Java Programming
CPSC 223J – Sections 01 & 03
Fall 2019

Description & Objectives

This course is designed for students with prior programming knowledge. It will prepare students for software development-related careers where they may find the need to quickly adopt unfamiliar programming languages to satisfy the current requirements of the field. The rapidly changing landscape of software development is heavily influenced by technological advancements. For example, new hardware may require the use of better-suited programming languages (e.g., mobile devices, sensors, and virtualization); new programming language features may change developers' language preferences (e.g., improvements in performance, scalability, and maintenance); and social and technological trends may require software whose requirements are satisfied by a limited set of languages (e.g., big data, crowd sourcing, and social networking). Students who complete the course will not only learn the Java programming language, but also acquire skills to explore and learn unfamiliar programming languages on their own. They will also appreciate maintaining knowledge of multiple programming languages.

This course is taught in the Java programming language, but the covered concepts apply to all programming environments. Labs and projects provide hands-on experience with programming, related skills such as debugging, and reading technical documentation.

Prerequisites

CPSC 120, CPSC 121, CPSC 131

Instructor

Bijan Hamidi
Email: bihamidi@fullerton.edu
Office: CS 401- cube 1 - Computer Science Building
Office Hours: Tuesday & Thursday ~10:05 am – 10:50 am & by appointment.
During final exam week, office hours are by appointment only.

Meeting Information

Section 01
Tuesday 8:00 am – 9:50 am CS 104
Thursday 8:00 am – 9:50 am CS 104

Section 03
Tuesday 11:00 am – 12:50 pm CS 300
Thursday 11:00 am – 12:50 pm CS 300

Important Dates

Section 01 Final Exam: Tuesday, December 17th 7:00 am - 8:50 am | Room CS 104

Section 03 Final Exam: Tuesday, December 17th 9:00 am - 10:50 am | Room CS 300

CSUF's Academic Calendar is posted online at «http://apps.fullerton.edu/AcademicCalendar/». The Academic Calendar contains all the campus closures and holidays.
CSUF's Admissions Calendar is posted online at «http://www.fullerton.edu/admissions/Resources/Calendars.asp». The Admissions Calendar contains all the major dates with respect to adding, dropping, and withdrawing from your classes.

Textbooks

Required

Java Programming, 8th Ed., by Farrell, ISBN: 9781285856919

Many popular technical books may be read online through the campus's subscription to Safari Books Online. From outside of the campus network, the campus library's WWW proxy will grant you access, «http://www.library.fullerton.edu/asp/ipcheck.aspx?url=http://proquest.safaribooksonline.com/

?uicode=calstate». The Safari Books Online service can be accessed directly from any computer on the campus network, «http://proquest.safaribooksonline.com/».

Technical Proficiency

Technical proficiency with information technology, such as, but not limited to, the use of web-based online services, sending and receiving electronic mail, and desktop computer file systems, is assumed.

G.E. Requirements

This class does not meet any CSU General Education requirements.

Student Learning Goals

Student will be able to write syntactically-correct source code that solves a well-posed computational problem. To accomplish this, the students will be able to:

- Analyze goals and requirements for a program, and develop from the analysis a program design
- Evaluate a program design to see if it satisfies a set of goals and requirements
- Make appropriate use of fundamental constructions such as variables, branches, loops, and functions that solves a well-posed computational problem in error-free code
- Run and test a program to see if it satisfies requirements
- Use an Integrated Development Environment (IDE) to accomplish the previous two goals
- Use both C++ (prerequisite) and Java programming languages
- Teach oneself a new computing technology or environment from documentation
- Utilize effective object-oriented programming

Attendance Policy

Since I will be calling roll during the first two weeks, you must be sure to attend all lectures and labs or make sure that I know that you will be absent. During each lab section, you will be doing in-lab exercises, and during lectures, I may assign/change assignments in addition to going over the material. You must therefore attend all lectures and assigned labs and plan to stay the entire period. You are responsible for any material covered during your absence. It is essential that you attend lectures and labs regularly to do well in the course.

If you cannot attend a lab or will miss a quiz for valid reasons (illness with doctor's note, for example), you should notify me before the start of the section if at all possible. You may send me an email if you cannot reach me personally.

Make Up Policy

Quizzes generally cannot be taken after they have been given in class. If you have gotten in touch with me personally (see above section) and have a valid excuse, I am willing to schedule a make-up quiz as long as it is taken no more than 2 weeks after the original. If it is later, the default for an excused missed quiz is that the final will be given extra weight.

Grading

Plus and minus grading is not used when determining final grades.

Grade	% of Total Points
A	90–100%
B	80–89%
C	70–79%
D	60–69%
F	Below 59%

Category	% of Final Grade
Participation	5%
In-lab Exercises + Homework	20%
Programming Assignments	15%
Final Project & Presentation	10%
Quizzes & Midterm	35%
Final Exam	15%

Required Coursework

Participation: Participation is awarded based on attendance and the quality of your engagement during class, including asking questions and answering the questions posed to the class.
Homework assignments: Homework refers to the questions assigned from the textbook. Students are expected to keep up with the assigned readings in the texts. Homework will be assigned periodically in lecture. These will not be graded, but credit will be given for assignments completed and turned in. Those wishing to work together may do so, but each student must turn in a separate assignment. (Note that this applies to the ungraded homework assignments only; ***no collaboration is allowed for the programming assignments***.) Homework must be typed and submitted on Titanium. Handwritten assignments will be penalized.
In-Lab Exercises: There will be in-lab exercises, usually meant to be completed during the lab. Since you are expected to work on these until you do them correctly, like the homework assignments, credit is given for exercises completed and turned in. Submissions will be accepted through titanium, and must be in a PDF format. The PDF should contain legible screenshots of all code in addition to screenshots of sample output.
Programming Assignments: ***Programming Assignments are to be worked on as an individual. Do not share your code as it could result in a mark of academic dishonesty.*** These are to be worked on or finished outside of the lab hours. Each programming assignment will give the due date and an explicit list of items to be turned in. Always check this list before the assignment is due. Each assignment will have equal weight unless specifically noted otherwise. Late assignments may be severely penalized. Even if the assignment is incomplete, it will usually be to your advantage to turn it in at the time due, rather than waiting to turn in a completed assignment late.
Final Project & Presentation: There will be a final project given out about halfway through the semester. This project will be presented by the student to the class. Details about the project will be explained at a later date.
Quizzes: There will be approximately 4 quizzes covering material from lecture, lab, and the text. The homework exercises and in-lab assignments provide a good review for these quizzes. Anyone missing a quiz should get in touch with the instructor as soon as possible.
Final: The final will be comprehensive. A missed final will be dealt with according to University regulations on incompletes and withdrawals.

Required Materials

- A writing instrument
- A notebook
- A USB memory stick
- A personal computer with the requisite development tools or regular access to a computer lab

Expectations

In the context of this course, expectations are defined as the following:

- Arriving to class prepared and on time.
- Taking notes.
- Actively listening to the lecture and asking questions when appropriate.
- Annotating code listings and handouts.
- Bringing any required materials to class.
- When needed/desired, seeking assistance to complete assignments.
- Barring an emergency, not leaving the class session early unless the instructor consents.
- Not distracting oneself or others with smartphones, games, online diversions, etc.
- Respecting and treating the instructor and the student's peers civilly.

Java Developer's Kit (JDK)

Software developers utilize the Java SE development kit required for developing, debugging, and monitoring Java applications. (This may not be included with your IDE, requiring a separate installation) «http://www.oracle.com/technetwork/java/javase/downloads/index.html».

Recommended IDE Options

Eclipse: Eclipse IDE for Java Developers
«https://www.eclipse.org/downloads/packages/release/2019-06/r/eclipse-ide-java-developers».

NetBeans: Apache NetBeans 11 LTS binaries
«https://netbeans.org/downloads/».

IntelliJ IDEA: Free Community Edition
«https://www.jetbrains.com/idea/».

Computer Labs:

- The computer science open lab, CS-200/202. Check the following page for availability http://cs.fullerton.edu/LabSoftware.aspx . Generally, it will open the second week of the semester.
- Other labs http://www.fullerton.edu/campuscomputerlabs/

Free laptop Lease: CSU Fullerton has a program where you can borrow a laptop. Please see http://www.fullerton.edu/it/students/equipment/longtermlaptop.php

Academic Dishonesty

Students are encouraged to assist one another and discuss the course materials with your peers. It is your responsibility to be aware of and follow the spirit of CSU Fullerton's academic honesty policy which can be found at «http://www.fullerton.edu/senate/documents/PDF/300/UPS300-021.pdf». Academic dishonesty will not be tolerated. The University Catalog and Class Schedule provide a detailed description of Academic Dishonesty under University Regulations.

The following will be the guidelines for collaboration in the programming assignments.

Students may discuss general program design and strategies for solving problems. However, any time you use another person's design or insight, it must be properly credited in the program documentation. This includes crediting algorithms taken from the text or class or the Web. You may NEVER give your code or use another person's code: the detailed algorithm and coding must be the student's own. This also holds true for debugging; another student may identify the error but should not dictate, rewrite, or show the code to correct it. Please note that the student giving help in violation of these guidelines will be held as responsible as the student receiving the help.

The instructor may at any time ask questions regarding any work submitted.

The Computer Science Department takes this matter very seriously. Any instance of academic dishonesty will likely result in a report to the Judicial Affairs Office and penalty up to a failing grade for the course.

Collaboration on the ungraded written homework is allowed as explained in the section on Homework assignments.

ADA Accommodations

Any student who, because of a disability, may require special arrangements in order to meet course requirements must register with the Office of Disability Support Services within the first week of classes. The Office of Disability Support Services' website is «http://www.fullerton.edu/DSS/». They can be reached by phone at 657-278-3117 or TDD at 657-278-2786. Their email address is «dsservices@fullerton.edu». Their office is located in University Hall, room 101. The instructor may request verification of need from the Dean of Students Office. Students requesting accommodations shall inform their instructors during the first week of classes about any disability or special needs that may require specific arrangements/accommodations related to attending class sessions, completing course assignments, writing papers or quizzes, tests or examinations.

Emergency Procedures

For your own safety and the safety of others, each student is expected to read and understand the guidelines published at «http://prepare.fullerton.edu/campuspreparedness/». Should an emergency occur, follow the instructions given to you by faculty, staff, and public safety officials. An emergency information recording is available by calling the Campus Operation and Emergency Closure line at 657-278-4444.

Instructional Continuity

Due to an event such as an epidemic or a natural disaster that disrupts normal campus operations, students must monitor the course Titanium site and their campus email address for any instructions and assignments that the instructor announces.

Laboratory Safety

Safety is no accident. Learning and following the appropriate safety practices and protocols is an integral part of all laboratory courses. Following the appropriate safety practices and protocols minimizes the chances of repetitive stress injuries, mishandling hazardous materials, and injury to self and others. Additional campus safety information is online at «http://riskmanagement.fullerton.edu/».

Recording & Transcription of Class Content

Recording class content is governed by UPS 330.230, «http://www.fullerton.edu/senate/publications_policies_resolutions/ups/UPS%20300/UPS%20330.230.pdf». Each instructor must permit class content to be recorded or transcribed by students when mandated to do so by the Americans with Disabilities Act or by other federal or state laws. Any recording of class content is for private use and study and shall not be made publicly accessible without the written consent of the instructor and students in the class.