Course Code Course Title

COMP 1029C 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