

Data Structures with Java CS 259 - Fall 2016

Instructor:

Joel Castellanos

Office: Electrical and Computer Engineering (ECE) Room 233

Office Hours: Monday 4:30 PM – 5:30 PM, Thursday 3:30 PM – 4:30 PM and by appointment.

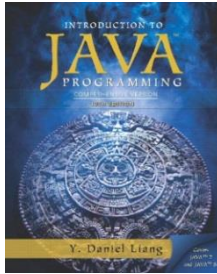
e-mail: joel@unm.edu

Course Web site: <http://www.cs.unm.edu/~joel/cs259>

Course Description

This is an introductory Java programming course that moves at an accelerated pace covering the material in both CS-152L (Computer Programming Fundamentals) and CS-251L (Intermediate Java Programming) in 5 credits in one semester. The breath of the course is similar to CS-152L and CS-251L, but the depth of the programming projects requires more problem solving skills and creativity.

Required Textbooks and Supplies



Introduction to java Programming (10th Edition)

by Y. Daniel Liang

- 1)
- 2) USB Flash Drive
- 3) i>clicker[®]. Available UNM bookstore.
- 4) Java SE JDK (Standard Edition Java Development Kit) version 8u51 (open-source):
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>
- 5) IntelliJ IDEA IDE (Integrated Development Environment) Community Edition version 14.1 (freeware): <https://www.jetbrains.com/idea/download/>
- 6) Blackboard Learn for turning in programming assignments, discussions, and grades:
<https://learn.unm.edu/>

Attendance

Class meets three times per week: Monday/Wednesday/Friday is a required component of the course. Quizzes, via i-clickers, will be given during almost every lecture. There are no make-up quizzes. Each quiz counts as less than 0.3% of your final grade. Thus, missing one quiz will have no effect on your final grade. Missing many quizzes will affect your final grade (by as much as 10%). Students with extended illnesses or travel requirements should seek an incomplete so that the work can be made up next semester.

Lab and Project Assignments

This is a computer programming course and the primary part of your grade is based upon authoring programs. Labs are mini programming projects usually due in less than one week from when assigned.

Late Policy

Lab assignments and projects can be turned in late with a penalty of FIVE PERCENT PER DAY. **Assignments more than 7 days late will not be accepted. This includes medically excused lateness!!!** The primary reason for no negotiation in this is that solutions are generally released and discussed in class one week from the due date. There are, however, opportunities to make up some missed work through extra credit assignments. A student that needs to miss many classes due to an extended or reoccurring illness or hospitalization will need to request a grade of *Incomplete* for the semester. With this, arrangements can be made for missed work to be completed during the following semester.

The lateness of an assignment is determined solely by the due date and the *Blackboard Learn timestamp of the final version* you submit.

When you submit an assignment in WebCT, it is **★YOUR RESPONSIBILITY★** to:

1. Exit Learn,
2. Log back into Learn,
3. Check that all required files are attached,
4. Check that the files uploaded correctly, and
5. Check that the contents of the submission are what you expect them to be. Do this by opening and examining your files from Learn. Be sure to examine them carefully to make sure you submitted the correct version.

Up until the assignment due date, you can take back your submission, and resubmit. Doing this correctly is your responsibility and part of learning how to use computer systems.

Academic Honesty

Students are encouraged to help each other on labs through personal interaction and through the Blackboard Learn discussions. There is, however, a difference between helping and cheating. Cheating includes:

1. Copying another person's work,
2. E-mailing or giving an electronic version of your work to anyone other than a course instructor.
3. Leaving a paper or an electronic version of your work where others can get it: you are responsible for your own computer security. **If you save a local copy of your work on a lab computer, delete it and empty the trash before logging off!**
4. Having another person complete any portion of your work.

The first time a student is caught cheating; the student will receive a negative grade for the assignment (i.e. if the assignment is worth 100 points, then a score of -100 is assigned).

Grading

Each student's final course grade is a weighted average of three component grades:
 60%: Programming Assignments: Labs and Projects (lowest lab will be dropped)
 10%: Quizzes: one each lecture period.
 30%: Exams: Midterm and Final.

Course Letter Grade: Each student's numerical course grade is:

$$ProgrammingAssignmentGrade \times 60\% + QuizGrade \times 10\% + ExamGrade \times 30\%$$

The course letter grade is calculated from the numerical course grade by using the table below.

Letter Grade Score Ranges					
>100%	A+	93 - 100%	A	90 - 92%	A-
88 - 89%	B+	83 - 87%	B	80 - 82%	B-
78 - 79%	C+	70 - 77%	C		
68 - 69%	D+	50 - 67%	D		
		< 50%	F		

Title IX:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 - <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>

ADA:

In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. If you have a disability, either permanent or temporary, contact Accessibility Resource Center at 277-3506 for additional information.

Syllabus	
Week 1	Chapter 1: Introduction to Computers and Java Chapter 2: Basic Computation (Variables, Data Types, Assignment Statements, Simple Input, Type Casting, Arithmetic Operators, String Class. Chapter 3: Flow of Control: Branching
Week 2	Chapter 4: Flow of Control: Loops
Week 3	Chapter 5: Defining Classes and Methods Chapter 6: More About Objects and Methods
Week 4	Supplement: java.awt.Graphics2D
Week 5	Chapter 7: Arrays
Week 6	Supplement: Animation I
Week 7	Supplement: Animation II
Week 8	Review and Midterm Exam
Week 9	Chapter 8: Inheritance, Polymorphism and Interfaces
Week 10	Chapter 9: Exception Handling
Week 11	Chapter 10: Streams, File I/O, and Networking
Week 12	Chapter 11: Recursion
Week 13	Chapter 12: Dynamic Data Structures and Generics
Week 14	Computational Problem Solving I
Week 15	Computational Problem Solving II
Week 16	Final Exam