

01219224 Computer Network Architecture & Programming

Sec 450 1st semester 2020(Aug – Dec)

Instructor Information

Instructor: Assoc.Prof. Anan Phonphoem, Ph.D. (วิศว.ดร.อนันต์ ผลเพิ่ม)
Office: Building 15, Room # 407
Office Hours: Monday 9:00 – 12:00 (Walk-In) or by appointment
Tel. No.: 02-942-8555 ext 1428, 1403
Email: anan.p@ku.ac.th
URL: <http://www.cpe.ku.ac.th/~anan/>; anan.phonphoem.in.th

Course Information

Lecture: Fri 09:00 – 12:00 Building 15, Room 204
Class URL: <http://www.cpe.ku.ac.th/~anan/> → Teach
Prerequisite: -

Course Description: Data communication network; data transmission; data link controls; local area network and wide area network; communication architecture and protocols; service-oriented programming.

Course Objective: Students become familiar with Data Communications and Network concepts and terminologies. Students should understand the network characteristics, certain network applications and security.

Text Book: “**Computer Networks and Internets**”, *Douglas E. Comer*, Person Education Inc., Prentice Hall, 4th Edition, 2004, ISBN 0-13-123627-X

Supplement: “**Data Communications and Networking**,” Behrouz A.Fourouzan, Mc Graw-Hill, ISBN 0-07-118160-1

Tentative Grades

Midterm exam:	42 %
Final exam:	42 %
HW and assignment (project):	14 %
Attendance:	2 %

Grading Policy

- Your Grade is based on the overall class performance. However, the cumulative score below 50% is considered as fail (F).
- An “F” grade will be given to any form of cheating (for all parties).
- You are not allowed to take the exam (or quiz) if > 20 min late.
- Make-up exam will only be provided for restrict circumstances such as severe illness.

Assignment Policy

- All hard-copy assignments must be handed in at the beginning of the class (> 20 min. is considered late). For soft-copy will be timed by the local time stamp.
- No Late assignment will be graded.
- No credit for plagiarism and considered as cheating.
- No credit for copying homework or assignment (for all copies) and considered as cheating.

Tentative Course Schedule

Week	Description
1	Course orientation Introduction to Computer Network and Internet; Network Applications
2	Network models
3	Signals and Information Sources
4	Transmission media Reliability in communication
5	Modulation and Demodulation Access Technologies
6	Medium Access Control Data Link Layer Standards
7	Network Programming and Traffic Analysis (hands-on lab) Internet Applications
	Midterm Exam
8	Wireless Network Technologies Extending LANs
9	IP Addressing
10	Web services
11	Internetworking and Dynamic Routing Datagram Forwarding
12	Supporting Protocols in TCP/IP Suites
13	TCP and UDP
14	IP version 6
15	SDN
	Final Exam