

# CS111A

# Introduction to Java

Mon/Wed 9:10AM to 11AM

Location: ACRC, PC-Lab 1

grwoo@ccsf.edu

Canvas Website: TBD

Office Hours: Mondays 3:30pm to 5pm in Batmale 456

Subject to changes throughout the semester.

Course Description: This course is a first course in computer programming. You are expected to know how to use a computer for basic tasks including e-mail and browsing the world wide web, but no futher background in computers is assumed. The emphasis will be on principals of computer programming, using the computer programming language Java. We will use Java as a tool that enables us to study computer programming, so you will learn many important features of Java. Thus, after completing this course you will be prepared to go on to study other programming languages or continue to study Java.

Learning to write computer programs is a time consuming and sometimes frustrating endeavor. I expect an average student to spend about 8 hours per week outside of class reading and working on programming assignments and other class work. If you don't have the time or dedication for such work, this class may not be for you.

Attendance Policy: You are expected to attend all classes and be seated for the class to begin promptly at ten minutes after the hour, when roll will be taken. Participation accounts for 10% of your grade. Any information that you miss due to nonattendance is solely your responsibility. This may include helpful information for assignments and tests. I may drop you from the class if you miss more than 3 classes in a row without explanation.

Prerequisite(s): None. Credit Hours: 4 units

**Days:** Monday and Wednesdays: 9:10 to 11am in PC-Lab 1 of the ACRC, Batmale 301 (Ocean/Phelan campus) Class will begin promptly at 9:10. There will be a ten-minute break at 10:00 if we're doing an in-class exercise.

Text(s): Java Concepts: Late Objects, 3rd Edition

**Author(s):** Horstmann; **ISBN:** 978-1-119-32102-6

### Student Learning Outcome(s):

At the completion of this course, students will be able to:

- 1. Describe the software development life-cycle and the use of algorithms in program design
- 2. Develop, implement and accurately predict the results of structured programs and code in Java, including the use of numeric and Boolean expressions, if and switch statements, loops and nested control structures
- 3. Write Java code with, and accurately predict the results of, methods that have reference and value parameters and return values
- 4. Write Java code to pass and process arrays and Strings

## Grading Policy:

Participation in excercises and activities during class time	10%
Programming Labs (10 pts / each)	40%
Test #1 (25 pts)	10%
Test #2 (25 pts)	10%
Test #3 (25 pts)	10%
Final Exam (50 pts)	20%

There will be three tests given in this class, in addition to the final exam. The first two and the assignments graded in time will be the basis for the midterm grade. If you will not be able to take a test when it's scheduled, you must notify me a few days before the test to request a make-up time.

### Midterm and final grades will be assigned on the following percentage scale:

90% - 100% A 80% - 89% B 70% - 79% C 60% - 69% D 0% - 59% F

Students who do not take the final exam will be assigned a grade of "FW". An "FW" is an "F" grade that also indicates that the student did not complete the course.

#### Homework:

The best way to learn how to program is to do it! Homework will be assigned about once a week, generally alternating between Programming Labs and Practice Problems.

#### • Programming Labs:

You must write and understand the assignment yourself. If you collaborate with other students, clearly indicate who in your comments. Programming Labs will be graded based upon their correctness, clarity, and programming style.

Homework will usually be due on Wednesday nights at midnight, but you should try to complete them early, so you can ask questions and get help. You will each encounter problems that require more time than you anticipate to fix – that's the nature of programming. So think of the homeworks as due before class. Then you can ask questions in class on the due date if necessary.

All homework submissions must include 2 major parts: the Java code you wrote (the source file) and some sample input and output showing how your program works. To turn in a problem that you may have worked on in a group, each team member should submit the assignment, listing whom you work with.

I will employ a student worker to grade homework assignments for this class. If you have any questions or concerns about this arrangements or a particular grading decision the grader makes, please don't hesitate to tell me. I will be happy to review grading decisions on request.

#### Homework Lateness policy:

Because of the importance of keeping up with the pace of class, late homework will be penalized severely. All homework assignments are due by midnight the night of the due date specified. Late homework will be penalized 5% if it is turned in before I go through the solution in class (the following class after it's due). Starting the day I present the solution, late homework will be penalized 50%. You will get no credit for turning in my solution as your own. All homework you turn in must be your own, even after we have gone through a solution in class.

#### Cheating

Cheating of any kind will not be tolerated. It will result in a grade of 0 on the assignment or test in question and can be cause for a failed grade and disciplinary action, including suspension or expulsion. Cheating on Programming Labs means copying code or answers from someone else. Getting help from others is not cheating as long as you're not copying their work or allowing them to copy yours. On the exams, any collaboration or copying constitutes cheating.

#### Software and Computer Access

Classroom assignments can be completed on repl.it before being copy and pasted into Canvas for submission. I encourage you to use Oracle's Standard Edition (SE) Java Development Kit: Java SE JDK 8. It is already installed on the CCSF Linux and Windows systems. That means all your homework can be done on your own computer or using the City College Linux server "hills". By registering in this class you will automatically be given an account on hills, or if you already had an account, it will be reactivated if necessary. You can access hills from any computer that is connected to the Internet.

For more information about how to use the CCSF computer systems for your classwork, see Craig Persiko's Computer Access and Use Information handout.

Use of CCSF computers, including remote access, is regulated by the CCSF Computer Usage Policy, which is found in hte college catalogue and on the web at http://www.ccsf.edu/Policy/policy.shtml. Do not give passwords and other sensitive information to unauthorized persons. This means you shouldn't tell anyone your personal passwords and you shouldn't give class account passwords to people who aren't in this class.

#### **Drop Procedures**

Generally it is your responsibility to drop or withdraw from a class by the final deadlines given in your course schedule. Do not ask me to drop you; use the Web4 system, or contact the Office of Admissions and Records to be withdrawn from a class. If you have more than three unexplained consecutive class absences, I may drop you from the class. If your name is on the roll at the end of the semester and you have stopped attending class, you will be assigned a final grade of FW. I will not give a late or retroactive drop or withdrawal.

# Disability Accomodations

Students with disabilities who need accommodations are encouraged to contact the instructor. Disabled Students Programs and Services (DSPS) is available to facilitate the reasonable accommodation process. The DSPS office is located in the Rosenberg Library, Room 323 and can be reached at (415) 452-5481.

## **Tentative Course Outline:**

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Due Date	Homework Schedule
1/22	• Programming Lab 1 Due: Hour of Code Programming Puzzles
1/24	• Programming Lab 2 Due: Hello World
1/31	• Programming Lab 3 Due: Muni Ridership Calculator
2/7	$\bullet$ Test #1 in class: Covers Chapters 1 (Introduction) and 2 (Fundamentals), and the first part of Chapter 3 (If-Statements)
2/14	Programming Lab 4 Due: Time Calculator
2/21	<ul> <li>No class on 2/19 (President's Day)</li> <li>Reading assignment</li> </ul>
2/28	• Programming Lab 5 Due: Rock - Paper - Scissors Game
3/7	Programming Lab 6 Due: Jackalope Populations
3/14	Programming Lab 7 Due: Parallelogram Program
3/21	$\bullet$ Test #2 in class: Covers Chapters 3 (Decisions) and 4 (Loops)
3/28	• Spring Break: No classes 3/26 - 3/28
4/4	Programming Lab 8 Due: Consumer Loan Program
4/11	• Programming Lab 9 Due: Analyze Phrase
4/18	<ul> <li>Programming Lab 10 Due: Palindrome Program</li> <li>Test #3 in class: Covers Chapters 5 (Methods), Chapter 2 (String Manipulation) and Chapter 6 (Arrays)</li> </ul>
4/25	• Programming Lab 11 Due: De-Dup Program
5/2	• Programming Lab 12 Due: Distance File
5/9	• Extra Credit: Design a Lottery
5/16	• Final Exam