

CMSC 740 – Advanced Computer Graphics

Fall 2008 Lectures: Tuesdays and Thursdays 9:30am – 10:45am CSIC 3118

Course Page: <http://www.cs.umd.edu/class/fall2008/cmssc740/>

Professor: Amitabh Varshney, 4407 AVW, (301)405-6761, varshney@cs.umd.edu. Office hours: Tuesdays and Thursdays 11:00am – 12:00pm, 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.

Teaching Assistant: Daehwan Kim, 4176 AVW, (301)405-2726, infphilo@cs.umd.edu. Office hours: Mondays and Wednesdays 2:00pm – 3:00pm.

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 Programming Guide: The Official Guide to Learning OpenGL, Version 2.1 (6th Edition) by OpenGL Architecture Review Board, Dave Shreiner, Mason Woo, Jackie Neider, Tom Davis, ISBN 0-321-48100-3, 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: Assignments 1, 2, and 3 are each 10% and Assignment 4 is 15% of the final grade. All submissions will be due on Thursdays at 9:30am (the beginning of the class). Late assignment submissions are due the following Monday at 9:30am and get penalized 20%. Everyone gets one free late (4 calendar days) without the 20% penalty. 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. Grading for all assignments will be done on a TA-accessible CS department computer. You can code and debug your assignments on any platform but you should give yourself enough time to recompile and possibly debug/reconcile your programs with one of the above platforms/environments so that they work correctly.

Video Shows: From 9:25am – 9:30am, 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 Tuesday, December 16, 2008.

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.