

# Introduction to Programming Section 01

## CS 46A

Spring 2025 In Person 4 Unit(s) 01/23/2025 to 05/12/2025 Modified 01/30/2025

### Contact Information

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Instructor: Narayan Balasubramanian

Lecture Time: 12:00 - 1:15 PM PST Tuesdays and Thursdays

Location: Science Building 142

Office Hours: 1:30 - 2:30 PM PST Tuesdays and Thursdays

Office Location: Duncan 282

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Feel free to reach out to me via email or drop by during office hours if you need any help. I'm here to support you!

Learning Assistants:

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### Course Description and Requisites

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Introduction to programming for anyone new to the field or who needs a refresher with basic Java programming syntax, object-oriented paradigm, control structures, iteration, etc. Hands-on activities in writing, compiling, executing, and debugging programs for solving real-world problems.

Lecture 3 hours/lab 3 hours.

Prerequisite(s): Math Enrollment Category M-I, M-II, or M-III, or MATH 1 with a grade of "C-" or better; and a major of Computer Science, Applied and Computational Math, Software Engineering, Forensic Science: Digital Evidence, or Undeclared; or instructor consent.

Letter Graded

# \* Classroom Protocols

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## Commitment to Equity

- Our classroom is a space where everyone is respected, regardless of background, identity, or experience level. Diversity in thought, culture, and perspective enriches our learning environment.
- Everyone's voice matters. Actively listen to others, and contribute constructively. Encourage and support your peers, especially those who might need a little extra help or confidence to participate.

## Academic Integrity

- Your work must be your own. This means all code, assignments, and projects should be created and completed independently unless group or pair work is explicitly allowed.
- While discussing concepts and helping each other understand challenging topics is encouraged, ensure that the final submission is your own work for individual work. Copying code from another student, AI-generated code, or other sources is considered plagiarism. Students may be asked to explain their code to demonstrate their understanding. Failure to do so may result in a penalty, including a reduction in grade.
- If plagiarism is detected, you will receive a warning, and your grade for the assignment may be reduced or given a zero, depending on the severity. Continued plagiarism may result in more serious consequences, including failure of the course and reporting to university administration.

By adhering to this classroom protocol, we can create a learning environment that is fair, respectful, and enriching for everyone. Let's work together to make this a great semester!

## ≡ Program Information

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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)

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

1. Analyze and explain the behavior of programs involving the fundamental program constructs
2. Write short programs that use the fundamental program constructs including standard conditional and iterative control structures
3. Identify and correct syntax and logic errors in short programs
4. Choose arrays or array lists for a given problem and write short programs that use arrays or array lists
5. Design and implement a class based on attributes and behaviors of objects

6. Construct objects using a class and activate methods on them
7. Write Javadoc comments for classes and methods
8. Write graphics program that draws simple shapes
9. Use interfaces and inheritance to describe common behavior of classes and write programs that use that common behavior
10. Use an integrated development environment and a debugger

## Course Materials

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### Required Text Book:

In this course, we will use the following textbook: **Java Early Objects** available through ZyBooks

To access this text, use the following instructions:

- Click any zyBooks assignment link in your learning management system (Do not go to the zyBooks website and create a new account)
- Subscribe A subscription is \$64. Students may begin subscribing on Jan 07, 2025 and the cutoff to subscribe is May 07, 2025. Subscriptions will last until Jun 06, 2025.

Students can download the static PDF version of the book to their devices.

**Optional Text Book:** Big Java - Early Objects Author: Cay S. Horstmann Publisher: Wiley Edition: 7th Edition

### Required Technology

- You will need a laptop with internet access to all classes, labs, and exams
- You will need to download Bluej () for the IDE

## Grading Information

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### Category Weights

Category	Weight	Notes
Class participation	5%	Attendance, question, helping fellow students ...
Quizzes	10%	Taken in class
Labs	15%	Every Friday

Homework	15%	Homework
Midterm 1	15%	
Midterm 2	15%	
Final	25%	

Your grade for the course is based on all course work listed above.

Grades are calculated by weighting the scores as defined above.

### Grading Scale

At Least	Letter Grade	Grade Point
97%	A+	4.0
93%	A	4.0
90%	A-	3.7
87%	B+	3.3
83%	B	3.0
80%	B-	2.7
77%	C+	2.3
73%	C	2.0
70%	C-	1.7
67%	D+	1.3
63%	D	1.0
60%	D-	0.7
Below 60%	F	0.0

All scores are listed in Canvas after grading completed and you should check your scores after they are posted. You must earn at least a C- (70%) to be eligible to take CS 46B. Note that "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 F13-1 for more details.

## University Policies

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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.