San Jose State University
Department of Computer Science
CS134, Computer Game DESIGN

Spring Semester 2021

Course and Contact Information

Instructor:	Kevin Smith
Office Location:	Online
Email:	kevin.smith@sjsu.edu
Office Hours:	Online (See Canvas Meeting Times)

Required Texts/Readings

Textbook

There is no textbook required for CS134. The following books are recommended reading:

Jason Gregory, *Game Engine Architecture (Second Edition).*
David H. Eberly, *3D Game Engine Design*
Robert Nystrom, *Game Programming Patterns*

Software and Computer

Students will be required to have access to a modern capable laptop or desktop computer running recent version of Windows or MacOS. It is preferable to have a machine with a GPU. In addition to a computer, a three-button mouse is required for the programming assignments. The development projects for this class will be done in C++. Students will be required to download and install a development framework for their particular operating system including Visual Studio (Windows) or Xcode (macOS) and a C++ graphics development library (instructions will be provided on first day of class).

Software Packages

Students are required to use the following software packages for this course:

1. Visual Studio 2017 Free Community Version (PC) or Xcode (MAC)
2. Adobe Photoshop CC or equivalent open software package such as GIMP (for sprites)
3. Camtasia or SnagIt Video Capture Software (or equivalent)
4. Autodesk Maya (free student version available)
5. OpenFrameworks C++ Library (Open Source   current version)

Adobe Photoshop will be used in the class for creating game content, such as sprites, background images and textures.

Autodesk Maya will be used for generating 3D content.

Camtasia or SnagIt will be used for creating videos of your assignments and projects.

Course Requirements and Assignments

It is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in class activities, completing assignments, and so on. More details about student workload can be found in

1. Development Projects (60%)
Students will complete a series of development projects involving the use of C++ and/or production tools covered in the class. The projects will be specified on Canvas.

2.

source files. If a source file is shared, then each team member must create signed comment block for the section of the code within that source file (ex: method or class) identifying their own work.

If you use any code or algorithms from sources outside of the class, you must include a citation for it in your work. It is expected that the vast majority of the work is your own original work and you will be graded on your contribution to the project not on cited code from external sources.

Zero Tolerance Plagiarism Policy

If student work is determined to be copied or derived from another source, the work assignment or project will receive an automatic grade of 0 and an Academic Integrity Report will be filed.

Course Materials and Copyright Information

The course materials including slides, notes, example code and videos are all copyright by the author (Kevin M. Smith). Copying these materials or work derived from it without permission from the author is prohibited by law. This includes copying to other third-party websites or services.

Grading Policy

No make-up tests (exams and quizzes) will be given and *no* **late work will be accepted**. This includes: homework, projects, videos, in-class exercises or any other work related to the class. If an exam or work is

better to submit it early.

At least	Grade
97%	A+
93%	A
90%	A-
87%	B+
83%	B
80%	B-
77%	C+
72%	C
70%	C-
67%	D+
62%	D
60%	D-
<60%	F

CS134, Computer Game Design, Course Schedule

This schedule is tentative and is subject to change. Due dates for assignments will be posted in Canvas and are generally due the following week after are assigned.

Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines