

Lec.	Date	Topic	Reading	Add. Reading
1	8/27/25	Course introduction	How to Read a Paper	
2	9/1/25	Network essentials	Writing reviews for systems conferences	
3	9/3/25	Congestion control	TCP CC: A Systems Approach - Chapter 4	
4	9/8/25		BBR: Congestion-Based Congestion Control	
5	9/10/25	DCTCP and L4S	Data center TCP (DCTCP)	
6	9/15/25		Validating the Sharing Behavior and Latency Characteristics of the L4S Architecture	Implementing the 'Prague Requirements' for Low Latency Low Loss Scalable Throughput
7	9/17/25	SDN and programmable networks	OpenFlow: Enabling Innovation in Campus Networks	
8	9/22/25		P4: Programming Protocol-Independent Packet Processors	
9	9/24/25	Datacenter networks	A Scalable, Commodity Data Center Network Architecture	
10	9/29/25		CONGA: Distributed Congestion-Aware Load Balancing for Datacenters	
11	10/1/25	ML and networks	DINC: Toward Distributed In-Network Computing	
12	10/6/25		Crux: GPU-Efficient Communication Scheduling for Deep Learning Training	
13	10/8/25	Video streaming	Confused, Timid, and Unstable: Picking a Video Streaming Rate is Hard	A Buffer-Based Approach to Rate Adaptation: Evidence from a Large Video Streaming Service
	10/13/25	No class (Fall reading days)		
14	10/15/25	Video streaming	Enabling Passive Measurement of Zoom Performance in Production Networks	
15	10/20/25	TBD	TBD	
	10/22/25	Mid project presentation		
	10/27/25			
16	10/29/25	Routing, BGP, and the Internet	Interconnection, Peering and Settlements - Part I	Interconnection, Peering and Settlements-Part II
17	11/3/25		SCION: Scalability, Control, and Isolation On Next-Generation Networks	
18	11/5/25			
19	11/10/25	5G	https://5g.systemsapproach.org/index.html (chapter 1, 2, 5)	Building Flexible, Low-Cost Wireless Access Networks With Magma
20	11/12/25	Security and Privacy	The CVE Wayback Machine: Measuring Coordinated Disclosure from Exploits against Two Years of Zero-Days	Snort – Lightweight Intrusion Detection for Networks
21	11/17/25		Tracking, Profiling, and Ad Targeting in the Alexa Echo Smart Speaker Ecosystem	
22	11/19/25	Photonic computing	Inference in artificial intelligence with deep optics and photonics	
23	11/24/25		Lightning: A Reconfigurable Photonic-Electronic SmartNIC for Fast and Energy-Efficient Inference	
	11/26/25	No class (Thanksgiving)		
24	12/1/25	Satellite networks	A Multifaceted Look at Starlink Performance	Delay is Not an Option: Low Latency Routing in Space
25	12/3/25	Project presentation		
26	12/8/25			