

Course Information

Course Number/Section:	CS1337.501
Course Title:	Programming Fundamentals
Term:	Fall 2020
Virtual Classroom Days/Time:	Mon, Wen 5:30 PM – 6:45 PM (USA Central Standard Time)

Professor Contact Information

Professor	Scott Dollinger
Office Phone	972-514-7190
Email Address	smd013000@utdallas.edu
Office Location	Virtual Office
Online Office Hours	Mon, Wen 3:45 – 4:45, Contact by phone

E-mail is the best way to contact me.

All e-mails must have Course.section in the e-mail title, where Course is the course number and section is the section number, or the e-mail will not get a response.

If you have any special problems, *please communicate to me via e-mail* as soon as reasonably possible.

TA/GRADER CONTACT INFORMATION:

To Be Announced and posted to e-learning when assigned.

Course Modality and Expectations

Instructional Mode

The course will be taught as mode 4 – Remote Virtual.

Lectures will occur in virtual classroom live sessions at the virtual class times listed for the course.

The virtual classroom sessions will be in Blackboard Collaborate, which is accessible from the blackboard course home page menu.

All virtual classroom session lectures will be recorded and accessible to the student on Blackboard Collaborate.

All virtual classroom session recordings will be uploaded to Microsoft Streams, which can be viewed and has closed captioning.

All class material will be posted to blackboard.

All required assignments will be posted to blackboard, along with associated due dates.

All exams and quizzes will be done online using blackboard during the exams assigned times.

For more information regarding the instructional mode for the course refer to this page for the description:

<https://www.utdallas.edu/fall-2020/fall-2020-registration-information/>

Course Platform

This course will be delivered using Blackboard Collaborate.

See the following guides for information:

<https://dox.utdallas.edu/manual1073>

<https://ets.utdallas.edu/elearning/resources/software/blackboard-ultra>

Expectations

The student is expected to participate (attend) all live virtual class sessions in Blackboard Collaborate.

If a student cannot attend a session, the student should view the recording.

The student is expected to read the assigned readings from the book to fully understand the course topics.

Asynchronous Learning Guidelines (Option)

The course is already taught in an asynchronous mode (see Instruction Mode Above).
Therefore, requesting asynchronous option will not have any effect on the course or the student.

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record.
Please see <http://go.utdallas.edu/syllabus-policies>.

Virtual Class Session Attendance (Participation)

The University's attendance policy requirement is that individual faculty set their course attendance requirements. In this class regular and punctual virtual class attendance is expected regardless of modality. Students who fail to attend virtual class sessions regularly are inviting scholastic difficulty. This course does not have special attendance requirements. There are not any attendance participation requirements that are used as part of grading (see Class Participation below for grading information).

Class Participation

Regular virtual class session participation, especially attendance, is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus.

Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Virtual Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student Accessibility accommodation.

Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Virtual classroom recordings will be available to all students registered for this class as they are intended to supplement the virtual classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures.

Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student Accessibility accommodation.

If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.

Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Class Materials

The Instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the virtual classroom experience.

These materials may be downloaded during the course; however, these materials are for registered students' use only.

Classroom materials may not be reproduced or shared with those not in class or uploaded to other online environments except to implement an approved Office of Student Access Ability accommodation.

Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Syllabus CS 1337.501

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

Prerequisite: CS 1336 with at least a grade of C or equivalent.

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 along with the fundamentals of object-oriented design.

Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering.

Programming language of choice is C/C++.

Students will also be registered for a diagnostic exam section.

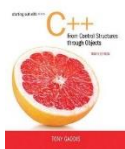
Student Learning Objectives/Outcomes

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.

Required Textbooks and Materials

Required Texts

Textbook:



Starting Out with C++ from Control Structures to Objects, 9th Ed

Tony Gaddis

ISBN-13: 97801344983799

ISBN-10: 01344983720

© Pearson 2017-02-23

Textbooks and some other bookstore materials can be ordered online or purchased at the [UT Dallas Bookstore](#).

C/C++ Development Tools

You can use whatever development environment you wish to develop your assignments. It is recommended that you use an Integrated Development Environment (IDE) with source code debugging capability to make your development efforts efficient. The C++ compiler that you use in your development environment must be a C++ 14 version capable compiler. The C++ 14 version is the level of the C++ compiler that is used to grade the submissions.

You must understand your IDE so that you know how to extract and identify all files (.cpp, .h, input text files ... etc.) required for uploading a grading submission. You can submit multiple files to a Blackboard assignment by uploading each of the required files individually. See the Tutorial section in the eLearning system home page titled Submittal and Development Guide.

UTD has an academic license for the Microsoft Azure Academic site, so students may download a free version of Visual Studio Community and install it on a personal system.

Syllabus CS 1337.501

Technical Requirements

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience.

Please review the important technical requirements on the [Getting Started with eLearning](#) webpage.

Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the [eLearning](#) website.

Please see the course access and navigation section of the [Getting Started with eLearning](#) webpage for more information.

To become familiar with the eLearning tool, please see the [Student eLearning Tutorials](#) webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week.

The [eLearning Support Center](#) includes a toll-free telephone number for immediate assistance 1-866-588-3192

Email request service, and an online chat service.

Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester.

For more details, please visit the [Student eLearning Tutorials](#) webpage for video demonstrations on eLearning tools.

Student emails will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student Accessibility, and many others.

Please see the [eLearning Current Students](#) webpage for more information.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users.

However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation.

Students should immediately report any problems to the instructor and also contact the online [eLearning Help Desk](#).

The eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

Grading Policy

Assessment	Percentage
Exam 01	25
Exam 02	25
Assignments	50

Range	Grade
97 - 100	A+
93 - 96	A
90 - 92	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
73 - 76	C
70 - 72	C-
60 - 69	D
00 - 59	F

Syllabus CS 1337.501

Course Policies

You are responsible for all the material in the assigned reading in the required course textbook.
You are responsible for all material supplied on eLearning, including announcements.
You must keep up with the course schedule and due dates that are posted to eLearning.

Extra Credit

Assignments that received a score of less than 75%, can be made up (re-submitted), but will be graded out of a maximum score of 75.

Such make up assignments must be submitted by the due date and time of the last assignment in the course.

Late Work

Assignments that are submitted by due date and time will be graded out of 100%.

Assignments that are handed in late will be scored as follows:

Days Late	Graded Out Of
1	95
2	90

After 2 days assignments will not be available for late submittal.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014.

It is a standard that UTD Student 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.”

Academic Support Resources

Please go to [Academic Support Resources](#) webpage for these policies.

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 [UT Dallas Syllabus Policies](#) webpage for these policies.

The description, schedules and timelines contained in this syllabus are subject to change at any time by the discretion of the Professor. Any changes will be announced in the virtual classroom session.

Syllabus CS 1337.501 Academic Calendar

Week No	Date	Topic / Lecture	Reading Chapter	Assignment Due
1	Aug 17 Mon	Course, eLearning Access, Syllabus Review		
	Aug 19 Wed	IDE Training Visual Studio 2019		
2	Aug 24 Mon	Arrays	07	
	Aug 26 Wed	Searching and Sorting Arrays	08	
3	Aug 31 Mon	Pointers	09	
	Sep 01 Tues	Census Due		
	Sep 02 Wen	Continued 01 Assignment Due		01
4	Sep 07 Mon	Holiday		
	Sep 09 Wen	Chars, C-Strings, String Class	10	
5	Sep 14 Mon	Structured Data File IO	11, 12	
	Sep 16 Wen	Continued 02 Assignment Due		02
6	Sep 21 Mon	Introduction To Classes	13	
	Sep 23 Wen	Continued		
7	Sep 28 Mon	More About Classes	14	
	Sep 30 Wen	Continued 03 Assignment Due		03
8	Oct 05 Mon	Continued 01 Exam Review Discussion		
	Oct 07 Wed	01 Exam On eLearning Blackboard Available From: Wen Oct 07 12:01 AM - 11:59 PM		
	Oct 10 Sat	Mid-Term Grades Posted		
9	Oct 12 Mon	Inheritance, Polymorphism, Virtual Functions	15	
	Oct 14 Wed	Continued		
10	Oct 19 Mon	Continued		
	Oct 21 Wen	Continued 04 Assignment Due		04
11	Oct 26 Mon	Exceptions, Templates Last Day to do Withdrawal	16	
	Oct 28 Wen	Continued		
12	Nov 02 Mon	Intro to Function Objects and Lambda Expressions	17.7	
	Nov 04 Wen	Continued 05 Assignment Due		05
13	Nov 09 Mon	Linked List	18	
	Nov 11 Wen	Continued Last Day to Withdraw (WL)		
14	Nov 16 Mon	Stacks and Queues	19	
	Nov 18 Wen	Continued		
15	Nov 23 Mon	Recursion	20	
	Nov 25 Wen	02 Exam Discussion 06 Assignment Due		06
	Nov 26 Thr - Nov 29 Sun	Holiday		
16	Nov 30 Mon - Dec 01 Tue	Reading Days		
	Dec 02 Wen	02 Exam On eLearning Blackboard Available From: Wen Dec 02 12:01 AM - 11:59 PM		

*The professor reserves the right to change any part of this syllabus, including this schedule calendar.
Any changes will be announced in class and posted to eLearn*