

# San Jose State University

## Computer Science

### CS 46A - Introduction to Programming

### Fall 2022

## Course and Contact Information

<b>Instructor:</b>	Qi Yang
<b>SJSU Home Page:</b>	<a href="https://www.sjsu.edu/people/qi.yang/">https://www.sjsu.edu/people/qi.yang/</a>
<b>Email:</b>	qi.yang@sjsu.edu
<b>Classroom:</b>	Zoom Meeting
<b>Class Days/Time:</b>	TR 1:30 - 2:45 pm
<b>Office Location:</b>	Zoom Meeting
<b>Office Hours:</b>	TR 8:00- 8:50 pm
<b>Prerequisites:</b>	Math Enrollment Category M, 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 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](#).

## Student Learning Outcomes

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.

**Participation Exercises (5%)**

These are programming exercises given in class.

The scores for PA1 and Par

The course grades will be automatically transferred from Canvas to SJSU official site and will

## Individual Work

All homework must be *your own individual work*. It is OK to have general discussions about homework assignments or read other material for inspiration. You may copy from the textbook, the labs, or anything you do in class. But you may not copy anything from other student at all, and you may not collaboratively produce results in pairs or teams. Your work must be entirely your own. **It is never okay to give your completed code to another student before the grace time.**

For exams, you must complete the work by yourself without help from others, within the specified period of time.

A first incident of cheating will result in a 0 for all involved students. A second incident will result in an F for the class for all students involved.

## 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
- (i) An ability to use current techniques, skills, and tools necessary for computing practice
- (j) 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 tradeoffs involved in design choices
- (k) An ability to apply design and development principles in the construction of software systems of varying complexity

## Miscellaneous Policies

**COVID-19 and Monkeypox Safety Training:** Students registered for a College of Science (CoS) class with an in-person component should view the CoS COVID-19 and Monkeypox Training slides for updated CoS, SJSU, county, state and federal information and guidelines, and more information can be found on the SJSU Health Advisories website. By working together to follow these safety practices, we can keep our college safer. Failure to follow safety practice(s) outlined in the training, the SJSU Health Advisories website, or instructions from instructors,

**Publicly Viewable Work:** Your class work (including homework, exam, and project work) may be viewable by other students of this course. Your grades will not be viewable by others.

**Copyright of Materials:** All materials created by the instructor for this course, including lectures, handouts, homework, exams, solutions, projects, and so on, are copyrighted property of the instructor. You may transcribe lectures or copy course materials for the use of yourself and other students registered in this course. You may not sell or give transcriptions of lectures or copies of course materials to others without the prior written consent of the instructor.

## University Policies

**University Policies:** Office of Graduate and Undergraduate Programs **hosts university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc.** You may find all syllabus related University Policies and resources information listed on GUP's [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>

## Tentative Schedule for CS 46A

**Exam 1:** Thursday, October 06

**Exam 2:** Tuesday, November 15

**Final Exam:** Wednesday December 14, 2022, 12:15 - 2:30 pm