CSC 234 C and Unix

1. CSC 234 C and Unix

2. credit units 3 contact hours 3

3. **Course Coordinator:** Kurt Voelker

4. **Textbook:** (and/or other required material)  Problem Solving & Program Design in C, Jeri R. Hanly & Elliot B. Koffman, Addison-Wesley.

5. a. **Course Description:** The C programming language and the UNIX programming environment. Operators, standard I/O functions, strings, pointers and arrays, data types and storage classes. Unix shell programming and basic I/O system calls. Credit not allowed for CSC, Software Engineering or CPE majors. 3 lectures.

   b. **Prerequisite:** MATH 142.

   c. **Required/Elective/Selective Elective for CPE, CSC, EE, SE**

   For Non-majors

6. a. **Course Goals/Outcomes**
   This course will give the student experience in writing, compiling, and running console applications in the C programming language under the UNIX operating environment. The student will rapidly progress from copying, compiling, and running simple programs, to modifying those programs to add features implemented using various branching and looping methods, to designing and running simple programs of their own design. Upon completing the course, the student will understand and be able to:
   - Edit and compile a console application in C under UNIX.
   - Properly format a program with related functions prototypes and comments.
   - Use single-entry/single-exit structured programming constructs.
   - Properly test a program and related functions.
   - Implement modules to solve complex problems.

   b. **How Student Outcomes addressed**
   ("B" = Basic level, "I" = Intermediate level, "A" = Advanced level)

   For Non-majors

7. **Major Topics Covered: (number of lecture hours each)**
   - Computers and the programming environment used (6)
   - Data types, variables vs. constants, strings, arrays, and pointers (6)
   - Branching with IF and SWITCH-CASE (6)
   - Looping with WHILE and FOR (6)
   - Functional decomposition and writing functions (6)
   - Reading/writing simple text files and formatted output (6)