

CPSC 8110 – Character Animation

Spring 2017

Syllabus

Instructor

Dr. Sophie Joerg
318 McAdams Hall
Office hours: Wed 1:30-2:30pm

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Course Topics

This course introduces students to the state of the art in computer animation with a focus on character animation. Topics for the course include animation basics, forward kinematics/inverse kinematics, motion editing, motion capture, motion graphs and motion trees, the perception of animation, faces and eyes, gestures and hands, emotions and style, behavior, and animation controllers.

Class Meeting Times

TR 9:30pm-10:45pm, McAdams 110E

Students are expected to wait for 15 minutes after the beginning of class before leaving if the instructor is late.

Materials

Rick Parent, *Computer Animation, Third Edition: Algorithms & Techniques*, Morgan Kaufman, 2012. (optional)

Software: Unity 5, 3D Game Engine, <https://unity3d.com/> (required)

Grading

Final grades will be based on assignments, your main project, a paper presentation, and participation. Class participation includes: contribution to class discussion, engagement, and attitude.

Assignments/Homework/Quizzes	40%
Project	30%
Paper presentation	20%
Participation	10%

Letter grades will be based on a 100-point scale. These ranges may be changed somewhat, but only to your advantage.

Assignments

Each of the assignments should follow the guidelines listed below.

- **Source Files** For each assignment, you will be notified on the method for submitting source files, if required.
- **Late Work** Late assignments will be accepted with penalty deemed appropriate (10%/day).
- **Independent/Team Work** You must work on assignments independently, unless specifically authorized to work in teams. Cheating of any kind will not be tolerated and will result in significant penalties.

Project

A half-semester long project that illustrates in-depth knowledge of one aspect of animation. Team projects are allowed. The complexity of the project should reflect the number of members of the team and all team members are expected to contribute equally to the final project.

Paper Presentation

Each student will be required to present a selected research article. It is possible to select both the project and the presentation on a related topic.

Academic Integrity

As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. In instances where academic standards may have been compromised, Clemson University has a responsibility to respond appropriately to charges of violations of academic integrity.

See the *Graduate School Policy Handbook* for the graduate academic integrity policy.