

Computer Science 808
Computer Animation
Spring 2005
Syllabus

Instructor

Dr. Timothy Davis
McAdams 303
656-0309
Office hours: T 5:00-6:00, W 3:00-4:00 (or by appointment)
tadavis@cs.clemson.edu

Class Meeting Times

TTh 12:30–1:45, Daniel 415

Course Webpage

<http://www.cs.clemson.edu/~tadavis/cs808/>

Textbooks

Isaac Victor Kerlow, *The Art of 3-D Computer Animation and Imaging (Third Edition)*, John Wiley & Sons, 2003. (optional)

John Kundert-Gibbs and Peter Lee, *Maya 5 Savvy*, Sybex Inc., 2004. (optional)

Dale K. Myers, *Computer Animation – Expert Advice on Breaking into the Business*, Oak Cliff Press Inc., 1999. (optional)

Rick Parent, *Computer Animation – Algorithms and Techniques*, Morgan Kaufmann, 2001. (optional)

Grading

Final grades will be based heavily on individual and team animation work. Presentations and class participation will also factor into your final grade.

Letter grades will be based on a 10-point scale.

Class Cancellation

Students are expected to wait for 20 minutes after the class beginning time before leaving if the instructor is late.

Maya Background

This course relies extensively on Maya, a 3D modeling, animation, and rendering application. Students entering this course have a wide variety of backgrounds and experiences with Maya and similar packages. While high-quality work is expected from all students in this course, more will be expected from those with Maya experience.

Assignments

Animation assignments will constitute the majority of your grade for the course. Each of these assignments should follow the guidelines listed below.

- **Webpage** A webpage with your animation must include:
 - description of the project
 - explanation of special features or problems encountered
 - images produced
- **In-class Demonstration** You should create a presentation for the class that shows the images/animation you produced and explains any of the problems you encountered. All student work will be critiqued by the class.

Final projects will be presented on Friday 5/6, 6:00.

- **Late Work** Late assignments will be accepted with penalty deemed appropriate.
- **Independent/Group Work** Some of the work for this course will take the form of team projects. You should strive to contribute to the team projects to get as much from the course as possible. On independent projects, you may get help from classmates on Maya-related problems.

Course Description

The course will cover aspects of production and computer animation. You will also gain valuable experience in critiquing work in the field. The following is a tentative list of topics covered in the course:

History of Animation

Animation Critique

Animation/Film Production Cycle

story concept, script-writing, storyboards, shot set-up, production, post-production

Disney 12 Animation Concepts

Rigging and Character Animation

MEL Scripting

Dynamics

particle systems, rigid bodies

Short Topics

lighting, textures, etc.