

CIS208 – C LANGUAGE LABORATORY (1 Credit Course)

Textbook: *A Book on C*, by Al Kelley and Ira Pohl.

Instructor: Scott Gillan

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Office Hours: Monday, 2:00– 4:00 Nichols 237

Prerequisite by Topic: CIS 200

Class web page: <http://www.cis.ksu.edu/~sdg5476/cis208/>

The web page will contain lecture notes, homework assignments, announcements and supplemental documentation.

Objectives:

1. To introduce students to the C programming language. After successfully completing this course, students will have demonstrated the ability to solve problems in the C programming language, with meaningful, clear, and complete internal documentation.
2. To introduce students to the UNIX operating system.
3. Prepare students for advanced programming classes, including basic C++

Software: Your homework programs must compile and run on a UNIX system.

Graded Work

There will be weekly homework assignments, either programming assignments or written assignments. Electronic submissions will be emailed to the instructor and hardcopies of each submission is to be turned in to the CIS office. If you are ever not sure that your homework was successfully submitted, please resubmit it or ask me to verify it. Written assignments are due in the CIS main office before their due date.

There will be at least 2 tests, including the final. Tests will be announced at least 2 weeks ahead of time.

I reserve the right to have pop quizzes.

Grading paradigm

Style and correctness will be emphasized. Style improves readability of complex code. This includes proper use of comments. Points will be deducted for bad comments, or even spelling mistakes.

Grade Scale (tentative)

A	90-100 %
B	80-89 %
C	70-79 %
D	60-69 %
F	0-59%

Assignments: Late homework assignments will assess a 10% penalty each day over the due date, up to 4 days. After 4 days, all submitted material will not be graded.

Collaboration Policy: Discussion of techniques and ideas covered in class is encouraged. HOWEVER, EVERY LINE OF WORK ON ALL ASSIGNMENTS MUST BE YOUR OWN. Be professional and do your own work. COPYING OTHERS WORK WILL BE PENALIZED.

Course Outline:

1. Introduction to the C Language. Basic Unix commands, C program compilation and execution.
2. Fundamentals of C. Lexical elements, constants, data types, operators, and library functions.
3. Flow of control. Conditional Statements in C programs: relational and logical operators; if, if-else, and case statements. Loop Statements in C programs: while, do-while, for loops, go to, break, continue.
4. Functions and Structured Programming. Designing Programs: problem decomposition, using library functions, top-down design, structured programming, and pseudo-code. Functions: user-defined functions and function prototypes, definitions, invocations and simple recursions.
5. Arrays and Pointers. One-dimensional and multi-dimensional arrays, working with pointers and Pointer arithmetic.
6. Strings and File I/O.
7. Data Structures. Declaring structures, initializing, accessing members, using pointers to structures, linking structures.
8. C++

Dishonesty Policy: On all assignments and on all exams, you are expected to do your own work; this is reiterated in the following statement from the Provost's Office: "Plagiarism and cheating are serious offenses and may be punished by failure on the exam, paper or project, failure in the course, and/or expulsion from the University."

For more information, please visit the Honor System web page at: <http://www.ksu.edu/Honor>

Disability Information: Any student with a disability who needs an accommodation or other assistance in this course should make an appointment to speak with me as soon as possible.