

Lesson 05-06: Midterm Review

CS 356 Computer Networks

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In-person Paper Exam

- Mar 9 Thurs 6-8 PM @ RLP 0.102
- Makeup Exam: Mar 8 Wed 6-8 PM @ GDC 2.402
- No class on Thurs Mar 8 at 9:30 AM or 11:00 AM
- 1 double-sided cheat sheet allowed
 - Handwritten or typed
 - Must be your own note
- **NOT allowed to work with others**
- **Peer review will be done during the exam**
 - Make sure Canvas discussion group reflects your actual discussion group

Topics

- Kurose Ch 1 – Ch 4 NAT
- Chap 1: Introduction
 - Layering and protocol
 - Design principles
 - Performance and delays: Processing, queuing, transmission delay, throughput, etc.

Topics

- **Chap 2: Application layer**
 - End-to-End design principle
 - HTTP
 - DNS
- **Chap 3: Transport layer**
 - Stateless vs stateful, connection-less vs connection oriented
 - UDP
 - RDT design
 - TCP/TCP CC

Topics

- **Chap 4: Network Layer Data Plane**
 - Inside router
 - IPv4
 - Subnet
 - NAT
- **Project related question**
- **Socket programming question in python**
 - You are given example code
 - No need to memorize python socket syntax

How to prep

- Lecture slides
- In-class Exercise, EXs
- Read textbook for broader context
 - May skip sections/topics that we didn't cover during lecture
- Additional practice questions in Kurose website (piazza post @101)
- Think about WHY behind WHAT
 - Protocol design choices
 - Pros and cons about different approaches, etc