CS1325.002 – INTRODUCTION TO PROGRAMMING
SPRING 2021
SYLLABUS

CONTACT INFORMATION

Professor:	Khiem Le, Ph.D.
Office:	ECSS 3.703
Office phone:	972-883-6217 (use MS Teams to call)
Email:	kvl140030@utdallas.edu (best way to reach me)
	Always use your UTD email account and include CS1325.002 in the subject
Lecture:	Mondays and Wednesdays, 4:00 to 5:15 PM, on-line
Office hours:	Monday 5:30 PM to 6:30 PM, Thursday 10:30 AM to 11:30 AM, or by appointment, see "Remote" document for details
Grader:	TBD
Email:	
Office hours:	

COURSE MODALITY AND EXPECTATIONS

Instructional Mode	Mode is "Remote/Virtual". Refer to this link for details: https://coursebook.utdallas.edu/modalities
Course Platform	The lectures will be delivered on Collaborate
Expectations	I do not need to keep track of students who opted for the asynchronous option, since the policy already has built-in flexibility to accommodate the asynchronous option. Lectures: It is strongly recommended you attend the lectures live, but you have the option to watch the recording instead. If you don't attend the lecture live, you need to watch the recording by the end of the day following the lecture to get participation credit. Tests and quizzes: You should take them at the normal time. However, you have the option to take them at the alternate time, but please contact me at least 1 week prior to the test/quiz. The normal and alternate times for the tests are specified in the Schedule section. Homeworks: You usually have 1 week to complete a homework. Late and very late submissions are usually accepted, with penalties. In specific instances, the time allocated may be different than one week, or late/very late submissions are not accepted. You will be notified if and when that happens.
Asynchronous Learning Guidelines	https://covid.utdallas.edu/response/faq/#spring-2021

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

CLASS PARTICIPATION

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. 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*.

CLASS RECORDINGS

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the 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 AccessAbility 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 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 AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

PREREQUISITES AND COREQUISITES

Prerequisite: CS 1336 or equivalent. The course has no corequisite.

TEXTBOOK AND REQUIRED TOOLS

TEXTBOOK

C How to Program, 8th Edition, by Deitel, Pearson. This is a reference (not required) textbook.

ZYLABS SUBSCRIPTION

You need to subscribe to zyLabs (auto-grading tool) for the homework coding assignments. Follow these steps to subscribe:

1. Logon to elearning

2. Click on "link_to_subscribe_to_zylabs" under "General info and tools" in elearning (**Do not go directly to the zyBooks website and create a new account**)
3. Subscribe. Your section number is 002

A subscription is **$19**. Students may begin subscribing on Jan 6, 2021 and the cutoff to subscribe is Apr 30, 2021. Subscriptions will last until May 22, 2021.

HONORLOCK

This course will use Honorlok, an on-line exam proctoring tool. To take an exam with Honorlock, you need a web camera with microphone, a laptop or desktop (no tablets/phones), Chrome browser, a reliable internet connection and your photo ID.

More details on Honorlock can be found at https://ets.utdallas.edu/testing-center/honorlock

PROGRAMMING TOOLS

You will need a stand-alone Integrated Development Environment (IDE) and its compiler to develop your programs. It is not required that you use a particular IDE or compiler, but if you use Windows, you have the option to install the CodeBlocks IDE, refer to "CodeBlock Notes" for details on how to install and configure it.

COURSE DESCRIPTION

Introduction to Programming (3 semester credit hours) Computer programming in a high-level, block structured language. Basic data types and variables, memory usage, control structures, functions/procedures and parameter passing, recursion, input/output. Programming projects related to engineering applications, numerical methods. May not be used to satisfy degree requirements for majors in Computer Engineering, Computer Science, Software Engineering, and Telecommunications Engineering. (3-0) S.

STUDENT LEARNING OBJECTIVES

The Learning Objectives of this class are as follows:

1. Ability to use fundamental programming constructs: assignments, loops, conditions.
2. Ability to process data in arrays.
3. Ability to develop programs in a functional form.
4. Ability to perform sequential file input and output.
5. Ability to express algorithms that solve elementary engineering and scientific problem.

GRADING

Your letter grade will be determined from an overall numerical score, calculated as a weighted average with the weights below:

Test #1 score:	33%
Test #2 score:	33%
Homeworks average:	19%
Quizzes average:	5%
Participation score:	10%

The overall numerical score is possibly curved and then converted to a letter score, as follows. Curving, if any, will always be in your favor. In addition, if you are borderline, at my discretion, I may decide to bump you up based on considerations such as active involvement in class (see "Class participation and involvement" section).

Overall numerical score (possibly curved)	Grade
≥97	A+
≥93	A
≥90	A-
≥87	B+
≥83	B
≥80	B-
≥77	C+
≥73	C
≥70	C-
≥67	D+
≥63	D
≥60	D-
Less than 60	F

If your homeworks average is less than 70%, your final letter grade cannot be better than C-, regardless of your other scores.

TESTS

- Each test covers all the handouts + information given during lectures + homeworks + class discussions + exos + quizzes, up to the exam. This means test #2 is a comprehensive exam.
- Tests are taken on eLearning and will use Honorlock. They are closed book, closed notes.
- Each test is graded out of 100.
- The test dates are shown in the "Schedule" section below. By default, it's assumed you take the test at the normal time, which is lecture time. However, you have the option to take the test at the alternate time, if you contact me at least 1 week prior to the test. The normal time and alternate time are listed in the "Schedule" section below. In addition, if you have unforeseen problems, such as medical issues or emergencies, you should contact me ASAP with the proper documentation. A makeup exam may be given at my discretion.

HOMEWORKS

- Homeworks are programming projects designed for you to practice the concepts learned. You will usually have one week to do each one, but in specific instances, the time allocated may be different than one week. You are notified of the due date when a homework is assigned.
- You will develop your program using a stand-alone Integrated Development Environment (IDE) and its compiler, then submit your program to the zylabs auto-grader for grading. To submit to zyLabs, you will need a zyLabs subscription.
- When you submit for grading, the zyLabs auto-grader automatically compiles and runs your program on predefined test cases, and immediately displays error messages, if any, and provides a score to you. In response, you can immediately determine and fix mistakes, and resubmit to improve your score. Your program may compile without error with your compiler, but yet have compilation issues

on zylabs. **It is your responsibility to fix your program so that it can be compiled by zylabs**. To minimize compilation issues with zylabs, use the compiler settings in "Homework notes".

- You are allowed multiple resubmission attempts on zylabs, up to a maximum, defined in the "Homework Notes", as long as you are still in the acceptance window of the homework. Your final zylabs score will be the highest score achieved over all the attempts.
- Usually another part of your total score will be determined manually by the grader through source code inspection. Your total score, along with the grader's feedback, is posted on eLearning.
- For details on what is expected from you for the homeworks, refer to "Homework Notes" posted on eLearning.
- A late submission is a submission made less than 24 hours past the due date. It will receive a 10% penalty on the grade.
- A very late submission is a submission made more than 24 hours, but less than 72 hours past the due date. It will receive a 30% penalty on the grade.
- For some specific homeworks, it could be that late submissions and/or very late submissions will not be accepted. If and when that happens, you will be notified when the homework is assigned.
- All submissions must be your individual work. If you get help from others (other students, CSMC) you must ensure that you submit only work that you have personally done. There are no group assignments in this class. Feel free to share ideas on solving the problem presented by a homework or project assignment, but DO NOT SHARE ANY CODE. When discussing logic, keep it general. If you give out every little piece of logic you have, there is a good chance the person you are helping will have very similar code as yours and may be flagged for being too similar. You should avoid using web sites on the Internet for help on projects. Copying code from a web site or another source 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. **Non observance of these rules will be considered as academic dishonesty and handled accordingly.** The only exception is when I give you code to use as part of your program submission, in which case you are allowed to use that code that you did not write.

QUIZZES

- Quizzes usually take place about a week after a section or chapter has been completed
- They are designed to give you a gauge as to how well you grasped the material, and prepare you for the tests and homeworks
- Quizzes are taken remotely on lecture days, during the lecture time. You have the option to take it at an alternate time on the same day, but you have to contact me at least 1 week prior to the quiz.
- There is no makeup quiz. If you miss a quiz due to an unexcused absence, you will get no credit.
- The maximum achievable score on each individual quiz may vary from quiz to quiz, as it depends on the number of questions in the quiz.
- The quiz average is the weighted average of the quiz scores, where the weight of a quiz is proportional to the maximum achievable score of the quiz. The average is normalized to be a score out of 100. For example, assume there are 3 quizzes, and quiz-1, quiz-2 and quiz-3 have 5, 10 and 15 questions respectively. If each question is 10 points, the maximum achievable scores of quiz-1, quiz-2 and quiz-3 are 50, 100 and 150 respectively. The quizzes average will be (s1+s2+s3)*100/(50+100+150), where s1, s2 and s3 are your scores on quiz-1, quiz-2 and quiz-3 respectively.

IN-LECTURE EXOS

I teach the programming concepts by illustrating them with a live program that I type, compile and run as a demonstration during the lecture. You will be asked to type, compile and run the same program along with me in class, and to submit your program by the deadline, which is 11:59 PM on the day following the lecture's day. Your program may be automatically graded. If your program is automatically graded, the grade will count in the participation score.

CLASS PARTICIPATION AND INVOLVEMENT

Class participation score is based on:

- Exo scores: If you don't submit the Exo by the deadline, you get zero point. If you submit by the deadline, you get the points from the automatic grading. If you are unable to submit the Exo by the deadline due to an emergency or medical reason, I will waive the Exo for you, provided that you submit acceptable documentation
- Quiz participation: Non participation counts as zero point, participation counts as 1 point (this is different from the quiz score which counts in the quizzes average). If you are unable to take the quiz at the normal time or alternate time due to an emergency or medical reason, I will waive the quiz for you, provided that you submit acceptable documentation
- Survey and other task assignments (other than homeworks): For each survey or task, completion by deadline counts as 5 points, otherwise counts as zero point

In addition, if you are borderline, I may decide, at my discretion, to bump you up based on your participation score and other considerations such as:

- Active involvement (asking questions, contributing to discussions, answering other students' questions) during the lectures or on the Piazza discussion forum

Disruptive behavior will not be tolerated

ISSUES ABOUT GRADING

Grade Dispute: Students are required to bring up any grading issue within a week of grade posting.

- Contact the grader for questions about the homework scores. Please copy me on all your emails with the grader so I am aware of the situation and can make sure it is resolved.
- Contact me for questions about the quiz and test scores.

ASSISTANCE

The CSMC expects to be able to provide assistance in the on-line format. Further details will be provided later.

You can also see me or the grader at virtual office hours.

Note you must have put effort into solving your problem before you seek help. That will make the tutoring more effective than if you come with a blank sheet of paper.

Virtual study groups are also an option, but make sure you comply with the Academic Integrity policy and your submission is the product of your individual effort.

COMMUNICATION

Tests, quizzes, lecture material, grades and announcements are posted on eLearning. Announcements are also emailed out to the whole class. In addition, you may also receive individual emails from me or the grader. **It is your responsibility to timely logon to eLearning and check your UTD email to stay abreast of assignments, announcements and other information.** Technical requirements for eLearning can be found at Getting Started with eLearning. Tutorials can be found at Student eLearning Tutorials.

DISCUSSION FORUM

We will use Piazza as a discussion forum. Please sign up by clicking on the link below, and be sure to use your UTD email address:
piazza.com/utdallas/spring2021/cs1325
Rather then emailing questions to me or the grader, I encourage you to post your questions on Piazza. When you post your question on Piazza, everyone can answer and everyone can benefit from the answer. Piazza makes it easy for students to discuss among themselves and benefit from the collective wisdom and knowledge of the students, Prof and grader. I encourage you to ask questions in particular when you're struggling to understand a concept—you can even do so anonymously.
Posting questions and/or answering questions also counts as participation and citizenship.
If the nature of your question is private, you can post a private question to me or the grader.
If you have problems or feedback for the developers, email team@piazza.com.

REMOTE/VIRTUAL LEARNING MODE OF OPERATION

Refer to the "Remote" document for details on the tools and processes used for lectures, office hours and tests.

SERVER UNAVAILABILITY OR OTHER TECHNICAL DIFFICULTIES

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

SCHEDULE (MAY BE ADJUSTED AS NEEDED)

Date		Lecture
Jan 20	1	Review of syllabus, unit 1-1: Introduction
Jan 25	2	Unit 1-2: Number systems
Jan 27	3	Unit 1-3: Data types, intro to pointers
Feb 1	4	Unit 1-4: Formatted I/O
Feb 3	5	Unit 1-4: Formatted I/O
Feb 8	6	Unit 2-1: Operators and expressions
Feb 10	7	Unit 2-1: Operators and expressions
Feb 15	8	Unit 2-2: Control structures
Feb 17	9	Unit 3-1 and 3-2: Functions, random generators, scope and storage
Feb 22	10	Unit 3-1 and 3-2: Functions, random generators, scope and storage
Feb 24	11	Unit 3-1 and 3-2: Functions, random generators, scope and storage
Mar 1	12	Unit 4-1 and 4-2: Arrays
Mar 3	13	Unit 4-1 and 4-2: Arrays

Mar 8	14	Unit 4-1 and 4-2: Arrays
Mar 10	15	Cushion
Mar 15		Spring break
Mar 17		Spring break
Mar 22	16	Test review
Mar 24	17	**Test # 1 – Normal time: 4 PM, alternate time: 1 PM**
Mar 29	18	Unit 5-1 and 5-2: Pointers
Mar 31	19	Unit 5-1 and 5-2: Pointers
Apr 5	20	Unit 5-1 and 5-2: Pointers
Apr 7	21	Unit 5-1 and 5-2: Pointers
Apr 12	22	Unit 6-1 and 7-1: Structures, self referential structures and linked lists
Apr 14	23	Unit 6-1 and 7-1: Structures, self referential structures and linked lists
Apr 19	24	Unit 6-1 and 7-1: Structures, self referential structures and linked lists
Apr 21	25	Unit 6-1 and 7-1: Structures, self referential structures and linked lists
Apr 26	26	Unit 9: File processing
Apr 28	27	Unit 9: File processing
May 3	28	Unit 9: File processing
May 5	29	Test review
May 10	30	**Test # 2 – Normal time: 4 PM, alternate time: 1 PM**

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."

UNIVERSITY'S POLICIES AND PROCEDURES

Please go to http://go.utdallas.edu/syllabus-policies for information on the university's policies and procedures, which include in particular:

- Student Conduct & Discipline
- Academic Integrity
- Withdrawal from Class
- Student Grievance Procedures
- Incomplete Grade Policy
- Disability Services
- Religious Holy Days

These descriptions and topics are subject to change at the discretion of the Instructor.