

CS 277: UNITY GAME PROGRAMMING II

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Winter 2021
Credits:	3
Total Contact Hours:	54
Lecture Hours :	54
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	108
Prerequisite:	CS 177.
Transferable to CSU:	Yes
Transferable to UC:	Yes - Approved
Grading Method:	Standard Letter

Catalog Course Description

This is the second course in Unity game programming using the C# programming language in the Unity 3D development environment. Topics include scripting, simple AI, animations, and path finding. 54 lecture hours.

Course Objectives

- Learn the advance aspects of the C# programming language.
- Use multiway selection structures, the AND logical operator and the OR logical operator to navigate decisions in the context of game development on an advanced level.
- Use nested repetition structures to navigate loops in the context of game development on an advanced level.
- Build complex 2D games that employ collisions, sprite graphics, animation and instantiation of objects.
- Continue to learn how to use the Unity game development software.

Major Course Content

1. Advance software development via the Unity development environment.
2. Understand the advance topics of the C# programming language in the context of game development.
3. Understand the advance topics of C# selections structures in the context of game development.
4. Understand the usage of C# repetition structures in the context of game development.
5. Boolean operators
6. Lists and arrays
7. Structures and classes
8. Object oriented thinking
9. The Agile Mentality
10. Prototype Game Development

Suggested Reading Other Than Required Textbook

The student will visit several programming online websites in order to analyze documentation about object oriented programming languages.

Examples of Required Writing Assignments

The student will create a flowchart and pseudocode before implementing the programming code for any given assignment.

Examples of Outside Assignments

Students will be required to complete the following types of assignments outside of the regular class time:

- Study course concepts
- Answer various programming questions
- Practice skills (i.e., writing programs and creating flowcharts).
- Read required materials.
- Solve programming problems
- Create programs that apply Object-Oriented programming techniques.

Instruction Type(s)

Lecture, Online Education Lecture