

School of Communication University of Miami

CIM440-35 – Intro to Creative Coding - Spring 2020

Wolfson 3034 MoWe 1:25 - 2:40PM

Instructor

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SYLLABUS

CLASS SITE: <https://github.com/zevenrodriguez/CIM440-IntroToCreativeCoding>

COURSE DESCRIPTION AND PURPOSE:

This course will introduce students to the building blocks of creative coding within the visual and media environment.

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

45%

Consist of assignments that will serve as building blocks to major projects.

Midterm Project

Design and develop an application that uses various inputs to control your application **20%**

Final Project

30%

An awesome interactive sketch that demonstrates your new found technical abilities as well as your attention to aesthetics.

5%

Class Participation

TEXTS AND RESOURCES:

Learning C# by Developing Games with Unity 2019: Code in C# and build 3D games with Unity, 4th edition

Mastering UI Development with Unity: An in-depth guide to developing engaging user interfaces with Unity 5, Unity 2017, and Unity 2018

Online Resources:

<https://learn.unity.com/>

RECOMMENDED READING:

Shiffman, Daniel. *The Nature of Code: Simulating Natural 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	Playability	Process	Creativity
A	Users can experience a cohesive and smooth interaction. Throughout the experience, instruction is clear and concise.	Students documents in detail project's inspiration, creation, user and code flow, and areas of potential growth	Project has gone through multiple iterations and provides something novel, original, and/or engaging to the users. Visually the project shows a high level of refinement
B	Project's instruction is clear, but experience can be buggy or lacks some cohesion. Student has shown growth throughout the process	Student completes all points of documentation, but areas lack sufficient detail	The project has some growth through iterations. Visually, the project needs more focus on design and details
C	Project's instruction needs work and experience has many issues	Documentation is missing details or key areas	Project did not go through enough iteration and its presentation and usability is too basic

D or Below	Project has problems including poor instruction and poor user experience	Student did not sufficiently explain the purpose nor how the project works	The project did not go through various iterations. Little work was done to make it visually appealing.
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<i>Grade</i>	<i>Points Required</i>	<i>Grade</i>	<i>Points Required</i>
A	93	C	74
A-	90	C-	70
B+	87	D+	67
B	83	D	63
B-	80	D-	60
C+	77	F	0

ATTENDANCE POLICY:

Students are expected to attend each class and be on time. All students are responsible for material covered in the classroom regardless of his/her presence. Three or more unexcused absences will result in the deduction of one complete letter grade. Doctor's appointments, job-related activities, interviews, study sessions or other meetings during class are *not* an excused absence.

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 current UM 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.

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 and Getting Started with Unity
(Jan 13th-16th)**

Week 2 - Getting Started with Unity UI (Jan 20th-23rd)

**Week 3 - Adding Interaction: Buttons, Keyboard input, and Conditionals
(Jan 27th-30th)**

Week 4 – Working with Media (Feb 3rd-6th)

Week 5 - Arrays and Loops (Feb 10th-13th)

Week 6 - Animation and Movement(Feb 17th-20th)

Week 7 - Midterm Project Workday (Feb 24th-27th)

Week 8 - Midterm Project Presentation (Mar 3rd-5th)

Week 9 - Functions (Mar 16th-19th)

Week 10 – Physics and Collision Detection (Mar 23rd-26th)

Week 11 – Working with Prefabs (Mar 30th- Apr 2nd)

Week 12 - Final Project Ideation Workshop (Apr 6th – 9th)

Week 13 - Final Project Workshop (Apr 13th – 16th)

Week 14 - Final Project Check-in (Apr 20th – 23rd)

IMPORTANT DATES:

Jan 13 - CLASSES BEGIN

Jan 20 - HOLIDAY (MARTIN LUTHER KING, JR. DAY)

March 7-15 - SPRING RECESS

March 25 - Last Day to Drop a Course

April 24 - CLASSES END (11:00 PM)

April 25 - April 28 - Reading Days

April 29- May 6 - FINAL EXAMS

STUDENT ACKNOWLEDGEMENT:

I HAVE RECEIVED AND READ THE SYLLABUS FOR CIM440, 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) _____