

Syllabus
November 10, 2013

Date	Speaker	Topic / Paper
September 3	rek	Introduction, Course Requirements TCP Sliding Windows
September 10	rek rek rek	Review Performance Metrics Congestion Control and Queuing TCP Congestion Control
September 17	rek rek	#1 Random Early Detection Gateways for Congestion Avoidance by Floyd and Jacobson #2 Tuning RED for Web Traffic by Christiansen et al.
September 24	Pankaj Didwania rek	#3 The War between Mice and Elephants by Guo and Matta #4 Core-Stateless Fair Queueing: a Scalable Architecture to Approximate Fair Bandwidth Allocations in High Speed Networks by Stoica et al.
October 1	rek Brett Levasseur	#5 Congestion Control for High Bandwidth-Delay Product Networks by Katabi et al. #6 TCP Westwood(+) Protocol Implementation in ns-3
October 8	Tran Didwania Levasseur rek	TCP Vegas; TCP Compound; TCP Cubic Wireless Networking Primer
October 15	Chung Tran rek	#7 Characterization of 802.11 Wireless Networks in the Home by Yarvis et al. #8 Observing Home Wireless Experience through WiFi APs by Patro et al.
October 22		No Class
October 29	rek Brett Levasseur rek	Cellular Networking Primer #9 An In-depth Study of LTE: Effect of Network Protocol and Application Behavior on Performance by Huang et al. Wireless Sensor Network Primer
November 5	Pankaj Didwania Chung Tran	#10 Towards MIMO-Aware 802.11n Rate Adaptation by Pefkianakis et al. #11 Defending against Flooding-Based Distributed Denial-of-Service Attacks: A Tutorial by Rocky Chang

November 12	rek rek	Routing Primer #12 A Performance Comparison of Multi Hop Wireless Ad Hoc Network Routing Protocols by Brock et al.
November 19	rek Chung Tran	Wireless Sensor Network Primer (cont) #13 Secure Routing in Wireless Sensor Networks: Attacks and Countermeasures by Karlof and Wagner
December 3	Brett Levasseur rek rek	#14 Ultra-Low Duty Cycle MAC with Scheduled Channel Polling by Ye et al. The Internet of Things #15 The ContikiMAC Radio Duty Cycling Protocol by Dunkels
December 10	Pankaj Didwania	#16 Containing Denial-of-Service Attacks in Broadcast Authentication in Sensor Networks by Wang et al. Student Project Presentations
December 17		Oral Final Exam