College of Science · Computer Science

Programming in Java Section 01

CS 49J

Spring 2025   In Person   3 Unit(s)   01/23/2025 to 05/12/2025   Modified 01/23/2025

🕐 Course Information

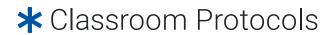|	
Class time	T/Th 13:30 - 14:45
Classroom*	Duncan Hall 318
Instructor	Yan Chen (yan.chen01@sjsu.edu)
Office Hour	T/Th 10:30 - 11:30 on Zoom (https://sjsu.zoom.us/j/85932098981 (https://sjsu.zoom.us/j/85932098981)) Or Make Appointment (https://calendly.com/yan-chen-sjsu/15min)
Grader	Amir Marashifar <amirali.marashifar@sjsu.edu (mailto:amirali.marashifar@sjsu.edu)>

*The class is in person. The lecture part will be recorded but the quality is not guaranteed. Some in-class demos and exercises may not be recorded.

🖥 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

- 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 links.
- No late homework questions (within 24 hours before due, excluding follow-ups) via email.
- **Instances of academic dishonesty will not be tolerated**. Your own commitment to learning, as evidenced by your enrollment at San José State University and the University's Academic Integrity Policy (https://www.sjsu.edu/studentconduct/docs/Academic Integrity Policy F15-7.pdf) require you to be honest in all your academic course work. Cheating or plagiarism (presenting the work of another as your own, the use of another person's ideas without giving proper credit, or using AI) will result in **a reduction in final course grade** (you will get a warning if it's your first time except for the last assignment and the final; 1 letter grade off every time after) and administrative sanctions by the University.

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 would 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

Course Materials

There is no required textbook for this course. The most comprehensive and up-to-date information (documentation, guide, examples, etc.) can be found at https://docs.oracle.com/en/java/javase/21/ (https://docs.oracle.com/en/java/javase/21/). All other materials (lecture notes, homework, etc.) will be posted on Canvas (https://sjsu.instructure.com/courses/1605547 (https://sjsu.instructure.com/courses/1605547)). You are responsible for **regularly checking the Canvas course page for any updates**, including its messaging system.

Software/Equipment

- Laptop/Desktop with internet connection that is capable of checking Canvas course page, submitting homework, installing/running the required software, etc.

- Java SE Development Kit 21 (JDK 21 https://www.oracle.com/java/technologies/downloads/#java21). The JDK is a development environment for building applications, and components using the Java programming language. Or any JDK that is above 8 (https://www.oracle.com/java/technologies/downloads/archive/).
- An IDE for writing/running Java programs. Suggested: IntelliJ IDEA (https://www.jetbrains.com/idea/) or Eclipse (https://www.eclipse.org/downloads/).
- Git (https://git-scm.com/downloads) and a GitHub account (https://github.com/) for version control.

Further Readings

- Big Java Early Objects 7/e, Cay Horstmann. https://horstmann.com/bigjava/

☰ Course Requirements and Assignments

There will be 5 programming assignments, a code meeting, a final exam, and other class activities for extra credits.

Programming Assignments

There will be 5 programming assignments throughout the course. Here's an overview of these 5 assignments:

- Assignment 0: set up the environment and get familiar with submitting your code based on the requirements.
- Assignments 1 & 2: each includes 4 ~ 5 coding exercises. Your code will be auto-graded by test cases and may be manually checked for additional requirements or uncaught errors. Can work in a group of 2.
- Assignments 3 & 4: write programs (one console, one GUI) using the classes and methods written in Assignment 1 or 2. Can work in a group of up to 3.

Schedule your time well to protect yourself against unexpected problems. Start early so you have time to ask questions if you need help. Late work will be accepted with a penalty of 20% per day (will NOT be accepted after 4 days have passed its deadline).

You will receive a zero if…

- Your code is not runnable (wrong class/method name, wrong parameter & return type, compiler errors, etc.)
- Your code is from the Internet, AI, or other students/groups.
- (For Assignments 1 to 4) Missing the code meeting.

Code Meeting

To receive points for Assignments 1 to 4, you need to schedule a code meeting with the instructor during the last week of the semester (May 5 - May 12). The meeting will be on Zoom and **one-to-one**, even if you have worked in a group.

The code meeting is to show you understand your code. It will be about 20 ~ 30 minutes, including 2 parts:

- Demo your programs in Assignments 3 & 4;
- Answer 2~3 questions about the code in Assignments 1 to 4.

The meeting itself doesn't have any points, but you will receive 0 on all programming assignments if you miss the meeting. Failing to explain your code may result in deductions on the programming assignments, even if your code works.

Final Examination

The final will be cumulative. The questions will be similar to the optional exercises. It will be online (a timed Canvas Quiz) so you can take it anywhere, but the date and time are fixed: **Tuesday, May 20, 13:00 - 15:00 Pacific Time**. In case of any verifiable reasons, a form to pick another slot will be distributed around 1 week before the final exam.

The Final Exam are closed-all-materials. Copying from others' work (from other students, previous semesters, the Internet, or AI) will be considered cheating.

The final Exam is mandatory as University policy S17-1 (http://www.sjsu.edu/senate/docs/S17-1.pdf [(http://www.sjsu.edu/senate/docs/S17-1.pdf)](http://www.sjsu.edu/senate/docs/S17-1.pdf)) states:

> *"Faculty members are required to have a culminating activity for their courses, which can include a final examination, a final research paper or project, a final creative work or performance, a final portfolio of work, or other appropriate assignment."*

Optional: Extra Credits

You can earn extra credits from various activities such as exercises and discussions. **NO late submission will be accepted for extra credits.**

Exercises

There will be 9 exercises as untimed Canvas Quizzes throughout the semester (2 pts each, due on Mondays). They will be **locked by passwords that are ONLY given in the lectures.**

Note that only **Exercise 0 is mandatory**, which serves the following purposes:

- Roll call for attendance of the first 2 classes (submitting the exercise indicates your attendance).
- Submitting your transcript so the instructor can double-check your prerequisites.
- Setting up the environment to get you prepared for future assignments.

Others

There will be discussions, reading assignments, etc. that are graded by participation (about 1 pt each). They are due on May 12.

Although exercises and discussions are optional, they are highly recommended to practice what you learned in class and to enhance your score. University Policy S16-9 ([http://www.sjsu.edu/senate/docs/S16-9.pdf (http://www.sjsu.edu/senate/docs/S16-9.pdf)](http://www.sjsu.edu/senate/docs/S16-9.pdf)) states that:

> *"Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practice. Other course structures will have equivalent workload expectations as described in the syllabus."*

✔ Grading Information

Criteria

Note that the "weight" is not percentage - they are "points". There will be at least 120 points available, including extra credits from optional exercises/activities. More details will be given in class.

Type	Weight	Topic	Notes
Assignments	60	Programming	Must have a code meeting to get the points.
Final Exam	40	Cumulative	Online Timed Canvas Quiz
(Optional) Others	20+	Others	Other class activities, such as exercises, discussions, etc.

Breakdown

The range also refers to "points", not percentages.

- A+ will be given to the top 1% of students.
- Grades near the borderlines will be rounded up depending on your level and quality of class participation (in class and in the Discussions on Canvas).
- The grade might be curved ONLY if the final grades of the class at the end of the semester are not normal.

Grade	Points	Grade	Points	Grade	Points
A	Above 93.00	B minus	80.00 to 82.99	D plus	66.00 to 69.99
A minus	90.00 to 92.99	C plus	76.00 to 79.99	D	63.00 to 65.99

B plus	86.00 to 89.99	C	73.00 to 75.99	D minus	60.00 to 62.99
B	83.00 to 85.99	C minus	70.00 to 72.99	F	Below 59.99

🏛 University Policies

Per [University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/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)](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

Important dates

Visit [https://www.sjsu.edu/registrar/calendar/spring-2025.php (https://www.sjsu.edu/registrar/calendar/spring-2025.php)](https://www.sjsu.edu/registrar/calendar/spring-2025.php) for the Academic Calendar.

Date	Description
Jan. 23, Thursday	First Day of instruction (for this class)
Feb. 18, Tuesday	**Last day to drop without a W grade**
	Last day to add classes via MySJSU
Mar. 9, Sunday	Daylight saving time starts (2 AM -> 3 AM)
Apri. 22, Thursday	Last day to late drop/withdraw
May 8, Thursday	Last day of instruction (for this class)
May 12, Monday	All class activities are due except for final (for this class)
May 20, Tuesday	**Final Exam (for this class) 13:00 - 15:00 Pacific Time**
May 24, Saturday	Grades (should be) viewable on MySJSU

Lecture Schedule

Will be posted on Canvas.