CMSC 280: Programming in a Second Language: Java

23rd of August, 2021

Lecture:	MWF 2:00-2:50pm, Stevens Lab
Website:	http://cs.longwood.edu/courses/cmsc280/f21/
Professor:	Julian Dymacek
Office:	Ruffner 328
Phone:	x2192
Email:	dymacekjm@longwood.edu
Office hours:	MWRF: 9:50–10:50am
	by appointment or if the door is open

Course Description

A programming-intensive course that gives students a comprehensive introduction to a language not taught in the introductory sequence. Examples of languages which may be taught are Ada, Fortran, and Java. May be repeated for credit when language changes. 3 credits.

Prerequisites

CMSC 160 or consent of the instructor.

Course Student Learning Outcomes

At the end of this course, the successful student will be able to:

1. write moderately complex Java programs, comprised of multiple components and making use of the Java libraries;

2. use language documentation to discover new details about a language or library; and

3. learn on their own how to program for particular libraries or technologies.

Textbook and Resources

1. No required textbook

2. The Java API

Course Structure and Student Expectations

You should expect to spend on average about 9 hours of your time every week on this course, including class and lab time as well as reading, practice, homework, and projects.

Course Requirements

Tentative Course Schedule

Week	Date	
1	Aug. 23–27	Introduction, main, compiling, data types
2	Aug. 30–Sept. 3	Classes and objects, references
3	Sep. 8–10	javadoc, builtin classes
	Sep. 6	*Labor Day* no class
4	Sep. 13–17	Object oriented design, inheritance
5	Sep. 20–24	Type inheritance, Implementation inheritance
6	Sep. 27–Oct. 1	Abstract classes, Interfaces
7	Oct. 4–6	Java collections & Exam
	Oct. 7–8	*Fall Break* no class
8	Oct. 11–15	Generics, Exceptions
9	Oct. 18–22	Graphics, Events
10	Oct. 25–29	GUIs
11	Nov. 1–Nov. 5	GUIs
12	Nov. 8–12	Threads
13	Nov. 15–19	Networking
14	Nov. 22	Project work day
	Nov. 24–26	*Thanksgiving* no class
15	Nov. 29–Dec. 3	Review
	Dec. 9	**Final Exam:** Thurs. 11:30-2:00pm

Important university dates

Aug. 31	Last day of Add/Drop (5pm)
Oct. 1	Last day for Pass/Fail (5pm)
Nov. 3	Deadline to withdraw with "W"
Dec. 3	Last day of classes

Grading Scale

		A	100–91	A–	90
B+	89	B	88–81	B–	80
C+	79	C	78–71	C–	70
D+	69	D	68–61	D–	60
		59 and lower is an F			

Graded work

This course is programming intensive, you should budget your time to include reading, assignments, class, and homework. If you are stuck on something talk to me sooner rather than later. The entire course is cumulative so you cannot afford to get behind.

Homework & Quizzes: You are expected to be an active participant in the class. You should be present and engaged. Pop quizzes will be given in class and cannot be made up.

Projects: There will be six projects assigned in the class. Projects will be larger assignments and require outside research and some may be completed in groups. Project grades will be based on both individual and group performance.

Exams: There will be a final exam. The final exam will, by the nature of the course, be cumulative. Exams are to be your work alone and not discussed with anyone.

Breakdown

Projects:	60%
Homework:	15%
Quizzes:	10%
Exam:	15%

Policies

For a list of campus wide polices please see:
   http://www.longwood.edu/academicaffairs/syllabus-statements/

Honor Code

We will follow the Longwood Honor Code in this class. When completing work please do not lie, cheat, or steal.

1. Do not lie and claim someone else's ideas as your own: you must give proper attribution

2. Do not cheat and copy work from another student or the Internet

3. Do not steal someone else's work and submit it: your files are to be written by you

4. You are responsible for securing your code/work: do not let someone else have access to your work/files

If you are unsure if your action will violate the honor policy: don't do it. Feel free to talk with me if you have questions.

Infractions of these policies will be dealt with harshly under the Longwood Honor Code with cases turned in to the Honor Board. Any student convicted of an honor offense involving this class will automatically receive a lowered *final course grade*, potentially severe as an **F**. You should consider all work in this class to be pledged work, whether or not the pledge appears on the assignment.

Support

Programming (and mathematical proof) is a different way of thinking about problem solving. A solution is not necessarily easy or obvious. I strongly encourage you to follow along with the class in readings and activities. When you have questions, ask. In addition to my regular office hours, you can always email to schedule a time to meet. If my office door is open feel free to stop by, if my door is closed I'm not available.

Attendance and late work

You are expected to attend and participate in class. Attendance will be recorded in every class. In accordance with campus policy, missing more than 10% of scheduled class time to unexcused absences may, at my discretion, result in the loss of one letter grade. Missing 25% of class or more, whether excused or not, may result in an automatic failing grade.

Late work will not be accepted outside of exceptional circumstances such as serious medical or family emergencies. Most extensions will require a note from a Longwood administrator.

Laptops and other electronic devices are not to be used during class, except with permission. No food in class.

If a student is at risk of missing more than 10% of a course due to Covid-19 quarantine or illness, faculty should work with the student to determine a reasonable path forward based on medical information, grades to date, and time remaining in the semester. Faculty are encouraged to count attendance in ways that are consistent with health and safety. Faculty may require virtual synchronous viewing, watching recorded lectures or participation in online activities, assignments or discussion boards.

Inclement weather policy

I don't plan to cancel class for weather unless the entire college shuts down. If extenuating circumstances cause me to cancel class, you will be notified by e-mail.