San José State University
College of Science, Computer Science Department CS 46A -03: Introduction to Programming, Fall 2025

Course and Contact Information

Instructor: Professor Takoua El Bejaoui

Email: takoua.bejaoui@sjsu.edu

Office Hours: TR 9:40am - 10:15am

Class Times

and Locations: Lecture Section 03: Tuesday and Thursday 9:00 AM-10:15 AM (DH 415)

Lab Section 15: Friday 11:00 AM-1:50 PM (MH 223)

Prerequisites: 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, Software Engineering, Forensic Science: Digital Evidence, or Undeclared; or graduate standing or instructor consent.

Course Description

Basic skills and concepts of computer programming in an object-oriented approach using Java. Classes, methods and argument passing, control structures, iteration. Basic graphical user interface programming. Problem solving, class discovery and stepwise refinement. Programming and documentation style. Weekly hands-on activity.

For the official catalog description, please visit the online catalog.

Course Materials

Course materials such as the syllabus, assignments, lecture notes... will be available on our class Canvas site. Students will also use Canvas, coupled with zybooks and zylabs, to submit assignments and exams. Students are responsible for regularly checking Canvas to learn of any updates and announcements.

Planned Course Learning Outcomes (PCLO)

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 a 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 to debug.

Optional Textbook

• Big Java: Early Objects By Cay S. Horstinann, 7/e, 2019, Wiley

Course Mechanics

● **Laptops**
  ○ You will need a laptop/desktop with internet access (running OSX, Windows, or some version of UNIX) to all classes, labs, and exams.
  ○ You can borrow laptops through the MLK Library or through ATE.
● **Online Discussion Board or Inbox (Canvas)**
  ○ You can ask and answer questions online via Canvas's discussion post or inbox/messaging app.
● **Required subscription to zybooks/zylabs** - which will be given through Canvas
  ○ **zyBook Pricing Information:**
    ● zyBook subscriptions start at $64 per student.
    ● A student's subscription is made available two weeks before the term starts and expires two weeks after the term ends.
    ● Students can extend their subscriptions for $25 for one year. They cannot use the zyBook for another course - it's just for personal use.
    ● Students can save a zyBook as a searchable PDF on their own devices (or print).

    Full Refund/One Free Retake

    ● If a student has to retake the same course using the same topic zyBook, they can email support@zybooks.com and we will provide a one-time free subscription.
    ● If a student drops out of the class, they can find the *Request a refund* button on the *My subscription* tab in their zyBook (applies to direct purchases).

Student Can't Pay Right Away

- Students can subscribe to a zyBook and pay $0. They will have access to Chapter 1. This is helpful if they are on a waitlist or they're not sure if they will stay in the class. The instructor will not see the student in the class zyBook roster until the subscription is purchased. But, all activity is recorded and time-stamped.
- Students can ask for a temporary subscription for up to 30 days if they need time to pay for their zyBook. On the Payment page, they would click *Have payment questions?* Then, *What if I can't pay right away?* See Does zyBooks offer temporary subscriptions?

Discounts/Bookstore

- If students need to use the same topic zyBook for another course (CS 1 uses the Java zyBook, CS 2 uses a combination of the Java and Data Structures zyBooks, for ex.), our system detects they are a repeat user of the same topic zyBook and give them an automatic 50% discount off of their subscription. This discount is available for up to one year after the previous zyBook expires (applies to direct purchases).
- If a student must purchase their zyBook through the bookstore (financial aid), we provide the bookstore access keys at a 10% discount and bill the bookstore after the add/drop date passes for the number of keys sold.

Help/FAQ article:Payment: Cost, financial aid, refunds, discounts, and more

For students:Can I get a refund if I drop my class, or I'm waitlisted and don't get in?

How to request a temporary subscription to a zyBook

How long do subscriptions last? / Can I extend? / Can I save or print?

Grading Information
1. All examinations must be taken in order to receive a passing grade.
2. No make-up examinations will be granted without a valid reason and proof.
3. One week grace period after assignment submissions' deadlines will be accepted.
4. Homework assignments will be posted to Canvas and due on Canvas (using Canvas assignment submission) by the announced due dates on Canvas. Please remember to check Canvas regularly.
5. Homework and Lab assignments are individual and group effort assignments. Students are encouraged to have intellectual discussions about the homework and lab problems. However, all students must prepare and submit their own solutions to the homework and lab problems which reflect their understanding and problem-solving methodologies. Any form of cheating or plagiarism such as copied/shared solutions or code will not be tolerated. For a team-effort assignment, all members of a team will share the same score. Therefore, please make sure to be professional, work effectively, and contribute equally to the team-effort assignments so that every team member has the opportunity to learn and improve themselves.

Grading

Homework Assignments: 15 %
Laboratory Assignments: 15 %
Midterm Exam 1:   20 %
Midterm Exam 2:   20 %
Final Exam: 30 %

Total: 100 %

Letter Grade Determination

Total $\geq$ 97%	A+
Total $\geq$ 93%	A
Total $\geq$ 90%	A-
Total $\geq$ 87%	B+
Total $\geq$ 83%	B
Total $\geq$ 80%	B-
Total $\geq$ 77%	C+
Total $\geq$ 73%	C
Total $\geq$ 70%	C-
Total $\geq$ 67%	D+
Total $\geq$ 63%	D
Total $\geq$ 60%	D-
Total < 60%	F

- All scores are listed in Canvas after grading completed and you should check your scores after they are posted.
- See [University Policy F13-1](#) for more details.

- You must earn at least a C- (70%) to be eligible to take CS 46B.

SJSU & CS Department Policies

● Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at <http://www.sjsu.edu/gup/syllabusinfo/>.

● CS Department and SJSU policies are also posted at <https://www.sjsu.edu/cs/programs/mscs/policies.php>.

BSCS Program Outcomes Supported by this Course
   (a) An ability to apply knowledge of computing and mathematics to solve problems
   (b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
   (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
   (d) An ability to use current techniques, skills, and tools necessary for computing practice
   (e) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices

Additional Information
- **General Tutoring**
  - **https://www.sjsu.edu/science-ssc/student-resources/tutoring/?**
- **Embedded Class Tutor**
  - CS 46A Lecture Class Embedded Tutor Class Assignments:
    - (03) TR 9:00 AM - 10:15 AM - Huy Duong (DH 415)
    - (15) F 11:00 AM - 1:50 PM - Scott Du (MH 223)
- **Lab Learning Assistant:**
  - CS 46A-15 Lab Learning Assistant:
    - (15) F 11:00 AM - 1:50 PM - Scott Du (MH 223)
- **Lab Instructor:**
  - (15) F 11:00 AM - 1:50 PM - Lazar Cankovic (MH 223)

CS 46A-03: Introduction to Programming, Fall 2025
Approximate Course Schedule

Week/Dates	Discussions Topics/Activities
Week 1 Th 08/21	Welcome to CS46A-03! Class Orientation, Syllabus Discussion
Week 2 T 08/26 & Th 08/28	Introduction, Our first Java Program, Class and Object
Week 3 T 09/02 & Th 09/04	Variable, Object and Method
Week 4 T 09/09 & Th 09/11	String and Graphics, Implementing Classes
Week 5 T 09/16 & Th 09/18	Class and Method, Numbers, Arithmetic, and I/O
Week 6 T 09/23 & Th 09/25	Strings and IO, If Statements and logical operators
Week 7 T 09/30 & Th 10/02	Nested If Statements, While Loop, For Loop
Week 8 T 10/07 & **Th 10/09**	Review and **Exam 1**
Week 9 T 10/14 & Th 10/16	Do Loops, Nested Loops
Week 10 T 10/21 & Th 10/23	String and Random, Array List and Nested Loops
Week 11 T 10/28 & Th 10/30	Array Lists, Arrays
Week 12 T 11/04 & Th 11/06	2D Arrays, Designing Classes
Week 13 T 11/11 & Th 11/13	Static Variables and Methods
Week 14 T 11/18 & Th 11/20	Packages and Unit Tests, Inheritance
Week 15 T 11/25 & **Th 11/27**	Polymorphism and Abstraction **(Thanksgiving)**
Week 16 T 12/02 & **Th 12/04**	Interface, Review and Practice, **Exam 2**
Final Exam Days December 10-12 and December 15-16, 2025	**Final exam will be held on T 12/16/2025 at 8:30 AM-10:30 AM for section 02 and Th 12/11/25 at 8:30AM - 10:30AM for section 03.**