WELCOME TO CSE 110!

CSE 110: Principles of Programming with Java (3)

Spring 2012, Syllabus and Course Information

School of Computing, Informatics, and Decision Systems Engineering, ASU Course web page in: www.asu.edu/myasu/

Meeting Time MWF: 9:40 PM – 10:30 AM, DISCOVERY 250

Instructor and Office Hours

Instructor: Dr. Janaka Balasooriya *Office*: Brickyard 504 (5th floor)

Phone: 480- 727– 8593 email: janakab@asu.edu

Office Hours:

MW 8:30 - 9:30 ROOM 201, Discovery Hall

W 11:30 – 12:30, 504 Brickyard TH 5:45 - 6:30 504 Brickyard

Online: https://connect.asu.edu/cse110sp12/

(time/dates will be announced in the class)

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

Teaching Assistants: Aaron Gottesman, aarong@asu.edu

Course 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 Objectives and Outcome

This course has been designed to give a solid understanding of programming and Java language for a beginning programmer. Upon successful completion of this course, you will be equipped with; problem analysis and algorithm design techniques, structured and object oriented programming concepts, and a good understanding of the Java programming language.

Students who complete this course can:

- 1. develop Java programs using primitive types
- 2. use predefined classes in their programs such as Math, String and Random classes
- 3. read and understand Java programs that includes multiple methods, control flow, arrays, and inheritance
- 4. develop Java programs with multiple classes and writing methods with control flow, arrays and including concepts of Inheritance and polymorphism
- 5. develop Java programs applying Object Oriented Programming approach such as Inheritance, Polymorphism
- 6. understand the use of static methods and variables
- 7. understand searching and basic sorting algorithms
- 8. understand basics recursion and write simple program using recursion

Major Topics Covered in the Course

- Introduction to problem solving, requirements & specifications, algorithms
- Java Primitive data types
- Control structures: Selection (if-else statements, switch statements) and repetition (while, for, and do while loops)

- Classes, objects, methods, attributes, object instances, function overriding and overloading
- Arrays data type and application of arrays: searching and sorting
- More about objects: Inheritance
- Basic Recursion

Requirements

- This course is an **introductory course** to programming using Java. **No previous background in programming is required**. Only a basic knowledge of using computers directory structure; copy, move, and rename files and folders are expected. However, dedication and hard work is required to succeed in this course.
- The course concentrates on programming concepts, problem solving, and program design.
- The course consists of 3 hours lecture and **50 minute lab section each week.** In the lab section you get the opportunity to get individual help and do practical work. You can also ask questions about materials, homework assignments, practice exams, and so forth.

Labs: Lab sessions begin January 9th, Monday 2012

Textbook:



Java Foundations: Introduction to Program Design and Data Structures, 2/E, by Lewis, Peter J DePasquale, and Joseph Chases, 2010, ISBN-10: 0132128810

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.

<u>Note:</u> 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.

Grading and Homework Policies

Your grade will be based on the following point system. There is no curving of scores. (Any changes will be announced in class)

- In class Quizzes = 60 points (after dropping the lowest graded quizzes, <u>Important: You must take the quiz to be considered as a lowest graded quiz</u>)
- In class activities and review-warm-up quizzes = 100 points
- Labs = 65 points (each lab worth 5 points)
- Midterms = 200 (Three midterms, drop the lowest graded)
- Final Exam = 130 points

• Homeworks = 120 (~7 homeworks, lowest graded will be dropped)

The lowest exam and quiz grade s are dropped. The following scale will be used to determine your final grade:

A +	675 - 656
A	655- 610
B+	609-590
В	589- 545
C+	544- 526
С	525 - 475
D	474 - 410
E	<410

- 1. Quizzes: There will be pop quizzes, which are not announced. Upon completion of all coursework, the lowest quiz grade will be discarded. There are no make-ups for missed quizzes. It is to your advantage to attend classes and to take all the quizzes. You need to take the quiz to be considered as the lowest graded quiz.
- 2. **Lab Attendance:** Students will earn points for attending lab sections each week and doing the programming exercises during lab sections. All students should be able to easily get the point value in the lab sections if they attend the lab regularly.
- 3. **Exams:** There will be 3 midterm exams and a final. The lowest midterm exam will be dropped. **The final exam is comprehensive.** There are no make-ups for missed exams. A **picture ID** will be required by all students taking exams when submitting your answer sheet.
- 4. No extra-credit or make-up assignments will be given.
- 5. Programming Assignments: Learning a computer language requires extensive practice. Be prepared to work considerable amount of time for this course, especially for doing programming assignments. There will be 7 assignments that will consist of programming and/or written exercises. The lowest assignment score will be dropped. Each assignment must be submitted on or before the due date. NO LATE ASSIGNMENTS WILL BE ACCEPTED. You need submit the homework to be considered as the lowest graded homework.
 - Download assignment files as soon as they are made available on the course web site; plan to do your work as early as possible to avoid unexpected problems. Printer/Server delays of 12 to 24 hours are not uncommon during the semester. It is your responsibility to plan ahead and complete the work on time.
 - Questions regarding the programming assignments may be asked during lecture or in my office. Please do not expect to get help in the lab if you do not have written work.
 - If you are unable to complete an assignment by the due date and time, turn in whatever work you have accomplished for partial credit. Always have **at least one backup** copy of your work.
- 6. In class activities and review-warm-up quizzes: In class activities have being designed for students to quickly recap main concepts discussed in the class. Review/warm-up quizzes (short take-home quizzes available online through blackboard) have being designed to further enhance students understanding of the topics discussed and warm-up for the next lecture.

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

 $YP = ((YET + Final\ Score - the\ lowest\ midterm\ score) + (YAT - the\ lowest\ assignment) + (YQT - lowest\ quiz\ grade) + YLT + inclass/lecture\ review\ quiz\ scores)$

where:

YP = **Your Points**

YET = Your Exam Points

YAT = Your Assignments Total

TNA = Total number of Assignments

YQT = Your Quiz Total

YLT = Your lab total

<u>Attendance</u>: You are expected to attend the class regularly and be punctual in class. You are responsible for all the announcements that are made in the class whether you attend or not. If you wish to be withdrawn from the class, you should complete the withdrawal form. DO NOT JUST STOP COMING TO CLASS! Submitting a completed withdraw form to the registrar office is the only guaranteed way to officially withdrawing from the class.

Grading Appeals

Any questions or appeals on grades of homework, projects, or quizzes must be done in writing by completing the "Grade Inquiry Form" within a week from the day the assignment was returned or comments were published online. State the problem and the rationale for any change in grade in your appeal.

<u>Cooperation and Academic Honesty:</u> You are encouraged to cooperate in study group on **preparing** homework, projects, quizzes and exams. However, anything 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 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.

The instructor and the TAs will CAREFULLY check any possible proliferation or plagiarism. We may also use the software tools to check any assignment that you submitted for grading. The Department of Computer Science and Engineering expects all students to adhere to ASU's policy on Academic Dishonesty. These policies can be found in the Code of Student Conduct:

http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm

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.

Announcement

Official announcements will be made either in the class or in the course web page. Make sure you regularly (at least once a day every two days) check the web page for any announcement. Announcements made in the class supersede the announcements posted in the course web page/printed material.

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.

Note: 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.

Ethics and Professional Behavior

(Borrowed from Professor Farideh Tadayon - Navabi in the Department of CSE at ASU)

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

Important Dates

Please check ASU academic calendar @ http://www.asu.edu/calendar/academic.html for following deadline and other important dates

Course withdrawal deadline – In Person/Online Complete withdrawal deadline

(This syllabus represents a general plan for the course and deviations from this plan may be necessary during the duration of the course, I reserve the right to change the schedule as course progresses and various circumstances develop)