CS 1325 INTROLDUCTION TO PROGRAMMING COURSE SYLLABUS

COURSE INFORMATION:

Course Number: CS 1325, Section 002 spring 2017
Course Title: Introduction to Programming

Credit Hours: 3

INSTRUCTOR CONTACT INFORMATION:

Name: Laurie Thompson
Office: ECSS 3.701
Telephone Number: (972) 883-6326

Office Hours: Mon 9:30am – 11:00am

Wed 1:15pm - 3:30pm

Email Address: Laurie.Thompson@utdallas.edu or select Laurie Thompson from the UT Dallas Email in

eLearning. Emails must have a Subject that begins with "CS1325.002:".

GRADER: TBD

COURSE PREREQUISITES AND COREQUISITES:

Prerequisite: CS 1336 or equivalent

Corequisite: None

DESCRIPTION:

CS 1325 - 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. Prerequisite: CS 1336 or equivalent. (3-0) S

STUDENT LEARNING OBJECTIVES/OUTCOMES:

- 1. Ability to use fundamental programming constructs: assignment, 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 problems

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REQUIRED TEXTBOOK AND MATERIALS:

<u>Problem Solving and Program Design in C</u>, Eighth Edition, by Jeri R. Hanly & Elliot B. Koffman, Pearson Education. ISBN: 978-0-13-401489-0.

Other materials including the syllabus, assignments, slides and sample programs will be posted on eLearning.

https://elearning.utdallas.edu

C++ COMPILER:

All programs you submit will be compiled and graded with MinGW 4.9.2 with the Code::Blocks IDE.

Code::Blocks is available in the open lab, ECSS 2.104, for your use. Problems with your personal machine will not be accepted as an excuse for missing or late submissions.

Information on installing and configuring Code::Blocks and the MinGW compiler on your own machine (Windows based) will be provided in another document.

For Mac users, I recommend using XCode or creating a Windows partition to install MinGW and the Code::Blocks IDE.

If you intend to use your own computer to write your programs, it is important that you get a compiler installed and functioning as quickly as possible.

If a student uses something other than Code::Blocks with the MinGW 4.9.2 compiler for development, he/she is responsible for verifying prior to submission that the code compiles properly with the stated compiler. No compiler is perfect and each one has its own quirks. It is the student's responsibility to make sure that the program functions as expected with the compiler that will be used for grading.

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TENTATIVE COURSE CALENDAR:

Date	Lecture Material	Reading Assignment Due
January 9	Review of syllabus, eLearning Access, Code::Blocks Installation	
January 11	Overview of C	Chapter 2 of the textbook
January 16	MLK Day – No Lecture	·
January 18	Overview of C and Top-Down Design with Functions	Chapter 3 of the textbook
January 23	Top-Down Design with Functions	·
January 25	Selection Structures	Chapter 4 of the textbook
January 30	Selection Structures	·
February 1	Repetition and Loop Statements	Chapter 5 of the textbook
February 6	Repetition and Loop Statements	
February 8	Pointers and Modular Programming	Chapter 6 of the textbook
February 13	Pointers and Modular Programming	
February 15	Pointers and Modular Programming	
February 20	Array Pointers	Chapter 7 of the textbook
February 22	Array Pointers	
February 27, 11:30am1:30pm.	Exam #1 – You will select the start time of a 1 hour and 15	
In the Testing Center, MC 1.401	minute timeslot in the window.	
	The signup will be available several weeks before the exam date at:	
	https://www.registerblast.com/utdallas/Exam/List	
March 1	Array Pointers	
March 6	Strings	Chapter 8 of the textbook
March 8	Strings	
March 13	Spring Break – No Lecture	
March 15	Spring Break – No Lecture	
March 20	Recursion	Chapter 9 of the textbook
March 22	Recursion	
March 27	Recursion	
March 29	Structure and Union Types	Chapter 10 of the textbook
April 3	Structure and Union Types	
April 5	Structure and Union Types	
April 10	Text and Binary File Pointers	Chapter 11 of the textbook
April 12	Text and Binary File Pointers	
April 17	Text and Binary File Pointers	
April 19	Pointers and Dynamic Data Structures	Chapter 13 of the textbook
April 24	Pointers and Dynamic Data Structures	
April 26	Pointers and Dynamic Data Structures	
May 5, 8:30am 10pm.	Exam #2 – You will select the start time of a 2 hour timeslot in	
In the Testing Center, MC 1.401	the window.	
	The signup will be available several weeks before the exam date at:	
	https://www.registerblast.com/utdallas/Exam/List	

The instructor reserves the right to modify this calendar as she deems necessary. Please see eLearning for discussions/announcements regarding changes to the calendar.

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GRADING POLICY:

Your course average will be calculated as follows:

Exam #1 – 35% Exam #2 – 40%

In class exercises/quizzes and citizenship – 5%

In class exercises and quizzes may be given at any time. Make-ups will not be given for these.

The citizenship portion of your grade will be based upon your regular on-time attendance of lectures, participation and attentiveness in lecture and adherence to lecture policies (See Conduct in Lecture).

Programming Assignments - 20%

The instructor will drop your lowest assignment grade if you submit all assignments as required and receive a grade of 60 or higher on each of the assignments.

Historically students who skip programming assignments, or do not put much effort into their programming assignments, or get a lot of help from classmates, mentors, or others do not perform well on exam questions testing the material covered by the assignment.

Attendance Policy:

In class exercises will be given and/or attendance will be taken in lecture.

You will be considered absent if you are not present when attendance is taken or if you leave before the end of lecture.

If you need to leave lecture early or arrive late for a legitimate reason, please notify the instructor by email before class.

If due to unforeseen circumstances you arrive after attendance was taken, you must inform the instructor at the end of lecture or you will be counted absent. This must not be a regular occurrence or it will impact the citizenship portion of your grade.

If you miss four or more in class exercises or have four or more recorded absences over the course of the semester your final course grade will be reduced by one letter grade (A goes to B, B+ goes to C+, etc.)

Conduct in Lecture:

Professional conduct is expected during lecture. Deductions to the citizenship portion of your grade may be made for:

- Disruptive behavior in lecture
- Repeatedly coming to lecture unprepared (without having read assigned reading, without a writing implement or without paper)
- Failure to adhere to the instructor's no devices policy
- Sleeping during lecture or other inattentiveness
- Repeatedly coming to lecture late or leaving early

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The instructor intends to assign letter grades as shown below. An average with a fractional portion of five tenths or above will be rounded up to the next whole number for determining the letter grade.

Averages	Letter grade	
97+	A+	
93-96	Α	
90-92	A-	
87- 89	B+	
83-86	В	
80-82	B-	
77-79	C+	
73-76	С	
70-72	C-	
67-69	D+	
63-66	D	
60-62	D-	
Below 60	F	

What you need to do to be successful in this course:

- Attend every lecture and pay close attention to lecture (don't let yourself be distracted).
- Dedicate 9-10 hours per week <u>outside of lecture</u> to CS 1325 for reading, practicing writing code, completing assignments, and studying for quizzes and exams.
- Read your assigned reading <u>before</u> the lecture. You are expected to have a basic understanding of the assigned textbook material before lecture. The focus of lecture will be program development.
- As you read individual sections of the textbook, answer the Self-Check Questions and check your answers to odd-numbered questions on instructor's website at www.pearsonhighered.com/hanly
- Start your assignment immediately. All assignments are designed to be worked on over a period of days or weeks. I expect that you will work on the assignment a little at a time rather than waiting until a day or two before it is due. Those that procrastinate will find this class to be much harder than it should be and will face the risk of below average grades.
- Ask for help!
 - o The instructor is available to help during office hours.
 - o The Computer Science Mentor Center (CSMC) offers walk-in tutoring.
 - o Be proactive.
 - Don't wait till the day an assignment is due to seek help. Please note that I do not have office hours every day. If you wait till close to the assignment due date to seek my help, it is possible that I won't have any office hours that day or there may be many students who will be competing for my time when you come to my office hours.
 - Don't wait till the end of the semester to seek help. If you have gotten far behind in your coursework or have done significant damage to your course average, I may not be able to help.

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UT DALLAS POLICIES AND PROCEDURES:

For information on University Policies on Student Conduct and Discipline, Academic Integrity, Copyrights, Email Use, Class Attendance, Withdrawal from Class, Student Grievance Procedures, Incomplete Grade Policy, AccessAbility Services, Religious Holy Days, and information about technical support and other student assistance resources please go to http://go.utdallas.edu/syllabus-policies.

COURSE & INSTRUCTOR POLICIES:

Academic Integrity:

All assignments, quizzes, and exams for this course are to be individual efforts. You are not to collaborate with other students. Prior to the assignment due date you are not to: discuss assignment solutions with other students, distribute your code to others, or publish your code. Copying of programming assignments, quizzes, or exams, in whole or in part, from other students will be considered an act of scholastic dishonesty. Copying of assignments from previous semesters will be considered an act of scholastic dishonesty.

For programming assignments, you may use source code provided by the instructor. You are not to view, copy, or distribute code from any other sources, including code from other students, code from assignments submitted in past semesters, or code from the Internet. Plagiarism detection software will be employed to detect copying of code.

Course Assignments:

All assignments will be announced and submitted using eLearning. You will be given at least one week to complete each assignment. Each assignment will include a due date and time. You may submit an assignment up to 24 hours after the due date and time with a 20 point penalty. **No excuses will be entertained for late assignments.**

Attendance:

The instructor expects you to attend the lectures for this course.

There is a strong, direct correlation between class attendance and class performance. Students who regularly attend class and pay attention to the lecture tend to make significantly higher grades than those who do not.

If you miss four or more in class exercises or have four or more recorded absences over the course of the semester your final course grade will be reduced by one letter grade (A goes to B, B+ goes to C+, etc.)

Assigned Seating in Lecture:

To facilitate classroom management seating will be assigned. The student will have some input as to where they will sit during lectures. Seat assignments are subject to change at the instructor's discretion.

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No Devices Policy:

This instructor has a strict no devices policy. You may not use your cell phone, laptop, tablet, PDA, music device, etc. during lecture. Headphones and earbuds must be put away dangling them from your head or neck is not acceptable.

If it appears that you are looking at your cell phone in your lap, etc. a reduction will be made in the citizenship portion of your grade.

The grader will be sitting at the back of the room and will notify the instructor if you are using your cellphones. This will likely result in a reduction of the citizenship portion of your grade.

Student Responsibilities:

You are responsible for all material discussed in lecture whether you are present for lecture or not.

Students are expected to be respectful of each other and of the course instructor. Disruptive behavior in the classroom will not be tolerated.

- Please make every effort to be on time to lecture. Do not begin packing up to leave before lecture has
 ended. It is likely that I will keep you until the end of the time allotted for every lecture and also that on
 many occasions I may keep you a few minutes over if we are in the middle of a discussion. Disruptions in
 lecture including students packing up early increase the likelihood of this occurring. The instructor does not
 intend to keep you more than 3 minutes after the normal end of lecture.
- You may not use electronic devices or phones in lecture.
- Raise your hand if you have a question or a comment to make about the material presented. The instructor
 may ask you to bring your question to office hours if it cannot be entertained in lecture.

You are responsible for all material supplied on eLearning (including announcements and discussion postings) whether you choose to read them or not.

You may not send your source code to the grader or instructor unsolicited by email expecting us to debug it.

This is not reasonable. There are just too many of you for us to do this. Also, part of learning to program is developing your own debugging skills. It is your responsibility to develop your code in a manner that minimizes errors. You should only ask for help with debugging as a last resort. We will help you find errors in person during office hours, but you should have narrowed down the problem before coming to see us. When coming in for help, bring your source code or put them out on the network so you can access them from our computer.

Grading Concerns:

If you think there is a mistake in the grading of your assignment, quiz or in class exercise and would like to request that it be regraded, **you must notify both the grader and the instructor** of this by email within **two weeks** after the date the grade is posted in the grade book on eLearning.

Before you request a regrade of an assignment first review the grading file attached to your graded assignment on eLearning. Run the tests used by the grader in the grading of your assignment (see the grading file or additional information provided by the instructor regarding the grading of the assignment).

Most deductions are made because students did not fully read the assignment instructions or disregarded the instructions. You may not change the problem to suit your purposes. Most assignments restrict the use of

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programming constructs and library functions not covered in lecture. Others require that you use particular constructs or functions. To get the maximum credit you must read the directions carefully and test your programs thoroughly.

If you think there is a mistake in the grading of your exam and would like to request that it be regraded, you must notify the instructor of this by email within two weeks after the date the grade is posted in the grade book on elearning.

Your request for any regrade must describe in detail what you perceive as the problem with the grading. Keep in mind that a regrade may result in an increase or in a reduction of the original grade. For assignments, quizzes, and in class exercises, please email the grader and copy the instructor, so that the instructor can monitor the progress towards a resolution of the issue.

Quiz and Exam Policies:

All exams and quizzes are closed book and closed notes.

You will be required to present a photo ID at each examination.

PDAs, computers, cell phones, other electronic devices, backpacks, and books will not be allowed at the desks during examinations.

Make-up examinations will be administered **only for well-documented emergencies**. A student must make every attempt possible, via telephone and email, to notify the instructor that he/she will miss a scheduled exam **prior** to the scheduled date and time or **immediately** thereafter. **If notification is not received in a timely manner, no make-up will be given.** See the information below for the instructor's policy regarding religious holy days.

Make-ups will not be given for quizzes.

Religious Holy Days:

You must notify this instructor in writing of any religious holy days that will prevent you from attending class as scheduled by census day (January 25, 2017). If the holy day coincides with a scheduled examination, you must request a make-up examination in writing, this exam will be scheduled before the original quiz or exam date. If the holy day coincides with an unannounced quiz, you will be given an opportunity to make up the quiz provided that you have previously notified the instructor as required above. Students will be informed on eLearning of the due date of all assignments at least one week in advance. If a religious holy day will prevent you from submitting an assignment on the due date, you must submit the assignment early via eLearning.

Extra credit work will not be given to individual students.

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