

CS179N: Graphics and Electronic Games

Syllabus

1 Logistics

Professor: Tamar Shinar

Discussion: Mondays, 10:00am-10:50am, Zoom (link on ilearn)

TA: Jason Goulding

Lab: Tuesdays, 1:00 PM - 03:50 PM, Zoom (link on ilearn)

Course website: <https://www.cs.ucr.edu/~shinar/courses/cs179n>

2 Course catalog description

Covers the planning, design, implementation, testing, and documentation of a graphics- or electronic game-related system. Incorporates using techniques presented in previous related courses. Emphasizes professional and ethical responsibilities; the need to stay current on technology; and its global impact on economics, society, and the environment.

3 Course learning goals

The learning goals for the course are the following:

- Learn to work in a small team to deliver a significant project in a fixed window of time.
- Deepen your knowledge and experience in a specific area of graphics (e.g., rendering, simulation, games).
- Gain awareness of the broader societal impacts of and the issues surrounding electronic games and other computer graphics applications.
- Gain exposure to current state-of-the-art in various areas of computer graphics and electronic games.

4 Group Project

Students will work in groups of 3-5. Each team will develop an original video game. Teams will submit a proposal, deliver three demos to the TA/instructor throughout the course, and submit a final report and video. Students will complete surveys of team member contributions near the end of the quarter.

5 Technical Presentation

Each student will deliver a technical presentation to be given during the discussion section. The technical presentation consist of two parts:

1. **Presentation (18 min).** Student delivers an original presentation on a technical, economic, or social topics related to games and game development.
2. **Discussion (5 min).** In order to facilitate the group discussion, the presenter should prepare two poll questions related to the topic to pose during the presentation. The questions should be given to the instructor in advance of the presentation.
3. **Audience participation.** Each student should ask at least one question during the presentation.

6 Attendance and Etiquette

Attendance at discussions and labs is required and counts for part of your participation grade. One unexcused absence from discussion is permitted without penalty. Otherwise, if you cannot make a discussion or lab, please email the instructors ahead of time explaining why you cannot attend. No recording by students is permitted.

7 Assessment

You will be assessed on the following:

- (10%) Discussion participation
- (10%) Technical presentation
- (10%) Game review
- (70%) Project
 - (5%) Proposal
 - (15%) Demo 1 - Lab 5
 - (15%) Demo 2 - Lab 8
 - (20%) Demo 3 - Lab 10
 - (5%) Report and Video
 - (10%) Individual Contribution

8 Academic Integrity

Your group projects are expected to be original. You must clearly document use of all external tools and resources, including software, geometry, assets, etc. You must comply with all licenses and copyright restrictions, and adhere to attribution guidelines. Please familiarize yourself with the campus academic integrity policy which can be found here:

<https://conduct.ucr.edu/policies/academic-integrity-policies-and-procedures>.