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, 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

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<table>
<thead>
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<tbody>
<tr>
<td>Online Exercises</td>
<td>50%</td>
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<tr>
<td>Exam</td>
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<td>Total</td>
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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

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<thead>
<tr>
<th>Course Learning Outcome</th>
<th>Exemplary</th>
<th>Competent</th>
<th>Needs Work</th>
<th>Unsatisfactory</th>
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