

Introduction to Computer Graphics

CAS CS480/CS680 (Spring 2012)

CS480 Course Description

Introduction to computer graphics algorithms, programming methods, and applications. Focus on fundamentals of two- and three-dimensional raster graphics: scan-conversion, clipping, geometric transformations, and camera modeling. Advanced concepts in computational geometry, computer-human interfaces, animation, and visual realism will be introduced as time and class interest allows.

CS680 Course Description

Graduate-level introduction to computer graphics algorithms, programming methods, and applications. Students attend CS480 lectures and are expected to complete additional work on problem sets, programming assignments, and tests.

Prerequisites

Working knowledge of Java, C, or C++ programming and data structures (CS112 or equivalent) and linear algebra (CS 232, MA 242, or equivalent), or consent of the instructor.

Lectures

TR 11-12:30 in MCS B25

Lab Sections and Tutorials

M 12-1pm and M 4-5pm in EMA 304, 730 Commonwealth Ave, third floor

Lab sections and tutorials will be offered some weeks on OpenGL programming, math related to computer graphics, etc. All tutorial topics will be announced at least a week in advance. Each section meeting in a given week covers the same material, and can accommodate approximately 25 students.

Instructor

Stan Sclaroff
Office hours: MTR 5-6pm (or by appointment)
Office location: MCS 140E, 111 Cummington Street, first floor
E-mail: sclaroff@cs.bu.edu
Phone: 353-8919

Teaching Fellow

Mikhail Kazdagli
Office hours: TBA in EMA 302, 730 Commonwealth Ave, third floor
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Required Texts

Hearn and Baker, *Computer Graphics*, fourth edition, Prentice Hall.
Woo, Neider, Davis, and Shreiner, *OpenGL Programming Guide*, Addison Wesley.

Course Home Page

<http://www.cs.bu.edu/faculty/sclaroff/courses/cs480/Home.html>

All class assignments, schedules, and lecture notes can be found on these pages.

Computer Lab

CAS CS Computing Lab
730 Commonwealth Ave., room 302

Grading

Programming projects 50%

Problem sets 8%

Mid-term quiz 14%

Final 28%

Incompletes will not be given.

Late Assignments

Late programming projects and problem sets will be levied a late penalty of 10% per day (up to 3 days). After 3 days, no credit will be given.

Tests

Midterm: Thursday, March 8 (in class)

Final: Friday, May 8, 9-11am (location TBD)

Tests are closed-book, but you can bring a single page (both sides) crib sheet on normal-sized paper (8.5x11 inches). Preparing a crib sheet is a useful study tool; it helps you to review and organize the material before the test. Your crib sheet should be written out (no mechanical or electronic reproductions are allowed). If you use a crib sheet, you will be asked to turn it in with your test.

Collaboration

All course participants must adhere to the College of Arts and Sciences Academic Conduct Code. Printed copies of the code are available from CAS 105. All instances of academic dishonesty will be reported to the academic conduct committee.

Course Mailing List

The course mailing list casc480a1-l@bu.edu is managed by IT's majordomo engine. If you preregistered for CS480, then you are already on this list. If you drop the class, they you will be automatically removed from this list.

To subscribe to the course mailing list, send the following e-mail message to majordomo@bu.edu:

subscribe casc480a1-l address

where *address* is replaced by your e-mail address. This should be in the body of the e-mail. Text in the e-mail subject line is ignored.

Students are encouraged to post course-related messages and questions to the mailing list. To send e-mail to the course mailing list, use the e-mail address: casc480a1-l@bu.edu. The mailing list server only accepts email posted from a BU account.