



# National University

of Computer & Emerging Sciences Peshawar Campus

**PROGRAM: COMPUTER SCIENCES**

**COURSE: (CL218) DATA STRUCTURES LAB**

**LAB INSTRUCTOR: MUHAMMAD HAMZA**

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## **COURSE CONTENT**

1. Array Based List
2. Linked List
3. Doubly Linked List
4. Single and Double Circular Linked List
5. Stack (Array and Linked List Based)
6. Queue (Array and Linked List Based)
7. Binary Tree & Binary Search Tree
8. AVL Tree
9. Threaded Binary Tree
10. Heap (Tree and Array Based)
11. Hash Tables
12. Graph
13. Sorting Algorithms

## **EVALUATION (Tentative)**

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|-------------------------|---|-----|
| 1. 15 Lab Tasks         | - | 20% |
| 2. 15 Quiz (Best of 10) | - | 10% |
| 3. Final Lab Exam       | - | 50% |

## **LAB RULES** **(MOST IMPORTANT)**

- Attendance will be marked on the basis of lab task submission.
- Each Lab task should be completed in the respective lab and you are responsible to get it evaluated by the instructor.
- No late submissions will be entertained.
- All labs will be tasks based.

**GOOD LUCK :)**