# CMPSC 24 (Summer '21) Resource List

## Week 1 -

- Pointers
- Control Structures
- <u>Templates (generic data type)</u>
- C++ Data Types
- <u>Classes</u>
- Namespace and Scope
- Dynamic Memory Allocation

#### Week 2 -

- Creating Objects
- Rule of three
- Introduction to Strings
- Overloading in C++
- Working with 'cstring'
- Information on 'sizeof(string)'

#### Week 3 -

- Linked List
- Binary Search Tree
- Makefile Tutorial

### Week 4 -

- Binary Search Tree Engine
- CLion Memory View
- CLion Breakpoints

# Week 5 -

- Runtime Analysis Practice Problems
- Big O Cheatsheet
- Inheritance
- More Big O Practice
- Runtime Analysis of Data Structures
- AVL Tree Tool

## Week 6 -

- Stacks
- Queues

### Week 7 -

- Heaps in STL
- Binary Heaps Video
- Priority Queue
- Comparator Class

## Week 8 -

Sorting Algorithms