15%	
20-Sep	Drawing	See & Hear	20-Sep EMPAC Open Core
24-Sep	Animating		21-Sep Sublimation
27-Sep	Making Sound		
1-Oct	Basic Interaction		1-Oct Laurie Anderson
4-Oct	Work in Class		
8-Oct	Work in Class		
11-Oct	See & Hear Crit	20%	9-Oct Dance and Finance
15-Oct	Mon on Tue -- No Class		12-Oct Mini-Maker Faire, Emma Willard
18-Oct	Setup Kinect, basic tracking	Kinect & Cameras	
22-Oct	Camera techniques		
25-Oct	TBD		
29-Oct	Work in Class		
1-Nov	Work in Class		
5-Nov	Kinect & Camera Crit	20%	
8-Nov	One-Day-Hack-a-Thon	Final Project	
12-Nov	Project Pitch	total = 35%	9-Nov Mark Fell
15-Nov	Project Pitch	pitch = 10%	
19-Nov	Specifics as needed		
22-Nov	Specifics as needed		20-Nov Laurie Anderson
26-Nov	Work in Class		
29-Nov	No Class - Thanksgiving		
3-Dec	Work in Class		
6-Dec	Work in Class		
exams	Final Project Crit	project = 25%	

Changes to syllabus may be made at instructor's best discretion with notification to the student