Date	Topic	Due Dates	Reading	Extra Reading	Notes	Class Video
Tue, Jan 19	Introduction: distributed systems, computer networks, and RPC		Prof. Kleppmann's slides, lecture 1	How to Read a Paper		Video: Introduction, Jan 19
Thu, Jan 21	Paper: RPC		Lightweight RPC (ACM TOCS 1990)	RPC (ACM TOCS 1984)		Video: RPC, Jan 21
Tue, Jan 26	System models: network faults, crash and Byzantine faults, synchrony assumptions		Prof. Kleppmann's slides, lecture 2			Video: Models and Assumptions, Jan 26
Thu, Jan 28	Paper: Byzantine Generals Problem		Byzantine Generals Problem (ACM TOPLAS, 1982)			Video: Byzantine Generals, Jan 28
Tue, Feb 2	Physical clocks, clock synchronisation, and causality		Prof. Kleppmann's slides, lecture 3			Video: Clock Synchronization, Feb 2
Thu, Feb 4	Paper: Network Time Protocol		Network Time Protocol (IEEE TOC 1991)			Video: NTP
Tue, Feb 9	Logical time, broadcast protocols (reliable, FIFO, causal, total order)		Prof. Kleppmann's slides, lecture 4			Video: NTP Part 2, Vector Clocks, and Broadcast
Thu, Feb 11	Paper: Lamport's Logical Clock		Lamport's Logical Clock (CACM 1978)			Video: Broacast Part 2 + Lamport's Logical Clock
Tue, Feb 16	CANCELLED: Winter Storm					
Thu, Feb 18	CANCELLED: Winter Storm					
Tue, Feb 23	CANCELLED: Winter Storm					
Thu, Feb 25	Replication, quorum protocols, state machine replication		Prof. Kleppmann's slides, lecture 5			Video: Replication
Tue, Mar 2	Paper: State Machine Replication		State Machine Approach (ACM Computing Surveys 1990)			Video: State Machine Replication
Thu, Mar 4	Consensus, details on the Raft consensus algorithm		Prof. Kleppmann's slides, lecture 6			Video: Consensus
Tue, Mar 9	Paper: Raft		Raft (ATC 14)	Raft Replay Visualization Tool	The Secret Lives	Video: Raft
Thu, Mar 11	Midterm 1					
Tue, Mar 16	SPRING					
Thu, Mar 18	BREAK					
Tue, Mar 23	Guest lecture: Dr. Lalith Suresh (VMware Research)					
Thu, Mar 25	Paper: Paxos Made Moderately Complex		Paxos Made Moderately Complex (CSUR 2015)	Prof. Paul Paul Krzyzanowski's slides on Paxos		
Fri, Mar 26		Project 1 due				
Tue, Mar 30	Paper: Practical Byzantine Fault Tolerance		Practical Byzantine Fault Tolerance (OSDI 99)			
Thu, Apr 1	Replica consistency, two-phase commit, linearizability, eventual consistency					
Tue, Apr 6	Paper: Dynamo		Dynamo (SOSP 07)			
Thu, Apr 8	Guest lecture: Prof. Kartik Nayak (Duke)					
Sun, Apr 11		Project 2 proposal due				
Tue, Apr 13	Case studies: collaboration software, Google's Spanner					
Thu, Apr 15	Paper: Spanner		Spanner (OSDI 12)			
Tue, Apr 20	Paper: ZAB and Zookeeper		ZAB (DSN 2011)	Zookeeper (ATC 10)		
Thu, Apr 22	Paper: NFS and AFS		NFS (Three Easy Pieces chapter)	AFS (ACM TOCS 88)		
Tue, Apr 27	Guest lecture: Dr. Lorin Hochstein (Netflix)					
Thu, Apr 29	Paper: MapReduce and Spark		MapReduce (OSDI 04)	Spark (NSDI 12)		
Tue, May 4	Paper: Datacenters		Datacenter as a Computer (Chapters 1 and 2)			
Thu, May 6	Midterm 2					
Sat, May 15		Project 2 report due				
	Stuff we didn't get to:					
	Chord					
	RAMCloud					