San José State University Department of Computer Science

CS 49J – Java Programming Spring 2020

Course and Contact Information

Instructor(s):	Mariia Surmenok
Office Location:	DH 282
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Office Hours:	MW 10:30-11:30AM
Class Days/Time:	MW 9-10:15AM
Classroom:	DH 450
Prerequisites:	Previous programming experience in a language other than Java.

Course Description

Introduction to the Java programming language and libraries. Topics include fundamental data types and control structures, object-oriented programming, string processing, input/output, and error handling. Use of Java libraries for mathematics, graphics, collections, and for user interfaces.

For the official catalog description, please visit <u>the online catalog</u> at <u>http://info.sjsu.edu/web-dbgen/catalog/courses/CS049J.html</u>

Course Learning Outcomes (CLO)

Upon successful completion of this course, students should be able to:

- Write Java applications which are appropriately documented using Javadoc
- Use Java to read and write text files
- Implement from specifications Java classes that embody data structures
- Use and work with pre-existing implementations in the Java collections framework
- Use iterators and enhanced for loops to traverse collections
- Write a graphics program that draws simple shapes
- Use Java exceptions for error handling

Required Texts/Readings

Textbook

Title	Big Java Early Objects 7/e.
Author	Cay Horstmann
Publisher	Wiley
ISBN	ISBN 9781119499459 (E-Text only)
	9781119499534(E-Text + loose leaf book)
	Available in the bookstore and directly from Wiley

You will need a wireless laptop (running OSX, Windows, or some version of UNIX). It must be capable of installing and running the course software

Course Requirements and Assignments

Exams (50%)

Two in-class mid-terms (15% each) and a final exam (20%). Exams cannot be made up, except for reasons of illness, as certified by a doctor, or documentable extreme emergency.

Programming Assignments (40%)

Schedule your time well to protect yourself against unexpected problems. I suggest starting early so you have time to ask questions if you need helps. Late work is accepted with a penalty of 10% per day. Late homework is not accepted one work past it's due date All homework is due at 11:59PM on the due date specified.

Quizzes (10%)

Quizzes will be given throughout the course covering the required material discussed. Two lowest scores will be dropped. No make-up quizzes.

Extra credit

The iClicker participation points may be used to give your final grade a slight boost.

Grading Information

Your grade for the course is based on the exams, the homework, and quizzes. Grades are calculated by weighting the scores as defined below.

At least	Letter Grade
93	А
90	A-
87	B+
83	В
80	В-
77	C+
73	С
70	C-
67	D+
63	D
60	D-
Below 60	F

Classroom Protocol

Exams:

- The exams are based on lectures, homework/lab assignments, and reading materials covered before the exam's date.
- Absolutely NO items may be shared during the exams, including books, notes, and calculators.
- Absolutely NO usage of cell phones during exams. Cell Phones must in off or silent mode and not within your reach.

Individual work:

- All homework and exams must be your own individual work. It is OK to have general discussions about the assignments or read other material for inspiration. You may never copy anything from anyone without attribution. This means if you find code on Stackoverflow or another web site, you need to give the URL where you found the code in a comment at the top of your class so that I can look at it if necessary.
- You may copy from the textbook, the labs, or anything we do in class without attribution. For assignments and exams, you may not copy anything from any other student at all, and you may not collaborative produce results in pairs or teams. Your work must be entirely your own.
- It is never okay to share your code with other students. If the other person submits your work, both students will receive a 0.
- First incident of cheating will result in a 0 on that assignment or exam. Second incident will result in a F for the class.

University Policies

Per <u>University Policy S16-9</u> (*http://www.sjsu.edu/senate/docs/S16-9.pdf*), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on <u>Syllabus Information web page</u> (http://www.sjsu.edu/gup/syllabusinfo), which is hosted by the Office of Undergraduate Education. Make sure to visit this page to review and be aware of these university policies and resources.

CS49J -- Java Programming, Spring 2020, Course Schedule

Course Schedule

Week/Lesson /Module	Date	Topics, Readings, Assignments
1	1/27	Intro to course, Quiz 1
1	1/29	Intro to Java
2	2/3	GitHub lab "Quiz 2"
2	2/5	Objects, graphics
3	2/10	Data types, I/O, Quiz 3
3	2/12	Data types, String
4	2/17	Classes, Quiz 4
4	2/19	Classes, graphics
5	2/24	Decision structures, Javadoc, Quiz 5
5	2/26	Loops
6	3/2	Loops, random, Quiz 6
6	3/4	Arrays, 2d arrays
7	3/9	ArrayList, Quiz 7
7	3/11	Static Methods
8	3/16	Midterm 1
8	3/18	Object oriented design
9	3/23	Inheritance, Quiz 8
9	3/25	Inheritance
10	3/30	Spring Recess
10	4/1	Spring Recess
11	4/6	Interfaces, comparator, Quiz 9
11	4/8	File I/O, Exceptions
12	4/13	File I/O, Exceptions, Quiz 10
12	4/15	JUnit, recursion
13	4/20	Midterm 2

Week/Lesson /Module	Date	Topics, Readings, Assignments
13	4/22	Generics
14	4/27	Java Collection, Quiz 11
14	4/29	Java Collection
15	5/4	Java Collection, Quiz 12
15	5/6	GUI
16	5/11	GUI
Final Exam	5/18	DH 450, 7:15-9AM