

# Course Outline

Course Name:

CS 201 Data Structures

Instructor Name:

Mr. Fazl-e-Basit

Week No	Duration	Topics
1	3 Hours	Arrays & Lists
2	3 Hours	Stacks – Applications – Implementation
3	3 Hours	Queues – Applications – Implementation
4	3 Hours	Link Lists - Implementation
5	3 Hours	Two-way circular Link List (Doubly Ring) - Implementation
6	3 Hours	Recursion - Implementation
7	3 Hours	Trees <ul style="list-style-type: none"><li>• Trees / Binary Tree</li></ul>
8	3 Hours	Binary Search Tree with Implementation Issues
9	3 Hours	AVL Tree with Implementation Issues
10	3 Hours	Red Black Tree with Implementation Issues
11	3 Hours	Threaded Binary Tree with Implementation issues
12	3 Hours	Hashing – Different Hashing Schemes
13	3 Hours	Sorting Algorithms - Implementation
14	3 Hours	Graph Algorithms Representation of Graphs
15	3 Hours	Breath First Search (BFS) and Depth First Search (DFS)
16	3 Hours	LAB Exam
		Final Exams