CSE 3541/5541: Computer Game and Animation Techniques
Fall 2019

1 General Information

Instructor: Huamin Wang (wang.3602@osu.edu)
Location: Mendenhall 115
Time: MWF 10:20AM-11:15AM; 11:30AM-12:25PM
Office hour: MWF 01:30PM to 02:00PM (DL 583), or by appointment
Website: http://www.cse.ohio-state.edu/~whmin/courses/cse3541-2019-fall/index.html
Course content: Computer game and animation history, gameplay design, character animation, physically based animation, interactive control, game engine.
Objectives: Be knowledgable in animation and game techniques.
Be competent with game and animation development using the Unity engine.
Be familiar with advanced computer animation topics.
Textbook: None.
Reference books: *Computer Animation, Third Edition: Algorithms and Techniques*
Grading\(^1\) Six labs (45%+15%) + Exam (25%) + Three written assignments (15%)
Each assignment is due at 11:59PM on each specified due date. Late submissions will be subject to 10% penalty after each day. Submissions will not be accepted after five days.

2 Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Labs and exams</th>
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<tbody>
<tr>
<td>Week 1 (Aug 21 to 23) Week 2 (Aug 26 to 30)</td>
<td>Overview and Introduction Math review and Introduction to Unity</td>
<td>Lab 1</td>
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<tr>
<td>Week 3 (Sep 02 to 06) Week 4 (Sep 09 to 13) Week 5 (Sep 16 to 20) Week 6 (Sep 23 to 27)</td>
<td>Transformation Rigid Body Dynamics Numerical Methods Particle Systems</td>
<td>Lab 2</td>
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<tr>
<td>Week 7 (Oct 00 to 04) Week 8 (Oct 07 to 11) Week 9 (Oct 14 to 18) Week 11 (Oct 21 to 25) Week 12 (Oct 28 to 01)</td>
<td>Interpolation and Keyframing Forward and Inverse Kinematics Cloth Soft Body simulation Fluid</td>
<td>Lab 3</td>
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<tr>
<td>Week 13 (Nov 04 to 08) Week 14 (Nov 11 to 15) Week 15 (Nov 18 to 22) Week 16 (Nov 25 to 29)</td>
<td>Collision Detection and Response Motion Capture Advanced Topics in Animation Presentations</td>
<td>Final Lab Exam?</td>
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3 Statement on Academic Misdemeanor and Disability Services

You are allowed to discuss your assignments with other students. However, the assignment must be completed by yourself and you are NOT allowed to use other’s work in your submission. It is NOT allowed to discuss any exam with others either. Refer to the University’s Code of Student Conduct for details. Please contact the instructor if you want to request disability accommodations.

\(^1\)The grading policy may be subject to change.