**CSC 307: Discrete Structures Course Curriculum**

i. Basic Set Theory: Basic definitions, Relations, Equivalence Relations Partitions, Ordered Set.

ii. Boolean Algebra

iii. Lattices and Logic

iv. Graph theory: Directed and Undirected graphs

vi. Graph Isomorphism, Basic Graph Theorems

vii. Matrices; Integer and Real matrices

viii. Boolean Matrices, Matrices med m, Path matrices

ix. Adjacency Vectors/Matrices: Path adjacency matrix

x. Numerical & Boolean Adjacency matrices.

xi. Applications to counting, Discrete Probability Generating Functions.