

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 , 9-11am (not 8-11)
- Assignments/quizzes – 40 percent
- Students are responsible for monitoring changes to course web pages 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