

**California State Polytechnic University, Pomona**  
**Computer Science Department**

**COURSE SYLLABUS**

**Fall 2016**

**CS445: Computer Graphics – 4 units**

**Instructor:** Professor Tony A. Diaz  
**Email:** [tadiaz@cpp.edu](mailto:tadiaz@cpp.edu)  
**Office:** College of Science – building 8, room 45  
**Office Hours:** MWF 9:20-10:20 am, TuTh 4-4:50 pm or appointment

**Class Web Site:** <http://blackboard.cpp.edu/>  
**Class Location:** 8/302  
**Class Hours:** TuTh 7-8:50 pm

**CATALOG COURSE DESCRIPTION**

Basic concepts in 2D and 3D graphics. Graphics hardware. Drawing concepts in 2D and 3D graphics. Geometric transformations. Windowing and clipping algorithms. Simple hidden line and surface removal. Color models and applications. 3D modeling. Animation. OpenGL libraries.  
Component(s): 4 lectures/problem-solving.  
Prerequisite(s): CS 241 and CS 256 with grades of C or better, or consent of instructor.

**REQUIRED TEXTS**

D. D. Hearn, M. P. Baker, W. Carithers, Computer Graphics with Open GL. 4th Edition. Pearson, 2011. ISBN 978-0-13-605358-3.

**GRADING**

10% Quizzes, 15% Small Programs, 25% Quarter Project, 25% Midterm exam, 25% Final Exam

Letter-grades are assigned using the *standard grading scale* :

A	93-100%	B	83-86%	C	70-76%
A-	90-92%	B-	80-82%	D	60-69%
B+	87-89%	C+	77-79%	F	< 60%

- ❑ As in any college-level class, you should plan to commit two to three hours studying/programming outside of class for every hour spent in class.
- ❑ While the project portion of this course will help you develop the mechanics of graphical programming, the quizzes and exam material forms the theoretical portion of the course – it will help you make good programming decisions.
- ❑ All students should have a Cal Poly Pomona intranet account.
- ❑ By having an Intranet account, you will automatically become part of intranet group cs44501. This allows for emailing to the entire group. I expect you to check your email regularly.
- ❑ Another benefit of being a member of the cs44501 group is that you can determine the email address of every other student in the class. Thus, if you miss a class, you should have no trouble contacting another student to learn what happened.
- ❑ You will probably receive faster response to your questions if you email to the entire class rather than just to me. Chances are that a fellow student has encountered and solved the problem you're reporting, and they'll be able to set you on the right track before I even get to read your email. I will often redirect your email to the group for solution.

- ❑ Students may neither do additional work nor repeat a quiz or project to raise a grade – grades are based upon coursework that is assigned and completed.
- ❑ If a student has a borderline course grade, s/he will only receive the higher grade if s/he has regularly attended class, arrived on time, participated, and have generally acted in a professional manner to other students and the instructor.

## GENERAL REQUIREMENTS

- ❑ Homework is due at the beginning of class – you should have also submitted your programs to BlackBoard by the beginning of class the day they are due. Assignments turned in after the start of the class in which they are due will be considered late.
- ❑ Late assignments are not accepted. This policy enables the instructor to grade and return assignments promptly. If a student cannot complete an assignment by the due date, then s/he should submit the portion of the assignment that has been completed. For all assignments, partial credit will be given for reasonable partial solutions.
- ❑ It is the student's responsibility to pick up his/her assignments/exams, if not claimed on the return day.
- ❑ There will be reading assignments and weekly lectures.
- ❑ Assignments will be made available and accessible from the course web site. It is the student's responsibility to get class assignments from the course web site.
- ❑ Student source code must follow the Programming Style Sheet available from the course web site.
- ❑ ALL program assignments must be completed for the student to **pass the class**.
- ❑ Students are responsible for all course materials. If a student misses a class, it is the student's responsibility to contact a fellow class member to determine what was missed.
- ❑ It is the student's responsibility to keep track of ALL grades (see the grading scale presented above to determine your grade).
- ❑ The best way for a student to contact the instructor is to come to his office during office hours.
- ❑ Turn off your electronic devices when you come into class – please do not interrupt lectures.
- ❑ The instructor does not give out or discuss grades through email. If you have a question about your final grade you need to go to the professor's office hours during the NEXT term.

## QUIZ/EXAM POLICY

- ❑ Quizzes are performed online via BlackBoard.
- ❑ No questions will be answered during exams. This policy avoids distracting others, obstructing vigilance, and giving unfair advantage.
- ❑ If a question contains an ambiguity or a misprint, then say so in your answer, providing the answer to a reasonable interpretation of the question; give your assumptions.
- ❑ Before the exams, I will discuss - in class - what will be covered on the exams. I will answer questions about exam coverage only during a class session.
- ❑ There will be no make-ups or rescheduling of exams or quizzes.

## SOFTWARE & COMPUTERS

- ❑ If a student sends email to the instructor, be sure to include your name, username (your CalPoly username), and the course number in the body of the e-mail. You should also use an appropriate subject line that looks like ***CS140 Program 1***. Failure to follow these guidelines may result in a delayed response or no response.
- ❑ We will be teaching graphical concepts using Java with Netbeans as our IDE. You **MUST** use this IDE, there will be NO exceptions.
- ❑ This course will use the Java programming languages on CS laboratory computers. **Make sure your programs work on these machines.**

## **ACADEMIC INTEGRITY**

Anything submitted for grading must represent the student's own individual work. Cheating and copying will be severely penalized. Discussion is encouraged among students, however, you must do your own homework, write your own programs, take your own tests, etc. Do not copy another student's program (either with or without their knowledge) or write code for another student. Two programs found to be substantially the same will be understood to have arisen from collaboration, and all parties involved will be subjected to a heavy penalty. Look up "academic integrity" in the University *Catalog* for a fuller discussion of the university's policy.