



Honors Intro to Programming for Visual Art | ART 3654C | SYLLABUS

Number Credit Hours: 4

Instructor: Annina Ruest

Office: AH 116

Phone: 561-799-8758

Email: aruest@fau.edu

Office hours: TR 11:50a-1:50p

Term: Fall 2017

Class Meeting Days: TR

Class Meeting Hours: 9:00-11:50

Class Location: AD 122

I. Course Description

The course introduces software as an art medium. This means that the course will combine the “making” of art projects involving computer programming with thinking about algorithmic art and digital culture. Students will learn basic programming concepts that are common to most modern programming languages. Students will be introduced to different genres within algorithmic art such as computer games, net art, software art, audiovisual performance, etc. This is an introductory class, and previous knowledge of art or programming is not expected.

Most assignments will be somewhat open-ended, requiring that students develop project ideas within given constraints (or lack thereof). Completing the assignments will involve creativity and critical thinking, as well as technical skill.

II. Course Prerequisites/Co-requisites

None

III. Course Objectives

- 1) Students will conceptualize and realize algorithmic digital art projects on a beginner to intermediate level.
- 2) Students will articulate thoughts about digital culture and digital art digital art projects, in written reading responses, in class discussions, and critiques.

IV. Course Evaluation

a) Creative Assignments

Criteria for grading: In creative assignments I look for technical, visual, and conceptual coherence. If a student takes a technical or conceptual risk, I will grade more leniently.

Project 1: ReMix

This is a collaborative project. All students will work on this project in weekly project installments for a total of four weeks. In the first week, every student will make a static visual composition. As a homework

assignment, this composition will be remixed by another student. The next week, this will be repeated. In remixed compositions, students will implement what they learned each week. Ideally, students will challenge themselves and create elegant but not overly complicated and reasonably open-ended compositions that are easily remix-able by others.

Criteria for grading: If the project corresponds to that week's assignment, is abstract, shows a reasonable amount of effort, and compiles, I give 100 points. If the project does not compile or does not correspond to the assignment, or demonstrate any effort, I will not give any points.

Due every week from week 2 to week 5

Project 2: Algorithm Project

This is either an abstract audiovisual or a visual composition. The code that drives this composition will have at least one of each of the following: A function, an if-statement, a loop, and an array. It is written from scratch by you. The purpose of this assignment is to practice program flow. Due week 6

Project 3: 3D Printing Assignment

This project applies code to physical objects. You will procedurally create a model and then 3D print it. Due week 8.

Project 4: p5.js Assignment

Use the p5.js and the p5.dom library to create a project that combines at least one dom element with the p5js canvas. Due week 9

Final Project

Students will make a creative software project over a span of four weeks. Due week 15.

b) Reading/Writing/Playing Assignments

Evaluation: In written responses, I look for critical and original thinking, and expect well-argued ideas.

Reading Assignment I

Read "Introduction", "A short history of technology and art", and "The presentation, collection, and preservation of digital art" from the book *Digital Art* by Christiane Paul, answer the reading questions, and make three questions of your own. I will post the questions on Canvas.

Reading Assignment II

Read Chapter 1 & 2 of *Digital Art* by Christiane Paul.

answer the reading questions, and make three questions of your own. I will post the questions on Canvas

Game-Playing assignment

I will give you a list of games to play and you will play them and record your thoughts in writing and through screenshots and/or screen recordings. You will then present the games to other students in the class.

c) Participation

Participating in class means that you respond to prompts, ask (technical) questions, and participate in reading discussions.

How I evaluate participation:

You make excellent contributions to every class 100%

You contribute frequently 85-95%

You participate occasionally 75-85%

You only participated once 20%

I cannot remember that you ever said anything in class 0%

d) Final Grade Breakdown

ReMix 20%
Algorithm project 5%
3D printing assignment 5%
p5.js assignment 5%
Final project 20%
Quiz I 10%
Quiz II 10%
Reading/writing assignments 15% (5% each)
Participation 10%

VIII. Course Grading Scale

A =(100-93%) A=(92-90%) excellent
B+=(89-88%) B= (87-83%) B=(82-80%) Good
C+=(79-78%) C=(77-73%) Average
D =(69-60%) poor
F < 60% failure

XII. Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.

Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

You are permitted two unexcused absences. Beyond that, you are required to provide a doctor's note or other third party written excuse. If such notice is not provided, the final grade for the class will be reduced by 10 points on a 100-point scale. The same amount of points will also be deducted for repeated lateness or prolonged absences during class. This does not have to be physical absence but can also be lack of participation due to texting, social media consumption, sleeping etc. Late projects/assignments will not be accepted without a doctor's note or other acceptable third party written excuse.

XIII. Policy on Accommodations

In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student

Accessibility Services (SAS) and follow all SAS procedures in Boca Raton, SU 131 (561-297-3880); in Davie, LA 131 (954-236-1222); in Jupiter and all Northern Campuses, SR 111F (561-799-8585) – and follow all SAS procedures.

XIV. Code of Academic Integrity Policy Statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Academic Integrity in the context of an art class like this one means that the idea for any project you make in this class needs to be your own idea. You cannot take other people's creative output and pass it off as your own. Remixing and modding is encouraged if the remix or mod is based on an original idea by you. Therefore, you cannot take somebody else's project that has a similar concept to what you had in mind, make a few changes, and then claim that the project is yours. This especially applies to projects that make up more than 5% of your final grade. The "Algorithm" project needs to be written from scratch. Talk to me if you are not sure whether your project could be considered plagiarism. If your project contains large portions of code written by other people, you need to acknowledge their contribution in the source code. I also want to know if anyone helped you with your project and if yes, how much they helped. This should be disclosed either in the source code or elsewhere in the project. The same is true for writing assignments.

XV. Statement Justifying Honors Status

This course is an Honors course that differs substantially from non-Honors courses. The course fulfills the mission of the Honors College to develop in students the capacity to combine knowledge from different fields (e.g. visual art and computer science) and apply it to the creation of original research. Students will be exposed to vocabulary of a specifically theoretical nature from both fields, and will be expected to comprehend these new concepts and to deploy them in their own critical thinking, creative research, and in writing. The creative research and writing components of the course will employ Honors-level assessment standards, and are designed to prepare students for work on the **Honors Thesis**. This course will reflect the interdisciplinary nature of Honors education in that it will inculcate critical attitudes and skills to foster a self-directed approach to learning.

XVI. Course Outline

Week 1

Overview. Abstraction, Systems, Software. Installing the Processing IDE.

Tech: Drawing

Homework: Read chapter 2 and 3 from "Getting Started with Processing", complete the code practice sheet, ReMix Topic I: Abstract drawing in code.

Week 2

Generative Art, Generative Software.

Tech: Interaction, variables, if/else.

Homework: ReMix Topic II: Abstract Interactivity, code practice sheet.

Read chapter 4, and 5, as well as D (Variable Scope) in "Getting Started with Processing".

Week 3

Audiovisual Performance.

Tech: Loops, animation (the procedural type)

Homework: ReMix Topic II: Abstract clock, code practice sheet, read chapter 7 from "Getting Started with Processing". Reading Assignment I

Week 4

Reading discussion. Quiz I

Tech: Media, Sound, Arrays.

Homework: ReMix Topic IV: Narrative

Week 5

Software Art.

Tech: Functions, program flow.

Homework: Algorithm Project. Reading Assignment I.

Week 6

3d printed algorithmic art.

Tech: Processing 3D & 3D printing

Homework: 3D Printing assignment.

Reading Assignment II

Week 7

Software and the Internet.

Tech: p5.js, Internet, social media, etc. 3d printing assignment due.

Week 8

Tech: 2d gaming libraries. Reading discussion II

Homework: p5.js assignment, game-playing assignment

Week 9

Computer game discussion. game-playing assignment due.

Quiz prep.

Week 10 Project proposal sessions for final project (bring 3 ideas).

Week 11 Tech: Object oriented programming & Quiz II

Week 12 debugging student projects, optional tech topics.

Week 13 debugging student projects, optional tech topic.

Week 14 debugging student projects, optional tech topic

Week 15

debugging student projects

Final crit.