

# 225L: Data structures & Algorithm

**Instructor: Shabbir Ahmed**

**Course Objectives:** To teach and instruct the students the basics of C++ programming language and its principles and mainly focus on data structure and its implementation. Upon completing the course, a learner will have clear and concise understanding of data structure and algorithm.

The motto of this course is **“We will learn together”-** so don’t feel any hesitation to ask questions.

**Every Question is warmly welcomed and appreciated.**

# Contact Info:

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# Office Hours:

# ST: 12:00 PM -4:00 PM

# Office Room: LIB600- C8

**\*\*Please make an appointment by call/mail before meeting me**

Course Outline & Schedule

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| --- | --- |
| Lab Class | Topic |
| Class 1 | Introduction, Dynamic Memory Allocation |
| Class 2 | Class & object, template class |
| Class 3 | Unsorted list, sorted list |
| Class 4 | Stack (Array) |
| Class 5 | Queue (Array) + Quiz |
| Class 6 | Stack, Queue (Linked list) |
| Class 7 | No class |
| Class 8 | Unsorted list, sorted list (Linked list) |
| Class 9 | Recursion |
| Class 10 | BST |
| Class 11 | Graph |
| Class 12 | Final |

**Mark Distribution**

Attendance: 10 marks

Lab Task: 30 marks

Quiz: 30 marks

Final: 30 marks