# CS 1063 Syllabus: Fall 2014 Section 5

Instructor: A. T. Chronopoulos Office Hours: TR 10:00 - 11:00 am in Peter T. Flawn Building (f.SB) 3.02.16 Address: Anthony.chronopoulos@utsa.edu Class Web Page: <u>http://www.cs.utsa.edu/~cs1063</u>

# Lecture Room and Times:

Section 5: TR, 11:30 am-12:45pm, in room FLN 3.02.02

#### **Textbook:**

*Building Java Programs: A Back to Basics Approach* by Stuart Reges and Marty Stepp, 3rd edition (or 2nd edition)

# **Prerequisite:**

No previous programming experience. Students with programming experience should consider CS 1713 or CS 2123.

If you have programming experience or took AP programming courses before, and want to go the next programming course CS1713, you should talk to the instructor about taking a **challenge test before the end of the first week**.

# **Course Objectives:**

- Student will learn programming terminology and will obtain a solid grasp of the basic mechanics of programming. This includes:
- Introduction to problem solving for programming (i.e., "how to think about solving the problem" including techniques such as pseudo-code or flowcharts)
- Syntax and program structure, including Java identifier rules
- Primitive data types and declarations
- Operations on ints (including mod), doubles (including truncation), and booleans
- String objects and basic String methods
- Basic input with Scanner, including validating input
- Basic output using System.out.println
- Conditional execution with if, else if, and else
- Basic looping, including for and while loops
- Static methods and method invocation
- One-dimensional arrays of primitive types and Strings including the following topics: declaration, initialization, assignment, traversal, and methods
- Basics of identifying and fixing errors

- Students will learn to understand code. Students should be able to trace the execution of code fragments, particularly simple cases such as keeping track of the values of variables through a short series of computations, including branches, loops, and method calls.
- Students will learn basic programming. Students should be able to write simple programs. Examples include: computing the area or volume of a shape given the formula, translating between units (e.g., miles to kilometers), counting the iterations of a while loop, taking unstructured input inside a loop and producing tabular output, or summing the values in an array. Students should be able to write reasonably correct Java code on paper, so that their programming skill can be evaluated by exams.

# **Grading Policy:**

- 30% Two in-class exams (September 24 and October 29)
- 30% Final exam: Saturday, December 13, 2014 from 7:00am to 9:30am
- 10% Online quizzes (around 12)
- 15% Laboratories (around 10)
- 15% Individual programming projects (3 projects)
- No late homework will be accepted without prior arrangement with the instructor!

All due dates are available in the blackboard calendar.

- You must fill out the online student evaluations for this class. Students who do no do this may be subject to a grade reduction of one letter grade.
- Class attendance and participation is required. Students who miss or do not participate in more than 4 classes during the semester without prior approval will be subject to a reduction in final grade.

# **Tentative Schedule:**

Week	Reading	Topics
1	Chapter 1	orientation, print and println
2	Chapter 1	errors, simple methods
3	Chapter 2	primitive data, variables, operators, and assignment
4	Chapter 2	for loops, pseudocode, scope
5	Chapters 1-2	Exam 1
6	Chapter 3	parameters, Math functions, using String methods
7	Chapter 3	using Scanner and Graphics objects
8	Chapter 4	if, else, else if, conditions, relational operators
9	Chapter 4	cumulative algorithms, text processing, combining if and return

		statements
10	Chapters 1-4	Exam 2
11	Chapter 5	while, logical operators, boolean type
12	Chapter 5	fencepost loops, Scanner loops
13	Chapter 7	array basics: declaration, initialization, access, assignment, Arrays class
14	Chapter 7	array traversal, coding methods for arrays
15	Chapters 1- 5, 7	Final Review

# **Blackboard:**

The course will be using Blackboard (<u>http://learn.utsa.edu/</u>) for project and laboratory hand-ins, grade reporting, and online quizzes. Blackboard also provides a course discussion page, course mail (not email) for exchanging course information, and a course chat page. The course calendar is also maintained there.

#### **Online Quizzes:**

There will be approximately 12 quizzes administered online through Blackboard. Two grades will be dropped in computing your quiz grade (one from the first half and another from the second half). You are responsible for taking the quiz on one of the days that it is available online.

# Laboratories:

You will receive grades for approximately 10 laboratories You are encouraged to collaborate on the laboratory exercises, **but direct copying is not allowed.** You must upload the deliverables for the laboratory in Blackboard by the due date to receive credit for the exercise. Late laboratories and projects will NOT be accepted unless you have made prior arrangements with your lecture instructor.

# **Individual Programming Projects:**

There will be three major programming projects this semester. While you may ask for assistance in debugging, these projects are to be ENTIRELY your own work.

Drop Date: Thursday, October 30, 2014

#### **Computer Accounts:**

As long as you are enrolled in this course. Your will have an account to access the computers in the classroom and the CS Main Lab. Make sure you choose VDI client when re-boot the machine.

Your account name will be your abc123 UTSA id. The initial password can be obtained from your instructor.

### Attendance:

Attendance in lecture is required. At the start of each class (except for exam days) you will log into <u>ClassQue</u> and answer the questions given there. To receive credit for attending that class, you must answer most of the questions given.

Students who fail to do this in more than 4 class meetings during the semester without prior approval will have their final grade reduced.

# **Scholastic Dishonesty:**

The integrity of a university degree depends on the integrity of the work done for that degree by each student.

The University expects a student to maintain a high standard of individual honor in his/her scholastic work.

In this course, you are encouraged to collaborate on the laboratories, but direct copying is **not** allowed. You may **NOT** collaborate on any of the individual programming projects. In particular, copying other people's code with minor modifications on individual projects is regarded as a serious case of cheating. You must write your own code. Because patterns of cheating do not always become apparent until after several assignments have been completed, you should be aware all of your assignments are available to your instructor on Blackboard.

Further information on UTSA's policies regarding academic dishonesty can be found in UTSA's Student Code of Conduct, Section 203.

# Miscellaneous:

All students are expected to understand the general rules and regulations of UTSA including the information at <a href="http://provost.utsa.edu/syllabus.asp">http://provost.utsa.edu/syllabus.asp</a>.