

University of Texas at El Paso
Electrical and Computer Engineering Department
EE2372 Software Design I, Spring 2020

As part of UTEP's mission to develop, promote and maintain safety, healthy learning the classes has been transition to online delivery, therefore the syllabus has been modified accordingly.

INSTRUCTOR:	Dr. Hector Erives
OFFICE:	Engineering
PHONE:	747-6778
EMAIL:	herivescon@utep.edu
OFFICE HOURS:	Through email or UTEP WebEx (https://utep.webex.com/meet/herivescon), or Blackboard Collaborate.
TEXT:	Engineering Problem Solving with C by Delores M. Etter, Pearson. (<u>required</u>).

Course Description:

An introduction to software design with a structured computer language that focuses on the construction of programs consisting of multiple functions residing in multiple files. The course covers program creation top-down-design, basic elements and operations, modular program construction, and the use of programming tools such as make files. Introduces MATLAB, and object oriented programming techniques (time permitting).

Class Outcomes:

1. Design, implement, and execute programs written in the C language.
2. Define the use of functions, and design multiple module programs.
3. Use a variety of programming tools for software development like IDE's (Integrated Development Environment), debuggers, and make files.
4. Create and use pointers, data structures, and enumerated data types.
5. Access text files directly in C language programs via I/O functions.

Topics covered:

1. Structure of programming techniques and programming tools.
2. Introduction, structure, compilation and execution of a C program.
3. Variables, data types and arrays.
4. Operators and expressions.
5. Assignment statements and flow of control statements.
6. Function definition and use.
7. Derived data structures.

8. Pointer definition and use.
9. Input and output statements.
10. File I/O.

Course Policies:

- Late homework will be accepted but with a penalty.
- Due dates for assignments, homework and exams will be notified with at least one week in advance.
- Quizzes will be given on a weekly basis.

Grading:

Item	Points (%)
Quizzes	10
Homework	10
Two Midterm Exams	2 × 20
Final Exam	30
Participation/Attendance	10

- Letter grades are assigned based on the scale:
A: 90% -100%,
B: 80% - 90%,
C: 70% - 80%,
D: 60% - 70%,
F: 0% - 60%.

Academic Dishonesty:

As an entity of The University of Texas at El Paso, the Department of Electrical and Computer Engineering is committed to the development of its students and to the promotion of personal integrity and self-responsibility. The assumption that a student’s work is a fair representation of the student’s ability to perform forms the basis for departmental and institutional quality. All students within the Department are expected to observe appropriate standards of conduct. Acts of scholastic dishonesty such as cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in the whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student, or the attempt to commit such acts will not be tolerated. Any case involving academic dishonesty will be referred to the Office of the Dean of Students. See the Office of the Dean of Students’ homepage at <http://sa.utep.edu/osccr/> for more information.

American Disabilities Act:

If you feel you may have a disability that requires accommodations, contact the Center for Accommodations and Support Services at 747-5148, go to Room 106E Union, or email cass@utep.edu.