CS 179n: Graphics and Electronic Games

Syllabus

Spring 2018

General

- Lecture: Wednesday 4:10-5:00 PM, Spieth Hall 1307
- Lab: Tuesday 6:40-9:30 PM, WCH 133

Instructor

- Craig Schroeder
- Office: Chung 309
- Hours: MF 4:00-5:00 PM, W 2:00-3:00 PM
- Email: craigs@cs.ucr.edu

Teaching Assistant

- Ounan Ding
- Office: TBD
- Hours: TBD
- Email: oding001@ucr.edu

Website

The course website contains all of the information that you should need about the class, including a schedule for all of the major elements of the course. All materials will be posted there, including details on projects and assignments. Important announcements will also occasionally be made on the website as well as in class.

Projects

This course is centered around a project, which students will complete in groups of 3-5. Each group may select from one of three projects directions (game, ray tracer, fluid simulator). Each group will complete a project proposal, five milestones (demonstrating steady progress towards completion of the project), the project itself, and finally a presentation of the project to the class.

Labs

This course contains a lab component. In half of the labs, the TA will begin by presenting relevant information or demonstrate skills useful for completing one or more of the project options. After this, the TA will assign
a task related to this, which must be completed in groups. Although the intent is that this task can be completed during lab, you will have a week to complete it. The last lab is reserved for project presentations. The remaining labs are reserved for you to work on your projects.

Assignments

As a capstone course, this course will explore broader issues beyond the core skills expected of a computer scientist, including ethics, societal impacts, working as a group, and presentation skills. Corresponding to these, you will be expected to complete four graded assignments, which consist of an essay and possibly some additional questions.

Grading

Your grade will be computed according to the grading scheme below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Contribution</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Final presentation</td>
<td>20%</td>
</tr>
<tr>
<td>Proposal</td>
<td>10%</td>
</tr>
<tr>
<td>Milestones</td>
<td>30%</td>
</tr>
<tr>
<td>Final project and writeup</td>
<td>15%</td>
</tr>
<tr>
<td>Lab tasks</td>
<td>5%</td>
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Late policy

There will be no make-up items allowed. Instead, the following accommodations will be made:

- Each team will have a total of 4 late days, which may be used on any items submitted through iLearn. No item may be submitted more than 2 days late.

- Each individual student is allowed to submit one assignment late. Assignments 1-3 may be submitted late until the end of office hours on Friday. Assignment 4 may be submitted late on the following Monday by 5:00 PM (in WCH 309). All assignments must be submitted in hardcopy. Assignments may be submitted early.

- Lab tasks may be completed up to a week after the beginning of each lab.

Academic integrity

Cheating is harmful to other students and the academic environment, and we take it very seriously. The primary emphasis of this course is on software engineering, tools, teamwork skills, and time management rather than on learning academic material. As a guide, these are examples of things that are permitted to use (√) and things that are not permitted to use (×). As a general rule, if you are not allowed to use something, you should also not be searching for it.

√ Published academic papers.

√ References, books, Wikipedia

√ Algorithms, pseudocode

× Implementations of algorithms (even in a different programming language)
Anything written by a different team

For assignments, anything written by anyone other than you (including your team)

Working on projects/milestones/presentations/labs with your team members.

References, code samples, tutorials for \LaTeX, git, blender, valgrind, etc.

Any violations of this policy will result in an 'F' for the course and a referral to the campus academic integrity committee. The line between what is allowed and what is not allowed tends to be fuzzy at the edges, and you will need to use good judgement. If you are not sure whether something is permitted, it is always safe to ask the professor or the TA.