## Computer Science 10 Computer Programming (in Java\*\*)

- Designed for CS pre-majors
- Primary goal: prepare for CS 20, 50, ...
- Assumption: students can already program in some high-level language
- So already familiar with fundamental concepts:
  - Data types, data storage (memory), variables, constants, assignment, arithmetic, array basics
  - Logical operations, selection and iteration structures
  - Modular programming (up to functions/methods)

## Course structure

- Plan is to cover most of Horstmann text
  - Chapters 1-11, 13-14, 18-20 (but not completely in order)
- Java and general programming topics (mostly review):
  - Java intro, data, operations, control structures (1, 4-6)
  - Classes, and arrays and other objects (2, 3, 7)
- Class design, and start OOP (8-9)
  - Midterm exam about here
- Inheritance and more OOP (10 and maybe supplement)
- Exception handling, and file I-O (11, 19, and 21.5)
- Some algorithms and related issues, graphics, and other Java topics (13-14, 18, 20, other?) as time permits

## Requirements

- Midterm exam 20 percent
  - Wednesday, October 29 (unless announced otherwise)
- Final exam 40 percent
  - Tuesday, December 9 , <u>9</u>-11am (not 8-11)
- Assignments/quizzes 40 percent
- Students are responsible for monitoring changes to <u>course web pages</u> too
- Questions?

## To Do - week 1

- Read chapters 1-4 in the text
  - In general, read ahead of the lectures
  - Try out / play with simple Java programs
- Go to a discussion section
- Verify CSIL access
  - Need account @engineering.ucsb.edu (@cs is alias) –
    apply online if don't already have one
  - Change password as required sign on and play a bit
- Optional: also install Java SE 6 JDK (need 1.5 at least)
  - To develop/execute Java programs on own computer
- Get to know the IC labs too