

PROG2100

TENTATIVE WORK PLAN

Programming C++

FACULTY INFORMATION

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TEXTBOOK / RESOURCE REQUIREMENTS

Course resources available in Brightspace

SUPPLIES / ADDITIONAL RESOURCES

Course resources available in Brightspace

ACCREDITATION / EXTERNAL CERTIFICATION

Not Applicable

ASSESSMENT AND EVALUATION METHODS

A variety of informal and formal methods may be used for assessing and evaluating your learning, including but not limited to:

- Assignments
- Labs
- Tests
- Projects
- Presentations
- Peer Assessments
- Self-Assessments

Evaluation Scheme:

Assignments: 5 @ 10% each.....	50%
In-Class Lab: 4 @ 5% each.....	20%
Final Project	30%
Total	100%

All coursework must be completed and submitted on or before the specified due date. Detailed instructions for each assignment will be provided with the assignment specifications. Grading will be completed, and results will be posted in Brightspace within five working days.

Late Submissions

Assessments and evaluations are to be handed in on or before the specified due date. Late submissions will be accepted with a 5-point penalty for each day late, up to one week. Later than one week receives a grade of zero. Should you be unable to complete an evaluation, speak with your faculty prior to the due date about your options.

Supplemental Evaluations

Students may be eligible to write supplemental evaluations however, not all courses are eligible for a course supplemental evaluation. Approval to exempt a course from eligibility for supplemental evaluation must be granted by

the school Dean and the Director of Enrolment and Registrar. For more information speak with your faculty or Academic Chair.

TENTATIVE SCHEDULE

Because every learner is different, it is effective to align the pace, workload, and delivery strategy to strengths of the learners. In a creative learning environment, **you should expect some variations** from this tentative work plan as well as a variety of informal assessments throughout the course.

Week/Unit	Topics/Description	Relevant Learning Outcome(s)	Value/Evaluation/ Due Dates (if applicable)
Week 1 Sep 2-6	Orientation Day (3rd) <ul style="list-style-type: none"> • Introduction to PROG 2100: Programming with C++ • Software installation and environment setup 	1	
Week 2 Sep 9-13	<ul style="list-style-type: none"> • C++ programming concepts <ul style="list-style-type: none"> • Basic syntax ○ Variables, Data types ○ Operators, control structures ○ Basic input/output operations <p>Individual Assignment #1</p>	1,3	In-class Lab 1 (5%)
Week 3 Sep 16-20	<ul style="list-style-type: none"> • C++ Memory Management <ul style="list-style-type: none"> ○ Pointers and references ○ Smart Vs. Raw pointers ○ Memory management issues <p>Individual Assignment #2</p>	1,3,4	Assignment #1 (10%)
Week 4 Sep 23-27	<ul style="list-style-type: none"> • I/O streams and Exception handling <ul style="list-style-type: none"> ○ File input/output ○ Use of 'String' manipulation ○ Exception handling methods 	1,3,4,6	Assignment #2 (10%) In-Class Lab 2 (5%)
Week 5 Sep 30- Oct 4	National Truth & Reconciliation Day (30th) - College Closed <ul style="list-style-type: none"> • OOP Basics with C++ <ul style="list-style-type: none"> ○ Encapsulation, Abstraction, Polymorphism, Inheritance ○ Working with classes, functions <p>Individual Assignment #3</p>	1,2,4,6	
Week 6 Oct 7-11	<ul style="list-style-type: none"> • OOP continued <ul style="list-style-type: none"> ○ Structs was classes ○ Encapsulation and Inheritance <p>Individual Assignment #4</p>	1,2,4,6	Assignment #3 (10%)
Week 7 Oct 14-18	Thanksgiving Day (14th) – College Closed <ul style="list-style-type: none"> • Advanced OOP concepts 	1,2,4,6	In – class Lab 3 (5%) Assignment #4 (10%)

Week/Unit	Topics/Description	Relevant Learning Outcome(s)	Value/Evaluation/ Due Dates (if applicable)
	<ul style="list-style-type: none"> ○ Overloading ○ Deep/Shallow copy constructors ○ Friend functions <p>Individual Assignment #5</p>		
Week 8 Oct 21-25	<ul style="list-style-type: none"> • Code organization and best practices <ul style="list-style-type: none"> ○ Header guards ○ Enum classes 	1,2,4,6	Assignment #5 (10%)
Week 9 Oct 28 – Nov 1	<ul style="list-style-type: none"> • Standard Template Library (STL) and SQLite <ul style="list-style-type: none"> ○ STL containers ○ Template Class 	1,2,3,5,6	In- Class Lab 4 (5%)
Week 10 Nov 04-08	<ul style="list-style-type: none"> • Working with Function Objects /Lambda Expressions • Group Project Initiation 	1,2,3,4,5,6	
Week 11 Nov 11-15	Remembrance Day (11) – College closed <ul style="list-style-type: none"> • Understanding Design patterns, Algorithms • Project Discussion/Project work 	1,2,3,4,5,6	
Week 12 Nov 18 - 22	<ul style="list-style-type: none"> • Understanding Threads • Project Discussion/Project work 	1,2,3,4,5,6	
Week 13 Nov 25 -29	<ul style="list-style-type: none"> • Review C++ Programming • Project Discussion/Project Work 	1,2,3,4,5,6	
Week 14 Dec 02 - 06	<ul style="list-style-type: none"> • Project Discussion/Project Work 	1,2,3,4,5,6	
Week 15 Dec 09 - 12	<ul style="list-style-type: none"> • Project submission and Presentation <p>Semester work ends- Course Wrap-Up</p>	1,2,3,4,5,6	Group Project (30%)

ADDITIONAL INFORMATION

Inclusion and Integrity of the Learning Environment

We strive to ensure that equity, inclusion and social justice is the reality for all students, faculty and staff. We commit to provide a safe and respectful working and learning environment where differences are valued, expected and honored. Within this environment, students are required to demonstrate the values of respect, academic integrity and honesty.

To support these goals, we have the following policies:

- Respectful Community
- Student Community Standards
- Employee Code of Conduct
- Sexual Violence
- Academic Integrity
- Academic Accommodations
- Educational Equity

For more information visit [Policy and Procedures](#)

Appealing a Final Grade

NSCC is committed to a fair, transparent and timely approach to a student's right to challenge academic decisions and non-academic decisions that affect academic progress and standing.

If you feel your final grade is unreasonable, speak with your faculty or Academic Chair about your concerns. If the issue is not resolved, you may pursue a formal appeal. Speak with your Student Services Advisor for more information on the [Student Appeals Policy](#), procedures, and your eligibility.

Copyright

Copyright compliance is a legal responsibility. All students, staff and faculty at NSCC are required to abide by the NSCC [Use of Copyright Materials Policy](#), [Fair Dealing Guidelines](#) and the *Copyright Act of Canada* when copying materials. This includes art, music, videos, sound recordings, images, printed works (book, journals, newspapers, etc.) and materials on the Internet. Check with your Campus Library if you have questions or visit our [Copyright Guide](#).

Preparing for Learning

Your success in this course stems largely from your level of engagement and willingness to learn. Preparation, attendance, and participation are key factors in learning. If you feel overwhelmed, lost, or disengaged, speak with your faculty, Academic Chair, or Student Services Advisor about how we can help.

Student Supports

Visit the [Student Supports Hub](#) to access accessibility, advising, career, financial aid, library, learning and wellness supports. For support with Brightspace visit [Service Desk](#) and select Technology Services and then View Services. Click **Create a Request** (Select "Brightspace", then "Brightspace Student Support"). Or, by phone, dial 902 491-4357, or Toll-free: 1 866 898 4357. For self-directed, how-to resources to aid in using Brightspace, visit the [Brightspace Toolkit](#).

Take care of yourself

As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating or lack of motivation. This may impact your daily activities and your academic performance.

We are here to support you.

To talk to a counsellor and explore other supports: [Wellness and counselling](#)

For online supports and our 24/7 student helpline: [HealthymindsNS](#)

Your wellbeing is a priority – review our [Mental Wellness Strategy](#)

Workplan Approval



Signature: Faculty

Kalpana Samaraweera Mudalige

Name of Faculty Member

27/08/2024

Date



Signature: Academic Chair

Monica Lloyd

Name of Academic Chair

2024-08-30

Date