

# CMSC 740 – Advanced Computer Graphics

Spring 2007 Lectures: Tuesdays and Thursdays 11:00 – 12:15pm CSIC 2118

Course Page: <http://www.cs.umd.edu/class/spring2007/cmsc740/>

**Professor:** Amitabh Varshney, 4407 AVW, (301)405-6761, varshney@cs.umd.edu. Office hours: Tuesdays and Thursdays 12:15 – 1:15pm, or by appointment. For an appointment, just drop by my office, or call me, or send me an email and we can fix up a time.

**Texts:** Our main textbook will be:

*Fundamentals of Computer Graphics*, Peter Shirley, Second Edition, ISBN 1-56881-269-8, A K Peters.

In addition, you may also find the following textbooks useful:

*Computer Graphics: Principles and Practice*, Second Edition in C, by James D. Foley, Andries van Dam, Steven K. Feiner, and John F. Hughes ISBN: 0-201-84840-6, Addison-Wesley.

*OpenGL 1.4 Programming Guide, Fourth Edition: The Official Guide to Learning OpenGL, Version 1.4* by Mason Woo (Editor), OpenGL Architecture Review Board, Jackie Neider, Tom Davis, Dave Shreiner ISBN 0-321-17348-1, Addison-Wesley

**Prerequisites:** MATH 240 (linear algebra) and CMSC 420 (data structures). Good knowledge of C/C++ programming. You should be able to independently design, code, and debug moderately sophisticated programs. You should also feel comfortable about concepts related to vectors (spaces and products) and matrices (inversion, products, transformations).

## Grading

Assignment and Project	45%
Mid-term Exam	20%
Final Exam	35%

**Assignments:** Assignment is worth 10%, Project is worth 35% of the final grade. All submissions are due on Tuesdays at the beginning of the class. Machine failures will not delay due-dates unless there is a massive catastrophe, announced by me as such. Assume that machine failures will happen and that contention for machines will occur. Start early.

**Video Shows:** From 10:55am – 11:00am, before each class I plan to show a video illustrating computer graphics. This is cultural: attendance is optional, and you will not be held responsible for knowing what is presented.

**Final Exam:** Final Exam will be 8:00am – 10:00am on Saturday, May 12, 2007.

**Academic Conduct:** I expect high standards of professional conduct and ethics. All work that you submit in this course must be your own or approved in advance by the instructor.