## COMPUTER ANIMATION AND LIGHTING

Cognitive Science 159 ASH 126, MW 1:00 – 2:20 Fall 2000

*Instructor*: Chris Perry *Office*: ASH 215

Office Hours: Weds 3:00 - 4:00, Thurs 1:30 - 3:30 or by appt.

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Link to class web page can be found at: http://helios.hampshire.edu/~chpCCS

E-class schedule web page: http://koshka.hampshire.edu/ical.html (also linked off of my page)

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## **Course Catalog Description**

The emotional impact of a computer generated film is heavily determined by the animation and lighting used to communicate its story. Animation is the posing of a virtual character over time and is greatly analogous to acting in traditional film. Lighting is what reveals the animated actions as happening at high noon, in a heavy fog, or under soft candlelight.

This course will introduce the student to animating and lighting on a computer. Class material will cover the theoretical and mathematical concepts that enable both techniques, including the algorithms at work "under the hood" of current software implementations. The course will also explore the larger history that supports these two art forms, including cel-based animation, painting, and cinematography. Theories and principles will be put into practice through project work with off-the-shelf software tools. Advanced math and computer programming experience are NOT required.

#### **Texts**

There are two reading packets. The cost for both is an even \$20.00. I will hand out the packets at the second class and I ask you to pay for them by the third class (either cash or a check made out to me).

### **Enrollment**

I will post a final list of the students in the class on my door (ASH 215) and on the class web page by noon on **Friday, September 8**.

# CS 159: Computer Animation and Lighting Expectations and Evaluations

Students will be evaluated (or graded, if 5-college) on the following criteria:

*Projects*. Several projects are due throughout the course of the semester. The early projects in both sections of the course will tend to be prescribed, shorter-duration assignments, while the later projects will be more open to student interpretation. Students should feel free to "pitch" me a custom version of any of the projects that more suits their interests and background, however, this must occur **before** the assignments are due. In other words, if you have a great idea that differs from the specifics of a particular project assignment, make sure you run it by me before forging ahead.

Projects will be evaluated for their completeness, scope, and the degree to which the student has addressed the relevant course materials in each. I will evaluate all projects that are handed in on time and that meet the requirements of the assignment. If a student hands in a project late, they should not expect an evaluation of it. If a student ever falls behind by two handed-in assignments (or turns in the final project late), they will not receive an evaluation for the course. All projects must be handed in by the due date of the final project for a student to receive an evaluation in the course.

Other assignments. Beyond the official projects, there will be smaller, project-supporting assignments that are due in class. These won't receive written evaluations but will be taken into account in the student's final narrative evaluation. Any of these that are to be handed-in will count toward the "falling two assignments behind" rule, given above.

Regular attendance. The various readings do not contain all of the material required for the course and therefore should not be considered a substitute for attending class. Roll will be taken at every class. Students that miss class are responsible for the material they missed and should follow-up with me or the other students to catch up. If a student has more than two unexcused absences they will not receive an evaluation for the course. **Tardiness of over 10 minutes is considered an absence.** 

*Reading*. There are regular reading assignments from a variety of sources. If it becomes clear in class discussions (or in the surprise reading quiz that I give every semester) that a student is not doing the reading, such will be noted in their evaluation.

Participation. Students will be evaluated on the amount and quality of their participation in class. One form of this is speaking during class discussions and lectures, another is presenting in-progress project work to the class, and yet another is how students interact with each other during in-class workshops.

*Other*. I reserve the right to assign something that I haven't included in this syllabus. To be fair, I intend to make it clear when these things come up exactly how much weight they will be given in the evaluations.

\* A student who meets these criteria for evaluation AND who demonstrates a firm engagement with the course material over the entire term will receive credit towards 1/2 of a CS Div I.