



# CS 1436 – Programming Fundamentals Syllabus

Term Fall 2024  
 Sections 1436.010 ECSS 2.102 MW 130-345  
 1436.011 ECSS 2.102 TR 130-345

## Instructor

Name Prof. Gordon Arnold  
 Office [ECSS 4.232](#)  
 Email [gordon.arnold@utdallas.edu](mailto:gordon.arnold@utdallas.edu)  
 Hours by appointment  
 Website <http://utdallas.edu/~gordon.arnold>

## Course Information

**Course Description** 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. Lab fee of \$30 is required. The class is open to students in the School of Engineering and Computer Science only. Credit cannot be received for both courses, CS 1336 and CS 1436. **Note that a grade of C or better in this class is required** to register for (CE 1337 or CS 1337). (3-2) S

**Prerequisites** None

**Learning Outcomes**

- ✓ Develop algorithmic solutions for use on computers
- ✓ Perform console input and output, know data types, utilize basic operators, and perform sequential processing
- ✓ Utilize the basic control structures for selection logic
- ✓ Utilize the basic control structures for repetition logic
- ✓ Perform sequential file input and output
- ✓ Develop programs in a functional form
- ✓ Process data in arrays

**Required Texts**

- *Starting Out with C++ from Control Structures to Objects, 10<sup>th</sup> ed.* by Tony Gaddis (\$10.99/month)
- zyBooks subscription (\$40):
  - Make sure you know what sections of CS 1436 you are taking
  - Sign in or create an account at <http://learn.zybooks.com>
    - You MUST use your UTD e-mail address (netid@utdallas.edu)
    - You will need to create a password for this account
    - You should not use your UTD e-mail password
  - Enter zyBook code: **UTDALLASCS1436ArnoldFall12024**
  - Subscribe

<b>Grading Criteria</b>	Homework/Labs	25%	A+	≥97	C-	70-72
	Project/Exams	75%	A	93-96	D+	67-69
	Make-Up Exams	NONE	A-	90-92	D	63-66
	Late Work	NONE	B+	87-89	D-	60-62
	Extra Credit	NONE	B	83-86	F	<60
	Curve of ANY Kind	NONE	B-	80-82		☹️
			C+	77-79		
			C	73-76		
				😊		

## Course Policies & Classroom Expectations

---

<b>Comet Creed</b>	“As a Comet, I pledge honesty, integrity, and service in all that I do.”
<b>Attendance Policy</b>	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.
<b>Computers, Phones, and Recording Devices</b>	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.  <b>I do not permit computers, cell phones, or recording devices in class during lectures.</b> 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.
<b>Cheating</b>	Homework, labs, projects, and exams are individual endeavors. I have a zero-tolerance policy for cheating. Should I discover cheating issues, I will <b>immediately report to the OCSC without warning</b> for disciplinary action. Cheating can include (but is not limited to) the following: <ul style="list-style-type: none"><li>• Copying answers from a classmate</li><li>• Turning in answer(s) that were clearly derived from a classmate’s answers</li><li>• Work (and especially code) created by AI and not by you</li><li>• Faking code functionality (making it pass tests without actually doing the work)</li></ul> The only resources you are allowed to use for your work are: <ul style="list-style-type: none"><li>• your instructor</li><li>• the assigned textbooks (except for the written portion of exams)</li><li>• the CSMC (except for projects/exams)</li></ul>
<b>Grade Disputes</b>	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.
<b>Class Materials &amp; Recordings</b>	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. <u>This includes cell phone cameras/video.</u> <b>Failure to comply with these University requirements is a violation of the <a href="#">Student Code of Conduct</a>, and <u>will</u> negatively impact your grade.</b>

## Additional Resources

---

<b>Academic Support</b>	Please go to <a href="http://go.utdallas.edu/academic-support-resources">http://go.utdallas.edu/academic-support-resources</a> .
<b>Syllabus Policies</b>	Please go to <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a> for these policies.

## Course Schedule (Tentative)

#	Week	Topic	Chapter	Lab
1	Aug 18 - Aug 24	Syllabus Review, Introduction to Computers	1	
		Introduction to C++	2	
2	Aug 25 - Aug 31	Number Systems & Introduction to C++		
		Introduction to C++		
3	Sep 01 - Sep 07	Expressions and Interactivity	3	
		Expressions and Interactivity		
4	Sep 08 - Sep 14	Expressions and Interactivity		Lab 1-1
		Expressions and Interactivity		Lab 1-2
5	Sep 15 - Sep 21	Expressions and Interactivity	4	Lab 2-1
		Expressions and Interactivity & Making Decisions		Lab 2-2
6	Sep 22 - Sep 28	Making Decisions		Lab 2-3
		Making Decisions		Lab 3-1
7	Sep 29 - Oct 05	Making Decisions		Lab 3-2
		Making Decisions		Lab 3-3
8	Oct 06 - Oct 12	Making Decisions		Lab 4-1
		Functions	5	Lab 4-2
9	Oct 13 - Oct 19	Functions		Lab 5-1
		Functions		Lab 5-2
10	Oct 20 - Oct 26	Functions		Lab 6-1
		Loops	6	Lab 6-2
11	Oct 27 - Nov 02	Loops		Lab 7-1
		Loops		Lab 7-2
12	Nov 03 - Nov 09	Loops		Lab 8-1
		Loops		Lab 8-2
13	Nov 10 - Nov 16	Loops & Files		Lab 9-1
		Files		Lab 9-2
14	Nov 17 - Nov 23	Arrays	7	Lab 10-1
		Arrays		Lab 10-2
	Nov 24 - Nov 30	Fall Break Thanksgiving Holiday		
15	Dec 01 - Dec 07	Arrays		Lab 11-1
		Arrays		

***Note: All labs and assignments are due on Saturday of that week at 11:59:00pm.***

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