



Computer Networking

Hyo-Sik Yang



➤ Objective

- Introduces the underlying concepts and principles of computer networks. A study of the seven layer OSI Model with a focus on concepts, functionality and performance of protocols used in communications networks.

➤ Office hours

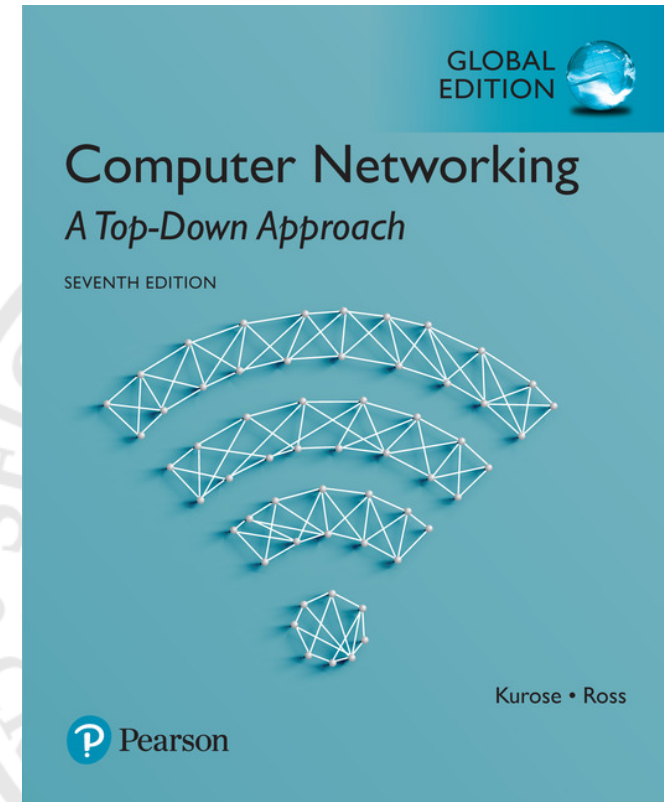
- Mon. & Wed. 15:00-16:50 or by appointment (arrange via e-mail: hsyang@sejong.edu), Choongmu Bld. 203C

➤ Prerequisites

- Elementary knowledge of applied probability and some C programming experience. Working knowledge of calculus, data structure, and algorithm

➤ Course material will be posed on <http://blackboard.sejong.ac.kr/>

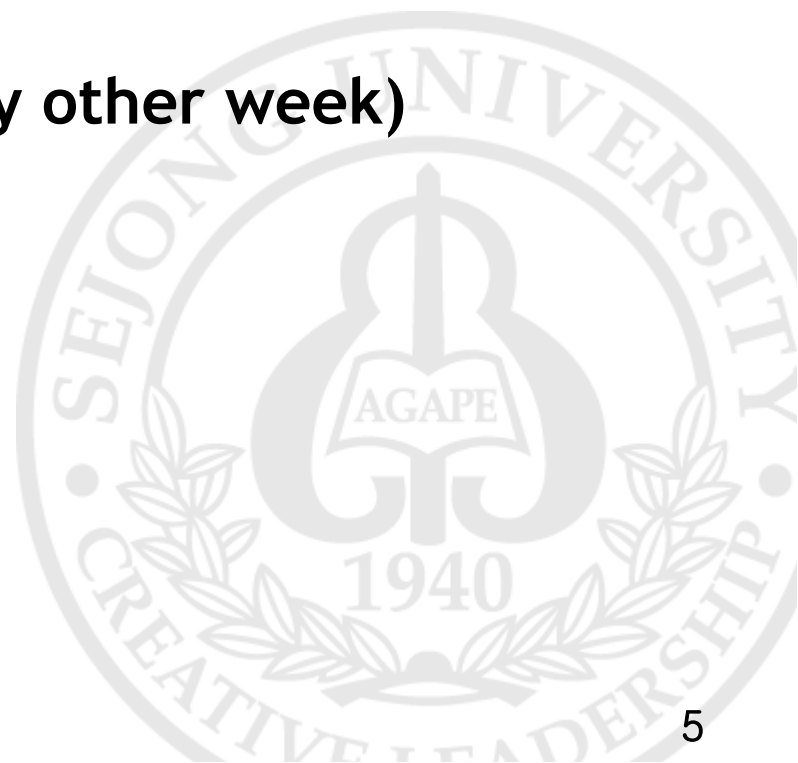
- ❏ Computer Networking - A Top-Down Approach, 7th ed., by James F. Kurose and Keith W. Ross, Pearson
- ❏ Korean edition strongly **NOT** recommended
- ❏ References
 - Data Communication and Networking
 - Data & computer communications



- 1st week: Introduction to computer networks
- 2nd week: Protocol layers and service model
- 3rd week: WWW, HTTP, FTP, and SMTP
- 4th week: Socket Programming
- 5th week: Multiplexing
- 6th week: TCP
- 7th week: 1st Midterm Exam, Congestion Control
- 8th week: Router, IP
- 9th week: Routing Algorithms
- 10th week: Multiple Access Protocols
- 11th week: Ethernet
- 12th week: 2nd Midterm Exam, CDMA
- 13th week: IEEE 802.11 Wireless LAN
- 14th week: Project presentation
- 15th week: Project presentation
- 16th week: Final Exam



- ➡ Two midterm exam (20% each)
- ➡ Final exam (20%)
- ➡ Homework (10%)
- ➡ Two projects (10% each)
- ➡ Attendance (10%)
- ➡ Pop-up quiz (5% Bonus, every other week)



✚ Exercise problems in text book

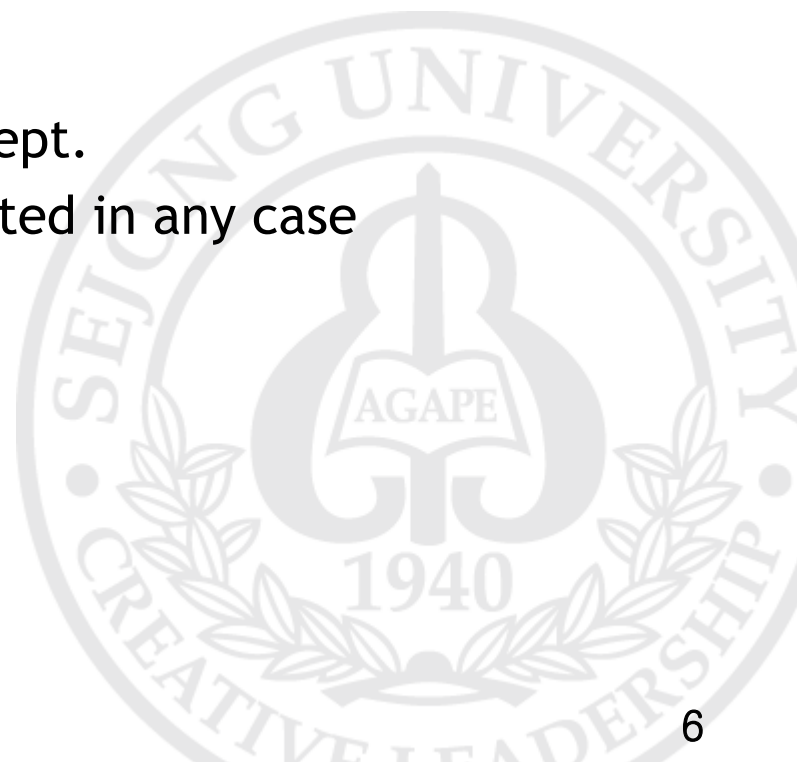
- Will not be graded
- Similar problems will be appeared in exams

✚ Wireshark problem

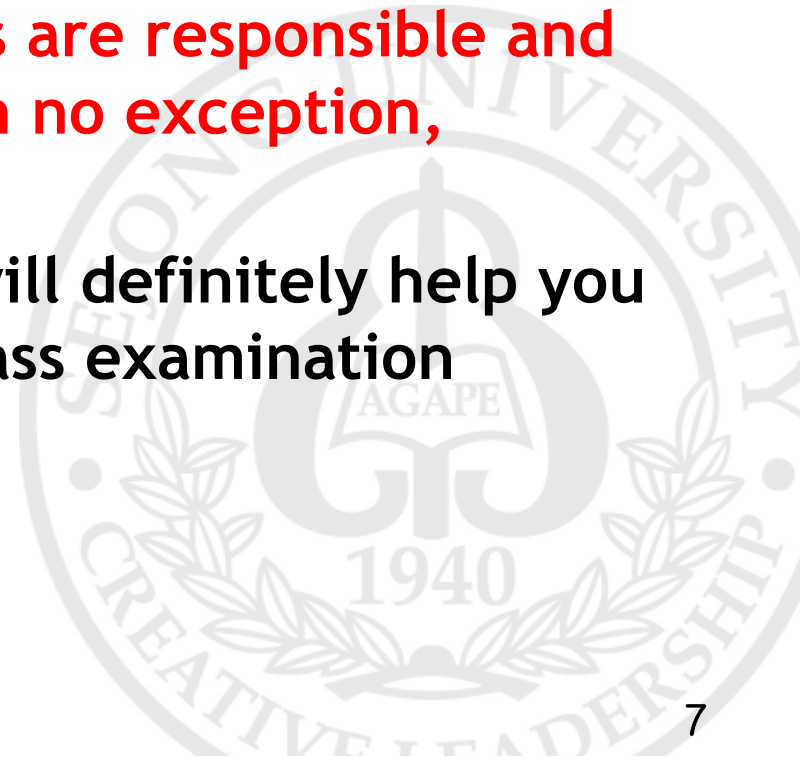
- Packet capture software
- Introduction session on 16th of Sept.
- No late homework will be accepted in any case

✚ Project

- Socket programming
- Research paper



- ❖ Cheating will not be tolerated under ANY circumstances. Discussions with your fellow students about the homework assignments are allowed. However, you must do your own work.
- ❖ If a student copies his/her homework from another student (group), both parties are responsible and will get F in this course (with no exception, excuse, warning)
- ❖ Doing your own homework will definitely help you secure good grades in the class examination



↘ Various protocols

- TCP
- IP
- HTTP
- FTP
- SMTP

