461 Midterm Review
Exam Format

• Same time: Wed. 3:30-4:50 p.m.
• Closed book
• Calculators encouraged, nothing fancy
• Essay questions
• Up to and including Ch 4.2
• Lectures are a good guide for prep
• Don’t cheat
Layering, Bits and BW

- Layering, encapsulation, headers, payloads, MTUs, etc.
- Encodings
- Propagation and transmission delays, BW delay product, latency and RTT, throughput
Framing and Errors

- Error detection vs. correction
- Parity, 2D parity
- Checksums and CRCs
- Stop and Wait vs. Sliding Window
Multiple Access

- FDMA vs. TDMA vs. CDMA
- CSMA, p-persistence, CSMA/CD
- Ethernet, binary exponential backoff
- 802.11, CSMA/CA
Switching and Bridges

• Learning bridges
• Spanning Trees
IP

• Service model
• Addresses (e.g., vs. Ethernet)
• Subnetting
• Forwarding
• Fragmentation/Reassembly
• ARP, DHCP
Routing

• Distance Vector vs Link State
• Count-to-infinity
• Split horizon
• Poison reverse