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| **ELEMENT** | **CONTENT** |
| DEPARTMENT | ECET |
| AUTHOR (S) | John Murphy |
| COURSE NUMBER | **CIS 2025** |
| COURSE TITLE | **C Programming** |
| SHORT TITLE | C Programming |
| COURSE LEVEL | 2000 |
| DATE CREATED |  |
| CHECKED/CHANGED | 2/1/2017 |
| PREREQUISITES |  |
| COREQUISITES |  |
| RESTRICTIONS |  |
| SPECIAL FEES | Yes |
| CREDITS | 3 |
| HOURS | 2 hours of lecture, 2 hours of lab per week |
| SEMESTER | Fall, Spring |
| COURSE DESCRIPTION | This course teaches the student to write programs using the C language. All fundamental features of C are covered including arrays, functions, pointers, file I/O, string manipulation, and preprocessor directives. This course emphasizes good software design techniques, programming style, and documentation. No prior programming experience is required. |
| SUGGESTED TEXTS | *Programming in ANSI C*; G. Kochan |
| OPTIONAL TEXTS |  |
| COURSE OUTCOMES | The successful student will be able to:   1. Design simple programs to accomplish specified tasks 2. Write complete C programs that use the basic features of C including variables, arrays, strings, conditional expressions, loops, functions, and pointers 3. Use more advanced features of the C language in one or more programs: structures, type definitions, file I/O, string library functions, command line arguments, preprocessor directives, memory allocation 4. Write a C program that is constructed from more than one source file 5. Compile and run C programs in a Windows environment 6. Debug simple C programs |
| COURSE CONTENT | 1. Compiling code 2. Writing simple programs 3. Computation using ints and floats 4. Calling functions 5. using characters 6. Loops and if statements 7. Switch statements and arrays 8. Sorting 9. Writing functions 10. Functions in multiple source files 11. Pointers and arrays 12. Structures 13. File I/O |
| LAB/STUDIO OUTCOMES |  |
| LAB/STUDIO CONTENT |  |
| LECTURE CAPACITY | 32/21 |
| LAB CAPACITY |  |
| GRADED OR P/NP | Graded |
| EVALUATION | Exams, quizzes, homework, lab reports |
| DELIVERY METHOD | LEC, LAB or ONL |
| ROOM REQUIREMENTS |  |
| AUTHOR’S NOTES |  |