SJSU SAN JOSÉ STATE UNIVERSITY

College of Science · Computer Science

Programming in Java

CS 49J

Fall 2025 Section 02 In Person 3 Unit(s) 08/20/2025 to 12/08/2025 Modified 09/18/2025

Contact Information

Instructor(s): Dominic Abucejo

Office Location: Via Zoom

Telephone: N/A

Email: dominic.abucejo@sjsu.edu

Office Hours: Zoom (by appointment only)

- Zoom (by appointment only - send email or notify in person)
- Hours: Monday/Wednesday 5:30pm to 6:30pm

Course Information

Class Days/Time: Tuesday/Thursday from 7:30am to 8:45am

Classroom: Sweeney Hall, Room 120

Prerequisites: CS46B equivalent in a language other than Java.

Instruction Mode: In person

Course Description and Requisites

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.

Prerequisite(s): CS 46B or equivalent in a language other than Java; Allowed Majors: Computer Science, Data Science, Math, Math ITEP, Stats, Applied/Computational Math, Software Engineering, Forensic Science: Digital Evidence, or Undeclared.

Letter Graded

Classroom Protocols

Collaboration Policy

Collaboration is encouraged, but you must cite the classmates you work with and you cannot copy their code. This includes sharing large blocks of code on discord.

Cheating

If a student is caught cheating on a homework assignment, the student will receive a 0 on that assignment. If a student is caught cheating on an exam, the student will receive a 0. A second incident of cheating will result in the student receiving an F in the course. All incidents of cheating must be reported to the University per University Policy F15-7.

Classroom Protocol

- You are expected to arrive for class on time, and to have your laptop available for each class, including exam days.
- Do NOT share any course material publicly (on Canvas, GitHub, etc.) without permission, including but not limited to lecture notes, lecture videos, passwords, homework/exam solutions, and class meeting links.

Program Information

Diversity Statement - At SJSU, it is important to create a safe learning environment where we can explore, learn, and grow together. We strive to build a diverse, equitable, inclusive culture that values, encourages, and supports students from all backgrounds and experiences.

Course Learning Outcomes (CLOs)

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

1. Write Java applications which are appropriately documented using Javadoc.
2. Use Java to read and write text files.
3. Implement from specifications Java classes that embody data structures.
4. Use and work with pre-existing implementations in the Java collections framework.

5. Use iterators and enhanced for loops to traverse collections.
6. Write a graphics program that draws simple shapes.
7. Use Java exceptions for error handling.

Course Materials

- All students are required to have access to a wireless laptop (running OSX, Windows, or some version of UNIX), upon which you can install required software. You will need it for all classes, labs, and exams.
- Technology used will include Canvas, programming in Java, and an IDE (Integrated Development Environment). Suggested: IntelliJ IDEA (https://www.jetbrains.com/idea/) or Eclipse (https://www.eclipse.org/downloads/).

The primary book used in this course will be referencing Java Programming using Zybooks. This is a required online book where you will complete assignments and labs. Access to this online book requires a subscription. A subscription is $89.

To get access to this book:

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: SJSUCS49JAbucejoFall2025
3. Subscribe

Course Requirements and Assignments

Library Liaison

Anamika Megwalu, email: *anamika.megwalu@sjsu.edu*, website: https://libguides.sjsu.edu

Course Requirements and Assignments

There will be 5 programming assignments, one group project and a final

(Individual) Programming Assignments

There will be 5 individual programming assignments throughout the course. Schedule your time well to protect yourself against unexpected problems. Start early so you have time to ask questions if you need helps. Late work will be accepted with a penalty of 20% per day (will NOT be accepted after 5 days passed its deadline). Copying from other's work (from other students or/and from Internet) will be considered as cheating.

(Individual) Exercises/Labs

Via zyBooks you will complete exercises and labs

(Individual) Quizzes

Canvas quizzes will be assigned during class. This will be closed book.

(Individual) Final Exam

There will be a cumulative final exam that covers all material throughout the semester. The exam will be a closed-all-materials quiz (except for the API link provided) on Canvas. The date and time are fixed (TBD).

✔ Grading Information

Grades will be posted to Canvas. There will be at least 135 points available. More details will be given in class.

- Programming Assignments (45 points. The first is worth 5 points, the rest are 10 points each)
- Final Exam (40 Points)
- Exercises/Activities (30 points)
- Quizzes (20 points)

Note: There are no extra credit point assignments

Your course grade will be determined by your final weighted average:

Grade Letter	Corresponding Grade Percentage
A+	*98.00% or higher*
A	*93.00% to 97.99%*
A-	*90.00% to 92.99%*
B+	*87.00% to 89.99%*
B	*83.00% to 86.99%*
B-	*80.00% to 82.99%*
C+	*77.00% to 79.99%*
C	*73.00% to 76.99%*
C-	*70.00% to 72.99%*
D+	*67.00% to 69.99%*
D	*63.00% to 66.99%*

D-	*60.00% to 62.99%*
F	*0%. to 59.99%*

All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades. See University Policy S20-2 for more details.

University Policies

Per University Policy S16-9 (PDF) (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 the Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

Course Schedule (Subject to change with fair notice, which will be posted in Canvas)

Week	Date	Topics
1	8/21	Introduction to the Course
2	8/25 - 8/29	Setup Environment (in-class lab) Variables and Primitives Scanner Class
3	9/1 - 9/5	Classes and Objects / String Class

Week	Date	Topics
4	9/8 - 9/12	Classes and Objects / Methods
5	9/15 - 9/19	Decisions
6	9/22 - 9/26	Documentation
7	9/29 - 10/3	Testing
8	10/6 - 10/10	Arrays, ArrayLists, and Loops
9	10/13 - 10/17	Algorithms Complexity and Big O & File I/O and Handling Exceptions
10	10/20 - 10/24	Inheritance / Abstraction and Interfaces
11	10/27 - 10/31	Comparable and Comparators
12	11/3 - 11/7	The Collections Framework
13	11/10 - 11/14	Learning about GUI programming 11/11 - No class (Veteran's Day - Campus Closed)
14	11/17 - 11/21	Generics
15	11/24 - 11/28	Multi-threading No class (11/26 to 11/28) - Thanksgiving
16	12/1 - 12/5	Other Topics / Last week of class

Week	Date	Topics
17	12/16 Final Exam	Tuesday (12/16) - 8:30-10:30 AM