UT|D

Course	**CS 1325 001 Introduction to Programming**
Professor	Dr. Miguel A. RAZO
Term	Fall 2017
Meetings	10:00 AM-11:15 AM Tues & Thurs, ECSS 2.311

Professor's Contact Information

Office Phone	972-883-4240
Office Location	ECSS 3.605
Email Address	mrazo@utdallas.edu(use CS 1325.001 as subject)
Office Hours	Tue/Thu 11:30 AM - 12:30 PM

General Course Information

Pre-requisites, Co-requisites, & other restrictions	Prerequisite: CS 1336 or equivalent
Course Description	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. This class is designed for Electrical and Mechanical Engineering majors and cannot be used to fulfill Major Requirements for Computer Engineering, Computer Science, Software Engineering, Telecommunications Engineering majors.
Student Learning Objectives	Our goal this semester is to introduce you to C as a basic tool that can be used to solve engineering problems. The official Course Learning Objectives (CLO's) for this course are quite general, but 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 problems.
Required Texts & Materials	"C: How to Program", Deitel and Deitel, 8th Edition, Pearson, 2016. ISBN-13: 978-013-397689-2/ISBN-10: 0-13-397689-0
Suggested Texts, Readings, & Materials	"C Programming for Absolute Beginners" (2nd Edition) by Michael Vine. Course Technology, 2009 "Engineering Problem Solving with C", Etter, Pearson, 2013 (0-13-608531-8) "C for Engineers and Scientists", Cheng, McGraw Hill, 2010 (978-0-07337605-9)

Academic Calendar

Unit	Topic
1	Intro to MATLAB
2	Basic C
3	Operators and Expressions
4	Control Structures
5	Functions
6	Arrays
7	C-Strings
8	Pointers
9	File Processing
10	Unions/Structures

Class Assignments:

There will be regularly assigned reading and homework problems. Reading assignments should be done before the class lecture. Homework problems will require the student to spend time programming a computer outside of class. It includes a test/sample scenario to demonstrate the correct operation of the assigned tasks.

Programming Project:

A programming assignment that includes all the topics covered in this class. Projects usually include input (user and files), store information in the proper variables (int, double, char, etc.) or structures (structs), process the information (i.e. statistical values), and produce an output (formatted output to screen and files). More details will be given in class.

Submitting Assignments

Programming assignments should be submitted using your elearning account. Each homework assignment should contain the following files:

> 1. A text copy of all source code including its documentation (comments and instructions to use your program)
> 2. A text copy of your programs input and displayed output (.txt)

Course Tools:

- **C Compiler:** All of the programs we write this semester will be in C. It is not essential that you use a particular C compiler. However, it is essential that your programs can be compiled and run by the TA's on their systems. Few options will be provided through elearning, for example, every student has access to a free student version of Microsoft's Visual C compiler, and there are some free downloadable compilers available as well.
- **Help Desk:** For help with issues regarding your computer, UTD maintains a walk-in help desk. Visit their Web site for details: ***http://www.utdallas.edu/ir/helpdesk/***

Course Policies

Grading (credit) Criteria	**Homework Assignments**	**20%**
	Programming Project	**20% (Due on Dec 5)**
	Exam 1	**20%(Closed Book/notes)**
	Exam 2	**20%(Closed Book/notes)**
	Exam 3	**20%(Closed Book/notes)**
	Pop Quizzes	**10% Extra/Bonus points**
Exam dates	**Exam 1(September/26), Exam 2(October/31), Exam 3(Dec 5)**	
Make-up Exams	**There will be no make-up exams unless previously requested and approved by the instructor**	
Extra Credit	**No extra credit assigments**	
Late Work	**No late homeworks, no partial credit**	
Class Attendance	**CS Department Policy: three consecutive absences leads to one letter grade drop. Four consecutive absences or 6 absences in total leads to an F.**	
Classroom Citizenship	**Class participation is given consideration. Respect for your classmates is necessary at all times**	
All other policies	**Please visit http://go.utdallas.edu/syllabus-policies for other policies**	

These descriptions and timelines are subject to change at the discretion of the Professor.