

**Syllabus**  
**Summer 2003**  
*July 29, 2003*

<b>Date</b>	<b>Speaker</b>	<b>Topic / Paper</b>
<b>June 3</b>	<b>rek</b>	Course Introduction Computer Networks History TCP Sliding Windows
<b>June 10</b>	<b>rek</b>  <b>rek</b>	Congestion Control and Queuing TCP Congestion Control <b><i>“Random Early Detection Gateways for Congestion Avoidance”</i></b> by Floyd and Jacobson
<b>June 17</b>	<b>Luba Sakharuk</b> <b>Eswin Anzueto</b> <b>rek</b>	<b><i>“Tuning RED for Web Traffic”</i></b> by Christiansen et al. <b><i>“The War between Mice and Elephants”</i></b> by Guo and Matta <b><i>“Core-Stateless Fair Queueing: Achieving Approximately Fair Bandwidth Allocations in High Speed Networks”</i></b> by Stoica, Shenker, and Zhang
<b>June 24</b>	<b>Yixin Hua</b>  <b>Hareesh Pattipati</b>  <b>Matthew Packard</b>	<b><i>“Promoting the Use of End-to-End Congestion Control in the Internet”</i></b> by Floyd and Fall <b><i>“Analysis and Design of an Adaptive Virtual Queue (AVQ) Algorithm for Active Queue Management”</i></b> by Kunniyur and Srikant <b><i>“Congestion Control for High Bandwidth-Delay Product Networks”</i></b> by Katabi, Handley, and Rohrs
<b>July 1</b>	<b>rek</b>  <b>Michael Pincott</b>  <b>Matthew Vidal</b>	<b><i>“A State Feedback Control Approach to Stabilizing Queues for ECN-Enabled TCP Connections”</i></b> by Gao and Hou <b>MANETconf: Configuration of Hosts in a Mobile Ad Hoc Network</b> , by Nesargi and Prakash <b>Interworking Internet Telephony and Wireless Telecommunications Networks</b> , by Lennox et al.
<b>July 8</b>	<b>Vikrant Karan</b>  <b>Eswin Anzueto</b>   <b>Yixin Hua</b>	<b>A Performance Comparison of Multi-Hop Wireless Ad Hoc Network Routing Protocols</b> , by Broch et al. <b>Comprehensive Performance Analysis of a TCP Session Over a Wireless Fading Link with Queueing</b> , by Abouzeid and Roy <b>Understanding TCP fairness over Wireless LAN</b> , by Pilosof et al.
<b>July 15</b>	<b>Philip Hardebeck</b>  <b>Luba Sakharuk</b>  <b>Hareesh Pattipati</b>	<b>The Impact of Multihop Wireless Channel on TCP Throughput and Loss</b> , by Fu et al. <b>Packet Leashes: A Defense against Wormhole Attacks in Wireless Networks</b> <b>Detecting SYN Flooding Attacks</b> , by Wang, Zhang and Shin
<b>July 22</b>	<b>Matthew Packard</b> <b>Michael Pincott</b>	<b>A Technique for Counting NATted Hosts</b> , by Bellovin <b>Save: Source Address Validity Enforcement Protocol</b> , by Li

	<b>Matthew Vidal</b>	et al. <b>Detecting Network Intrusions via Sampling: A Game Theoretic Approach</b> , by Kodialam and Lakshman
<b>July 29</b>	<b>Vikrant Karant Matthew Packard Michael Pincott Matthew Vidal Eswin Anzueto Yixin Hua Hareesh Pattipati Luba Sakharuk Vikrant Karant</b>	<b>The HoneyNet Project: Trapping the Hackers</b> , by Spitzner <b>Storage Area Networks</b> <b>Internet2</b>  <b>Simulating Web Traffic</b>  <b>Firewalls</b> <b>3Com Network Measurement</b> <b>Wireless Security</b>
<b>August 5</b>		<b>Oral Final Exams in FL135</b> <b>5:00 Matthew Packard</b> <b>5:30 Eswin Anzueto</b> <b>6:00 Michael Pincott</b> <b>6:30 Hareesh Pattipati</b> <b>7:00 Matthew Vidal</b> <b>7:30 Yixin Hua</b> <b>8:00 Luba Sakharuk</b> <b>8:30 Vikrant Karant</b>