

**Guidelines of B.Sc. (H) Computer Science Sem III (CBCS)**  
**Operating System (BHCS06) Core Course - (CC)**

Chapter	Topic	Contents	Lectures
1	<b>Introduction</b>	1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.11	10
2	<b>System Structures</b>	2.1, 2.3, 2.4, 2.5, 2.7 – 2.7.4, 2.10  * 2.2 – Coverage with Demo for Practical Purpose	6
3	<b>Process Concept</b>	3.1, 3.2, 3.3 (excluding process creation using Windows API figure 3.11)	4
4	<b>Multithreaded Programming</b>	4.1, 4.2, 4.3, 4.4 – 4.4.1	4
5	<b>Process Scheduling</b>	5.1, 5.2, 5.3 – 5.3.4	5
6	<b>Synchronization</b>	6.1, 6.2, 6.3, 6.6 - 6.6.1	4
7	<b>Deadlocks</b>	7.1 , 7.2, 7.3 (excluding deadlocks with mutex locks)	3
8	<b>Memory-Management Strategies</b>	8.1, 8.2, 8.3, 8.4, 8.5	8
9	<b>Virtual-Memory Management</b>	9.1, 9.2, 9.3, 9.4 – 9.4.3	5
10	<b>File System</b>	10.1, 10.2, 10.3	4
12	<b>Mass-Storage Structure</b>	12.1, 12.4	3

**References**

1. Silberschatz, P.B. Galvin, G. Gagne, Operating System Concepts, 9th edition, John Wiley Publications.

**Additional Resources**

1. Dhamdhere, D. M. (2006). Operating Systems: A Concept-based Approach. 2nd edition. Tata McGraw-Hill Education.
2. Kernighan, B. W., & Rob Pike, R. (1984). The Unix programming environment (Vol. 270). Englewood Cliffs, NJ: Prentice-Hall
3. Stallings, W. (2018). Operating Systems: Internals and Design Principles. 9th edition. Pearson Education.

4. Tanenbaum, A. S. (2007). Modern Operating Systems. 3rd edition. Pearson Education.