

Principles of Programming with Java

CSE 110 –Fall 2014

Instructor and Office Hours:

Instructor: Carlos Rubio-Medrano

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And by appointment; if office hours are not convenient, I will be happy to make an appointment to meet with you at other times.

Catalog Description: Concepts of problem solving using Java, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts, social and ethical responsibility

Course 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 programming concepts, problem solving, and program design.

The course consists of 3 hours lecture and **one hour lab section each week.** In the lab section you get the opportunity to get individual help and do practical work.

Lab Schedule: NOTE: Labs begin on Wednesday, August 27, 2014

| Lab Letter | Schedule Line # | Lab Date & Time | Location |
|------------|-----------------|-----------------|-----------|
| A | 86010 | M 3:00-3:50PM | COORL1-38 |
| B | 86011 | W 3:00-3:50PM | COORL1-38 |
| C | 86012 | F 3:00-3:50PM | COORL1-38 |
| D | 86008 | T 1:30-2:20PM | COORL1-38 |
| E | 86009 | TH 1:30-2:20PM | COORL1-38 |

Textbook: Java for Everyone, Late Objects (second edition) by Cay Horstmann

There is no need for you to purchase a copy of the textbook. The cost of the book is covered by your course fee, and you have access to the Horstmann: *Java for Everyone 2e* eText book through the *IncludeED* program.

Prerequisites: No courses. Basic computer literacy is useful.

Important Note: CSE 110 is far more rigorous than other 100-level courses offered by our department. The appropriate introduction to computers course is CSE180. Both courses satisfy the General Studies CS requirement.

Major Topics Covered in the Course:

- 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

Learning Outcomes:

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

Tips for Success: 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.

Course Web Site: Most documents (i.e. assignments, solutions, *some* notes, etc.) associated with this course will be made available at <http://myasucourses.asu.edu/>, ASU's portal system. All students who are registered in CSE110 course should be able to access the course material through ASU's portal. If you experience any difficulty, please let me know as soon as possible. **It is your responsibility to print your assignments from this web site and start working on the assignment as soon as it is posted. Try to get started early on your assignments so you can get help if you need it. You should check the announcement page often as the semester progresses.**

Getting Help: There are many help resources available for this course. You can get help from tutors during office hours each week. In addition, their schedule will be available later on the course web page. Tutors office hours and lab hours are subject to change. For the latest information on office and lab hours, please check the class web page frequently. If you bring questions regarding assignments, make sure you have the development of your solution thus far.

Assignments and Assessment (subject to change): 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.

| | |
|---------------------------------|-----|
| Quizzes | 10% |
| Weekly recitations (Labs) | 15% |
| Assignments (drop lowest one) | 25% |
| Exams (drop the lowest midterm) | 50% |

Quizzes: Quizzes may be announced during the class or they may be unannounced. There are no make-ups for missed quizzes. The lowest quiz grade will be dropped.

Lab assignments: lab assignments 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.

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, but your lowest grade will be discarded.

Exams: There will be four exams (includes 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. The lowest midterm exam grade will be discarded. The final exam is **mandatory**.

The following scale will be used to determine your final grade:

Grade Breakdown:

| Final Grade | Percentage |
|-------------|------------------|
| A+ | >= 97% |
| A | >= 90% and < 97% |
| B+ | >= 87% and < 90% |
| B | >= 80% and < 87% |
| C+ | >= 77 and < 80% |
| C | >= 70% and < 77% |
| D | >= 60% and < 70% |
| E | < 60% |

All students must have a passing grade in both the exam component of the class and the assignments component of the class in order to pass the class.

You can calculate your own standing by using the following formula:

$$YP = ((YFE + (YME - \text{the lowest midterm exam score}))/300 * 50 + (YAT - \text{the lowest assignment})/140 * 25 + (YQT - \text{lowest quiz grade}) / (\text{TNQ} * 10) * 10 + \text{YLT} / (\text{TNL} * 10) * 15$$

Where:

YP = Your Percent

YFE = Your Final Exam Score

YME = Your Midterm Exam Points

YAT = Your Assignments Total

TNQ = Total number of quizzes

YQT = Your Quiz Total

YLT = Your lab total

TNL = Total number of labs

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

Submission: Programming assignments will be submitted electronically to the assignment submission site. Please note that this submission site is neither the digital drop box on Blackboard, nor is it by any means of email. Instructions for submission will be provided.

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

Academic Integrity: The Student Academic Integrity Policy of Arizona State University requires each student to act with honesty and integrity and to respect the rights of others in carrying out all academic assignments (see: http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm) There are a number of actions that constitute a violation of the policy. These actions **include, but are not limited to:**

- practicing any form of academic deceit;
- referring to materials or sources or employing devices (e.g., audio recorders, crib sheets, calculators, solution manuals, or commercial research services) not specifically authorized by the instructor for use during tests, quizzes, homework, and class activities;
- acting as a substitute for another person in any academic evaluation or using a substitute in any academic evaluation;
- possessing, buying, selling, or otherwise obtaining or using, without appropriate authorization, a copy of any materials intended to be used for academic evaluation in advance of its administration;
- depending on the aid of others to the extent that the work is not representative of the student's abilities, knowing or having good reason to believe that this aid is not authorized by the instructor;
- providing inappropriate aid to another person, knowing or having good reason to believe the aid is not authorized by the instructor;
- submitting the ideas or work of another person or persons without customary and proper acknowledgment of sources (i.e., engaging in plagiarism);
- permitting one's own ideas or work to be submitted by another person without the instructor's authorization; or
- attempting to influence or change any academic evaluation or record for reasons having no relevance to class achievement.

University policy allows for cheating sanctions ranging from zero credit for an assignment to expulsion (without expectation of readmission) from the University. **Any student who is found to have violated the University's Academic Integrity Policy in this course, no matter how minor the violation, will at a minimum receive an E in the course.**

Professional and Ethical Behavior: Engineers (and the students in this class) are expected to treat others fairly, with respect and courtesy, regardless of such factors as race, religion, sexual orientation, gender, disability, age, or national origin. In this class, you are expected to contribute to the overall campus climate such that others feel welcome, are respected, and are able to develop to their full potential. This will allow each person to contribute to the success of the class as a whole. ASU and the College of Engineering are committed to maintaining a productive, enjoyable and diverse campus environment.

Engineers are expected to effectively communicate ideas. Inappropriate language (written and oral) does not effectively communicate your ideas to an audience. Inappropriate language includes not only profanity, but also words that are demeaning to a person or group (racially, sexually, ethnically, etc.).

You are expected to participate in the various classroom activities, including:

- coming to each class on time and staying until dismissed;
- following instructions given by the instructor, including actively working on whatever assignment has been given;
- not consuming any food or drink while in the ASU classrooms, and not bringing any open containers of food or drink into the classrooms; and
- avoiding disruptive side conversations.

You are expected to make appropriate use of ASU facilities and property, including:

- leaving a clean work space – tables, floors and chairs; all trash picked up and disposed of; treating walls, furniture and floors properly –putting feet on tables and chairs, etc., not writing upon or disfiguring furniture; and
- leaving computers as you would furniture – clean and ready to use, without any remaining software, links, screen savers or settings that will offend or impede the efforts of subsequent users.

These are consistent with university-wide behavioral expectations described in the various codes of conduct and policies administered through ASU Office of Student Life - Student Judicial Affairs:
(<http://www.asu.edu/studentlife/judicial/index.html>)

Adapted from Prof. Burrow's document

University Policies: All university and college policies concerning withdrawal deadlines, incomplete, audits, and other procedures are in effect for this course. All students are advised to be aware of and to carefully follow these guidelines. Please do not come to me at the end of the course and want an "Incomplete" simply because you have fallen behind. **Incomplete is not given.**

If you have need for special seating inform me at the beginning of the class. Furthermore I reserve the right to assign seating for any student at the beginning of the semester or during the semester.

Java Resources: There are many online high quality resources available for Java. Check the tutorials at <http://docs.oracle.com/javase/tutorial/index.html>

How to Study: For general advice on how to study for any course, see Dr. William J. Rapaport's web page, "[How to Study](#)".

Note: You are responsible for the contents of this syllabus and the information on the homepage. Make sure you know how to access the home page. Announcements in the class take precedence over printed material. It is very important to check the homepage frequently during the semester.

Important Note:

Please sign, date and return this page to the instructor to continue enrollment in the course. Your signature indicates your knowledge and acceptance of all policies indicated in the syllabus including but not limited to the following points:

1. No late assignment will be accepted under any circumstances
2. Any grading appeals must be submitted in writing to the instructor within two days of your receipt of graded materials
3. Any instances of academic dishonesty will be punished at minimum with a failing grade due to academic dishonesty (XE) for the course and at maximum with expulsion from the university without expectation of readmission

Print name _____

Sign name _____

Date _____

Email address _____