

College of Science · Computer Science

Introduction to Programming Section 02 **CS 46A**

Spring 2025 In Person 4 Unit(s) 01/23/2025 to 05/12/2025 Modified 01/20/2025



🚨 Contact Information

Instructor: Ethel Tshukudu

- Class Time: Tuesday and Thursday, 10:30 11:45.
 - Lecture Room: Science Building 164
- Office Hours: Tuesday and Thursday, 1:00 p.m 2:00 p.m at DH 251
- Email: ethel.tshukudu@sjsu.edu

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 contacts:

- Dalen Martin: dalenchristopher.martin@sjsu.edu
- Meghana Indukuri: meghana.indukuri@sjsu.edu
- Scott Du: scott.du@sjsu.edu

Course Description and Requisites

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

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, Al-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

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)

At the end of the course students should be able to:

- 1. Analyze and explain the behavior of programs using fundamental program constructs
- 2. Write short programs using fundamental program constructs, including standard conditional and iterative control structures.
- 3. Identify and correct syntax and logic errors in short programs
- 4. Select arrays or array lists for a given problem and write short programs using them
- 5. Design and implement a class based on attributes and behaviors of objects
- 6. Create and initialize objects using a class and invoke methods to manipulate or retrieve their data.
- 7. Write Javadoc comments for classes and methods
- 8. Write graphics programs that draw simple shapes

- 9. Utilize interfaces and inheritance to define and implement common behaviors across classes, and develop programs that leverage these shared behaviors.
- 10. Use an integrated development environment (IDE) and a debugger to write, test, and debug programs.

Course Materials

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: https://bluej.org/)

✓ Grading Information

Category Weight Notes

| Category | Weight | Notes |
|-------------------------|--------|---|
| Participation Exercises | 5% | class exercises |
| Poll everywhere | 5% | during lectures |
| Reading quizzes | 5% | A reading quiz at the start of each lecture |
| Labs | 15% | Every Friday |

| Homework | 15% | Weekly homework |
|----------------|-----|---------------------|
| Midterm quiz 1 | 15% | Covers Week 1-5 |
| Midterm quiz 2 | 15% | Covers Week 6-10 |
| Exam | 25% | Covers all lectures |

Grading Scale

| Range | Grade |
|----------|-------|
| 97-100 | A+ |
| 93-96 | А |
| 90-92 | A- |
| 87-89 | B+ |
| 83-86 | В |
| 80-82 | B- |
| 77-79 | B- |
| 76-78 | C+ |
| 73-76 | С |
| 70-72 | C- |
| 67-69 | D+ |
| 63-66 | D |
| 60-62 | D- |
| Below 60 | F |

■ University Policies

Per <u>University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf)</u>, 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 <u>Syllabus Information</u> (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.