

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, COMP 2012H. *Prerequisite(s)*: COMP 1021 OR COMP 1022P OR COMP 1022Q (prior to 2020-21) 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