CS 1428: Foundations of Computer Science I
Fall 2015

Sections 003 & 004

Instructor: Dr. Jill Seaman
Comal 307G
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Course Webpage: http://www.cs.txstate.edu/~js236/cs1428

Office Hours: M, W: 1:30pm – 3:00pm
R: 1:30pm – 3:30pm
and by appt.

Meeting Time/Place: Section 003: MW 3:30PM-4:50PM DERR 234
Section 004: MW 11:00AM-12:20PM DERR 234

Text: Tony Gaddis, Starting out with C++: From Control Structures through Objects, 8th Edition, ISBN: 0133769399

List of recommended/required readings:
Chapters 1-7, 11.1-11.8
See course website for a weekly schedule.

Course Description: Introductory course for computer science majors, minors and others desiring a technical introduction to computer science. The course emphasizes problem solving, algorithm development, structured programming, good coding style, and programming in C++.

Prerequisites: MATH 1315

Course Objectives:

At the end of the course, the students should be able to:

1. Describe the properties of good algorithms.
2. Design and develop good algorithms using a top-down approach.
3. Use the C++ programming language to implement, test, and debug algorithms for solving simple problems.
4. Explain the concepts of data types, variables, and literals and use them in programs.
5. Write C++ code that solves computational problems.
6. Use an if or if-else construct to implement branching in an algorithm.
7. Use a for loop for definite iteration.
8. Use a while or do-while loop for indefinite iteration.
9. Use functions and parameters to simplify longer programs and reuse code from

previous solutions.

10. Demonstrate the mechanics of parameter passing with emphasis on the difference between pass by value and pass by reference.
11. Manipulate data in arrays.
12. Create a new data type by using a structure.
13. Analyze and explain the behavior of simple programs involving the fundamental programming constructs covered in this class.
14. Modify and expand short programs that use the constructs covered in this class.
15. Describe strategies that are useful in debugging.
16. Use a Windows- or Mac-based editor and compiler environment to develop programs in C++.

Grading:

Attendance:	Required	
Quizzes:	5%	lowest 5-pt quiz of 10 is dropped
Programming Assignments:	20%	lowest of 7 is dropped
Lab:	15%	one of sections L08—L14
Exam I:	15%	Sep 30 (W)
Exam II:	15%	Nov 11 (W)
Final Exam (comprehensive):	30%	
section 003: Mon Dec 7	2:00 - 4:30pm	
section 004: Wed Dec 9	8:00 - 10:30am	

Attendance: I expect you to be in class every day. You are responsible for any announcements made in class on days that you are absent.

Quizzes: 5-point Quizzes are announced during the previous class and will count for 5 points each. 2-point quizzes are unannounced and count for 2 points each. 2-point quizzes contain no questions and cannot be dropped.

Makeup Policy: Missed quizzes and programming assignments cannot be made up. Exams may be made up in exceptional circumstances, with documentation and/or approval from the instructor.

Late policy for programming assignments: see the PA submission policy on the class webpage.

Notifications from the instructor: Notifications related to this class will be sent to your Texas State e-mail account. Be sure to check it regularly.

TRACS: We will use the TRACS website for the following:

- Grades (Gradebook2 tool)
- Programming assignment submissions (Assignments tool)

Everything else will be on the class webpage (including lecture presentations)

Campus Labs: Use **MCS 590** to work on your programming assignments. You may also use your own computer, but you should install CodeBlocks (or some other C++ IDE) first. The lab instructors and tutors can help you with the installation.

HELP: In addition to the instructor's office hours, there are other places to obtain assistance. Lab tutors and instructors are available in MCS 590/594 and your lab instructors will hold office hours in their respective offices.

Withdrawals/drops: You must follow the withdrawal and drop policy set up by the University and the College of Science. You are responsible for making sure that the drop process is complete.
http://www.registrar.txstate.edu/registration/drop-a-class.html

Last day to drop: October 25, 2014.

Classroom Behavior: The main rule is to not disrupt or distract other students during class. For example, do not browse the web, watch videos, or type loudly on a laptop computer. Please silence your phones and other devices. Do not carry on a conversation with your neighbor during class (unless you are instructed to do so). No smoking or vaping in the classroom. Please do not arrive late or leave early (unless you can do it without violating the main rule).

Academic Honesty: You are expected to adhere to both the University's Academic Honor Code as described here: http://www.txstate.edu/effective/upps/upps-07-10-01.html, as well as the Computer Science Department Honor Code, described here: 2013 0426 HonestyPolicy CSPPS.doc.

- You may work together on your programming assignments. If you submit a program that is the result of group work, you must list the names of all contributors in the file header. Each group member must submit a copy.

  Note: I do not advise working together. In order to do well on the exams, you must practice writing code on your own.

- Do not include code obtained from the internet or any other source in your programming assignment (except what is provided by the instructor during the current semester).

  The penalty for submitting a program that includes code from the internet or any other source outside of the class will be a 0 for that assignment.

Accommodations for students with disability:
Any student with a special needs requiring special accommodations should inform me during the first two weeks of classes. The student should also contact the office of disability services at the LBJ student center.