Course	**CS 1336.504 Programming Fundamentals**
Professor	**Jonathan Brandenburg**
Term	**Fall 2016**
Meetings	**Mo/We 5:30 PM – 6:45 PM** **ECSS 2.312**

Professor's Contact Information

Office Phone	(972) 883-3863
Office Location	ECSS 3.403
Email Address	jcb011200@utdallas.edu
Office Hours	Mo/We 1:30 PM – 3:30 PM and by appointment
Other Information	E-mail is the best way to reach the professor. When sending an email, please include the class number and section in the subject or at the top of the email.

General Course Information

Pre-requisites, Co-requisites, & other restrictions	Corequisite CS 1136
Course Description	Programming Fundamentals (3 semester credit hours) Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. Programming language of choice is C++. The class is open to students in the School of Engineering and Computer Science only. May not be used to satisfy degree requirements for majors in the School of Engineering and Computer Science. Note that a grade of C- or better in this class is required in order to register for (CS 1324 or CS 1325); a grade of C or better in this class is required to register for (CE 1337 or CS 1337 or TE 1337).
Learning Outcomes	After successful completion of this course, students should have an: • Ability to develop algorithmic solutions for use on computers • Ability to perform basic keyboard input, console output, and to utilize basic operators, type casting, and math library functions. • 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
Required Texts & Materials	Starting Out with C++, From Control Structures through Objects (8th edition – orange slice) ; Gaddis, Tony; Pearson Publishing ISBN 0-13-376939-9 Be sure your textbook is the 8th edition!

Suggested Texts, Readings, & Materials	• C++ language tutorial http://www.cplusplus.com/files/tutorial.pdf • C++ reference: http://www.cppreference.com • C++ tutorial http://www.learncpp.com/
Assistance	There are many resources at UTD to provide assistance. Take advantage of these resources! Options include: • Professor's office hours • TA office hours • The Computer Science Mentor Center. A schedule will be posted early in the semester • Tutors • Study groups (be aware of the academic honesty policy)
C++ Compiler (Required)	This course will use the Code::Blocks interactive development environment with the MinGW/GCC compiler. For Windows, there is a download that includes the IDE and the MinGW compiler at http://www.codeblocks.org/downloads/26. Be sure to select the installer that installs the compiler. If a student uses a compiler other than the specified version for development, that student is responsible for verifying prior to submission that the code compiles properly with the stated compiler. No compiler is perfect and each one has its own quirks. It is the student's responsibility to make sure that the program functions as expected with the compiler that will be used for grading. If a student intends to use their own computers to write the class assignments, it is important that the student get a compiler downloaded, installed, and running on the computer as soon as possible. If a student doesn't have a computer, or if has problems getting a compiler installed, the student should write the programs in the labs until the problems are resolved. In any case, please note that the student is responsible for getting the programming assignments written and turned in on time. Since there are many computers available on campus, problems with a personal machine will not be accepted as an excuse for not doing the assignments or late submissions.

Assignments & Academic Calendar

Week	Date	Topic	Reading
1	Mon 8/22	Introduction to CS 1336	Read Chapter 1
	Wed 8/24	Introduction to Programming	
2	Mon 8/29	Pseudocode	Read Chapter 2
	Wed 8/31	Introduction to C++	
3	Mon 9/5	NO CLASS	
	Wed 9/7	Introduction to C++	
4	Mon 9/12	Introduction to C++	Read Chapter 3
	Wed 9/14	Expressions and Interactivity	
5	Mon 9/19	Expressions and Interactivity	
	Wed 9/21	Expressions and Interactivity	
6	Mon 9/26	Review	
	Wed 9/28	Exam 1	Read Chapter 4
7	Mon 10/3	Making Decisions	

	Wed 10/5	Making Decisions	
8	Mon 10/10	Making Decisions	Read Chapter 5
	Wed 10/12	Loops and Files	
9	Mon 10/17	Loops and Files	
	Wed 10/19	Loops and Files	
10	Mon 10/24	Loops and Files	
	Wed 10/26	Loops and Files	
11	Mon 10/31	Review	
	Wed 11/2	Exam 2	Read Chapter 6
12	Mon 11/7	Functions	
	Wed 11/9	Functions	
13	Mon 11/14	Functions	
	Wed 11/16	Arrays	Read Chapter 7
14	Mon 11/21	NO CLASS	
	Wed 11/23	NO CLASS	
15	Mon 11/28	Arrays	
	Wed 11/30	Arrays	
16	Mon 12/5		
	Wed 12/7	Review	
	Finals Week	Exam 3	

Course Policies

Grading (credit) Criteria	**Grading Policy** Homework and quizzes – 15% Exam 1 – 15% Exam 2 – 15% Exam 3 – 15% Projects – 40% (4 projects, each worth 10%) **Grading** A+ 97 and above A 93 - 96 (93 or more and less than 97) A- 90 - 92 (90 or more and less than 93) B+ 87 - 89 (87 or more and less than 90) B 83 - 86 (83 or more and less than 87) B- 80 - 82 (80 or more and less than 83) C+ 77 - 79 (77 or more and less than 80) C 73 - 76 (73 or more and less than 77) C- 70 - 72 (70 or more and less than 73) D 60 - 69 (60 or more and less than 70) F Below 60 **Grade Disputes** All grade disputes must be reported within 1 week and resolved within 2 weeks of the grade in question being posted to eLearning. See the TA for grade disputes related to homework, quizzes, and projects. See the professor for grade disputes related to exams.
Make-up Exams	An exam should not be missed except for the most extreme circumstances (such as hospitalization or death of an immediate family member). A make-up exam may be given to students with a valid reason (and documentation) for missing the exam. Otherwise, the missed exam grade will be zero. The allowance of a make-up exam is at the sole discretion of the instructor.
Extra Credit	None
Late Work	All assignment due dates will be posted to eLearning.

	Assignments turned in late but within 24 hours of the due date and time will be accepted at a penalty of 25%. An assignment will not be accepted if turned in after 24 hours of the due date and time. Projects are intended to take approximately 15 to 20 hours to complete, including designing, coding, and testing. Thus, it is not appropriate to wait until a couple days before the assignment is due to start the project.
Special Assignments	None
Class Attendance	Expected. There will be a sign-in sheet. The Computer Science Department attendance policy: Three consecutive absences lead to one letter grade drop. Four consecutive absences result in an F.
Classroom Citizenship	Professional at all times. Students are expected to be respectful to each other and to the course instructor. Do not sleep in class. Plan your schedule and social life to ensure you are alert and ready to learn in class. Do not make or take cell mobile phone class in class. Ensure your device is silent.
Comet Creed	*This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:* *"As a Comet, I pledge honesty, integrity, and service in all that I do."*
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.