

Syllabus
October 19, 2007

Date	Speaker	Topic / Paper
September 4	rek	Introduction TCP Sliding Windows Congestion Control and Queuing
September 11		No Class
September 18	rek rek	TCP Congestion Control <i>#1 Random Early Detection Gateways for Congestion Avoidance by Floyd and Jacobson</i>
September 25	rek rek rek	<i>#2 Tuning RED for Web Traffic by Christiansen et al.</i> <i>#3 Core-Stateless Fair Queueing: a Scalable Architecture to Approximate Fair Bandwidth Allocations in High Speed Networks by Stoica et al.</i> Computer Networking History
October 2	Chris Gianfrancesco & Rick Skowyra Pushkaraj Chitre & Meganne Atkins	<i>#4 The War between Mice and Elephants by Guo and Matta</i> <i>#5 On Designing Improved Controllers for AQM Routers Supporting TCP Flows by Hollet et al.</i>
October 9	Ivor Rodrigues & Syed Zaidi rek Ronak Bhuta & John Keenan	<i>#6 Emulating AQM from End Hosts by Bhandarkar et al.</i> Wireless Primer <i>#7 Enhancing TCP Fairness in Ad Hoc Wireless Networks Using Neighborhood RED by Xu and Gerla</i>
October 16	rek Angel Pagan & Xiang Li Adwait Belsare	Routing Primer <i>#8 A Performance Comparison of Multi-Hop Wireless Ad Hoc Network Routing Protocols by Broch et al.</i> <i>#9 Improving TCP Performance over Mobile Ad Hoc Networks by Exploiting Cross-Layer Information Awareness by Yu</i>

October 23	Chris Gianfrancesco Suvesh Pratapa	#10 Characterization and Analysis of Multi-Hop Wireless MIMO Network Throughput by Hamdaoui and Shin #11 XORs in the Air: Practical Wireless Network Coding by Katti et al.
October 30	Syed Zaidi Pushkaraj Chitre	#12 Solutions to Performance Problems in VoIP over a 802.11 Wireless LAN by Wang et al. #13 802.11 User Fingerprinting by Pang et al.
November 6	rek Meganne Atkins rek	#14 On the Performance Characteristics of WLANs: Revisited by Choi et al. #15 Robust Rate Adaptation for 802.11 Wireless Networks by Wong et al. #16 CARA: Collision-Aware Rate Adaptation for IEEE 802.11 WLANs by Kim et al.
November 13	Adwait Belsare & Suvesh Pratapa Ivor Rodrigues	#17 Defending against Distributed Denial of Service Attacks: A Tutorial by Chang / DDOS Defense by Offense by Walfish et al. #18 Secure Routing in Wireless Sensor Networks: Attacks and Countermeasures by Karlof and Wagner
November 27	rek Xiang Li Angel Pagan	WSN Primer #19 An Energy-Efficient MAC Protocol for Wireless Sensor Network by Ye et al. #20 WiseMAC: An Ultra Low Power MAC Protocol for the Downlink of Infrastructure Wireless Sensor Networks by El-Hoiydi and Decotignie
December 4	Ronak Bhuta Rick Skowyra	#21 Ultra-Low Duty Cycle MAC with Scheduled Channel Polling by Ye et al. #22 Energy-Efficient Communication Protocol for Wireless Microsensor Networks by Heinzelman et al.
December 11		Final Exam