

# Advanced Computer Graphics

CSCI 6631 Section 001  
Fall Semester 2012

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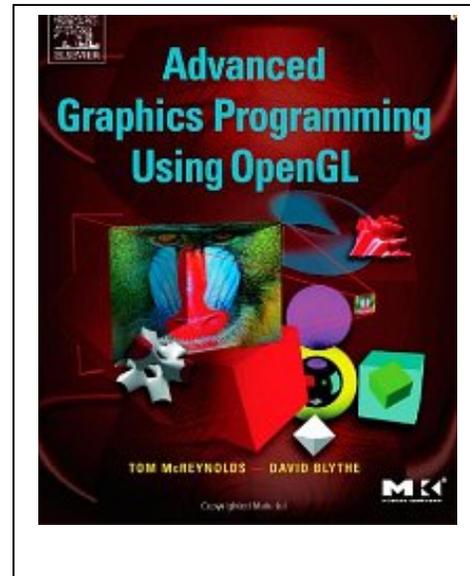
**Meets:** 11:00AM - 12:15 PM Tu,Th in  
Math 307

**Office Hours:** 9:00-11:00AM M,T,Th;  
other times by appointment only. Office Hours  
will be held in **Math 307**.

**Prerequisite:** CSCI 4631/4631G with a  
grade of C or better or consent of department.

**Text:** **Advance Graphics Programming  
Using OpenGL** by Tom McReynolds

The book **Interactive Computer Graphics: A  
Top-Down Approach Using OpenGL** (Sixth  
Edition) by Edward Angel would also be useful,  
if you don't already have it.



## Course Content:

This course is an advanced course in Computer Graphics with an emphasis on techniques, algorithms and the mathematics involved in modern computer graphics. The topics covered will be (we reserve the right to adjust as the term progresses):

- Splines and Parametric Curves and Surfaces
- Programmable Shaders
- Animation
- Color, Visual Realism
- Advanced Texture Mapping (Bump, Environment Mapping)
- Scene Realism (motion blur, depth of field)
- Stereo Viewing
- Scientific Visualization
- Ray Casting and Ray Tracing

## Grading:

(1) Homework/programming assignments will consist of **60%** of your final grade; and tests **30%**. The other **10%** will be based on your class attendance and participation, and I reserve the right to give pop quizzes, which will factor into that 10%. The test component will be computed as the mean of one in-class, closed-book announced midterm plus the final exam grade. **It expected that, unless otherwise stated, that you turn in your own work and not a collaborative effort.**

(3) All work is graded on a numerical (percentage) basis. The correspondence between numerical and letter grades is given as follows:

A:  $\geq 90$ ,  
B: 80 - 89,  
C: 70 - 79,  
D: 50 - 69,  
F:  $< 50$ .

(4) It is expected that all homework will be turned in on time. Lateness penalties are:

- 1 day late - 10% off;
- 2 days late - 20% off;
- 3 days late - 40% off;
- $>3$  days late – *fuggheddaboutit!!*

**Note:** We count school days (Sundays and holidays are not included).

(5) No make-ups for graded work (either tests or homework) will be given except for a legitimate (e.g., medical) reasons.

(6) Questions about the grading of student work should be raised within 72 hours of its return. After that time frame, issues raised will risk not being entertained.

(7) Students should retain all returned graded work, in case there are issues raised about the grade.

(8) The "I" grade (for Incomplete) is given only in exceptional circumstances, (e.g. missing the final exam because of a surgery).

## **Attendance:**

The UNO Senate (Feb. 20, 2002) has made the taking of attendance a requirement for "developmental, 1000, and 2000 level courses." (See Appendix B from: [http://www.uno.edu/senate/minutes/2001\\_2002/01\\_22\\_02.pdf](http://www.uno.edu/senate/minutes/2001_2002/01_22_02.pdf)). Attendance will therefore be taken at each class meeting. Although not a formal component of the computation of grades, good attendance will impact final grades in borderline cases. Important course content is often introduced outside of the published sources and/or scheduled presentations.

## **Academic Dishonesty:**

Finally, we must call your attention to the University's policies regarding academic dishonesty ([http://www.studentaffairs.uno.edu/studentpolicies/policymanual/academic\\_dishonesty.cfm](http://www.studentaffairs.uno.edu/studentpolicies/policymanual/academic_dishonesty.cfm)). Academic dishonesty includes cheating, plagiarism, and collusion. In particular, it includes "the unauthorized collaboration with another person in preparing an academic exercise" and "submitting as one's own any academic exercise prepared totally or in part for/by another." In the event of academic dishonesty, **the student will be assigned a grade of 0** on the exam or exercise, the student will be informed in writing of the action taken, and **a copy of this letter will be sent to the Assistant Dean for Special Student Services.**

## **Students with Disabilities:**

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact their instructors and/or the Office of Disability Services to discuss their individual needs for accommodations.