

No.	Date	Topic	Details	Reading	Projects
1	Sep. 8	Overview OS structures	<i>history, operating system purpose</i> <i>services, user/kernel interface, system calls</i>	§1.1–1.5 §2.1–2.7	Proj. 1 out
2	Sep. 15	Processes Communication	<i>abstractions, independent/cooperative processes</i> <i>IPC, mechanisms</i>	§3.1–3.3 §3.4–3.6	
3	Sep. 22	Threads Scheduling	<i>concepts, multithreading, libraries</i> <i>criteria, process vs. thread, evaluation</i>	§4.1–4.4 §5.1–5.5, 5.7	
4	Sep. 29	Synchronization Deadlock	<i>monitors, readers/writers, semaphores</i> <i>characterization, detection, avoidance, prevention</i>	§4.1–4.2.2 §7.1–7.7	Proj. 1 due Proj. 2 out
5	Oct. 6	Memory management Page tables	<i>swapping, paging, TLB</i> <i>structure, pages, segmentation</i>	§8.1–8.3 §8.4–8.6	
6	Oct. 13	Virtual memory	<i>demand paging, cow, thrashing, memory mapping</i>	§9.1–9.7	
7	Oct. 20	Storage <i>Mid-term review</i>	<i>disks, disk structure, other I/O</i>	§12.1–12.4	
	Oct. 22				Proj. 2 milestone due
8	Oct. 27	<i>Mid-term exam</i> Storage management	<i>disk scheduling, RAID, mirroring, striping</i>	§12.5–12.8	
	Nov. 2				Proj 2 due
9	Nov. 3	File systems Interface	<i>concepts, access, sharing, protection</i> <i>hard links, soft links</i>	§10.1–10.6	Proj. 3 out Proj. 4 out (extra credit)
10	Nov. 10	File implementation Advanced file systems	<i>file allocation, naming, caching, consistency, inodes</i> <i>versioning, log-structured</i>	§11.1–11.7	
	Nov. 16				Proj. 3 milestone due
11	Nov. 17	Other I/O	<i>hardware, DMA, streams</i>	§13.1–13.6	
	Nov. 24	<i>no class</i>			
12	Dec. 1	Protection Security	<i>protection, encryption, ACLS</i> <i>authentication, networks, cryptography</i>	§14.1–14.8 §15.1–15.6	
	Dec. 7				Proj 3 due
13	Dec. 8	Advanced topics <i>Final exam</i>	<i>distributed systems, virtual machines</i>	§16.1–16.6, 17.1–17.4	
	Dec. 16				Proj. 4 due (extra credit) <i>No slip days/extensions</i>