CMPS 310 Game Programming

3.0 hours credit, 45 contact hours.

Tue & Thur 2:00 pm ~ 3:20 pm @ Room 209, Thurman Hall.

Instructor: Shizhong Yang, Room E113, School of Computer Science

Phone: 771-3113.

Office hours: Tue/Thur 11:00 am -12:30 pm.

Textbooks:

Recommended:
Title: Processing: a programming handbook for visual designers and artists, 2nd
    edition, The MIT Press, 2014
ISBN: 978-0-262-02828-8
Author: Casey Reas and Ben Fry

Specifics:

A. This course introduces students to the design and implementation of video
    games. Topics include basic game artificial intelligence, storyboarding, graphics
    and animation programming and sound. This course will require significant
    programming. This course will be hands-on with the goal of successfully
    implementing most of the material covered in the course. The final project of the
    course will be the implementation of a video game.

B. Prerequisites: CMPS 190.

Topics:

The students will participate in the programming of video games. The projects
will vary from semester to semester and will be chosen for intrinsic interests and
being easy enough to be solved. The course will have the students practice details
as they are doing their projects. The open source Processing will be used for
coding. Students will install setup their own coding environment in their
desktop/laptop, start from the simple moving objects codes, do more complicated
projects and test run their codes step by step. All projects will be assigned and

graded on Moodle. The study guide will be provided for students to prepare their midterm and final.

Program ABET Outcomes:

This course addresses ABET Program Outcomes a, b, and c. Each graduate by the time of graduation will demonstrate:
Outcome a: an ability to apply knowledge of computing and mathematics appropriate to the discipline. [PEO1]
Outcome b: an ability to analyze a problem, identify and define the computing requirements appropriate to its solution. [PEO2]
Outcome c: ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. [PEO2]

Course Work Evaluation:

	Approx. weight in grade
Assignments, projects	20%
Midterm	35%
Final	35%
Attendance	10%

Grading:

90%-100%	A
80%-89%	B
70%-79%	C
60%-69%	D
59% and less	F