CPSC 8810
Special Topics: 3D Game Development
Fall 2016
Syllabus

Instructor

Dr. Sophie Joerg   656-3436
318 McAdams Hall   sjoerg@clemson.edu
Office hours: Wed 1:30-2:30pm

Course Topics

This course introduces students to important concepts of 3D game development and to the use of the 3D Game Engine Unity. Topics for the course might include unity and game programming basics, player movements, cameras, game design, terrain creation, character controllers, path following, steering, and finding, flocking, ethics in games, interfaces, and audio.

Class Meeting Times

MW 9:30pm-10:45am, McAdams 118C

Students are expected to wait for 15 minutes after the beginning of class before leaving if the instructor is late.

Prerequisites

Good knowledge of an object-oriented programming language is essential. The course uses the game engine Unity which can be programmed in C# or Java without specific introduction to these languages or object-oriented programming. Linear algebra knowledge (vectors, matrices) and computer graphics knowledge are advantageous.

Materials

Software: Unity 5, 3D Game Engine, https://unity3d.com/ (required)

Grading

Final grades will be based on assignments, presentations, quizzes, your main project, and participation. Class participation includes: contribution to class discussion, engagement, and attitude.

Presentations	10%
Assignments	20%
Quizzes	30%

| Project | 30% |
| Participation | 10% |

Letter grades will be based on a 100-point scale. These ranges may be changed somewhat, but only to your advantage.

Presentation

Each student will be required to give two very short presentations on selected games.

Assignments

Each of the assignments should follow the guidelines listed below.

- **Source Files** For each assignment, you will be notified on the method for submitting source files, if required.

- **Late Work** Late assignments will be accepted with penalty deemed appropriate (10%/day).

- **Independent/Team Work** You must work on assignments independently, unless specifically authorized to work in teams. It is not allowed to submit code copied from other sources (such as the internet or classmates). Cheating of any kind will not be tolerated and will result in significant penalties.

Project

A more than half-semester long project resulting in a game. Teams of 2-4will be formed. The complexity of the project should reflect the number of members of the team and all team members are expected to contribute equally to the final project.

Communication

You are required to check your Clemson email at least once a day. All email to the instructors must come from your Clemson email address.

Recording Devices

Lectures may not be recorded without the written permission of the instructors, and you do not have the instructors' permission to use notes from the lectures for commercial lecture note purposes.

Mobile Devices

Please silence your devices before class. Do not text during class.

Academic Integrity Statement

As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. In instances where academic standards may have been compromised, Clemson University has a responsibility to respond appropriately to charges of violations of academic integrity.

Accessibility Statement

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester. You can access further information here: http://www.clemson.edu/campus-life/campus-services/sds/.

Title IX (Sexual Harassment) Statement

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at http://www.clemson.edu/campus-life/campus-services/access/title-ix/. Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 110 Holtzendorff Hall, 864.656.3184 (voice) or 864.656.0899 (TDD).