



Course Syllabus 2016 Fall

Course Information

CS 1336.505 Programming Fundamentals

Time: TR 7:00 – 8:15 pm

Location: ECSS 2.305

Professor Contact Information

Dr. Karen Mazidi

Email: Karen.Mazidi@utdallas.edu

Office: ECSS 3.203

Office phone: 972-883-3868

Office hours: Monday, Tuesday, Thursday 4:00-5:00 pm or by appointment

Mentoring Center Information

ECSS 4.415 Main Room / Walk-in Tutoring

ECSS 3.620 and 3.621 Review/Reword Rooms

login at: <https://csmc.utdallas.edu/login.php> to see hours of operation and other information

Course Pre-requisites, Co-requisites, and/or Other Restrictions

CS 1136 is a co-requisite for this course

Course 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.

Student Learning Objectives/Outcomes

After successful completion of this course, students will have attained:

1. Ability to develop algorithmic solutions for use on computers
 2. Ability to perform console input and output, utilize basic operators, and perform sequential processing
 3. Ability to utilize the basic control structures for selection
 4. Ability to utilize the basic control structures for repetition logic
 5. Ability to perform sequential file input and output
 6. Ability to develop programs in a functional form
 7. Ability to process data in arrays
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Required Textbooks and Materials



Starting Out with C++, From Control Structures through Objects (8th edition – orange slice on cover); Gaddis, Tony; Addison-Wesley Publishing. ISBN 978-0-13-376939-5

Suggested Course Materials

- C++ language tutorial <http://www.cplusplus.com/files/tutorial.pdf>
- C++ reference: <http://www.cppreference.com>
- C++ tutorial <http://www.learncpp.com/>

Compiler

All projects will be compiled with MinGW 4.9.2. You can use any IDE that uses MinGW 4.9.2.

- For Linux users, Eclipse is a good choice.
- For Mac users you can use XCode. I have found Eclipse to be a bit buggy on Mac. I have a virtual Windows 7 environment on my Mac so I can use any Windows program.
- Windows users have a lot of good choices, including:
 - Eclipse – [Professor Vogel has a good guide here](#)
 - Code::Blocks 16.01. This is a free download for Windows. <http://sourceforge.net/projects/codeblocks/files/Binaries/16.01/Windows/codeblocks-16.01mingw-setup.exe>. This download includes the IDE and MinGW 4.9.2.

You can always use the computers in the computer labs on campus. The option to use your own computer is just for your convenience, it is not a requirement.

Assignments & Academic Calendar

Important Dates

- Class starts Monday August 22
- Labor Day September 5 (School Closed)
- Census Day September 7
- Fall break November 21 - 25
- Last day of class Thursday December 8
- Final exam Thursday 12/15 8:00-10:45 pm ECSS 2.305

Topics and Sequence (a tentative schedule)

- Week 1 August 22 - Read Chp.1
 - Course introduction
 - Introduction to Computers and Programming
- Week 2 August 29 – Read Chp. 2
 - Getting started with C++
 - C++ data types
- Week 3 September 5
 - C++ variable creation and initialization
 - Programming practice
- Week 4 September 12 – Read Chp. 3
 - Mathematical expressions
 - Characters, strings, formatting output

- Week 5 September 19
 - Library functions
 - Debugging
- Week 6 September 26
 - Review
 - Exam 1
- Week 7 October 3 – Read Chp 4
 - If statements
- Week 8 October 10
 - Switch statement
 - Programming practice
- Week 9 October 17 – Read Chp 5
 - The while loop
 - The for loop
- Week 10 October 24
 - The do-while loop
 - File handling
- Week 11 October 31
 - Review
 - Exam # 2
- Week 12 November 7 – Read Chp. 6
 - Functions
- Week 13 November 14
 - Advanced function features
 - Programming practice
- November 21 – 25 Thanksgiving break
 - No classes
- Week 14 November 28 - Read Chp. 7
 - Arrays
- Week 15 December 5
 - Arrays
 - Review
- Exam Week

Grading Policy

- Project Assignments (30% of the course grade): There will be at least 5 programming/project assignments.
- Two mid-term exams (30% - 15% each - of the course grade).
- Final exam (30% of the course grade).
- Quizzes and class participation (10%). Attendance counts as part of the participation grade.

Letter grades will be assigned as follows:

Below 60 is an F

100 is an A+

Otherwise:

Grades ending in 7,8,9 are +

Grades ending in 0,1,2 are –

Grades ending in 3,4,5,6 are neither + nor -



Course & Instructor Policies

- All electronic devices (phones, computers, tablets, etc.) must remain out of sight during class
- Assignments must be turned in on the due date, by midnight.
- Late assignments are deducted by 10% on the first and second days late. After two days, the assignment will not be accepted.
- Makeup exams are not given unless prior permission has been granted due to extenuating circumstances.
- Do not turn in programming code or other work that is not your own. This will result in a zero for all parties. Discussion and collaboration are good things, turning in someone else's work as your own is not.
- If you do not agree with a grade you have been given, you must make your case within a week of receiving the grade or the grade stands as is.

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.”

Attendance Policy

Per Computer Science administration guidelines, please be aware that **3 consecutive absences leads to one letter grade drop. Four consecutive absences lead to an 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.