Syllabus
November 11, 2011

Date	Speaker	Topic / Paper
August 29	rek	Introduction, Course Requirements TCP Sliding Windows
September 12	rek rek rek	Review Performance Metrics Congestion Control and Queuing TCP Congestion Control
September 19	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 26	rek **Eric Wang**	#3 Core-Stateless Fair Queueing: a Scalable Architecture to Approximate Fair Bandwidth Allocations in High Speed Networks by Stoica et al. #4 The War between Mice and Elephants by Guo and Matta
October 3	rek **four students**	#5 Congestion Control for High Bandwidth-Delay Product Networks by Katabi et al. TCP Flavors (Vegas, Cubic, Compound, High-Speed TCP)
October 10	rek **Jim Gaskell** rek	#6 An Implementation and Experimental Study of the eXplicit Control Protocol (XCP) by Zhang and Henderson #7 Defending against Flooding-Based Distributed Denial-of-Service Attacks: A Tutorial by Rocky Chang #8 An Analysis of the Skype Peer-to-Peer Internet Telephony by Baset and Schulzrinne
October 17		**No Class**
October 24	**Steve He** **Lianmu Chen**	#9 Inferring Internet Denial of Service Activity by Moore et al. #10 DDoS Defense by Offense by Walfish et al.
October 31	rek **Eric Wang**	Wireless Networking Primer #11 CARA: Collision-Aware Rate Adaptation for IEEE 802.11 WLANs by Kim et al.
November 7	**Jim Gaskell** rek	#12 802.11 User Fingerprinting by Pang et al. Routing Primer

	Steve He	#13 A Performance Comparison of Multi Hop Wireless Ad Hoc Network Routing Protocols by Brock et al.
November 14	**Lianmu Chen** **rek**	#14 XORs in the Air: Practical Wireless Network Coding by Katti et al. Wireless Sensor Network (WSN) Primer
November 21	**Eric Wang** **Jim Gaskell**	#15 Ultra-Low Duty Cycle MAC with Scheduled Channel Polling by Ye et al. #16 Secure Routing in Wireless Sensor Networks: Attacks and Countermeasures by Karlof and Wagner
November 28	**Steve He** **Lianmu Chen**	#17 An Empirical Study of UHF RFID Performance by Buettner and Wetherall #18 Design and Evaluation of a Versatile and Efficient Receiver-Initiated Link Layer for Low-Power Wireless by Dutta et al.
December 5	**rek** **rek** **Steve He & Eric Wang** **Jim Gaskell** **Lianmu Chen**	#19 Low-Power Interoperability for the IPv6 Internet of Things by Dunkels et al. #20 Leveraging IP for Sensor Network Deployment by Duquennoy et al. Student Project Presentations (25 minutes each) Recent Research in Wireless Body Networks Telos Mote Implementation Security in Near Field Communications
December 12		**Final Exam**