CS1337 Computer Science I

Spring Semester, 2017

Course: CS 1337

Where: 001: ECSS 2.410

005: ECSS 2.311

When: 001: TR 8:30 – 9:45am

005: MW 2:30 – 3:45pm

Instructor: Gordon Arnold

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Office: ECSS 4.232

(972) 883-7518

TR 11:30am – 1:00pm or by appointment

Course Description

Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on:

- the definition and use of classes
- the fundamentals of object-oriented design
- basic analysis of algorithms
- searching and sorting techniques
- introduction to software engineering

Programming language of choice is C/C++.

Course Expectations:

After successful completion of this course, the student should have an:

- 1. Ability to use single and multi-dimension arrays
- 2. Ability to implement linear and binary searches
- 3. Ability to implement simple sorting algorithms
- 4. Ability to implement structured data types
- 5. Ability to define and implement a class
- 6. Ability to use fundamentals of object-oriented design

Course Materials

Required:

• Starting out With C++: From Control Structures Through Objects, 8th Edition, by Tony Gaddis

Course Policies

Attendance:

There is a strong, direct correlation between class attendance and class performance. Students who regularly attend class tend to make significantly higher final grades than those who do not. To this end, the Computer Science department has instituted a <u>mandatory</u> attendance policy. In this class this policy will be implemented as follows:

Student misses three(3) classes: Drop one letter grade (~10 pts.) from final grade Student misses four(4) classes: Final grade becomes an F.

<u>To verify attendance, students will be required to bring their Student ID (Comet Card) to class to sign in.</u> Not having your Student ID may result in you being counted as absent.

This policy may be waived at the discretion of the instructor if there is a <u>documented</u> reason for the absence (e.g. school events, illness). A student must make every attempt possible, in person or via email, to notify the instructor that he/she will miss a class in advance or in the case of an emergency, immediately thereafter.

Students are expected to be respectful to each other and to the course instructor. Disruptive behavior in the classroom will not be tolerated.

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Electronics:

Once the class starts, electronic devices (including computers, tablets, cell phones, recording devices, etc.) are to be put away. They will not be needed for the lecture portion of the class. Recording the lectures without the express consent of the instructor is not allowed. Hand written notes are both acceptable and encouraged.

Programming Projects/Homework:

The homework problems will require the student to spend time programming a computer. Programming assignments should be turned in by means of eLearning. Assignment files contain:

- o A text copy of all source code (.CPP).
- Documentation in the program should include algorithms and, if required, class diagrams.
 If additional Documentation is required, it should be submitted as a Microsoft Word,
 PDF, or text file. Please do not use rtf or file types as they are not readable in e-learning.
- An executable version of your program that can run on a Windows CS Lab machine.(.EXE)

Programming assignments will be graded on a 100 point basis, utilizing the following criteria:

0	Program design (did you think about it?)	30%
0	Program Execution (does it work?)	20%
0	Satisfaction of Specifications (does it do what it is supposed to do?)	20%
0	Coding style (is it easy to read/understand/maintain?)	20%
0	Comments (are there enough?)	10%

Keep in mind that you always want to write code that is easy to understand and is also easy to maintain.

Grading:

25% - Programming Projects / Assignments

75% – Exams

All assignments will be announced and submitted using eLearning. Each assignment will include a due date and time. **Late assignments will not be accepted**.

The instructor reserves the right to give unannounced quizzes. There will be no make-up quizzes. Make-up examinations will be administered only for well-documented emergencies. A student must make every attempt possible, in person or via email, to notify the instructor that he/she will miss a scheduled exam prior to the scheduled date and time or immediately thereafter. If notification is not received in a timely manner, no makeup will be given.

The grading scale in this class <u>may</u> use a curve. The purpose of the curve is not to improve the student's grade, but instead to take into account any problems with measurement of the student's aptitude. Whether or not a curve will be used will not be decided until all grades are in. Individual assignments/tests will not be curved. <u>There will be no additional work given on an individual basis</u>. Your midterm grade will have a limited number of data points and may or may not be an accurate reflection of your final grade, just your proficiency up to that point. The base grading scale given below may be adjusted based upon the performance of the class as a whole:

97-100	A+ 😊	80-82	B-	63-66	D
93-96	A	77-79	C+	60-62	D-
90-92	A-	73-76	C	<60	F 🟻
87-89	B+	70-72	C-		
83-86	В	67-69	D+		

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to http://go.utdallas.edu/syllabus-policies for these policies.