CS 1336.010 - Programming Fundamentals
Tuesdays & Thursdays 1 pm to 2:15 pm ECSS 2.312

Instructor	Dr. Jey Veerasamy Office: ECSS 3.231 Office Phone: 972-883-4241 (you can call me during office hours) E-Mail: jeyv@utdallas.edu Office hours: Tuesdays 10:30 am - 12:30 pm Thursdays 10:30 am - 12:30 pm Additional hours by appointment
TA	Vaibhavi Moghe Email: vxm170130@utdallas.edu Office: ECSS 2.104A1 Office hours: Mondays 11:30 am - 12:30 pm Wednesdays 1:00 pm - 2:00 pm Additional hours by appointment

Prequisites: None

Co-requisites:
CS 1136 – A sequence of labs will be assigned and graded for CS 1136, these are separate from the assignments made in CS 1336. Students earn separate grades for CS 1336 and CS 1136.

Catalog Description:
Introduction to computers. Primitive data types, variable declarations, variable scope, and primitive operations. Control statements. Methods/functions. Arrays, and strings using primitive data arrays. Output formatting. Debugging techniques.
Designed for students with no prior computer programming experience. This class cannot be used to fulfill degree requirements for majors in the School of Engineering and Computer Science.

Learning Outcomes:

After successful completion of this course, the student should be able to:
- Ability to develop algorithmic solutions for use on computers
- Ability to perform console input and output, utilize basic operators, and perform sequential processing
- Ability to utilize the basic control structures for selection
- Ability to utilize the basic control structures for repetition logic
- Ability to perform sequential file input and output
- Ability to develop programs in a functional form
- Ability to process data in arrays

Teaching Philosophy Statement

My goal is to make each class as enjoyable as possible! Since most of my courses are entry-level programming courses, I use project based learning approach to teach. In

other words, I work on a series of real-world scenario based problems. After discussing each problem in high level, I expect the students to code along with me in the class. I strongly encourage all my students to bring a laptop to get the max out of my classes. My exams will contain a series of problems as well. Few of those problems will be similar to the problems covered in the class or in assignments. I do not use multiple choice questions in the exam & I do not ask for any definitions either. Since I focus on the big picture and problem solving skills, I encourage the students to review the book closely to get the complete details. Be ready to keep up with the course by doing weekly homework! If you are curious about how things work, not afraid to try, sincere in attending classes & willing to interact with me, you will do very well in my class!!

Textbook:
Starting Out with C++, From Control Structures through Objects (9th edition); Gaddis, Tony; Addison-Wesley Publishing. ISBN-13: 978-0134498379 ISBN-10: 0134498372
Notes regarding textbook material:
As you read the text watch the corresponding VideoNotes. The VideoNotes are available at
http://www.pearsonhighered.com/gaddis/.

Additional optional resources:
Programming using JavaScript: www.khanacademy.org/cs, www.utdallas.edu/~jeyv/kajs
C++ language tutorial www.cplusplus.com/files/tutorial.pdf
C++ reference: www.cppreference.com
C++ tutorial www.learncpp.com

Academic Calendar: See "Course Homepage" within elearning for the detailed schedule. It will be updated with lecture notes as the semester proceeds.

Course & Instructor Policies:
The final grade will be computed as follows:

Tests	50%	*2 tests contributing 25% each* Each test will be conducted during the class timings. Sample test questions will be provided at least 1 week in advance. You will be required to code in the test. Necessary documentation/sample code will be provided to avoid the need for memorization as much as possible. There will be 5 questions in the test, each worth 10 points. Your test score will be capped at 40 and recorded out of max 40 points. All make-up tests are scheduled during the week following the actual test date at the discretion of the instructor - advance notice is required. There should be a valid reason for scheduling make-up tests & they need to be coordinated with the instructor prior to the test date except for serious medical condition (Doctor certificate or hospital receipt will be required as proof.) I do not use curving to boost the final grades.
Assignments	50%	*There will be several assignments distributed throughout the course, typically due every week. All of them will have equal weightage.* I encourage everyone to submit the assignments 1 or 2 days early. Do not wait until the

		last minute to submit it. But I do understand things happen and occasionally you may not be able to submit assignments on time. My policy is to assess 1% penalty for every 2 hours. For example, if you submit the assignment exactly 1 day later, 12% penalty will be assessed. Late assignments will be accepted up to 4 days. You won't be able to submit it after 4 days and your assignment grade will be set to 0. You can ask for clarifications and help in the Assignments forum. If you need help with your code, it is ok to post 1 or 2 lines of code, but do not post your full program - email it to TA or professor instead. You are expected to start working on them as soon as they are posted. Do not expect us to rescue you on the day of submission.

Course credit is only given for work assigned in the course schedule. No extra work will be assigned nor will extra credit be given for any extra work performed by a student. Instructor is responsible for grading all the tests, quizzes & weekly participation. TA will be responsible for grading assignments and weekly activities. So, contact the TA directly for any grading issues related to those items. If you cannot resolve it with TA, bring it to instructor's attention.

In addition to meeting the instructor before or after the class, you can also visit the instructor or TA during respective office hours. You can call instructor's office phone during office hours as well. However, be prepared to hold and wait if the instructor is busy with another student in the office. Additionally, you are welcome to email the instructor or TA. If you need help with your program, in addition to problem description & applicable error messages, include your source files with your email too, so that we can review & help you efficiently.

Letter grades will be assigned as follows:

97-100	A+	94-97	A	90-94	A-
87-90	B+	84-87	B	80-84	B-
77-80	C+	74-77	C	70-74	C-
67-70	D+	64-67	D	60-64	D-
Below 60	F				

Programming Assignments:

Each programming assignment will require the students to spend a few hours to even days programming in a computer. Right way to approach the programming assignments is to start on them at least one week earlier than the due date & get help when you get stuck (you can approach the instructor, TA, or tutors at CS tutoring lab for help). Do not waste lots of hours trying to fix a small glitch. In simple words, your approach will determine whether programming assignments provide an enjoyable learning experience or end up like a painful useless activity.

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

Max Score		
Source Code	Overall design	40%
Formatting	10%	

Naming	10%	
Capitalization	10%	
Execution	Nominal cases	25%
Special cases	5%	
Total	**100%**	

Programming assignments should be turned in by means of eLearning. You need to submit only .cpp files for individual assignments, unless explicitly stated otherwise. Any standard C++ compiler and Integrated Development Environment (IDE) can be used to develop, debug and run your programs. Microsoft Visual Studio, Microsoft Visual Express, Code::Blocks, NetBeans, Eclipse and jGRASP are a few popular tools. More information about these tools will be provided in elearning.

Course Schedule:

All the class files can also be accessed directly through box.com.

Week	Class Activity/Notes	Read …
1	Review of syllabus Intro. to Computers and Programming	Chapter 1
2	Introduction to C++ Expressions and Interactivity Making Decisions	Chapter 2 Chapter 3
3	Expressions and Interactivity Making Decisions Loops and Files	Chapter 4
4	Loops and Files	Chapter 5
5	Loops and Files cont'd	
6	Loops and Files cont'd	
7	Test 1 prep questions Test 1 prep review	
8	**Test 1: Tuesday Oct 10 @ 1pm**	
9	Functions	Chapter 6
10	Functions	
11	Arrays	Chapter 7: 7.1 - 7.10
12	Arrays	Chapter 8: 8.1 - 8.4
13	Arrays	
	Thanksgiving Break	
14	Test 2 Review Questions	

15	**Test 2: Tuesday Dec 5 @ 1pm**	

CS dept attendance policy
Three absences will result in one letter grade drop. Four absences will result in F.

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.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.