CS5222– Computer Networks & Internets, 2025/26 Semester A

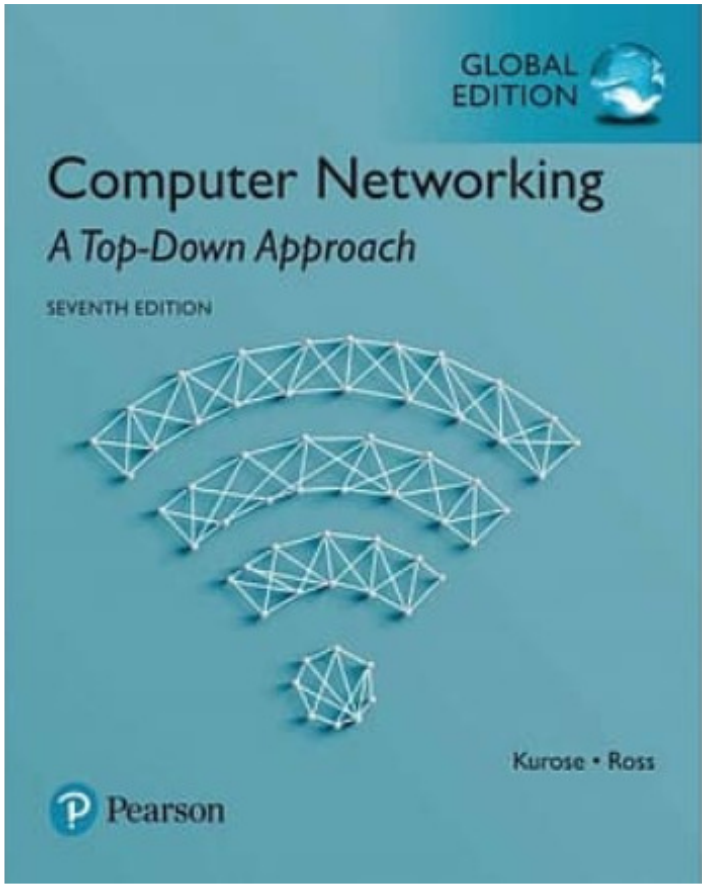
Dr. Man Hon Cheung
CS Department
City University of Hong Kong

Teaching Team

- Instructor (Lectures)
  - Dr. Man Hon CHEUNG (Michael)
  - Email: mhcheung@cityu.edu.hk
- Instructor (Tutorials)
  - Dr. Yuefeng DU
  - Email: yuefengdu2@cityu.edu.hk
- Grading TAs
  - Please refer to our course website

Teaching Materials

- Weekly lecture notes, tutorial, reading materials
- Textbook:
  - Jim Kurose and Keith Ross, "Computer Networking: A Top Down Approach", 7th edition, Addison-Wesley, March 2017. (Required readings)
  - Will also adopt some content from the 6th edition
- Slides:
  - Based on my previous slides on the 6th edition and add in new content from 7th edition



Teaching Pattern

- Lecture (2 hours per week)
  - Information sessions
- Tutorial (1 hour per week)
  - Exercises/discussions on weekly question sheet based on lecture materials/readings

Assessment

- **30% course work**:
  - 15%: Three assignments (Problem sets & paper reading)
  - 10%: One Wireshark assignment
  - 5%: (Research report) Research on a new computer networking technology (related to Cha.1-7 of textbook) that you are experiencing in everyday lives (e.g., read in recent news or using in your office)
  - Late submissions get **zero** mark
- **70% final examination**
  - *"For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained."*

Assessment (cont'd)

- **Plagiarism will not be tolerated**
  - If we find that students directly copy some solutions they found, we will treat these cases as plagiarism, and the students will get zero marks for the related questions in the assignment. No warnings will be given!
  - But you are welcome to discuss with other students. Just don't copy from one another.
  - https://www.cityu.edu.hk/pvdp/ah/uni-ah-req.htm

Mark Appeal

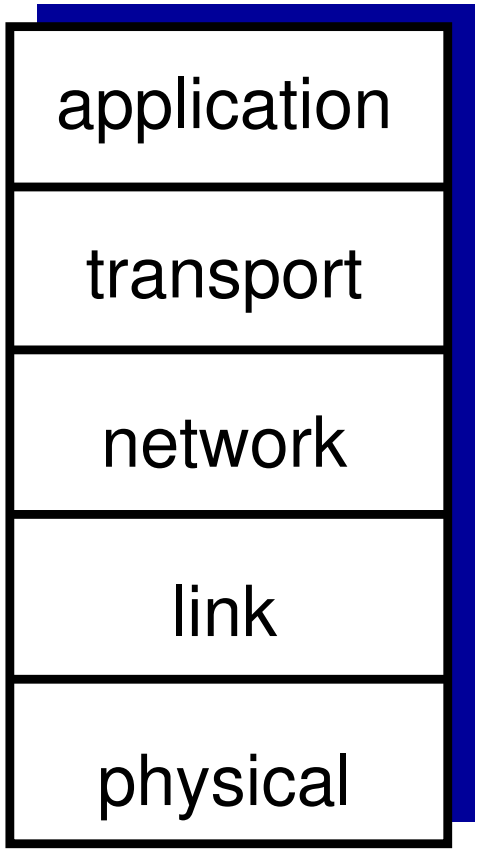
- Students are responsible to keep track on their marks.
- Any objection to the course marks should be made to the TA by email within one week of mark announcement. No change will be made afterwards.

Questions about course content?

- Lectures & Tutorials:
  - Ask questions during class (most efficient)
    - Priority for F2F session
  - Email instructors
    - May be directed to TAs to shorten response time
- Grading:
  - Will let you know who to contact in Canvas later

Course Overview

- Chapter 1: Introduction
  - Terminologies, circuit switching vs packet switching
  - Delay and loss in packet-switched networks
  - Protocol layers and their service models



Course Overview (cont'd)

- Chapter 2: Application Layer
  - Applications: Web, e-mail, domain name service (DNS), P2P file sharing, video streaming, content distribution networks (CDNs)

- Chapter 3: Transport Layer
  - Multiplexing and de-multiplexing
  - User datagram protocol (UDP) vs transmission control protocol (TCP)
  - Congestion control

Course Overview (cont'd)

- Chapter 4 & 5: Network Layer
  - Forwarding and routing
  - Internet protocol (IPv4, IPv6)
  - Routing protocols (distance vector, link state)
- Chapter 6: Link Layer
  - Error detection and correction techniques
  - Multiple access protocols
  - Link layer addressing
- Chapter 7: Wireless and Mobile Networks (if time)
  - WiFi
  - LTE
- A lot of interesting materials to cover!