CS/CE 1337 – Computer Science I

Term Fall 2025
Section CS 1337.001 ECSW 3.210 MW 230-345p

Instructor

Name	Prof. Gordon Arnold
Office	ECSS 4.232
Email	gordon.arnold@utdallas.edu
Hours	MW 1000-1100a or by appointment
Website	http://golear.org

Contacting the Instructor	**Email:** I teach a lot of classes, a lot of sections in those classes, and a lot of students. **Contacting me by email is always the best way, but you must include your class and section in the subject line of any e-mail you send.** If you do not, it will be marked as spam (not the gelatinous canned meat product) and will not be answered.
	Making an Appointment: Often, making an appointment is the best way to meet with me. Please use MS Teams or Outlook to send me a meeting request. As with e-mail please include your class and section in the request.
	Phone/Teams Chat: If you try to contact me by phone or through chat on MS Teams, I **cannot** guarantee a timely response.

Course Information

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 an exam section. (3-0) S
Prerequisites	CS 1436 with a grade of C or better or equivalent.
Learning Outcomes	✓ Ability to use single and multi-dimension arrays ✓ Ability to implement simple searching and sorting algorithms. ✓ Ability to implement pointers and perform simple memory management ✓ Ability to implement structured data types. ✓ Ability to define and implement a class. ✓ Ability to use fundamentals of object-oriented design.
Required Materials	• **Textbook:** *Starting Out with C++ from Control Structures to Objects, 9th ed.* (or higher) by Tony Gaddis (10th ed. is $10.99/month online) • **zyBooks**: ZyLabs is mandatory. Labs, in class activities, assignments and practice problems will be posted in Zylabs and you will post the solutions there. It is an auto grader tool. The feedback on your code will however be provided to you by the graders.

- **C++ Compiler and IDE:**
  - You may use any IDE you wish as long as it supports the proper version of the compiler (gcc)
  - I encourage everyone to use Online GDB (https://www.onlinegdb.com)
    - This will simulate the ZyBooks environment for testing.
    - It provides a clean debugger interface that will make it easier to fix bugs in your code.
    - Use of a debugger is one of the most important skills you should learn in this class
    - It's free and little set-up required.
  - All projects you submit will be compiled with g++ 5.4.1 with C++11 standards. You may use any IDE that can utilize at least g++ 5.4.1. Using a newer version of C++ should not create any problems as long as the proper standard is being used.
- **Note Taking Supplies**: I expect you to actively take notes. Anything discussed in class or available in the textbook is fair game on a test. Have something available to collect all the knowledge given to you (be that in physical or digital form).

- **Computer:** You will need a computer for this class. Minimum specs can be found here: https://oit.utdallas.edu/technologyinitiative/hardware. However, if you do not have a computer, the CS computer lab is open 24/7 and contains all the software you will need for this class.
  - **Use of smart phones, headphones/earphones, cameras, microphones, and/or laptops is strictly prohibited.** Tablets that use a digital pen (no keyboards or mice) are allowed for students to take notes. This is not a popular rule among students, but we don't need the distraction. There is no need to copy my examples in class as I will make them available to you. I would rather you focus on how we are solving the problem.

Grading Criteria						
	Assignments	40%	A+	≥97	C-	70-72
	Attendance	-10%	A	93-96	D+	67-69
	Exam #1 (Midterm)	30%	A-	90-92	D	63-66
	Exam #2 (Final)	30%	B+	87-89	D-	60-62
	Make-Up Exams	NONE	B	83-86	F	<60
	Late Work	NONE	B-	80-82		😟
	Extra Credit	NONE	C+	77-79		
	Curve of ANY Kind	NONE	C	73-76		
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To enroll in course CS/CE 2337, you must have completed either **CE/CS 1337 with a grade of C or higher**. Additionally, you need to score an **average of at least 70% (C-) across both exams** to qualify for a grade of C or better in the course. E.g.: if your overall score is a B- but your exam avg score is D, your final score will still be a C-.

Course Policies & Classroom Expectations

Attendance Policy	This course is scheduled to be taught in the Traditional (in person) Mode. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. Historically students who skip class, don't complete or don't put much effort into their programming assignments, or get a lot of help from classmates/mentors/etc., do not perform well on exam questions testing the material covered by the assignment. Therefore:
	- Miss <3 classes — -0% - Miss 3 classes — -10% - Miss 4 classes — -20% - Miss 5 classes — -30% - Miss >5 classes — -100%
Computers, Phones, and Recording Devices	If you do not have a computer, the CS computer lab is open 24/7 and contains all the software you will need for this class.
	Use of smart phones and headphones/earphones is strictly prohibited. Laptops need to be closed, until I request to open for an in-class activity. Tablets that use a digital pen (no keyboards or mice) are allowed for students to take notes. This is not a popular rule among students, but it is done so to maintain fairness in the academic environment for all students. There is no need to copy my examples in class as I will make them available to you. I would rather you focus on how we are solving the problem.
Cheating	Homework, labs, projects, and exams are individual endeavors. I have a zero-tolerance policy for cheating. Should I discover cheating issues, I will **immediately report to the OCSC <u>without</u> warning** for disciplinary action. Cheating can include (but is not limited to) the following:
	- Copying answers from a classmate - Turning in answer(s) that were clearly derived from a classmate's answers - Work (and especially code) created by AI and not by you - Faking code functionality (making it pass tests without actually doing the work)
	The only resources you are allowed to use for your work are:
	- your instructor - the assigned textbooks (except for the exams) - the CSMC (except for exams)
	Students should avoid using web sites like YouTube or GitHub for help on assignments. First, the material you find online will be arranged and taught differently. This can lead to unnecessary confusion. Second, copying code from a web site is considered plagiarism and will be treated as such. If you find code on a web site, it is highly likely another student will find it as well which may cause both submissions to be flagged for similarity. Submitting project and assignment details to web sites for outside help is also considered academic dishonesty by UTD.

Grade Disputes	All grade disputes must be reported within 1 week of the grade in question being posted in eLearning. Uncontested grades will become final after 1 week and cannot be disputed later. If you have questions regarding your grades, please contact your instructor. Please note that due to FERPA, grades cannot be discussed via e-mail.	
Class Materials & Recordings	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 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. Students are expressly prohibited from recording any part of this course. This includes cell phone cameras/video. **Failure to comply with these University requirements is a violation of the Student Code of Conduct, and will negatively impact your grade.**	

Additional Resources

Academic Support	Please go to http://go.utdallas.edu/academic-support-resources.
Syllabus Policies	Please go to http://go.utdallas.edu/syllabus-policies for these policies.

Course Schedule (Tentative)

#	Week		Topic
1	Aug 25	Aug 27	Review of CS 1436
2	Sep 01	Sep 03	**Labor Day**, Arrays
3	Sep 08	Sep 10	Search and Sorting
4	Sep 15	Sep 17	Pointers
5	Sep 22	Sep 24	C Strings
6	Sep 29	Oct 01	Structured Data
7	Oct 06	Oct 08	Review
	Oct 10		**Exam #1 (Midterm) (sec 701)**
8	Oct 13	Oct 15	Classes, Constructors
9	Oct 20	Oct 22	Copy constructor, Operator Overloading
10	Oct 27	Oct 29	Inheritance
11	Nov 03	Nov 05	Polymorphism, Pure Virtual Functions
12	Nov 10	Nov 12	Exceptions
13	Nov 17	Nov 19	Recursion
	Nov 24	Nov 26	**Thanksgiving Break**
14	Dec 01	Dec 03	Review
	TBD		**Exam #2 (Final) (sec 701)**

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