

CSE 110

Principles of Programming with Java

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1. Description

This course is an **introductory course to programming** using Java language. The course requires **no previous background** in programming, but does **require considerable dedication and hard work**. The course concentrates on concepts of problem solving using Java, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts, social and ethical responsibility

2. Credits and contact hours

3 credits, lecture/lab

3. Prerequisites or co-requisites

No courses. Basic computer literacy is useful.

4. Topics

Content includes:

- Introduction to problem solving, requirements & specifications, algorithms
- Java Primitive data types (int, double, char....)
- Control structures: if-else statements, switch statements, loops
- Classes, objects, methods, parameters , overriding, overloading
- Arrays, searching and sorting
- File input & output

5. Learning Outcomes

- a) Develop Java programs using primitive types
- b) Use predefined classes in their programs such as Math, String and Random classes
- c) Read and understand Java programs that include multiple methods, control flow, and arrays
- d) Develop Java programs with multiple classes and writing methods with control flow
- e) Develop Java programs applying object-oriented programming approach
- f) Understand the use of static methods and variables
- g) Understand searching and basic sorting algorithms

6. Course resources

- Textbook: Java for Everyone, Late Objects (second edition) by Cay Horstmann
- There are many online high-quality resources available for Java. Check the tutorials at <http://docs.oracle.com/javase/tutorial/index.html>

7. Course organization

One does not learn how to program computers by reading a book alone; Practice is essential. Students who are most successful in CSE110 read the upcoming sections in the textbook ahead of time to first introduce terms and concepts, **attend every class and participate actively** (taking notes and asking questions), review the material in the text again to make sure it is clear, read and begin assignments shortly after they are posted so they may ask questions well ahead of the deadline, go to office hours or use the discussion board when help is needed, study past homework, quizzes, handouts lecture notes and use them to practice writing code in preparation for exams.

Check Blackboard regularly for updates and information.

8. Evaluation

Your course grade in CSE110 will be based on the distribution below. Each item is elaborated upon in the following sections. There is absolutely no group work allowed in this course unless explicitly stated by the instructor.

Exams	50%
Assignments	25%
Labs	25%

- **Exams:** There will be **three exams (including a final exam)** given during the semester. The exams will be comprehensive. Exams may consist of multiple choice, fill-in-the-blank, short answer, programming problems, or any combination thereof.

- **Assignments:** Programming assignments will be given throughout the semester. As with all assessments in this class, all programming assignments are to be done individually because they are designed to help you practice the concepts you need to learn in this class. Finding the answer somewhere does not equal practice. Programming assignments should take you anywhere from thirty minutes to ten hours to complete, depending on your skill level and study habits. They may include a written portion, a programming portion, or both. If you have trouble, please take advantages of office hours and other help resources, such as the discussion board. **Homework assignments can never be made up and can never be turned in late.**
- **Labs:** labs are programming projects assigned during lab time to enforce concepts learned during lecture. You have to complete them during lab time to get full credit for the lab assignments. **They can never be made up and can never be turned in late**

9. Grading

The following is the grading scale that will be used in the course (I reserve the right to modify the scale or grading system). Any adjustments to grading must be presented within two days of receipt of your graded materials – no grade changes will be made afterwards.

- A+ >= 97%
- A >= 93%
- A- >= 89%
- B+ >= 85%
- B >= 81%
- B- >= 77%
- C+ >= 73%
- C >= 69%
- D >= 65%
- E < 65%

The grade of “I” (incomplete) can be given ONLY when a student, who is doing otherwise acceptable work (passing grade), is unable to complete a part of work (e.g., the final exam) because of documented illness or other conditions beyond the student’s control. In the latter case, the student must discuss with the instructor and complete an application form from the department before the part of work is due or as soon as the circumstances are known. Please see ASU grading policies at: <https://students.asu.edu/grades>

Grading Appeals: Any discrepancy or disagreement in grading must be presented to the instructor **within a week of your receipt of your graded materials**; otherwise no grade change will be made.

Note: I reserve the right to change this grading system as the course progresses and various circumstances develop.

10. Classroom Behavior

Cell phones and pagers (must be/or state alternative rule) turned off during class to avoid causing distractions. **The use of recording devices is not permitted during class.** Any violent or threatening conduct by an ASU student in this class will be reported to the ASU Police Department and the Office of the Dean of Students

11. Disability Accommodations

Suitable accommodations will be made for students having disabilities and students should notify the instructor as early as possible if they will require same. Such students must be registered with the Disability Resource Center and provide documentation to that effect.

12. Academic Integrity and Honor Code

You are encouraged to cooperate in study group on learning the course materials. However, you may not cooperate on preparing the individual assignments. Anything that you turn in must be your own work: You must write up your own solution with your own understanding. If you use an idea that is found in a book or from other sources, or that was developed by someone else or jointly with some group, make sure you acknowledge the source and/or the names of the persons in the write-up for each problem. When you help your peers, you should never show your work to them. All assignment questions must be asked in the course discussion board. Asking assignment questions or making your assignment available in the public websites before the assignment due will be considered cheating. All individual tests must be done independently. Working together during tests is not permitted.

The instructor and the TA will CAREFULLY check any possible proliferation or plagiarism by comparing among the student submissions, previous student submissions, and the publications in the public Web sites. We will use the document/program comparison tools like MOSS (Measure of Software Similarity: <http://moss.stanford.edu/>) to check all assignments and tests that you submitted for grading.

The Ira A. Fulton Schools of Engineering expect all students to adhere to ASU's policy on Academic Dishonesty. These policies can be found in the Code of Student Conduct:

<https://provost.asu.edu/academic-integrity>

ALL cases of cheating or plagiarism will be handed to the Dean's office. **Penalties include a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees.**

Fulton Schools of Engineering Honor Code

<https://engineering.asu.edu/integrity/>

1. Seek out, acquaint myself with, and obey the instructor's rules concerning the materials I am allowed to use and the types of collaboration in which I am permitted to engage in each of my courses.
2. Help my fellow engineering students to succeed both academically and professionally, while both following the instructor's guidelines on collaboration and encouraging my classmates to behave ethically.
3. Ensure that all of my individual work products reflect my own abilities and not those of someone else. I will never copy the work of others or give others the opportunity to copy mine.
4. Contribute a fair share of work to all teamwork in which I participate and acknowledge the contributions of others. I will accept responsibility for the integrity of all work submitted by my team.
5. Use only aids authorized by the instructor during all examinations, quizzes, projects, assignments and other evaluations.
6. Provide aid to, or receive aid from other students only as permitted by the instructor.
7. Give full credit to others for their words and ideas, whether directly quoted or paraphrased, using proper citation practices in all of my work, including text, figures and computer code, and all materials obtained from the Internet.
8. Never act dishonestly including lying, cheating, stealing, or attempting to corrupt the academic enterprise in any way.
9. Ensure that all data I record, or report are objective, true, accurate and properly documented.
10. Treat all students, faculty and staff with respect, courtesy and dignity, the way I would like to be treated myself.
11. Recognize that it is how I act when no one else is watching that defines my true character.
12. Act at all times with integrity, as the true professional that I am to become.

12. Sexual Discrimination

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at

<https://sexualviolenceprevention.asu.edu/faqs>

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

IMPORTANT

- Any information in this syllabus (other than grading and absence policies) may be subject to change with reasonable advance notice.
- All contents of these lectures, including written materials distributed to the class, are under copyright protection. Notes based on these materials may not be sold or commercialized without the express permission of the instructor. [[ACD 304-06](#)].