COP3275 - Computer Programming Using C

Syllabus – Spring 2018

Course Perspective and Objectives:

This course (*3 credit hours*) is for non-computer science majors with little or no background in programming. Thus, prior knowledge of C is not expected. The main objective of the course is to get hands on the C programming language, and to learn the syntax and the different structures to build programs. We will learn how to solve problems and transform the solutions into computer programs written in C language. Goals for this introductory course -by the end of the semester- should be: 1) introducing the basic computer software and hardware concepts to build programs; 2) understanding the fundamental C coding building blocks and structures to build interactive problems; 3) introducing how to write a modular and efficient programs in C. MAC 1147 (or equivalent) is a prerequisite for this course, however any mathematical terms or operations required will be taught to you when needed in the course.

Course Instructor and Class Info:

Instructor:	Ahmed E. Khaled
E-mail:	aeeldin [At] ufl [Dot] edu
Lecture time:	M, W, F | Period 8 (3:00 PM - 3:50 PM) – Room: CSE E119
Office hours:	M (4 - 5PM) – Room: CSE E312
Course URL:	www.cise.ufl.edu/class/cop3275sp18
Textbook (recommended):	"C Programming: A Modern Approach", K. N. King, 2nd Edition, W.W. Norton, 2008. The book is not required for the course and you may also use online references for supplemental readings.
TA(s):	Name: *TBD* Office hours: *TBD* - Room: *TBD*

Course Overview:
The following list highlights the topics and sections to be covered in this course (exact schedule is subject to change):

- Intro to Programming: Programming language, flow control, Bits and Bytes.
- Intro to C: Program structure, compiler and IDE.
- Primitive Data Types: variables and constants.
- Expressions: operations and reference mechanisms.
- Control Statements: if-else, for loops, while loops and switch-case statements.
- Methods: functions and recursion.
- Arrays and strings.
- Pointers.
- Modular designs: Structs and Enums.
- Input and Output: Standard I/O and handling text files.
- Basic Data Structures.
- Exception Handling: Error handling, debugging and testing.

Grading:
- 5 Programming assignments: 10% each
- 1 Midterm exam: 15%
- 6 in-class Quizzes: total of 35%
- Continuous participation in lecture: 5% *(Bonus credit)*

Class policy:
- The attendance is important, the course is designed mainly on *class participation* (this is the best way to learn and succeed). The practice exercises discussed in the lecture will help you in your programming assignments and the quizzes as well.
- All programming assignments are individual work (unless instructed otherwise), details for submitting the homework are described in the next section (dates will be provided in our first lecture).
- The Assignments can be turned in late up to ONE day but will be penalized by 10% of the assignment's maximum score.
- We will have 7 short quizzes held at the beginning of the lecture time and the lowest one will be dropped. These quizzes are to make sure that you catching up with the course material and you will be given the explicit topic(s) to expect before each quiz.
- Quizzes and assignments may be made up only when the student has a permissible absence with documented excuse or come to talk with me, if possible notify the instructor as early as possible.
- Re-grades may be requested up to ONE WEEK after the grades are made available.
- All cell phones should either be turned off or set to silent during the lecture.

Homework Submissions:
For each programming assignment, you should submit the following (on canvas as a Soft copy):
- ➢ Code files: all your developed code files (.c/.h).
- ➢ PDF file: hold a copy of your C code, answers to the required questions and screenshots of the outputs (after running your program).
- ➢ zip your code files + the PDF file, then name the new file as HWx_YourLastName_YourFirstName.zip where x is the assignment number (1-6).

then, print the PDF file and HAND the copy to the instructor in class.

Grading Scale:
A   [100% - 92%]
A-   (92%   - 88%]
B+   (88%   - 85%]
B   (85%   - 82%]
B-   (82%   - 78%]
C+   (78%   - 75%]
C   (75%   - 72%]
C-   (72%   - 68%]
D+   (68%   - 65%]
D   (65%   - 62%]
D-   (62%   - 58%]
E   (58%   - 0%]

Honesty Policy:
UF students are bound by The Honor Pledge which states," We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code." On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:" On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class. Note that failure to comply with this commitment will result in disciplinary action compliant with the UF Student Honor Code Procedures.
See http://www.dso.ufl.edu/sccr/procedures/honorcode.php

Accommodation for Students with Disabilities:
Students requesting accommodation for disabilities must first register with the Disability Resource Center - www.dso.ufl.edu/drc/ . The DRC will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodations. Students should contact the DRC and complete this process as early as possible in the term for which they are seeking accommodations.

UF Counselling Services:
Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
• UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx, counseling services and mental health services.
• Career Resource Center, Reitz Union, 392-1601, career and job search services.
• University Police Department 392-1111.

Online Course Evaluation Process
Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu . Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu .

Software Use:
All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.