COMS 4140-1
Networking Laboratory

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General Information

- Instructor: Shlomo Hershkop
  - my background
- TA - TBD
- Labs (Interest Lab)
  - Meeting times depend on groups
- Meeting time
  - Lectures Monday 11-12:15, CLIC Lab
  - Group Dependant

- Instructor office hours:
  - my office 460 CSB
  - TBD (?)
    - lets take a rough poll
Course Overview

- **Goals**
  - Gain hands-on experience
  - Reinforce important networking concepts and techniques

- **Organization**
  - Weekly lectures review relevant materials
  - Weekly labs
    - group work
    - 3 hours each
General Information

- CLIC Lab
  - cs accounts
  - mice – getting swipe access

- Let’s go around the room
  - introduce yourself
  - background related to networking
  - background in CS/relevant stuff
  - why you are taking the course
Material Covered (partial list)

- Wide Area Networks
  - Internetworking
  - Static & Dynamic Routing
  - UDP & TCP

- LAN Switching & Bridges

- DHCP, NAT, DNS, SNMP
  (and various other 3 & 4 letter acronyms 😊)
Bibliography & Readings

- **TextBook**
  - *Mastering networks*
    by Jorg Liebeherr and Magda El Zarki
    Sample Chapters and more info at the authors' Web Site

- **Reference books**
  - *Computer networking: a top-down approach featuring the Internet* by James Kurose and Keith Ross
  - Cisco Essentials book and Cisco Web Site
  - Unix Man Pages & RFCs

- **Course Web Site will be populated with FAQ & Links**
  - Please submit any links you think would be interesting to the rest of the class
Lab Organization

- Groups (maximum 4 people, optimal is 3)
  - One report per group
  - Pre-Labs and Lab Feedback form completed by each of the students individually

- Group Selection
  - Find people that you can work with
  - Random selection is also a choice 😊
Grading Scheme

- Pre-lab questions: (20%) (Individual)
- Two Exams, each 20% (40%) (Individual)
  - can be replaced by projects
- Lab Reports (30%) (Group)
- Class Participation (10%) (Individual)
  - 2 Makeups for lost Labs
Cheating Policy

DON’T
Class schedule

- will be posted on the class website:
  - www.cs.columbia.edu/~sh553/
why is this course important

- computer science is not programming
- computer science education is lacking if not enough hands on practice
- lots of theory in this course 😊
- will have fun learning the material in controlled environment
Group Projects

- Project proposals will be due mid October
  - group or individual
  - try not to write a PHD dissertation as part of the project 😊
  - will have suggestions posted online

- break into two parts
  - one for midterm
  - one for final

- three weeks to complete past mid october
Questions?
Shopping List

- Obtain Text
  - Start reading 1-24, 45-71 for next week
- Setup swipe access
  - level 48