

3. Operating Systems (CS-110)

(3-0-2)

Introduction to Operating Systems; layered architecture, basic concepts: interrupt architecture, system calls,, Processes and Threads: synchronization and protection; CPU scheduling; Deadlocks; Main memory management including paging and segmentation schemes; Virtual memory management including page replacement algorithms; Storage management including file systems; Case studies of Unix.

References:

1. A. Silberschatz, P. Galvin and G. Gagne, Operating System Concepts, Ninth Edition, John Wiley & Sons, 2012
2. William Stallings, Operating Systems: Internals and Design Principles, Seventh Edition, Pearson Education.
3. A.S.Godbole and A. Kahate, Operating Systems, Third Edition, TMH.
4. Andrew S. Tanenbaum and Herbert Bos, Modern Operating Systems, Prentice Hall.