Fall 2006

CEG 476/676: Computer Graphics I

Thomas Wischgoll
Wright State University - Main Campus, thomas.wischgoll@wright.edu

Follow this and additional works at: http://corescholar.libraries.wright.edu/cecs_syllabi

Part of the Computer Engineering Commons, and the Computer Sciences Commons

Repository Citation
http://corescholar.libraries.wright.edu/cecs_syllabi/61

This Syllabus is brought to you for free and open access by the College of Engineering and Computer Science at CORE Scholar. It has been accepted for inclusion in Computer Science & Engineering Syllabi by an authorized administrator of CORE Scholar. For more information, please contact corescholar@www.libraries.wright.edu.
Welcome to
CEG476/CEG676 - Computer Graphics I
Fall Quarter 2006

Instructor: Dr. Thomas Wischgoll
thomas.wischgo@wright.edu
328 Russ Engineering Center
937-775-5057

Office Hours: Mon/Wed 05:30pm - 06:30pm
(or by appointment)

Textbook: Computer Graphics
Donald Hearn and M. Pauline Baker

Webpage: http://avida.cs.wright.edu/courses/CEG476/

Lecture: Mon 04:10 pm - 05:25 pm
Wed 04:10 pm - 05:25 pm
(RC 148)

Exams: Midterm: Mon, Nov 1st, 04:10 pm (in class)
Final project: due Wed, Nov 15th, 11:59 pm

Grading Policy: 40% (assignments) + 30% (midterm) + 30% (final project)= 100%

Each class is different. Therefore, no absolute grading scheme can be defined in advance. However, the following guarantees will always be made:

90% 80% 70% 60% 50%
Course Goals/Objectives

By the end of this quarter, you will have learnt techniques for constructing 2-D and 3-D objects as well as manipulating and rendering the objects using OpenGL.

The outline of the course is as follows:

- Introduction
- Geometric primitives
- Attributes of geometric primitives
- Antialiasing techniques
- Homogeneous coordinate system
- 2-D and 3-D viewing transformations
- Structures and hierarchical modeling
- 2-D and 3-D viewing transformations
- Input devices and interactive techniques
- Visible surface detection methods

Prerequisites

- CS400 and MTH253 or 255

If you are unsure about any of these requirements, come talk to me.

Course Format

The course consists of two lectures a week. Attendance of the lectures is not strictly mandatory. However, you are responsible for all materials, announcements, assignments, etc. covered in either the lecture or assignments. If you miss a class, consult a classmate for any missed materials.

The purpose of the class is for everyone to understand the issues involved with computer graphics. To this end, if you don't understand something during class, please ask. If you are confused, it is likely that a few of your classmates are as well. Also, listen to others' questions. Many times you'll think you understand a concept until you hear someone else's question about it. Dialogue is the best way to learn things, so don't be afraid to speak up.

There will be two assignments to be returned on the specified date, one in class midterm, and one final project. The grade will be determined as stated earlier.

Assignments

Three assignments will be given which are due on the following dates:

Assignments

Assignments 1: Wed, Sep 18th due Wed, Sep 27th, 11:59 pm
Assignments 2: Wed, Sep 27th due Wed, Oct 9th, 11:59 pm
Assignment 3: Wed, Oct 9th due Wed, Oct 30th, 11:59 pm

For implementing the assignments, you can use the PCs in room 152C RC. You can also use any other computer that is available to you. However, you need to be able to demonstrate your software on one of the computers within Russ Engineering Center. On the day the assignment is due, please turn in a screenshot of your software and your source code, including makefiles or project files.

Office Hours

Office hours are as listed above or by appointment. If you are unable to come to the posted office hours, contact me and we can arrange to meet. There is no reason why anyone should be unable to see me if they need to.

Other Resources

The class web page is maintained at http://avida.cs.wright.edu/courses/CEG476/. It will keep information, assignments, announcements, etc. There is also a class mailing list. Make sure your email address is registered with the registration system. Please check the web page and read your email. I will try to make any announcements in both places as well as in class, but you don't want to miss anything.

Class Policy

• Assignments will not be accepted late unless approved by the instructor.
• The solution for the assignment has to be turned in as executable and source code to receive full credit. The solution has to work on one of the computers in the Russ Engineering Center receive full credit.
• During the midterm, after completing the test, each student must sign his test solution in with the instructor.

Fine Print

Exams Exams will emphasize insight and problem solving ability rather than memorization. Exams will be closed notes, closed book, and no laptops or calculators.

Missed Exams Makeup exams will only be given for the gravest of reasons. If you must miss an exam due to extreme illness, etc., contact the instructor (email is fine) or leave a message with the Department of Computer Science and Engineering office (937-775-5131) before the exam. Be sure to leave both the reasons for missing the exam and how to reach you.

Add/drop Policy A copy of the add/drop policy is available at the main office or online.

Cheating Please do not. I am not obsessed with looking for cheating, but if I see something suspicious, I will refer it to the Office of Judicial Affairs. This is more work for me, and is
embarrassing for everyone. Again, please don't; this has been a problem in the past. If the rules are unclear or you are unsure of how they apply, ask the instructor beforehand. The academic integrity policy as available online.

Feedback If you like, dislike, or don't understand something I'm doing with the course, please stop by my office hours, send me email, or paste together a note from newspaper clippings and drop it in my mailbox. I won't always change things, but I will always explain why I'm doing them the way I am.

Copyright All federal and state copyrights reserved for all original material presented in this course through any medium, including lecture or print. Individuals are prohibited from being paid for taking, selling, or otherwise transferring for value, personal class notes made during this course to any entity without the express written permission of the lecturer.