

Course Code
COMP 1029C

Course Title
C Programming Bridging Course

Course Description

This course introduces the C programming language. It is intended for students who already have some experience in computer programming but wish to learn how to apply those programming skills to the C language. The course covers basic programming topics, such as variables, control, loops, and functions, to more advanced topics. Students explore these by self-learning of course materials together with guided programming exercises. Students without the prerequisites but possess relevant programming knowledge may seek instructor's approval for enrolling in the course. Graded P or F. *Exclusion(s):* COMP 2011 *Prerequisite(s):* COMP 1021 OR COMP 1022P OR COMP 1022Q OR ISOM 3230 OR ISOM 3320

List of Topics

Introduction to C

- C Basics
- Variables
- Text Input and Output

Essential Programming in C

- Making Decisions
- For Loops
- While Loops

Functions and Arrays

- Functions
- Variable Scope
- Arrays

Strings and Structures

- Strings
- Structures
- Random Numbers

Advanced Topics

- File Input and Output
- Recursion

Textbook(s):

N/A

Reference Book:

N/A

Grading Scheme

Online Exercises	50%
Exam	50%
Total	100%

Intended Learning Outcomes (ILOs)

1. Define basic programming elements such as variables, control, loops and functions in C
2. Describe data structures and data abstraction in C
3. Implement advanced programming concepts in C
4. Design, write and debug computer programs in C

Assessment Rubric

Course Learning Outcome	Exemplary	Competent	Needs Work	Unsatisfactory