CSE 320: Systems Fundamentals II – Course Schedule

Tuesdays & Thursdays, 1:15 pm - 2:35 pm (via Zoom)

The following course schedule is TENTATIVE and subject to change. Readings are taken from Computer Systems: A programmer's Perspective, 3rd edition (https://www.amazon.com/Computer-Systems-Programmers-Perspective-3rd/dp/013409266X/ref=dp_ob_title_bk) by Bryant and O'Hallaron.

Date	Lecture Topics	Book Readings
2/2	Administrative; System Software Overview	1
2/4	C for Java Programmers	online C reference
2/9	C for Java Programmers	
2/11	C for Java Programmers	
2/16	C for Java Programmers	
2/18	C for Java Programmers	
2/23	C for Java Programmers	
2/25	Linking and loading	7
3/2	Linking and loading	
3/4	Dynamic memory allocation (basic concepts)	9.9-9.11
3/9	Dynamic memory allocation (implementation techniques)	
3/11	Exceptional control flow, processes	8.1-8.4
3/16	Exceptional control flow, processes	
3/18	Exceptional control flow, processes	
3/23	Signals, signal handlers	8.5-8.8
3/25	Async-signal-safety, waiting for signals, nonlocal jumps	
3/30	System-level I/O: Unix I/O, Unix file system concepts	10.1-10.4
4/1	System-level I/O: File descriptors, sharing files, pipes, redirection	10.6-10.12
4/6	System-level I/O: File descriptors, sharing files, pipes, redirection	10.6-10.12
4/8	**Midterm Exam**	
4/13	Concurrent Programming - Motivation (via network servers)	11.1-11.4
4/15	Concurrent Programming - Overview of threads	12.1-12.3
4/20	Synchronization: Race conditions, mutual exclusion, semaphores	12.4-12.8
4/22	Synchronization: Bounded buffer, Readers & Writers	
4/27	Thread safety, races, deadlocks	
4/29	Memory hierarchy, cache concepts	6
5/4	Cache memories	
5/6	Virtual memory concepts	9.1-9.8

5/17	**Final Exam** (online, 11:15 am -- 1:45 pm)	