School of Communication
University of Miami

CIM 540-36, CIM 640-S
Intro to Creative Coding
M-W 12:20 - 1:35, Tu-Th 3:30 – 4:45PM
Fall Semester 2017
Class Site: https://github.com/zevenrodriguez/CIM540-640

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SYLLABUS

COURSE DESCRIPTION AND PURPOSE:

This course will introduce students to the building blocks of creative coding within the visual and media environment. Students will learn to create dynamic images, type and interfaces, that can translate into web, mobile and print forms. Through sets of problems, students will learn programming fundamentals that translate in virtually all programming platforms.

MATERIALS FEES: None

COURSE PREREQUISITES: None

ASSIGNMENTS/COURSEWORK:

All assignments should have a project folder in your repository with a readme, including any links to code, descriptions, and visuals associated to the assignment. ALL ASSIGNMENTS ARE DUE BEFORE THE NEXT CLASS.

Practice (5 total) *Consist of assignments that will serve as building blocks to major projects.*	**50 points total** 10 points each
Code Plan (5 total) *Are pseudocode and logic breakdown of what you want your programs to do.*	**10 points total** 2 points each

Midterm Project **15 points total**
Design and develop a web application that uses inputs to control a HTML5 canvas

Final Project **25 points total**
An awesome interactive sketch that demonstrates your new found technical abilities as well as your attention to aesthetics.

TEXTS AND RESOURCES RECOMMENDED:

Lauren McCarthy, Casey Reas, Ben Fry. *Getting Started with p5.js: Making Interactive Graphics in JavaScript and Processing*

Reas, Casey and Ben Fry. *Getting Started with Processing*.

Online Resources:
http://www.p5js.org
http://p5js.org/gallery/

RECOMMENDED READING (not related to p5js):

Rushkoff, Doug. *Program or be programmed: Ten commands for a digital age*.
Shiffman, Daniel. *The Nature of Code: Simulating National Systems with Code.*
Noble, Joshua. *Programming Interactivity: A Designer's Guide to Processing, Arduino, and OpenFrameworks.*

GRADING/EVALUATION:

This is a skills based course and as such in class assignments are either complete or not. The professor determines whether the submitted assignment meets the appropriate criteria to be deemed completed. Midterm and final projects are graded on their functionality, aesthetics, creativity, and effort.

Grade	*Points Required*
A	95
A-	90
B+	87
B	84
B-	80

C+	77
C	74
C-	70
D	60
F	0

ATTENDANCE POLICY:

Learning to program is like learning a new language; it builds on concepts. Missing a class might hinder your ability to understand concepts presented on another day. If you know that you will be missing class, please make arrangements ahead of time. Missing more than 2 classes will result in a failing grade.

RELIGIOUS HOLY DAY POLICY:

It is the student's obligation to provide faculty members with notice of the dates they will be absent for religious holy days, preferably before the beginning of classes but no later than the end of the first three (3) class days. Absences due to observance of religious holy days not pre-arranged within the first three class days may be considered unexcused and there is no obligation to allow any make up work, including examinations. Missing a class due to travel plans associated with a particular religious holy day does not constitute an excused absence. The University's complete Religious Holy Day Policy can be found in the 2017-2018 Bulletin.

HONOR CODE AND PLAGIARISM STATEMENTS:

Students enrolled in this course are expected to abide by the University of Miami Honor Code. The purpose of the Honor Code is to protect the academic integrity of the University by encouraging consistent ethical behavior in assigned coursework. Academic dishonesty of any kind, for whatever reason, will not be tolerated.

No honest student wants to be guilty of the intellectual crime of plagiarism, even unintentionally. Therefore, we provide you with these guidelines so that you don't accidentally fall into the plagiarism trap.

Plagiarism is the taking of someone else's words, work, or ideas, and passing them off as a product of your own efforts. Plagiarism may occur when a person fails to place quotation marks around someone else's exact words, directly rephrasing or paraphrasing someone else's words while still following the general form of the original, and/or failing to issue the proper citation to one's source material.

In student papers, plagiarism is often due to...

- turning in someone else's paper as one's own
- using another person's data or ideas without acknowledgment
- failing to cite a written source (printed or internet) of information that you used to collect data or ideas
- copying an author's exact words and putting them in the paper without quotation marks
- rephrasing an author's words and failing to cite the source
- copying, rephrasing, or quoting an author's exact words and citing a source other than where the material was obtained. (For example, using a secondary source which cites the original material, but citing only the primary material. This misrepresents the nature of the scholarship involved in creating the paper. If you have not read an original publication, do not cite it in your references as if you have!)
- using wording that is very similar to that of the original source, but passing it off as one's own.

The last item is probably the most common problem in student writing. It is still plagiarism if the student uses an author's key phrases or sentences in a way that implies they are his/her own, even if s/he cites the source.

Sharing code and collaborating on solutions is actively encouraged in this class. We're working with software that is able to evolve and remain free because of contributions from a community – including direct contribution of source code, detailed bug reports, documentation, example code, help on the forums, and so on. You will be able to contribute in this way. Likewise, sharing will extend to the work you do in class. You are actively encouraged to share code solutions with your colleagues. "Free software" or "open source software" is still based on ownership and requires attribution. Appropriating work without attribution is plagiarism and will never be tolerated. ***If you attempt to pass someone else's work off as your own without giving that person credit, you will fail this course.***

COURSE TOPICS OUTLINE

Depending on the speed of the class, some topics might be delayed or sped up. In the case of delays, time will be devoted to workshops on trouble areas.

Week 1
Introduction to Creative Coding
Getting started with Github

Week 2
Intro to Javascript

Week 3
Conditionals

Week 4
Arrays and Loops

Week 5
Intro to p5.js

Week 6
Working with Images and Creating an interface

Week 7
Programming Interaction and User Input

Week 8
Animation

Week 9
Project Review – Fall Recess

Week 10
Objects

Week 11
Working with audio and video

Week 12
Libraries

Week 13
Working with Data, Saving State

Week 14 - Thanksgiving

Week 15 - Final Workday

Week 16 - Final Project Review

Week 17 - Final

STUDENT ACKNOWLEDGEMENT:

I HAVE RECEIVED AND READ THE SYLLABUS FOR CIM540-640, SECTION .
I HAVE COMPLETED THE PREREQUISITE COURSES LISTED IN THE SYLLABUS OR HAVE HAD THE PROFESSOR SIGN BELOW TO CERTIFY A WAIVER OF THE PREREQUISITES.

SIGNED: _____

PRINT NAME: _____

DATE: _____

PROFESSOR PREREQUISITE WAIVER (IF NEEDED)_____