

Course Outline

Course Title Logic and Programming

Course Code PROG 1700

Hours 90

Credits 6

Prerequisites

Co-Requisites

Conditions

Course Description

This course introduces the fundamentals of logic and computer programming and their role in the creation of software solutions for any problem. Logic is used to break down complex problems into manageable tasks to allow for comprehensive problem-solving using computer code. This course covers the process of creating logical designs and implementing them as programmatic code to build computer software programs.

Rationale

Logic and problem-solving are core skills required to succeed in the world of information technology. All IT professionals, regardless of their specialty, benefit from a foundational knowledge of programming concepts and the skills they develop as they learn to program

Learning Outcomes

Students are required to successfully complete each course outcome. In keeping with NSCC's approach to portfolio learning, students will have demonstrated the ability to:

1. Translate logic principles into programming code to solve problems.
2. Perform Input/Output operations within software applications to retrieve data for manipulation and/or presentation.
3. Store data inside various data structures within software application to achieve specified tasks.
4. Implement conditional and logic within software applications to control program behaviour.
5. Implement functions/procedures within a software application to create maintainable/readable code.
6. Design and implement loops within software applications to perform repetitive tasks.
7. Implement debugging techniques using an IDE.

Grading

The pass for this course is 60%

Required Supplies

See instructor for details.

Other Learning Resources

See your Instructor for details.

Other Information

Not Applicable

Other Course Notes

It is the responsibility of the student to review and understand all Nova Scotia Community College policies, most specifically the Student Community Standards, Academic Integrity, Student Appeals, Use of Copyright Materials, and Academic Accommodation policies. Policies directly applicable to students are referenced in the student handbook. The policies and procedures can be found on the College website: [Policies & procedures \(https://nsc.ca/policies/\)](https://nsc.ca/policies/)

If you have questions about policies and/or procedures, you are encouraged to ask Faculty, your Academic Chair or Staff at Student Services.

Workplan

A workplan for this course is attached and will be reviewed by your faculty member(s) within the first week of class study.