PROG2400
Data Structures

TENTATIVE WORK PLAN

FACULTY INFORMATION

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Office Telephone	N/A
Campus	Annapolis Valley Campus – Centre for Geographic Sciences (COGS)
Office Location	Room 114-B
Availability	Monday – Thursday 3:30 – 4:30 pm

Academic Chair:
Monica Lloyd
902-584-2056
monica.lloyd@nscc.ca

Administrative Assistant:
Angie Publicover
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angie.publicover@nscc.ca

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: 6 @ 10% each...60%
Test 01...20%
Test 02 ....20%
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
 	
Jan 06 - 10
	Introduction to Data Structures
	• Linear /Non-Lenear Structures
	• Intro to time complexity
	• Algorithms and problem solving
	
	• Arrays
	  ○ Array operations
	  ○ Related algorithms
	  ○ Arrays Vs. other data structures
		1,2	

Week 2 Jan 13 - 17	Linked Lists • Linked lists basics • Linked lists operations • Related algorithms	1,2	**Assignment 01 – 10%**
Week 3 Jan 20 - 24	**Jan 24 – PD day/No Classes** Advanced Linked lists • Arrays Vs. Linked Lists	1,2	
Week 4 Jan 27 -31	Stacks • Stack operations • Linked list based and array-based implementations • Algorithms	1,2	**Assignment 02 – 10%**
Week 5 Feb 03 - 07	Queues • Queue basics • Linked list based and array-based implementations • Algorithms	1,2	
Week 6 Feb 10 - 14	Queues & Stacks Continue. • Compare Data Structures	1,2	**Assignment 03 – 10%**
Week 7 Feb 17 - 21	**Feb 17 – Heritage Day/No Classes** Recursion • Recursion basics	1,2	

Week/Unit	Topics/Description	Relevant Learning Outcome(s)	Value/Evaluation/ Due Dates (if applicable)
Week 8 Feb 24 - 28	**Feb 26 – Assessments and Evaluations Day/No Classes** Trees • Binary Tree concepts • Binary Search Trees	1,2	**Assignment 04 – 10%**
Week 9 Mar 03 - 07	Trees Continue • Tree traversals	1,2	**Test 01 – 20%**
Week 10 Mar 10 - 14	**Study Break / No Classes**		
Week 11 Mar 17 - 21	Time Complexity Fundamentals & Working with Algorithms	1,2,3	**Assignment 05 – 10%**
Week 12 Mar 24 - 28	Sorting & Searching Algorithms	1,2,3	
Week 13 Mar 31 – Apr 04	Iterative solutions and Eliminating Recursion	1,2,3	**Assignment 06 – 10%**
Week 14 Apr 07 - 11	Review and discussions	1,2,3	
Week 15 Apr 14 - 16	Final Evaluations **Semester work ends- Course Wrap-Up**	1,2,3	**Test 02 – 20%**

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.
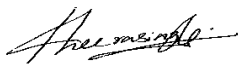
We are here to support you.
To talk to a counsellor and explore other supports: Wellness and counselling
For online supports and our 24/7 student helpline: HealthymindsNS
Your wellbeing is a priority – review our Mental Wellness Strategy

Workplan Approval

[signature]	*[signature]*
Signature: Faculty	Signature: Academic Chair
Kalpana Samaraweera Mudalige	Monica Lloyd
Name of Faculty Member	Name of Academic Chair
27/12/2024	2025-01-03
Date	Date