

CS 251: Intermediate Programming using Java
Spring 2020
Prof. Thomas Hayes
Course Handout

1 Overview

This course continues the journey you began in CS 151: namely, learning how to solve problem-solving tasks on a computer, using a general-purpose programming language—specifically, Java. The first aspect of this journey is simple: understanding and gaining mastery of the features provided by the language. Features such as: encapsulation and data hiding, objects, inheritance, events, exceptions, and concurrency. The second aspect of this journey is a bit harder to pin down: getting to the heart of a problem, understanding how to solve it, and converting this solution into working code. Hopefully, by dint of your hard work and determination, over the course of this semester, you will find yourself making rapid progress in both of these areas.

2 Course Materials

There will not be a required textbook for this course. Instead, we will be taking advantage of a number of free resources available on the internet, starting with the Java Tutorials, hosted at Oracle.com. However, I do recommend the books *The Java Programming Language, Fourth Edition*, by Arnold, Gosling, and Holmes.

3 Website

I have set up a site for this course on UNM Learn. Most course materials, including this syllabus, will be available through this website. The site will be used for class discussions and homework assignments, as well as important announcements such as updates to this syllabus. You should plan to visit this website every day; important class resources and announcements will be posted there.

If you are unable to access this site, please contact me immediately; again, it is essential that you visit this website routinely, and keep up with the information posted there.

4 Instructor Help

My office is FEC 3130. If you would like to meet with me outside of class, please arrange an appointment by email, or by talking to me after class.

My email address is `hayes@cs.unm.edu`. This should be used for private correspondence such as appointment requests or concerns about your grade.

Questions about homework questions should ordinarily be posted on the discussion forums on UNM Learn, to allow for group or class participation in the discussion. However, when this is not appropriate, you should email me instead.

5 Class Participation

Students are expected to attend all lectures unless excused in advance for valid reasons, such as illness or tragedy. Attendance will normally be taken. You are expected to pay attention to the lecture and participate in the class discussion. Students who seem excessively distracted or inattentive in class will be asked to leave and marked as absent.

From time to time, timed quizzes will be given during class. These will be graded. There may also be other quiz-like minor assessment instruments to be done at home between classes.

6 Lab Participation

This class has a weekly computer lab component. Attendance is required. If, for some reason, you cannot attend the lab section for which you are registered, but can attend a different section the same week, that can count as your attendance. However, you must arrange this in advance to ensure there is space available in the lab you want to attend. It is your responsibility to ensure that the lab instructor knows you are there and marks you as present.

If you feel you need extra help or would just like to attend another lab section in addition to your own, you may do so, but this will not count for anything. Again, check with the lab instructor in advance to ensure space is available in the section you want to attend that is not your own.

7 Grading

Grades will be based on:

- 60% Programming Assignments (labs and projects)
- 30% Exams (midterm and final)
- 10% Lecture, quizzes, and participation

8 Working Together

Students are encouraged to work together on all projects (but not on exams and quizzes). This includes discussion of problem statements, algorithms, data

structures, and other design decisions. It does not include code. Each student must write their own code.

When trying to track down a bug, it is sometimes helpful to let someone else take a look at it. It is acceptable to show someone else your code for this purpose. However, it is not acceptable to look at someone else's code before submitting your own. Each student is responsible for protecting their own code, and ensuring that no-one else copies it, even "by accident."

9 Academic Honesty

Cheating will be dealt with very harshly, and includes, but is not limited to:

- Copying code from another person or having someone else write your code.
- Allowing another person to copy your code.
- Copying code from the Internet or another source.
- Attempting to disassemble, decompile, or otherwise reverse engineer compiled example programs.
- Leaving your code (paper or electronic copies) where others can find it. You are responsible for the security of your intellectual property
- Violation of the University policy on acceptable computer use.

Note: Not being able to explain how some significant part of your code works will result in a zero for the assignment. It does not matter if the reason you do not understand your code is because you did not do the work or because you got your code working by trial and error. If I suspect someone of cheating, the first thing I do is ask that person to explain the code. This is not a quiz you ever want to fail. Too much code in the real world is built and maintained by trial and error. It makes for a house of cards. It is not a good way to produce code nor is it a good way to learn.