

**San José State University**  
**Computer Science Department**  
**CS46A, Introduction to Programming, Section 1, Winter, 2019**

**Course and Contact Information**

Instructor:	H. Chris Tseng
Office Location:	MH213
Telephone:	(408) 924-7255
Email:	chris.tseng@sjsu.edu
Office Hours:	Mon-Fri., 11:55AM – 12:10 PM and by appointment or email
Class Days/Time:	Mon-Fri., 9:00 – 11:55 AM; Mon-Fri., 1:00 – 3:45 PM (Lab)
Classroom:	MH 225
Prerequisites:	Eligibility for Math 019 and a major of Computer Science, Software Engineering, or Undeclared; or instructor consent

**Course Format**

**Technology Intensive, Hybrid, and Online Courses**

This course will be conducted in a hybrid form of flipped class with in-class instruction. Students will have the opportunity to learn at their own pace and get focused learning from instructor in classroom.

**Faculty Web Page and MYSJSU Messaging**

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on [Canvas Learning Management System course login website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the messaging system through [MySJSU](http://my.sjsu.edu) at <http://my.sjsu.edu> to learn of any updates.

**Course Description**

**Catalog 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. (See prerequisites description on top of this page)

**Course Learning Outcomes (CLO)**

Upon successful completion of this course, students will achieve learning outcomes related to the following:

\*Analyze and explain the behavior of programs involving the fundamental program constructs

- \*Write short programs that use the fundamental program constructs including standard conditional and iterative control structures
- \*Identify and correct syntax and logic errors in short programs
- \*Choose arrays or array lists for a given problem and write short programs that use arrays or array lists
- \*Design and implement a class based on attributes and behaviors of objects
- \*Construct objects using a class and activate methods on them
- \*Write javadoc comments for classes and methods
- \*Write graphics program that draws simple shapes
- \*Use interfaces and inheritance to describe common behavior of classes and write programs that use that common behavior
- \*Use an integrated development environment and a debugger

## **Required Texts/Readings**

### **Textbook**

Cay S. Horstmann, Big Java, Early Objects, 6th Edition. ISBN: 978-1-119-05644-7

### **Additional Readings**

A list of additional readings will be provided on the Canvas page associated with this class under <http://sjsu.instructure.com>.

### **Other technology requirements / equipment / material**

You will be required to have a wireless-network ready laptop computer to participate in the class. You will also need to use your own laptop with wireless access to submit your assignment inside SJSU campus. Your laptop needs to have wireless capability and you need to register a free wireless account at <https://one.sjsu.edu/>. The instructor is not responsible for providing either laptops or alternatives.

## **Course Requirements and Assignments**

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 60 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 practica. Other course structures will have equivalent workload expectations as described in the syllabus.

a. Exams:

There will be one midterm and one final.

b. Quizzes:

There will be eight quizzes.

c. Programming Assignments:

There will be eight programming assignments as HW grades.

d. Labs

You must enroll for a lab section and attend all labs. Lab rules can be viewed [here](#).

e. Tentative course exam and HW due dates:

(Please note that this is “subject to change with fair notice”)

Programming HW/Quiz: daily.

Midterm: Wed., Jan. 9, 2019

Final: Fri., Jan. 18, 2019

**Final Examination or Evaluation**

The final will be comprehensive on all material covered in this course.

**Grading Information**

Grades:

HW programming assignments	25 %
Midterm	25 %
Lab	10 %
Quizzes	10%
Final Exam	30%

**Determination of Grades**

Grades will be assigned as described below. These intervals, however, may change (i.e., either way!) according to the performance of the class as a whole. C- is a passing grade.

- A: [ 93, 100 ]
- A-: [ 90, 93 )
- B+: [ 87, 90 )
- B: [ 83, 87 )
- B-: [ 80, 83 )
- C+: [ 75, 80 )
- C: [ 70, 75 )
- C-: [ 65, 70 )
- D+: [ 60, 65 )
- D: [ 55, 60 )
- D-: [ 50, 55 )
- F: [ 0, 50 )

**Classroom Protocol**

You are expected to attend classes. If you cannot attend, it is your responsibility to get a copy of the lecture notes and class announcements from a reliable classmate. The instructor reserves the right to ignore frivolous or

inappropriate e-mail inquiries. Students are expected to participate actively to provide improvement to presentations by other classmates.

### **University 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](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>. Make sure to review these policies and resources.

# CS46A, Introduction to Programming, Sec. 1, Winter, 2019 Course Schedule

*The schedule is subject to change with fair notice emailed to students.*

## Course Schedule

Day	Topics, Readings, Assignments, Deadlines
1	Lesson 1 :video + Installing BlueJ and Introduction; HW#1
2	Lesson 2 :video + Using Objects; Quiz #1; HW#2; Lab#1
3	Lesson 3 :video + Implementing classes; Quiz #2; HW#3; Lab#2
4	Lesson 4 :video + Fundamental Data Types; Quiz #3; HW#4; Lab#3
5	Lesson 5 :video + Decisions; Lab#4
6	Review; Midterm
7	Lesson 6 :video + Loops; Quiz #4; HW#5; Lab#5
8	Lesson 7 :video + Arrays and Array Lists; Quiz #5; HW#6; Lab#6
9	Lesson 8 :video + Designing Classes; Quiz #6; HW#7; Lab#7
10	Lesson 9 :video + Inheritance; Quiz #7; HW#8; Lab#8
11	Lesson 10 :video + Interfaces; Quiz #8; HW#9; Lab#9
12	Review
Final Exam	9 AM, Friday, Jan. 18, 2019