Course Overview
CS 314: Game Design
Instructor: Ashwin Lall
Spring 2017
Last modified: 2017-01-12

Course Details

- Meeting times and place: MWF 10:30-11:20, Olin 220
- Office Hours: MWF 11:30-12:30, by appointment, or whenever I look free.
- Textbooks:
  1. Unity 4.x Game Development by Example (Creighton)
  2. The Art of Game Design: A Book of Lenses (Schell), 2nd Edition

Course Description

This course will cover the computer science and theory of game design as well as practical game development. We will cover computer science concepts such as 3D projection and transformation, rasterization, texture-mapping, shading, path-finding, and game theory, as well as game design topics such as mechanics, elements, theme, iteration, balance, documentation, and interest curves. A significant component of the course will be prototyping games using the Unity game engine. There will be two showcases during the semester: one at mid-semester and another at the end of the semester. You will be expected to present your games to attendees at these events.

Grading

Grades will be based on the following weighting scheme:

<table>
<thead>
<tr>
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<th>Weight</th>
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<tbody>
<tr>
<td>Game assignments</td>
<td>50%</td>
</tr>
<tr>
<td>Coding homework</td>
<td>10%</td>
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<tr>
<td>Exams</td>
<td>20%</td>
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<tr>
<td>Reading notes/responses</td>
<td>20%</td>
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Game assignments: There will be three warmup and two big game assignments that will collectively make up half your grade. The magnitude of this weight reflects the fact that the goal of the course is ultimately for you to be able to make good games. You will work on a team for the latter two assignments.

Coding homework: You will have several coding homework assignments to help you reinforce the computer science concepts (3D graphics, pathfinding, game theory, etc.) that will be covered through the semester.
**Exams:** There will be two in-class exams on the computer science material that we cover in class. The purpose of these is to make sure that you have solidified the CS concepts that you have learned in class and practiced in the coding homework.

**Reading notes:** Every day that you have a reading from the Schell book assigned, I expect you to submit your notes from the chapter. These notes should summarize the chapter and go well beyond simply listing off the individual sub-headings. I will give the following feedback for each set of reading notes:

- × Notes not submitted
- ✓- Notes submitted with not enough detail
- ✓ Notes submitted with sufficient detail
- ✓+ Notes submitted with sufficient detail and appropriate examples

**Responses:** You will have game analysis, critique, and other writing assignments based on the reading from the Schell book that will be due on NoteBowl.

**Academic Honesty**

Academic honesty, the cornerstone of teaching and learning, lays the foundation for lifelong integrity. Academic dishonesty is intellectual theft. It includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for evaluation. I will assume that you are familiar with the Code of Academic Integrity (http://www.denison.edu/about/integrity.html).

**Disability Accommodation**

Any student who thinks he or she may need an accommodation based on the impact of a disability should contact me privately as soon as possible to discuss his or her specific needs. I rely on the Academic Support and Enrichment Center in Doane to verify the need for reasonable accommodations based on documentation on file in that office.

**Appropriate Use of Course Materials**

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