Syllabus CS 1337.012

Course Information

Course Number/Section:	CS1337.012
Course Title:	Computer Science I
Term:	Spring 2021
Virtual Classroom Days/Time:	Mon, Wen, Fri 12:00 PM – 12:50 PM (USA Central Standard Time)

Professor Contact Information

Professor	Scott Dollinger
Office Phone	972-514-7190
Email Address	Scott.Dollinger@utdallas.edu
Office Location	Virtual Office
Online Office Hours	Mon, Wen 1:00 – 2:00, 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, p*lease 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 asyncrounous mode (see Instruction Mode Above).
Therefore, requesting asychronous 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.

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

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

Course Description

CS 1337 Programming Fundamentals (3 semester credit hours)

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.

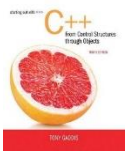
Student Learning Objectives/Outcomes

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.

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

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.

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Academic Calendar

Week No.	Date/Day	Lecture Material
01	Jan 18 Mon	MLK Holiday
	Jan 20 Wed	Course, Syllabus, eLearning Review
	Jan 22 Fri	07 Arrays
02	Jan 25 Mon	Continued
	Jan 27 Wed	08 Searching and Sorting Arrays
	Jan 29 Fri	Continued
03	Feb 01 Mon	09 Pointers
	Feb 03 Wed	Continued, Census Due, Last Day to Withdraw
	Feb 05 Fri	Continued Assignment 01 Due
04	Feb 08 Mon	Chars, C-Strings, String Class
	Feb 10 Wen	11 Structured Data, 12 File IO
	Feb 12 Fri	Continued
05	Feb 15 Mon	Introduction To Classes
	Feb 17 Wen	Continued
	Feb 19 Fri	Continued Assignment 02 Due
06	Feb 22 Mon	Introduction To Classes
	Feb 24 Wen	Continued
	Feb 26 Fri	Continued
07	Mar 01 Mon	More About Classes
	Mar 03 Wed	Continued
	Mar 05 Fri	Continued Assignment 03 Due
08	Mar 08 Mon	01 Exam Discussion
	Mar 10 Wed	01 Exam Midterm
	Mar 12 Fri	2nd Half Course Discussion
	Mar 13 Sat	Mid-Term Grades Posting Due
09	Mar 15 Mon - 19 Fri	Spring Break Week
10	Mar 22 Mon	Inheritance, Polymorphism, Virtual Functions
	Mar 24 Wed	Continued
	Mar 26 Fri	Continued
11	Mar 29 Mon	Continued
	Mar 31 Wen	Continued
	Apr 02 Fri	Continued Assignment 04 Due
12	Apr 05 Mon	Exceptions, Templates Last day to withdraw
	Apr 07 Wen	Continued
	Apr 09 Fri	Continued
13	Apr 12 Mon	17.7 Intro to Function Objects and Lambda Expressions
	Apr 14 Wen	Continued
	Apr 16 Fri	Continued Assignment 05 Due
14	Apr 19 Mon	18 Linked List
	Apr 21 Wen	Continued
	Apr 23 Fri	Continued
15	Apr 26 Mon	19 Stacks and Queues
	Apr 28 Wen	Continued
	Apr 30 Fri	Continued
16	May 03 Mon	20 Recursion
	May 05 Wen	Continued
	May 07 Fri	02 Exam Discussion, Last Class Day Assignment 06 Due
	May 12 Wen	02 Exam Final

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